

# A- Issues Report

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## Draft Memorandum

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**SUBJECT:** Beaverton TSP Task 1.2 - Draft Issues Report

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The purpose of this memorandum is to summarize areas in the existing Beaverton Transportation System Plan (TSP) that need to be included or revised to reflect updates to the Oregon Transportation Plan (OTP), Transportation Planning Rule (TPR) and Regional Transportation Plan (RTP) that have occurred since the previous Beaverton TSP update in 2003. Additionally, this memorandum provides a background document review of prior studies and plans relevant to the TSP update, as well as an updated Table of Contents for the Beaverton TSP that incorporates new material.

Many State and Regional policies and regulations have been updated since the 2003 Beaverton Transportation System Plan (TSP) was adopted. The TSP update should include the relevant updates to those rules and policies found during the plan and document review. When updating a City's existing TSP, it is important to compare the TSP to other documents relevant to the City's transportation facilities. Since Beaverton's TSP was adopted in 2003, the following documents have been implemented or updated:

- Metro Regional Transportation Plan
- TriMet Transit Investment Plan
- TriMet Elderly and Disabled Transportation Plan
- Transportation Planning Rule requirements (OAR 660-12-0050 and -0055)
- Other relevant State, County, Metro, and City studies and documents

In general for the TSP update, all City, County, and State projects that have funding associated with them in the document review need to be incorporated into the TSP for future year analysis. Coordination of land use and transportation planning between the City, County and the State needs to be accounted for in the TSP update as well. The following document highlights key elements to consider while updating the 2003 TSP. This background review is useful throughout the project, but initially it identifies conflicts and discrepancies between previous planning documents and identifies how local plans fit into the larger regional context.

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## OTP, TPR and RTP

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The OTP, TPR and RTP have all been updated since the Beaverton TSP was last updated (2001) and adopted (2003). A summary of these documents and the impact to the TSP update process follows.

### ***Oregon Transportation Plan***

*Adopted September, 2006*

The *Oregon Transportation Plan* (OTP) guides the State's transportation facility and mode plans by setting the general direction for transportation development statewide for the next twenty years and providing overall direction for allocation of resources and coordination of modes of transportation. It provides policies to increase livability in the State of Oregon by emphasizing alternative forms of transportation to the single occupant vehicle (SOV). The plan seeks to develop public transit, rail lines, bicycling and pedestrian facilities, airports and pipelines, while also emphasizing the maintenance and improvement of highways, roads and bridges. Thus, the plan calls for a transportation system that has a modal balance, is both efficient and accessible, provides connectivity among rural and urban places and between modes, and is environmentally and financially stable.

<p><b>Relevance to TSP Update:</b></p> <ul style="list-style-type: none"><li>▪ The TSP update needs to follow the guidance outlined in the <i>Oregon Transportation Plan</i> to ensure that the City maintains a safe, balanced and efficient transportation network.</li></ul>
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### ***Oregon Transportation Planning Rule (TPR) (OAR 660-012)***

*July, 2006*

The State of Oregon adopted 19 statewide planning goals that must be implemented in a comprehensive plan for each city (with a population over 2,500 individuals) and county in the state. In addition to identifying how land, air and water resources of each specific jurisdiction will be utilized, a review and needs analysis must be completed for improving public facilities.

One of the 19 goals is the Transportation Planning Rule (Goal 12). To comply with this rule, Beaverton must adopt a Transportation System Plan (TSP) that complies with the State TSP. The overarching goals to be accomplished by the TPR are to:

- Reduce dependence on the automobile and the number of people driving alone.
- Establish a stronger connection between land use and transportation planning.

Local TSPs are expected to examine possible land use solutions to transportation problems and identify multi-modal, system management and demand management strategies to address transportation needs. This entails the development of modal plans, including pedestrian, bicycle, motor vehicle and transit. These plans must strive to provide an integrated transportation network and include an inventory of current infrastructure, provide a gap analysis and identify how these

gaps are going to be filled. The areas of analysis addressed in the TPR for a transportation system plan include:

- Roadway capacity and level-of-service
- Transit capacity and capacity utilization
- Bicycle and pedestrian system capacity
- Adjustment of turning movement volumes produced by travel demand forecasting models
- Estimation of future transportation needs (person travel), reflecting:
  - Population and employment forecasts consistent with comprehensive plans
  - Measures to reduce reliance on the automobile
  - Increased residential, commercial and retail development densities
  - Location of neighborhood shopping centers near residential areas
  - Better balance between jobs and housing
  - Maximum parking limits for office and institutional developments
  - Appropriate levels of transportation facilities to serve land uses identified in transportation plans
  - Increases in average automobile occupancy
  - Increases in modal shares of non-automobile modes
  - Transportation Demand Management (TDM) programs
  - Land use and subdivision regulation
- Estimation of future goods movement
- Access management

The *Oregon Land Conservation and Development Commission* adopted amendments to sections of the TPR – OAR 660-12-0050 and -0055 – in 2005. The amendments clarify planning requirements for amending local TSPs when land use plan amendments are proposed. These strategies were incorporated into the adopted TSP and will be carried forward in the update.

**Relevance to TSP Update:**

- The planning goals identified above from the State TPR prioritize the minimization of dependence on the automobile and are beneficial to the City of Beaverton. They need to be incorporated in the TSP update.

***Metro 2035 Regional Transportation Plan- Federal Component***  
*Metro, 2007*

The federal component of the *2035 Regional Transportation Plan (RTP)* provides an updated blueprint to guide transportation planning and investments in the tri-county Portland metropolitan region. This document extends the planning horizon of the previous plan by five years through the year 2035 and was developed to meet new federal (SAFETEA-LU) planning requirements. The plan also meets federal and state air quality requirements.

Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) addresses the many current challenges facing our transportation system—improving safety, reducing traffic congestion, improving efficiency in freight movement,

increasing intermodal connectivity, and protecting the environment – as well as making preparations for addressing future challenges. This federal legislation emphasizes:

- Enhancement of the public participation process. Legislation includes examples such as conducting public meetings at convenient times and in accessible locations, employing visualization techniques to describe plans, and making public information available in an electronically accessible format.
- Increased coordination. SAFETEA-LU requires that metropolitan planning organizations (MPOs) coordinate their transportation planning with other activities in the area including economic development, environmental protection, airport operations and freight movement.
- Adoption of operational and management strategies. State and MPO plans need to include strategies to improve performance of transportation facilities to relieve congestion and maximize the safety and mobility of people and goods.
- Enhancement of the integration and connectivity of the transportation system across and between modes.

The federal component of the 2035 RTP makes a first step toward improved implementation of the 2040 Growth Concept, the region’s long-range plan for addressing expected growth while preserving the region’s livability. The focus of this component of the update is on Federal compliance elements, not the Oregon Transportation Planning Rule (TPR) or other regional requirements.

An overarching aim of the 2035 RTP is to link transportation planning and investment decisions to the vision embodied in the 2040 Growth Concept, the region’s long-range strategy for managing growth. The RTP defines a framework for making choices about where to allocate limited transportation resources and choices about the future envisioned for the region and, by extension, the state of Oregon.

