

# MEMORANDUM #2

**DATE:** October 13, 2015

**TO:** Warrenton TSP Project Management Team

**FROM:** Ray Delahanty, AICP, DKS Associates  
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**SUBJECT:** **Warrenton Transportation System Plan Update  
Background Document Review**

P14180-008

The purpose of this memorandum is to summarize a review of planning documents, policies, and regulations applicable to the Warrenton Transportation System Plan (TSP) update. The City's current TSP will serve as the foundation for the update process, to which new information obtained from system analysis and stakeholder input will be applied to address changing transportation needs through the year 2040. As new strategies for addressing transportation needs are proposed, compliance and coordination with the plans, policies, and regulations described herein will be required. For the purposes of this memo, the roadway identification is as follows:

- Fort Stevens Highway 104 is used to reference Highway 104, which is also known as S Main Ave in downtown Warrenton
- US 101 Business is used to reference the Warrenton-Astoria Highway that runs between Fort Stevens Highway 104 and the Astoria Regional Airport. US 101 Business is also known as the Warrenton-Astoria Highway and Marlin Avenue
- 105 AA Connect is used to reference E Harbor Street (between US 101 Business and US 101)
- OR-104S (Fort Stevens Spur) is used to reference the Fort Stevens Spur between Fort Stevens Highway 104 and US 101
- 105 AC Connect is used to reference the Fort Stevens Spur located between US 101 and US 101 Business

## Summary of Key Background Plan Outcomes

The following table summarizes the key background plan outcomes that were identified in the review of the background documents that follow.

Key Issue(s)
Motor vehicle capacity improvements at US 101/SE Dolphin Avenue, US 101/US101 Business, Old Youngs Bay Bridge, 105 AA Connect/US101 Business, Fort Stevens Highway 104/US 101 Business, and Fort Stevens Highway 104/US 101
Pedestrian and bicyclist safety along and across Highway 101, US 101 Business, Fort Stevens Highway 104, and 105 AA Connect. Construct sidewalks, bike lanes, and crosswalks throughout the City
Improve pedestrian and bicycle access on New Youngs Bay Bridge and Old Youngs Bay Bridge
Develop a truck circulation plan to limit number of trucks traveling through downtown

## City/Local Plans, Policies, and Regulations

The following sections summarize local plans, policies, and regulations.

### City of Warrenton Comprehensive Plan – 2011

Article 8, Transportation, in the Warrenton Comprehensive Plan includes a summary of the last TSP update process and the objectives and content of the adopted TSP. The 2004 TSP and the 2009 TSP revision were adopted as addenda to the Comprehensive Plan and Article 8 clarifies that, where goals or policies within the Comprehensive Plan contradict or inconsistent with the TSP, the standards of the TSP prevail. Article 8 includes the following transportation goal:

*Encourage and help provide a safe, convenient, well-maintained and economic transportation system that recognizes the relationship of the system to other land uses and takes into account the value of various modes of transportation.*

Many of the transportation policies in the Comprehensive Plan refer to the standards and recommendations in the adopted TSP. Policies that directly reference the TSP include those related to street classification and design, parking, and financing. Policies under Section 8.350 address multi-modal transportation and, among other things, express specific community objectives related to the Astoria Regional Airport, boating and shipping activities, land development along the Skipanon Channel, pedestrian walkways, and the bicycle system.

The policies in the adopted Comprehensive Plan will inform the development of the TSP update project goals and objectives (Technical Memorandum #4). The Comprehensive Plan transportation policies will be updated to reflect current community objectives, expected transportation conditions, and the standards and recommendations of the updated TSP.

## City of Warrenton Transportation System Plan – 2004

The current City of Warrenton Transportation System Plan (TSP) was adopted in 2004. The plan discusses key transportation issues being faced by the city, establishes evaluation criteria to determine a preferred alternative, and identifies additional improvements needed. The plan assumed that the city would grow from its 2002 population of 4,280 residents to 5,741 residents by the year 2020. The goals of the TSP included the following:

- Develop a multimodal transportation system that serves the travel needs of residents, businesses, visitors, and freight transport
- Provide a transportation system that balances transportation system needs with the community's desire to maintain a pleasant, economically viable city.
- Maintain a TSP that is consistent with the goals and objectives of Warrenton, Clatsop County, and the State
- Work to improve cost-effective and safe public transportation through and within Warrenton
- Provide for an interconnected system of pedestrian and bicycle facilities in Warrenton to serve commuters and recreational users
- Provide a transportation system that serves the needs of all members of the community
- Provide a transportation system that balances transportation services with the need to protect the environment and significant natural features
- Work to ensure that development does not preclude the construction of identified future transportation improvements and that development mitigates the transportation impacts it generates when appropriate.
- Provide a transportation system that has sufficient capacity to serve the needs of all users
- Provide reasonable and effective funding mechanisms for City transportation improvements identified in the TSP
- Provide a transportation system that maintains adequate levels of safety for all users