**Relevance to TSP Update:**

- The TSP update should ensure consistency with the federal component of the RTP.
- The 2040 Growth Concept and air quality determination should be refined in the Beaverton TSP update to consider recent federal FTP findings.

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## **Background Plan and Document Review**

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Documents that were reviewed are summarized in the following sections and are grouped by agency (City of Beaverton, Metro, Washington County and the State of Oregon). Additionally, a summary of how each document pertains to the Beaverton TSP update is included. This document review does not represent an exclusive list of documents which shall be considered for this update, since other reports addressing specific area master plans or feasibility studies may be considered through the plan update process as appropriate. However, the land development and travel forecast tasks will generally supersede these studies. An updated Table of Contents for the Beaverton TSP based on requirements identified in the background plan review are located at the end of this document.

### **City of Beaverton**

Documents generated by or for the City often deal directly with matters of local concern, and can include but are not limited to local ordinances, land use changes, or infrastructure changes. Summaries of the following documents are included in this section:

<i>Beaverton Transportation System Plan</i> .....	5
<i>City of Beaverton Comprehensive Plan</i> .....	6
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### ***Beaverton Transportation System Plan***

*DKS Associates, June 2003*

The current *Beaverton Transportation System Plan* (TSP), formally adopted in 2003, provides a plan for the development of the City’s transportation infrastructure, addressing improvements to new and existing roadways, pedestrian and bicycle facilities, public transit service, and transportation demand management strategies required to address the City’s transportation needs for a 20-year planning period (with a forecast year of 2020). The Beaverton TSP was developed to provide a review of the transportation system, evaluate deficiencies in the system, and plan for future improvements. A key objective of this plan was to achieve a safe, convenient, and economic transportation system for all users. The TSP outlines the City’s goals for developing its transportation facilities to meet short and long term needs.

#### **Relevance to TSP Update:**

- The TSP update will reevaluate future transportation conditions and needs based on the horizon year of 2035 and determine reasonable project phasing scenarios given project funding.
- The TSP update will consider and incorporate all findings and projects from the adopted TSP that are still relevant in addition to adding and prioritizing new projects.

## ***City of Beaverton Comprehensive Plan*** *City of Beaverton, Revised February 2008*

The Comprehensive Plan is a set of maps, policies, and implementing measures affecting land use within the city limits, and ultimately within the urban growth boundary (UGB). The plan acts as a guide to define the direction, quality and quantity of future development, and to evaluate decisions that will have an impact on the future of the community. Plan goals and policies are implemented through subsequent measures, such as zoning and development ordinances, that provide decision-making criteria and standards by which proposals can be evaluated.

*The City of Beaverton Comprehensive Plan* has a section (Chapter 6) devoted to transportation goals and policies. This chapter of the comprehensive plan summarizes the *Beaverton Transportation System Plan (TSP)* and identifies the roadway classifications and multimodal (roadway, transit, bicycle, and pedestrian) improvement plans outlined in the City of Beaverton TSP. In addition to the transportation chapter, the Comprehensive Plan also has a number of other transportation related goals and policies, including:

- Goal 3.5.1 Policy B of the Land Use Element attempts to reduce auto trips with a mixture of complementary land uses, while Policy C sets standards for street and adjacent building designs within mixed use land use designations that ensure a setting that is attractive and accessible to multiple transportation modes.
- Goal 3.12.1 of the Land Use Element states that areas served by good transportation networks should contain compatible industrial, manufacturing, warehouse and heavy industrial development.
- Goal 7.5 of the Natural Resources Element encourages higher density and mixed used districts to allow for living, working and shopping in close proximity, thereby reducing energy consumption for travel. Further, the City's transportation plan has mapped multi-modal transportation corridors for use by automobiles, pedestrians and bicycles.
- The Environmental Quality and Safety Element attempts to reduce vehicle-related air pollution through the support of multi-modal transportation corridors and mixed land use patterns.
- Goal 9.2 of the Economy Element attempts to support business development through an effective transportation system.

### **Relevance to TSP Update:**

- Transportation related goals and policies outlined in Beaverton's Comprehensive Plan need to be incorporated into the TSP update.
- Once this TSP update has been completed, the City of Beaverton's Comprehensive Plan needs to be updated to reflect the changes.

## ***City of Beaverton Development Code***

*Revised August 2008*

The City of Beaverton Development Code was created to implement Comprehensive Plan policies and is intended to ensure that development is of the proper type, design, and location and is served by a proper range of public facilities and services. The Code describes responsibilities of the City Council, Planning Commission, and the Director of Planning and Development, provides administrative procedures for public hearings and land use actions, describes uses allowed within zoning districts, and contains land division regulations and development provisions.

Section 60.55 of the Development Code establishes design standards and performance measures for all transportation facilities constructed or reconstructed within the City of Beaverton. This section provides Traffic Management Plan and Traffic Impact Analysis threshold criteria for development applications, connection requirements for street, bicycle, and pedestrians, access standards, minimum street widths, and transit facility standards.

### **Relevance to TSP Update:**

- Requirements outlined in the City of Beaverton Development Code (such as minimum required sidewalk widths or parking stall ratios) need to be considered in the TSP Update.
- The City of Beaverton Development Code needs to be updated if, as a result of the TSP update process, any of these requirements are amended.

## ***The Beaverton Code***

*Revised April 2008*

The *Beaverton Code* is a reference of all ordinances in the City of Beaverton, relating to how the City conducts business, and addresses provision of public utilities, crimes, parking, and enforcement of the City's ordinances. The *Beaverton Code* includes chapter 6, which deals specifically with transportation related to vehicles and traffic. The purpose of this section is to provide general regulations for parking, bicycles and pedestrians.

### **Relevance to TSP Update:**

- Changes to parking, bicycle, or pedestrian regulations during the City's TSP update process may need to be added to the *Beaverton Code*.

## ***City of Beaverton Capital Improvement Program***

The City's *Capital Improvement Program* (CIP) is a comprehensive document which details all of the approved funded and unfunded projects for the city for a five year period. The current CIP is for fiscal years 2008/09 through fiscal years 2009/10. The current transportation related CIP projects are listed below:

- 110th Ave Traffic Calming



- Cabot St/113th Ave Traffic Calming
- 6th Ave (Murray-141st) Traffic Calming
- 125th Ave Extension (Brockman Rd - Hall Blvd)
- Lombard (Broadway to Farmington) Realignment
- Rose Biggi Ave Extension (Crescent St to Hall Blvd)
- Dawson Wy Extension To Hocken Ave
- Oleson Rd (Fanno Creek - Hall Blvd)
- 170th Ave/173rd Ave (Baseline Rd-Walker Rd)
- Cornell Rd (Evergreen Pkwy to Bethany Blvd)
- 173rd Ave (Walker to Cornell) Street Lighting
- Beaverton Creek Trail (Hall-Lombard)

**Relevance to TSP Update:**

- All transportation projects in the City CIP impact the transportation system in the City of Beaverton and their status for completion needs to be considered in the TSP update.
- The TSP update will develop a new list of projects to prioritize and then it will develop a funding strategy for those projects based on priority. These projects will be considered in future CIPs.