### Key Issues

Some of the main issues raised in the previous TSP that are still outstanding or have only partially been addressed are listed below. The current TSP update will determine how to address these outstanding concerns:

- Traffic volume levels were expected to cause operations at nine intersections to not meet mobility standards by 2022: US 101/105 AA Connect, US 101/SE Neptune Ave, US 101/US 101 Business, Fort Stevens Highway 104/US 101 Business, US 101/Fort Stevens Highway 104/Perkins Lane, US 101 Business/105 AA Connect, US 101/OR-104 S (Fort Stevens Spur), US 101/SE Dolphin Avenue, 105 AA Connect/SE Neptune Avenue. Several of these are unsignalized intersections that were considered likely to meet traffic signal warrants.
- Motor vehicle safety concerns due high crash rates or skewed geometry in growing areas, such as US 101/US 101 Business, Fort Stevens Highway 104/7<sup>th</sup> Ave (Hammond), US 101/SE Dolphin Avenue, US 101/OR-104S (Fort Stevens Highway Spur), DeLaura Beach Lane/Ridge Road
- Bicycle and pedestrian safety on the Old Youngs Bay and New Youngs Bay Bridges
- Pedestrian safety and accessibility along and across Highway 101, Fort Stevens Highway 104, US 101 Business, DeLaura Beach Lane, SW 9<sup>th</sup> Street, and SE Neptune Avenue

## Key Standards

- Access spacing guidelines in the Warrenton Development Code require minimum spacing of 25 feet on local streets, and follow ODOT guidelines for arterials and collectors
- Traffic signal spacing follows ODOT guidelines
- The City of Warrenton does not have an adopted mobility standard for intersections under City jurisdiction. The Warrenton Development Code states that facilities shall be managed to maintain adequate performance standards

## Recommended Improvements

Improvements were recommended to ensure acceptable future traffic operations through the 2022 planning horizon year. Note that the previous Warrenton TSP included an Astoria-Warrenton Parkway and Astoria Bypass project via Highway 105 and US 101 in Warrenton. The current TSP update will assume that the bypass will not be constructed within the planning horizon year of 2022 and will recommend improvements without the bypass. The current TSP update will, however, determine how to address other outstanding improvements recommended in the prior TSP, shown later in this document under the “Key Projects” section.

## Clatsop County Transportation System Plan

The Clatsop County Transportation System Plan (TSP) was adopted in 2003, and is currently being updated. The TSP is the County’s long-range plan for developing and managing its transportation system and providing for the transportation needs outside of incorporated city boundaries. The 2003 plan discusses key transportation issues being faced by the county, establishes evaluation criteria to determine a preferred alternative, and identifies additional improvements needed.

The TSP included the following goals:

- |                                     |                          |
|-------------------------------------|--------------------------|
| ■ Mobility                          | ■ Environment            |
| ■ Livability                        | ■ System Preservation    |
| ■ Coordination                      | ■ Capacity               |
| ■ Pedestrian and Bicycle Facilities | ■ Transportation Funding |

Clatsop County facilities located in the City of Warrenton include the following:

- Ridge Road (between Pacific Drive and US 101)
- Lake Drive
- DeLaura Beach Lane
- Whiskey Road
- Ensign Lane (between US 101 and Business 101)
- SE 19<sup>th</sup> Street
- SE Airport Lane

Clatsop County uses the ODOT mobility target for district/local interest roads under county jurisdiction. The mobility targets require operation with a v/c of 0.75 or better on rural lands outside of Urban Growth Boundaries, 0.80 or better in unincorporated communities outside of Urban Growth Boundaries, 0.95 or better along streets with posted speeds less than 35 mph inside Urban Growth Boundaries, or 0.90 or better along streets with posted speeds greater than 35 mph inside Urban Growth Boundaries.

When the new Clatsop County Transportation System Plan is adopted, the mobility targets will be updated. The following standards would be evaluated for the highest one-hour period on an average weekday (typically, but not always, the evening peak period between 4 p.m. and 6 p.m. during the spring or fall). For signalized, all-way stop, or roundabout controlled intersections, the intersection should meet Level of Service (LOS) “E” or better and a volume to capacity (v/c) ratio not higher than 0.85. For two-way stop or yield controlled intersections, all movements serving more than 20 vehicles should meet LOS “E” or better and a v/c ratio not higher than 0.90. LOS “F” is acceptable at movements serving no more than 20 vehicles during the peak hour.