***Beaverton Downtown Regional Center Development Strategy***

The *Beaverton Downtown Regional Center Development Strategy* is a summary of existing developments and cultural amenities in the Beaverton Regional Center. This area is bounded by Hwy 217 to the east, Cedar Hills Boulevard to the west, Center Street to the north, and 5<sup>th</sup> Street to the south. The *Beaverton Downtown Regional Center Development Strategy* is a comprehensive review of ways in which Beaverton can achieve significant levels of 2040 Regional Center design type development over the next 50 years. The 2040 Regional Center design type is characterized by mixed-use, pedestrian-oriented areas supporting higher densities of employment and housing.

**Relevance to TSP Update:**

- The TSP Update should evaluate transportation related goals outlined in this document related to increased traffic associated with redevelopment and higher densities.
- Associated vehicle, bicycle, and pedestrian master plans should be evaluated to ensure the quality of the systems are maintained.

***Beaverton 114<sup>th</sup> Avenue Area Redevelopment Plan***

*Parsons Brinckerhoff, February 2003*

The *Beaverton 114<sup>th</sup> Avenue Area Redevelopment Plan* is intended to create favorable conditions for the development of a higher density, pedestrian friendly, transit-oriented, compact, mixed use neighborhood, while continuing the development of Beaverton's core area, and creating a

signature development project to serve as the gateway into downtown Beaverton. The site is proposed to have a variety of land uses including residential, commercial, office, open space, and mixed used. Three concepts are evaluated in the study, with all three concepts assuming the following circulation patterns:

- The proposed street rights-of-way shown in the alternatives are intended to be accessible to pedestrians, bicycles, cars, and buses.
- A 3/4-mile long pedestrian and bicycle route that circulates through the Hall Creek open space area and along adjacent streets. The intention of this path is to provide a designated walking and biking path for physical fitness and recreation, and to provide connections to 117<sup>th</sup> Avenue and Center Streets.
- A new north-south circulation route that provides full access to the study area at a signalized intersection.
- Limited access onto 114<sup>th</sup> from Canyon Road. Concepts D, E and F show 114<sup>th</sup> Avenue as a right-turn-in only.
- The potential for a future east-west street connection between 115<sup>th</sup> and 117<sup>th</sup> Avenues.

The chosen street circulation/design concept (Concept F) has been incorporated into the City of Beaverton Comprehensive Plan. The estimated PM Peak hour trips resulting from the alternatives are presented in *Table 1*.

**Table 1: Total Trips Estimated by Alternative Concepts**

Concept	PM Peak Hour Trips
Concept D	1,547
Concept E	1,689
Concept F	1,966

Source: *Beaverton 114<sup>th</sup> Avenue Area Redevelopment Plan*

**Relevance to TSP Update:**

- Incorporate recommendations and changes as appropriate from the *Downtown Regional Center Development Strategy*.
- The transportation assumptions and other specific guidelines for the *Beaverton 114<sup>th</sup> Avenue area Redevelopment Plan* need to be incorporated into the TSP update.

**Beaverton Downtown Parking Solutions Strategy**

*Parametrix, April 2007*

The *Beaverton Downtown Parking Solutions Strategy* deals with the supply and demand for parking with downtown redevelopment associated with the 2040 Growth Concept, which envisions higher-density, mixed-use, pedestrian oriented development within Centers throughout the Portland Region. The study recommended a number of policy level actions and parking management strategies. Below is a summary of the recommended policy actions from the study:

- Adopt policies and rules to guide parking management
  - Codify Guiding Principles for Parking Management as elements of City Code.
  - Establish “Parking Management Zones” based on desired economic uses and user types.
  - Adopt “Operating Principles” and an implementation framework that defines the priority purpose/use for parking in each parking management zone. Adopt the principles and framework as City Code elements.
  - Adopt the 85% Rule to facilitate/direct parking management strategies<sup>1</sup>.
- Eliminate minimum parking requirements for all commercial parking development within Zones A and B<sup>2</sup>.
- Require .75 stalls per unit minimum parking standard for residential development within Zones A and B.
- Where parking is required establish a parking Fee-in-Lieu program to accommodate developments that cannot incorporate parking into development sites (i.e., for reasons of site size, geometries, etc.).
- Establish a Downtown Parking and Transportation Enterprise Fund as a mechanism to direct funds derived from parking over time into a dedicated fund.
- Evaluate additional funding sources for future parking development and parking system management.

**Relevance to TSP Update:**

- The TSP update should incorporate and update prior findings from this document in the parking section.

## Metro

Metro is a governing body that deals with regional issues such as transportation and regional growth and development patterns. Since the City of Beaverton is within the Portland Metropolitan Area and under Metro’s jurisdiction, the City can benefit from Metro’s transportation improvements and initiatives. The following relevant Metro documents are summarized in this section:

[Metro’s Highway 217 Corridor Study](#) ..... 11

<sup>1</sup> The 85% Rule is a measure of parking utilization that acts as a benchmark against which parking management decisions are based. Within the parking industry, it is assumed that when an inventory of parking shows more than 85 percent occupancy in the peak hour, the supply becomes constrained and may not provide full and convenient access to its intended user. Once a supply of parking routinely exceeds 85 percent occupancy in the peak hour, the 85% Rule would require that parking management strategies be evaluated and/or implemented to bring peak hour occupancies to a level below 85 percent to assure intended uses are conveniently accommodated.

<sup>2</sup> Zone A areas include parcels located within a 1/4 mile walking distance of bus transit stops that have 20 minute peak hour transit service or 1/2 mile walking distance of light rail station platforms that have 20 minute peak hour transit service. Zone B includes parcels located within 1/4 mile walking distance of bus transit stops. Zone B also includes those parcels that are located greater than 1/4 mile walking distance of bus transit stops, 1/2 mile walking distance of light rail station platforms, or both.

<a href="#"><u>Metro Non-Single Occupancy Vehicle (SOV) Target Actions Study</u></a> .....	13
<a href="#"><u>Metro Corridor Project: Beaverton-Hillsdale/ Canyon Road Case Study</u></a> .....	14
<a href="#"><u>TriMet Transit Investment Plan 2008</u></a> .....	16
<a href="#"><u>TriMet Elderly and Disabled Transportation Plan</u></a> .....	17

## ***Metro’s Highway 217 Corridor Study***

*Metro, November 2004*

The *Highway 217 Corridor Study*’s purpose was to develop multi-modal transportation solutions for traffic problems on Highway 217 and the rest of the identified corridor. The goal was to develop transportation improvements that would be implemented in the next 20 years to provide efficient movement of people and goods through and within the Highway 217 corridor while supporting economically dynamic and attractive regional and town centers and respecting the livability of nearby communities.

The Highway 217 Corridor Study is being completed in two phases. The first phase developed and analyzed a wide range of multi-modal alternatives. Based on this evaluation, the alternatives were refined to a smaller set and studied in more detail in the second phase. The six options from phase one are summarized in ***Table 2***.

**Table 2: Highway 217 Corridor Study Options**

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**Option 1: arterial, transit and interchange improvements**

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|---|--|
| <ul style="list-style-type: none"><li>• No new lane on highway</li><li>• Arterial improvements</li><li>• Interchange improvements</li><li>• Significantly increased transit service</li></ul> | Key findings: <ul style="list-style-type: none"><li>• does not improve overall drive times or congestion on Highway 217</li><li>• has by far the most environmental and neighborhood impacts due to the number of surface street (arterial) improvements that are included</li><li>• provides the most congestion relief on surface streets</li><li>• is the most expensive option</li></ul> |
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**Option 2: Six lane without interchange improvements**

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|---|---|
| <ul style="list-style-type: none"><li>• New lane on highway in each direction</li></ul> | Key findings: <ul style="list-style-type: none"><li>• does not resolve the merge/weave problems on Highway 217</li><li>• is the least expensive option</li><li>• has the fewest environmental impacts</li></ul> |
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**Option 3: Six lane plus interchange improvements**

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|--|--|
| <ul style="list-style-type: none"><li>• New lane on highway in each direction</li><li>• Interchange improvements</li></ul> | Key findings: <ul style="list-style-type: none"><li>• provides the most congestion relief for drivers on Highway 217</li></ul> |
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**Option 4: Six lane with carpool lanes**

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|---|--|
| <ul style="list-style-type: none"><li>• New lane on highway in each direction for carpools</li><li>• Interchange improvements</li><li>• Increased transit service</li></ul> | Key findings: <ul style="list-style-type: none"><li>• does not relieve congestion on general-purpose (non-carpool) lanes</li><li>• drivers in carpool lane have the fastest trip on Highway 217</li><li>• does not increase carpooling</li></ul> |
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**Option 5: Six lane with rush-hour toll lanes**

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| <ul style="list-style-type: none"><li>• New tolled lane on highway in each direction</li><li>• Interchange improvements</li><li>• Increased transit service</li></ul> | Key findings: <ul style="list-style-type: none"><li>• drivers in the toll lane have the fastest trip on Highway 217</li><li>• reduces overall congestion on Highway 217</li><li>• has the smallest funding gap and could potentially be built sooner than other options</li><li>• provides most benefits to trucks in corridor</li></ul> |
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**Option 6: Six lane with tolled ramp meter bypasses**

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| <ul style="list-style-type: none"><li>• New lane on highway in each direction</li><li>• Interchange improvements</li><li>• Increased transit service</li><li>• New tolled lane on entrance ramps to bypass meters</li></ul> | Key findings: <ul style="list-style-type: none"><li>• provides similar improvements as option 3, but has a smaller funding gap</li><li>• provides most benefits to trucks in corridor</li></ul> |
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Source: *Highway 217 Corridor Study*, Metro

Based on the November 2005 recommendation from the policy advisory committee, the following three options were further analyzed in a second analysis phase that focused on financing and phasing opportunities<sup>3</sup>:

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<sup>3</sup> <http://www.oregonmetro.gov/index.cfm/go/by.web/id=27221>, October 2008.

- **Option A** - a new general-purpose (free, unrestricted) lane in each direction on Highway 217
- **Option B** - a new express toll lane in each direction Highway 217 in addition to existing general-purpose lanes
- **Option C** - a new lane in each direction on Highway 217 and a new tolled ramp meter bypass lane on highway entrances

Options A and B were selected to advance to additional analysis, pending the funding of an environmental impact study.

### **Relevance to TSP Update:**

- The TSP should consider the possibility of implementation of one of the above options for the Hwy 217 Corridor.

### ***Metro Non-Single Occupancy Vehicle (SOV) Target Actions Study***

*Cogan Owens Cogan, July 2005*

The RTP identifies 2040 Non-Single Occupancy Vehicle (Non-SOV) Targets in order to meet the Oregon Transportation Planning Rule (TPR) requirement to reduce vehicle miles of travel (VMT) per capita. As required by the RTP and the TPR, jurisdictions within the Metro region must adopt policies and actions that encourage a shift towards non-SOV modes. The following is a summary of major transportation demand management (TDM) measures currently being implemented in the Beaverton TSP or codes encouraging non-SOV modes:

- Modal Targets (RTP)
- Parking Management and Requirements (RTP)
- Support of TMAs (RTP)
- Roadway Connectivity and Requirements (RTP)
- Transit Pass Program in Regional Centers (RTP)
- Other Transit Strategies
- Development Incentives
- Implementing Bicycle/Pedestrian Facilities

The following existing minimum requirements are recommended from the study for ongoing implementation and monitoring:

- Modal targets adopted in local TSPs
- Connectivity planning requirements
- Transit-oriented design requirements
- Maximum parking ratios

At a minimum, the following requirements are recommended to be considered by local jurisdictions during the next RTP update process.

- Continue to require **transportation-efficient development** through efforts to meet density and other land use targets in centers and corridors as part of compliance with Metro Functional Plan and related requirements. This type of development includes

higher density and mixed use development with access to frequent transit service and bike and pedestrian facilities and with opportunities for short pedestrian and bicycle trips to near by destinations. Local jurisdictions and the region as a whole would be given credit for these efforts as part of the modal targets monitoring process.

- Construct **bicycle and pedestrian improvements** as required by state and federal regulations, and consistent with local TSPs and regional guidelines. Local governments and Metro should prioritize improvements that enhance connectivity of the bicycle and pedestrian system and access to transit.
- Continued provision of **frequent and comprehensive transit service** by TriMet and other transit agencies. Local jurisdictions and the region as a whole would be given credit for these efforts as part of the modal targets monitoring process.
- Support and encourage efforts to implement **employer-based TDM strategies**.
- Encourage efforts to **eliminate employer-subsidized parking and/or support for parking cash-out**, preferred HOV-parking or other parking pricing strategies. This strategy ultimately would be implemented primarily by the private sector. However, local governments would be required to encourage such practices and consider them in parking management and design regulation efforts. Local governments also could be required or encouraged to consider use of these strategies for their own employees.
- Support and coordinate **Safe Routes to School programs and projects**. Local jurisdictions and Metro should support and help coordinate these efforts by seeking and procuring project funding from federal, state and local sources, and providing technical assistance.

#### **Relevance to TSP Update:**

- The TSP update should evaluate the TDM strategies currently being implemented in the Beaverton TSP.
- In addition, the TSP update should consider additional TDM strategies to encourage non-SOV travel.

#### ***Metro Corridor Project: Beaverton-Hillsdale/ Canyon Road Case Study***

*ECONorthwest, June 2005*

The Metro Corridors Project evaluated the Beaverton-Hillsdale Highway and Canyon Road Corridors. Its purpose was to identify opportunities for and constraints to achieving the development in corridors that the Metro 2040 Growth Concept, Regional Framework Plan, and related documents encourage or require.

The mix of uses, vibrant commercial environment and available capacity of the roadway network create many opportunities for the Beaverton Hillsdale Highway and Canyon Road corridor redevelopment. The shortcomings of the existing system to adequately serve modes other than the private automobile and the area's link to high quality regional transit makes these corridors, particularly Beaverton Hillsdale Highway, ripe for a new development model; one whose infrastructure and urban form support multiple modes of moving about within the community and within the region. Some recommended transportation strategies are presented below.