## **Recommended Improvements**

The current Warrenton TSP update will determine how to address the recommended Clatsop County improvements, shown later in this document under the “Key Projects” section.

## **Hammond Marina Master Plan Update – 2005**

The Hammond Marina Master Plan update provides a current plan for improvement of the Hammond Marina, located at the northwest corner of the City of Warrenton. It covers land use and proposed a circulation and parking plan surrounding the existing marina, as well as a plan to realign the channel for optimum use of the basin. The original Hammond Marina Master Plan, completed in 1991, also proposed a circulation and parking plan. If the recommended full development of the Hammond Marina Master Plan is completed, Lake Drive to Seafarer’s Park would have a 241 stall parking lot located on the east side of the road, and a 30,000 square foot multi-purpose building on the west side of the road with a smaller 105 stall parking lot located on the southwest side of Lake Drive. The current TSP update will determine how to address the recommendations from the plan, shown later in this document under the “Key Projects” list.

## **Downtown and Marina Master Plans – 2010**

The Warrenton Downtown and Marina Master Plans document contains goals developed for downtown Warrenton and the adjacent Warrenton marina, including design guidelines for both districts. The five key ideas for improving the downtown area are to: focus on the natural setting; connect to the waterfront, improve bicycle and pedestrian circulation, create a green downtown, and have the city lead by example. The major elements of the Downtown Master Plan contain proposed streetscape and intersection improvements for key roadways (US 101 Business and Fort Stevens Highway 104), strategies to strengthen the street grid, and zoning code adjustments to encourage redevelopment. The Downtown Plan includes short-, mid-, and long-term action plan items and cost estimates. Parks and open spaces, including a public plaza and improvements to Skipanon Park, are incorporated into the master plan. The Marina Master Plan includes a considerable amount of redevelopment of upland areas associated with the Marina and proposes parking, street, and access improvements. The document acknowledges that a traffic study will likely be required to evaluate traffic generation by the proposed changes in the plan and that ODOT will need to be consulted

regarding existing and proposed approaches to the highway. The current TSP update will determine how to address the recommendations from the plan, shown later in this document under the “Key Projects” list.

## **Warrenton Parks Master Plan – 2010**

The Warrenton Parks Master Plan includes a long-term vision for the Warrenton Parks System and is intended to guide development of the city parks system from 2011 until 2030. The plan provides an existing inventory, identifies current and future park needs, includes a capital improvement plan, creates a strategy for short and long-term land acquisition, and identifies potential funding techniques and sources. The plan recommends that Skipanon River Park, located downtown, construct parking, access, and circulation improvements and that Tansy Point construct parking improvements and build a trail connection between Tansy Point and Carruthers Park.

## **Warrenton Trails Master Plan – 2008**

The Warrenton Trails Master Plan was developed in order to plan a network of trails that links destinations, natural features, historic landmarks, community facilities, other transportation facilities, neighborhoods, businesses, regional trails, adjacent communities, and state and federal parks. The overall goals of the Warrenton Trails Master Plan are to provide connections for residents to recreate, increase access to the trail system, and encourage trail use around schools.

The plan includes several new trail connections. These include Beaver Trail, which will run along Iredale Street and former logging roads between the Hammond Post Office and 11<sup>th</sup> Street, bringing trail access to the Warrenton Soccer Fields. Creekside Trail will bridge King Street and 105 AA Connect to 14<sup>th</sup>, and will connect the Eastern Skipanon River Trail Spur at Fort Stevens Highway 104 along Ensign Lane and across US 101.

## **Warrenton Urban Renewal District Plan - 2007**

The Warrenton Urban Renewal District Plan outlines infrastructure upgrades for the improvement and redevelopment of Warrenton. The main goal of this plan is to improve economic health and appearance of the area by providing for more attractive shopping, dining, living, working, and recreating.

The plan outlines goals for developing the downtown area through bike and pedestrian trails with portals and trailheads, focusing on connectivity. The plan states that during the second phase of the Warrenton Urban Renewal District Plan, \$25,000 is to be used for tourist and bicycle directional signage. For the third phase, it provides \$200,000 for restrooms and \$50,000 for additional trailheads and directional/interpretive signage.