- Creation of connections between sites
  - Reduces reliance on arterials
  - Creates shared parking opportunities
  - Reduces private access points
- Creation of human scale transportation system
- Connectivity to and through adjacent neighborhoods
- Well-spaced and easy to cross locations to connect pedestrians to bus stops
- Infrastructure and urban form support multiple modes of moving within community

## Conclusions from the study:

- If Corridors draw from the same regional markets that Centers do, then their effect on Centers depends on whether they are offering competing or complementary goods.
- Corridors in the Portland metropolitan region are drawing from markets larger than those of the adjacent neighborhoods to support their retail sales.
- National trends in retail show more new development at major intersections and less along extended strips.
- There is an opportunity for the region to take advantage of national trends in retail to restructure strip development corridors.
- Residential, office, lodging, and institutional uses have the potential to supplant retail as the highest and best uses along some parts of Corridors.
- Redeveloped Corridors would support Centers.
- A major transformation of current Corridors will require a major transformation of the streetscape.
- Transportation improvements can decrease congestion and increase mobility and access along Corridors.
- Without the benefit of clear public policy and public investment, most Corridors will change slowly.
- Public efforts undertaken to transform development in Corridors will need to do all the things that are now typical of sub-area and Corridor planning in Oregon, and then some.
- State, regional, and local funding for transportation improvements along Corridors is necessary to support the land use and development alternatives.

## Recommended changes to local rules and policies:

- Change road designs policies within the Transportation System Plans (TSPs) or public works standards to encourage transportation improvements that support the land use and development alternatives and remove barriers.
- Rezone the neighborhood corridor segments to limit the amount of retail and allow for the density of residential, office, lodging, institutional and limited commercial uses envisioned by the land use and development alternatives.
- Implement transportation and street-design strategies to support the land use and development alternative.
- Review current codes for appropriate design guidelines and development standards for retail in corridors.



- Provide incentives to encourage the redevelopment of Corridors.

**Relevance to TSP Update:**

- The Beaverton TSP update should consider the recommended changes to local rules and policies for the Beaverton-Hillsdale and Canyon Road corridors.

***TriMet Transit Investment Plan 2008***

*TriMet, August 2007*

TriMet's *Transit Investment Plan* (TIP) lays out TriMet's strategies and programs to meet regional transportation and livability goals through focused investments in service, capital projects and customer information. The TIP is a rolling five-year plan that is updated annually. The TIP relies on long-term goals and strategies developed by Metro, including the Regional Transportation Plan (RTP). These plans direct development to Regional Centers, Town Centers and key corridors. The TIP shows how TriMet will implement the transit portion of the RTP over the next five years. The TIP has four priorities to complete their goals:

1. **Build the "Total Transit System":** Enhance customer information, access to transit, stop amenities, frequency, reliability, passenger comfort, safety and security.
2. **Expand high-capacity transit:** Invest in MAX Light Rail, Commuter Rail and Streetcar service along key corridors to connect regional centers.
3. **Expand Frequent Service:** Add to TriMet's network of bus lines that run every 15 minutes or better, every day.
4. **Improve local service:** Work with local jurisdictions to improve transit service in specific local areas.

Priorities identified in the TIP which could impact transportation in and around the City of Beaverton include:

- The TriMet Commuter Rail line between Beaverton and Wilsonville
- TV Highway Corridor Pedestrian Improvements
- Expansion of Frequent Bus Service from Beaverton TC to Tualatin (76-Beaverton/Tualatin (Hall Blvd.).
- Extension of bus service from Beaverton TC to Scholls Ferry Rd (54-Beaverton-Hillsdale Hwy).
- Possible extension of the Red Line further west to reduce crowding between Beaverton Transit Center (TC) and the Merlo Road/SW 158th Ave station.

**Relevance to TSP Update:**

- The above mentioned projects will have an impact on the transportation system within the City.
- The TSP update should include these projects in its future analysis.

## ***TriMet Elderly and Disabled Transportation Plan***

*TriMet, September 2006*

The *Tri-County Elderly and Disabled Transportation Plan* (EDTP) recognizes the increased needs for a growing population of elders and people with disabilities and addresses their many different transportation needs. Building on the foundation of the 2001 EDTP, this plan describes a continuum of service investments designed to provide attractive and cost effective transportation alternatives to elders and people with disabilities. The goal is to offer a range of services that match individual abilities and support customer independence and convenience, but also promote fixed route and other lower-cost options as the best use of scarce transportation resources. It provides assurances that basic transportation needs are met and that services are well distributed and coordinated. The recommendations of the plan include:

- Make the RideWise consumer education and travel training program a standard and fully coordinate a new and different TriMet LIFT paratransit eligibility process with RideWise. This program gives people freedom, independence and choice.
- Neighborhood shuttles and shopper shuttles to take elders and people with disabilities (E&D) to fixed route transit and to activities, such as grocery shopping, that are difficult to do on the bus. These are hybrid fixed route/paratransit services, so trips can be grouped, but the service is personalized.
- Involving people with disabilities and elders in sensitivity awareness and training for fixed route and paratransit drivers, in fixed route customer service monitoring, in fixed route travel training, and in assisting people with disabilities make transfers from one route to another or use the system beyond an initial training period.
- Give organizations used accessible vans in exchange for providing rides to elders and people with disabilities and recruiting members to be volunteer drivers in the Ride Connection community-based transportation program.
- Fixed route service frequencies and coverage in some suburban areas, as well as ways to get to the fixed routes, will need to be improved. The total fixed route transit system from the waiting area, customer service by the operators, priority seating, and security will need to be continually monitored for accessibility and improvement.
- A truly multi-modal transportation system will have pedestrian-safe communities with sidewalks. This plan recommends beginning by developing a Pedestrian Master Plan for one suburban area that can be used as a model by other communities.
- The increase in fatal crashes involving drivers over age 75 can be attributed in part to the driving environment — complicated intersections, hard-to-read signs, badly timed traffic lights. This plan recommends Federal Highway Administration (FHWA) guidelines be adopted for signage, intersection design, pavement markings, lighting, merging lanes for entering freeways and many other roadway features that take into account the limitations of older drivers.
- Older drivers must deal with gradual changes in functioning, changes in their reflexes, their ability to make quick decisions, and their vision at night. This plan recommends older driver safety programs be regularly scheduled throughout the tri-county area and that the programs introduce people to their public transit options as well.

**Relevance to TSP Update:**

- The Beaverton TSP update should consider the recommended actions from the TriMet *Elderly and Disabled Transportation Plan*.