## **Greater Astoria – Warrenton Area Regional Transportation System Refinement Plan – 2007**

The Greater Astoria-Warrenton Area Regional Transportation System Refinement Plan identifies future regional transportation needs in the City of Astoria, the City of Warrenton, and western Clatsop County and recommends a set of improvements to meet those needs over the short (0-10 years), medium (10-20 years), and long term (20+ years). The current TSP update will determine how to address the recommendations from the plan, shown later in this document under the “Key Projects” section.

## Sunset Empire Transit District Long Range Transportation Plan

The Sunset Empire Transit District (SETD) is currently developing a long range transportation plan. Several goals include increasing ridership, decreasing headways, adding bus pullouts on US 101, adding bus shelters and kiosks, and improving inter-city connections to Columbia County, Kelso/Longview, and Portland.

### City of Warrenton Development Code

Warrenton's Development Code, Title 16 of the City's Municipal Code, implements the Comprehensive Plan by providing descriptions of land use designations, allowable uses within those districts, and development regulations. In addition to residential, commercial, and industrial districts, the City has water-dependent and aquatic development zones, as well as a number of overlay zones focused on the protection of the Astoria Regional Airport airspace and natural resource areas (floodplain, beaches and dunes, compressible soils, etc.). The Zoning Map shows the location of land use designations and helps direct the type, location, and density of land uses in the city.

The code chapters and sections below are relevant to the development of transportation facilities and system development in Warrenton.

**16.12.010 Definitions.** The Development Code has defined a number of transportation-related terms, including Level of Service, Pathway/Walkway/Access Way, and Transportation Mode. Transportation Facilities are described as the “physical improvements used to move people and goods from one place to another (e.g., streets, sidewalks, pathways, bike lanes, airports, transit stations and bus stops, etc.).”

**16.20.040 Review of Transportation Facilities and Improvements for Compliance with Land Use Regulations.** This section establishes that transportation facilities and improvements meeting one or more of the definitions for transportation facilities and improvements in Chapter 16.12 are permitted outright in most of the City's land use districts.

**Chapter 16.120 Access and Circulation** includes sections for both vehicular and pedestrian circulation. Vehicular Access and Circulation requires permits for access to public streets and provides options for meeting access spacing requirements. Additional requirements cover shared driveways, connectivity and block formation, vision clearance fire access and circulation, and other topics relating to vehicular access. All developments, except single-family detached housing, duplexes, or triplexes on individual lots, must provide a continuous pedestrian and/or multi-use pathway system, the standards for which are found in Section 16.120.030.

**Chapter 16.128 Vehicle and Bicycle Parking** includes the City's parking standards. Providing bicycle parking is required for all uses with more than 10 vehicle parking spaces; multi-family uses with four or more dwelling units must provide at least one sheltered bicycle parking space for each dwelling unit.

**16.136.020 Transportation Standards** includes the City's minimum street rights-of-way and required improvements by street type (see Table 1 below and Table 16.136.010 in the Development Code).

**Table I**  
**City of Warrenton Street Design Standards**

Type of Street	Average Daily Trips (ADT)	Right-of-Way Width	Curb-to-Curb Pavement Width	Motor Vehicle Travel Lanes <sup>4</sup>	Median/Flex Lane <sup>5</sup>	Bike Lanes or On-Street Parking (both sides)	Curb	Planting Strip <sup>5</sup>	Sidewalks
<i>Arterial Roads</i>									
<b>4-Lane Arterial</b>	Varies	80 - 102 ft.	64 - 78 ft.	12 ft. <sup>4</sup>	14 ft.	8 ft.	Yes	6 ft.	6 ft.
<b>2-Lane Arterial</b>	Varies	80 ft.	40 - 54 ft.	12 ft. <sup>4</sup>	14 ft.	8 ft.	Yes	6 ft.	6 ft.
<i>Collector Roads</i>									
<b>Collector Road</b>	Varies	60 - 64 ft.	36 - 40 ft.	12 ft. <sup>4</sup>	None	6-8 ft.	Yes	6 ft.	6 ft.
<i>Local Roads</i>									
<b>Local Road</b>	Varies	50 - 60 ft.	28 - 36 ft.	10-12 ft.	None	8 ft. parking (on one or both sides <sup>1</sup> )	Yes (on one or both sides)	5 ft.	5 ft. <sup>3</sup>
<b>Alternative Local Road<sup>2</sup></b>	< 250	50 ft.	20 - 28 ft. (no curbs required)	10 ft.	None	None <sup>1</sup>	None	5 ft.	None
<b>Alleys</b>	N/A	12 - 24 ft.	12 - 24 ft.	N/A	N/A	None	None	None	None
<b>Multi-Use Paths</b>	N/A	8 - 16 ft.	8 - 16 ft.	N/A	N/A	None	None	None	None

<sup>1</sup> Bike lanes are generally not needed on low volume (less than 3,000 ADT) and/or low travel speed (less than 35 mph) roads.