## **Washington County**

Since the City of Beaverton is located within Washington County and several of the roads in the City belong to the County, it is necessary to consider Washington County transportation documents into the City’s TSP. Summaries of the following documents are included in this section:

<a href="#"><u>Washington County Transportation System Plan</u></a> .....	18
<a href="#"><u>Washington County Major Streets Transportation Improvement Program</u></a> .....	19
<a href="#"><u>Washington Square Regional Center Study- City of Tigard</u></a> .....	20

### ***Washington County Transportation System Plan***

*Adopted October, 2002*

The Washington County 2020 Transportation Plan provides policies and strategies for planning and developing an efficient, multi-modal transportation system. The plan addresses the need for improved vehicle, pedestrian, bicycle and transit facilities and urban commuting issues resulting from significant population and employment growth within the County. The plan identifies the following Beaverton locations as study areas to determine specifically how an identified need should be met, however, the alignment and function of the facility has yet to be determined:

- US 26 (Sunset Highway)
- Highway 217 (OR 217)
- Tualatin Valley Hwy
- 119<sup>th</sup> Avenue - Cornell Road to Barnes Road
- 185<sup>th</sup> Avenue - US 26 to Baseline Road

In addition, the plan identifies deficiency areas where 2020 conditions will exceed acceptable performance measures and no solution has been identified.

- Cornell Road- Dale Avenue to Cedar Hills Boulevard
- Farmington Road- Kinnaman Road to Hocken Avenue
- Murray Boulevard- Walker Road to Brockman Road
- Beaverton Regional Center
- Washington Square Regional Center

**Relevance to TSP Update:**

- The Beaverton TSP update will work to coordinate with transportation system designations and improvements recommended in the Washington County Plan.

## ***Washington County Major Streets Transportation Improvement Program***

The Major Streets Transportation Improvement Program (MSTIP) is a joint effort of Washington County and thirteen cities (including Beaverton) to recommend fair distribution local transportation funding. The MSTIP is a property tax levy that has become part of the County's general fund and is used for County owned transportation facility improvements. The current MSTIP (3C) list recommends transportation projects to be construction between 2007 and 2012, while the prior MSTIP (3B) has projects currently being constructed during the period between 2006 and 2009.

Projects to be constructed between 2006 and 2009 under MSTIP 3B:

- SW 175th Avenue at Scholls Ferry. This project will realign 175th Avenue to intersect with Scholls Ferry Road at Roy Rogers Road. This will eliminate the offset intersections that currently exist in this area. Cost: \$1,400,000.
- Cornell Road from Evergreen Parkway to Bethany Boulevard. This project will rebuild and widen Cornell Road to five lanes with bike lanes, curbs, sidewalks, landscape strips, three traffic signal modernizations, signing, striping and sound wall installations. Cost: \$7,430,000.
- Commuter Rail line between Wilsonville and Beaverton, running on existing freight tracks. The 15-mile train will carry almost 5,000 riders in each peak period, roughly equivalent to the carrying capacity of two lanes of a major arterial. Commuter Rail would remove cars from the roads, helping bring the entire system into balance. MSTIP 3B is contributing \$25,000,000 for this work.
- NW Murray Boulevard from Highway 26 (Sunset Highway) to Cornell. This project will provide funding to design future improvements and acquire right-of-way. Murray Boulevard will eventually be widened to five lanes with bike lanes and sidewalks and the intersection of Murray at Cornell Road significantly improved. MSTIP 3B will provide \$5,300,000 for this work.
- NW Saltzman Road from Cornell to Thompson. This project will provide the funding to design future improvements and acquire right-of-way. Saltzman Road will eventually be widened to include a center turn-lane. Additional improvements planned are: bike lanes, sidewalks, illumination, landscaping, as well as intersection and safety improvements. MSTIP 3B will provide \$6,500,000 for this work.

Projects to be constructed between 2007 and 2012 under MSTIP 3C:

- 185<sup>th</sup> from Kinnaman to TV Hwy. Interim three-lane project with bike and pedestrian facilities.
- Farmington from 170<sup>th</sup> to Kinnaman. Three lanes with bike and pedestrian facilities
- Scholls Ferry Road from Barrows to Teal. Design and possible construction of interim three lane arterial with bike and pedestrian facilities
- Beaverton-Hillsdale/Oleson/Scholls Intersection. Preliminary engineering work only.
- Murray from Hwy 26 to Cornell. Five lanes with bike and pedestrian facilities.
- Walker Road west of Murray. Project to be determined based on results of corridor analysis.

**Relevance to TSP Update:**

- The above mentioned County projects will have an impact on the transportation system within the City.
- The TSP update should include relevant projects in its future analysis.

***Washington Square Regional Center Study- City of Tigard***  
*Spencer & Kupper, September 1999*

One key element of the 2040 Growth Concept is the designation of regional centers- areas containing concentrated commerce, local government and retail services, and housing served by high-quality transit. The Washington Square area is one of three regional centers in Washington County (Beaverton Regional Center and Hillsboro Regional Center) and one of eight in the metropolitan region. Problems identified in the study were related to traffic congestion, sidewalk and bike lanes, transit and future traffic congestion. Some of the recommended transportation improvements from the study are:

- Development of a “Transit Access and Action Plan” in concert with TriMet.
- Improvements to the regional roadway system.
- A bridge over Highway 217 connecting Nimbus Drive to the Mall area.
- A bridge over Highway 217 connecting Locust to Nimbus.
- Extending Nimbus Drive to Greenburg Road.
- A collector system at Oak-Lincoln-Locust.
- Widening Hall Boulevard to three lanes between Oleson Road and the southern boundary of the study area.
- Interchange capacity improvements at Highway 217.
- Bike Paths.
- Commuter Rail.
- People mover.

**Relevance to TSP Update:**

- The TSP update should consider the possibility of additional improvements in the Washington Square Regional Center and their potential impacts on the Beaverton transportation system.

## **State of Oregon**

Documents generated by or for the State of Oregon often deal directly with matters of regional and state concern. The State of Oregon owns five facilities in the City of Beaverton and the standards set forth by the state apply to these facilities. The following documents have been reviewed for this section:

<a href="#"><u>Oregon Highway Plan</u></a> .....	21
<a href="#"><u>ODOT Highway Design Manual</u></a> .....	24

<a href="#"><u>Oregon Access Management Rule (OAR 734-051)</u></a> .....	25
<a href="#"><u>ODOT State Transportation Improvement Program (STIP)</u></a> .....	26
<a href="#"><u>Oregon Bicycle and Pedestrian Plan</u></a> .....	27
<a href="#"><u>2008 Transportation System Planning Guidelines</u></a> .....	28

## **Oregon Highway Plan**

*Amended January, 2006*

The 1999 Oregon Highway Plan (OHP) defines policies and investment strategies for Oregon’s state highway system for the next 20 years by further refining the goals and policies of the Oregon Transportation Plan (OTP). One of the key goals of the OHP is to maintain and improve safe and efficient movement of people and goods, while supporting statewide, regional, and local economic growth and community livability. The implementation of this goal occurs through a number of policies and actions that guide management and investment decisions by defining a classification system for state highways, setting standards for mobility, employing access management techniques, supporting intermodal connections, encouraging public and private partnerships, addressing the relationship between the highway and land development patterns, and recognizing the responsibility to maintain and enhance environmental and scenic resources.

Key OHP policies with bearing on transportation planning and the current Beaverton TSP update include the following.

- Policy 1A- State Highway Classification System
  - Policy 1A calls for the implementation of a classification system for state highways to identify management objectives
    - The five state highways in Beaverton are US 26 (Sunset Highway), OR 8 (Tualatin Valley Highway/Canyon Road), OR 10 (Beaverton Hillsdale Highway), OR 210 (Scholls Ferry Road) and OR 217(Highway 217) and are classified as Statewide and District Highways (See **Table 3**).
- Policy 1B – Land Use and Transportation
  - Policy 1B strives to maintain a balance between serving the function of a main street and a state highway. Key elements from this policy include:
    - Encourage the availability and use of transportation alternatives.
    - State and local government must work collaboratively in planning and decision-making relating to transportation system management.
- Policy 2B – Off-System Improvements
  - The State policy is to provide financial assistance for local road projects when the projects are cost-effective in improving state facility conditions.
- Policy 1F- Highway Mobility Standards

- ODOT has adopted standards for mobility for state facilities through the OHP and the *Highway Design Manual* as amended (HDM) (See **Table 3**). Standards contained in the OHP are used for planning purposes to identify deficiencies, while facilities and improvements are designed to HDM standards.
- Policy 2F: Traffic safety
  - Increase the safety of the state transportation system through engineering, education, enforcement, and emergency services.
- Policy 1G: Major Improvements
  - Policy 1G in the OHP pertains to Major Improvements and states that ODOT places a priority on improving system efficiency and management before adding capacity where improvements are needed.

**Table 3: Applicable 1999 Oregon Highway Plan Mobility Standards**

Facility	Milepost	Highway Classification	National Highway System	Freight Route	Truck Route	Mobility Standard (Volume/Capacity)
Or 8 (Tualatin Valley Highway/Canyon Road)	.05 to 2.85	District	No	No	No	0.99
	2.85 to 2.90	District	Yes	No	No	0.99
	2.90 to 5.84	Statewide	Yes	No	Yes	1.1
Or 10 (Beaverton Hillsdale Highway)	8.68 to 8.74	District	No	No	No	0.99
Or 210 (Scholls Ferry Road)	9.03 to 9.60	District	No	No	No	0.99
Or 217 (Highway 217)	0 to 7.52	Statewide (Expressway)	Yes	Yes	Yes	0.99
US 26 (Sunset Highway)	53.33 to 73.81	Statewide (Expressway)	Yes	Yes	Yes	0.99

- Policy 3A: Access Management
  - Policy 3A sets the foundation for much of ODOT’s access management practices by pairing the classification system defined in Policy 1A with detailed access management objectives and associated access spacing standards.
  - As a Freeway, US 26 (Sunset Highway) and OR 217 (Highway 217) shall maintain the following access management standards:
    - Freeways are multi-lane highways that provide for the most efficient and safe high speed and high volume traffic movement.
    - Interstate Freeways are subject to federal interstate standards as established by the Federal Highway Administration.
    - Freeways are subject to ODOT’s Interchange Policy.

- ODOT owns the access rights and direct access is not allowed. Users may enter or exit the roadway only at interchanges.
    - Preference is given to through traffic.
    - Driveways are not allowed.
  - Traffic signals are not allowed.
  - Parking is prohibited.
  - Opposing travel lanes are separated by a wide median or a physical barrier.
  - Grade separated crossings that do not connect to the freeway are encouraged to meet local transportation needs and to enhance bicycle and pedestrian travel.
  - The primary function is to provide connections and links to major cities, regions of the state, and other states.
- As a Statewide Highway in an urban environment, the segment of OR 8 (Tualatin Valley Highway/Canyon Road) classified as a statewide highway maintains the following access management objectives.
- Provision of high to moderate speed operations with limited interruptions in traffic flow.
  - Direct access to the abutting property is a minor objective.
  - The function of the highway is consistent with the purchasing of access rights. As the opportunity arises, access rights should be purchased with a preference to purchase access rights in full.
  - The primary function of these highways is to provide connections to larger urban areas, ports, and major recreational areas of the state not served by freeways or expressways.
- In addition, OR 210 (Scholls Ferry Road), OR 10 (Beaverton Hillsdale Highway) and parts of OR 8 (Tualatin Valley Highway/Canyon Road) have been classified as a district highway and held to the following access management objectives.
- These highways provide for safe and efficient medium speed and medium- to high-volume traffic movements.
  - Traffic movement demands and access needs are more evenly balanced, with reasonable access to abutting property.
  - The function of the highway supports acquisition of access rights in limited circumstances, recognizing the balanced demands of traffic movement and access needs. Purchase of access rights should be considered where beneficial such as, but not limited to, ensuring safe and efficient operation between connecting highways in interchange areas, protecting resource lands, preserving highway capacity on land adjacent to an urban growth boundary, or ensuring safety on segments with sharp curves, steep grades or restricted sight distance, or those with a history of accidents.
  - The primary function of these highways is to provide connections and links to intercity, inter-community and intracity movements.



**Relevance to TSP Update:**

- The OHP provides policy and investment direction for the State’s facilities (US 26, OR 217, OR 210, OR 10, and OR 8) within the City of Beaverton.
- The TSP update shall incorporate all of the OHP standards and policies listed above since any improvements to State facilities need to meet these standards.

***ODOT Highway Design Manual***

*Revised August, 2008*

The *ODOT Highway Design Manual* contains standards for the design of state highways and various highway elements. Included in the manual are elements to be considered for evaluating the feasibility of construction and determination of right of way needs such as the general alignments, roadway widths, and criteria for installation of turn lanes. In addition, the Highway Design Manual should be used to identify areas where design exceptions may be required.

The *Highway Design Manual* displays the maximum allowable volume to capacity ratios for the 30<sup>th</sup> highest annual hour of traffic for use in the design of highway projects. These standards are to be applied to conditions forecasted to exist 20 years after completion of the proposed improvement. If the applicable mobility standard can not be met, a design exception should be sought. Sections from that table relevant to the study area are presented below in **Table 4**.

***Table 4: Applicable HDM 20 Year Design-Mobility Standards***

Highway Category	MPO - Inside Urban Growth Boundary (Volume/Capacity)
Interstate Highways and Statewide Expressways (NHS) (US 26 and OR 217)	0.75
Statewide (NHS/ Freight Route) (OR 8)	0.75
District / Local Interest Road (OR 210, OR 10, and OR 8)	0.85

**Relevance to TSP Update:**

- The mobility standards in the 2003 *Highway Design Manual* are applied to highway construction projects to ensure that new projects have a minimum of 20 year design life.
- These standards would apply to new work on US26, OR 217, OR 210, OR 10 and OR 8.

## ***Oregon Access Management Rule (OAR 734-051)***

*January, 2007*

ODOT has adopted the identified administrative rules to establish procedures and criteria used to govern highway approaches, access control, spacing standards, medians and restriction of turning movements in compliance with statewide planning goals and in a manner compatible with acknowledged comprehensive plans and consistent with Oregon Revised Statutes, Oregon Administrative Rules, and the *1999 Oregon Highway Plan*. Any new street or driveway connections, as well as any changes to existing street or driveway connections to state highways within the city must be found to be in compliance with these rules by ODOT.

OAR 734-051, referred to as “Division 51” was crafted for the purpose of implementing the policies in the OHP regarding access management, and therefore, was founded upon the same highway classification system, management objectives, and spacing standards as previously described as being a part of the OHP. In addition, Division 51 provides detailed procedures for approach permitting and decision-making regarding the approval or denial of approaches, including requirements for deviations and a defined appeal procedure.

These rules enable the State to set policy and direct location and spacing of intersections and approaches on state highways, ensuring the relevance of the functional classification system and preserving the efficient operation of state routes. Regulating access can:

- Protect resource lands
- Preserve highway capacity
- Ensure safety for segments of state routes with sharp curves, steep grades or obstructed sight distance.

The access management standards adopted by ODOT are summarized in ***Table 5***.

***Table 5: ODOT Access Management Standards***

Facility	Posted Speed (MPH)					Interchange
	>55	50	40 & 45	30 & 35	<25	
Statewide Highway (feet)	1,320	1,100	990	720	520	1.9 miles
Statewide Expressway (feet)	2,640	2,640	2,640			1.9 miles
Statewide Highway(inside STA) (feet)				*	*	1.9 miles
District Highway (feet)	700	550	500	350	350	1.9 miles
District Highway(inside STA) (feet)				*	*	1.9 miles

\* Minimum access management spacing for public road approaches is the existing city block spacing or the city block spacing as identified in the local comprehensive plan. Public road connections are preferred over private driveways and in STAs driveways are discouraged. However, where driveways are allowed and where land use patterns permit, the minimum access management spacing for driveways is 175 feet (55 meters) or mid-block if the current city block is less than 350 feet (110 meters).

**Relevance to TSP Update:**

- These standards will be used in the TSP update to establish a connectivity plan, verify access spacing for any proposed highway modifications, and analyze current access conditions on congested state highways.
- These standards will be applied to all rights of way under the State's jurisdiction in the City of Beaverton.

***ODOT State Transportation Improvement Program (STIP)***

*Amended September, 2008*

The Statewide Transportation Improvement Program (STIP) is Oregon's four-year transportation capital improvement program. This document identifies the funding for and scheduling of transportation projects and programs. The STIP includes projects on the federal, state, city, and county transportation systems, multimodal projects (highway, passenger rail, freight, public transit, bicycle and pedestrian), and projects in the National Parks, National Forests, and Indian tribal lands. Oregon's STIP covers a four-year construction period, but is updated every two years in accordance with federal requirements. The currently approved program is the *2008-2011 STIP*.

The approved *2008-2011 STIP* was reviewed for projects that should be considered for complimentary or conflicting traffic impacts. Projects included in the 2008-2011 Approved STIP that are located in Beaverton include:

- Hwy 217 (Beaverton Hillsdale Hwy to SW Allen Blvd) - Preliminary design and engineering. Key Number 15604; Total cost \$416,000.
- OR 217 (Sunset Hwy - Tualatin Valley Hwy) - Widen highway and structures, complete ramp work. Key Number 06025; Total cost \$37,877,000.
- US26 (NW 185th Ave - Cornell Road) - Widen US26 from OR217 interchange to Cornelius Pass exit. Key Number 14070; Total cost \$18,512,000.
- US26 (Sunset Hwy, North Plains - Cornell Road) - Grind and inlay. Key Number 13707; Total cost \$9,899,000.
- Westside Trail Master Plan (Willamette to Tualatin) - Required planning prior to engineering and construction phases. Key Number 15586; Total cost \$335,000.
- BVTN Powerline trail (Merlo LRT Station-Schuepbach Park) - Construct Multi-Use Trail. Key Number 13526; Total cost \$1,639,000.
- NW Cornell Rd (NW Evergreen Parkway-NW 158<sup>th</sup> Ave) - Widen roadway to 4 lanes with left turn lanes, median islands, sidewalks & bikelanes. Key Number 15324; Total cost \$10,608,000.

- OR10 (Oleson/Scholls Ferry Rd intersection) - Improvements to hazardous intersection. Key Number 14389; Total cost \$6,688,000.
- Rose Biggi Ave (SW Hall Blvd to SW Crescent St) - Extend Rose Biggi Ave- PE Phase only. Key Number 14400; Total cost \$647,000.
- Fanno Creek Trail (Hall Boulevard Crossing)- Project Development Work Prior to construction phase. Key Number 15588; Total Cost \$401,000.

**Relevance to TSP Update:**

- Projects included in the STIP are funded and will have an impact on the transportation system within the City.
- The TSP update should include funded projects in its future projects list and identify STIP funding.

***Oregon Bicycle and Pedestrian Plan***

*Adopted June, 1995*

The provision of safe and accessible bicycling and walking facilities in an effort to encourage increased levels of bicycling and walking is the goal of the *Oregon Bicycle and Pedestrian Plan*. The Plan provides actions that will assist local jurisdictions in understanding the principals and policies that ODOT follows in providing bike and walkways along state highways. In order to reach the plan's objectives, the strategies for system design are outlined, including:

- Providing bikeway and walkway systems that are integrated with other transportation systems;
- Providing a safe and accessible biking and walking environment; and
- Development of education programs that improve bicycle and pedestrian safety.

The document includes two sections, including the *Policy & Action Plan* and *Bikeway & Walkway Planning Design, Maintenance & Safety*. The first section contains background information, legal mandates and current conditions, goals, actions, and implementation strategies ODOT proposes to improve bicycle and pedestrian transportation. The second section assists ODOT, cities and counties in designing, constructing and maintaining pedestrian and bicycle facilities. Design standards are recommended and information on safety is provided.

**Relevance to TSP Update:**

- The TSP update needs to ensure that the City's bicycle and pedestrian plans are up-to-date and in line with those set forth by the *Oregon Bicycle and Pedestrian Plan*.
- Transportation alternatives developed through the study process will need to provide for bicycle and pedestrian travel as recommended in this plan.

## ***2008 Transportation System Planning Guidelines***

*May, 2008*

Transportation System Planning Guidelines 2008 (TSP Guidelines) is intended to assist local jurisdictions in the preparation and updating of transportation system plans. The guidelines help jurisdictions develop plans that meet local needs and comply with state rules, requirements and regulations. TSPs adopted after January 1, 2000 must also be consistent with the *Oregon Highway Plan*. The guideline document is designed to provide assistance to local jurisdictions in the preparation and update of TSPs to comply with requirements associated with:

- *Transportation Planning Rule 1999, OAR 660*
- *Access Management Rules, 2000 OAR 734*
- *Oregon Public Transportation Plan, 2006*
- *Oregon Highway Plan, 1999*
- *Oregon Aviation Plan, 2000*
- *Executive Order 12898 on Environmental Justice for Minority and Low Income*
- *Populations: USDOT Order 56102 and FHWA Order 6640.23.*
- *Executive Order EO-23 on Quality Development*
- *Executive Order EO-00-07 on Sustainability*

### **Relevance to TSP Update:**

- The Beaverton TSP update will include responses to transportation, land use, environmental, economic and social changes that have occurred in the community since the TSP was last prepared.
- The update will also attempt to anticipate emerging issues.

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