<sup>2</sup> The alternative local road standard may be used when approved by the City of Warrenton. The standard is intended to apply under the following circumstances:

- The local road will serve 18 or fewer dwelling units upon buildout of adjacent property.
- The ADT volume of the road is less than 250 vehicles per day.
- Significant topographical or environmental constraints are present.
- Use of the alternative local road standard will not create gaps in connectivity or roadway standards with adjacent roadway sections (i.e. sidewalk, parking, travel lane widths).
- The City-appointed engineer and Emergency Service Providers have reviewed and accepted usage of the alternative local roadway standard.

<sup>3</sup> Sidewalks are required on all local roads in high-density residential and commercial zones unless exempted by the City-appointed engineer or Planning Commission.

<sup>4</sup> Where parking is constructed next to a travel lane, the travel lane shall be increased to a width of 14 feet to function as a shared roadway and accommodate bicycles.

<sup>5</sup> Footnote indicates that these features are optional. Flex lanes would provide for traffic flow in one direction or another depending upon the specific traffic patterns and demands for an area. Flex lanes could be used for transit routes or emergencies, and would provide extra right-of-way width for future rail or transit. Appropriate safety measures would need to be installed in conjunction with flex lanes.

This code section also refers to TSP Figures 5-3, 5-4, and 5-5 for local, collector and arterial roads cross sections. Requirements include submitting a street plan for future extensions as part of a subdivision application, local street spacing, and limitations on cul-de-sacs and dead-end streets.

As part of the TSP update the street functional classifications and cross-section standards will be reviewed and potentially revised to ensure that they meet community needs. Where modifications are proposed, the Development Code standards will need to be updated for consistency with the updated TSP. In addition, the Development Code contains a number of other transportation-related development requirements (e.g., Traffic Impact Study (TIS) requirements in Chapter 16.256). Amendments to the City's development requirements may be needed in order to implement the recommendations of the updated TSP and to better comply with the State's Transportation Planning Rule (see Technical Memorandum #3, Regulatory Review).

## City of Warrenton Capital Improvement Plan

The City of Warrenton has a Capital Improvement Plan (CIP) that outlines specific projects that will be funded through 2021.

### 2015-16 Fiscal Year Projects:

- DeLaura Beach: \$120,000 to build a multi-use trail along SW DeLaura Beach between Ridge Road and Fort Stevens State Park
- Hammond Post Office: \$100,000 to install sidewalk and crosswalk improvements by the Hammond Post Office
- NW Cedar Court Improvement Project: \$137,000 to rebuild NW Cedar Court south of Warrenton Drive and upgrade water and sewer mains
- Chokeberry Avenue: \$90,000 to improve access right-of-way between SE 19<sup>th</sup> Street and Food Bank
- NW 13<sup>th</sup> Street and Warrenton Drive Trail Improvements: \$141,000 to provide a multi-use trail along NW 13<sup>th</sup> Street between Warrenton Drive and the Riverfront Trail
- SW 3<sup>rd</sup> Street Improvement Project: \$87,000 to improve roadway and drainage on SW 3<sup>rd</sup> Street between SW Main Ct and Fort Stevens Highway 104
- N Main/NW 7<sup>th</sup> Place Improvements: \$391,600 to upgrade the water system and repair and rebuild N Main St and NE 7<sup>th</sup> St
- \$550,650 in unallocated SDC revenue funded improvements

### 2016-17

- 105 AA Connect (East Harbor Street) sidewalks: \$100,000 to install sidewalk improvements along ODOT rights of way, including 105 AA Connect (East Harbor Drive) to connect downtown Warrenton to US 101
- SE 2<sup>nd</sup> Street: \$325,000 to rebuild SE 2<sup>nd</sup> Street east of US 101 Business to the old CostCo site
- SW 4<sup>th</sup> Street: \$118,000 to improve SW 4<sup>th</sup> Street between Fort Stevens Highway 104 and SW Alder Court
- NE Skipanon Improvement Project: \$143,000 to improve NE Skipanon Drive north of Fort Stevens Highway 104
- 4<sup>th</sup> Avenue Improvement Project: \$195,000 to rebuild Fourth Avenue between Lake and Jetty
- SW 2<sup>nd</sup> Street: \$48,000 to construct new roadway for SW 2<sup>nd</sup> Street between Elm and Gardenia

**2017-18**

- Quick Fix Funds: \$100,000 to install sidewalk improvements along ODOT rights of way
- SW 2<sup>nd</sup> St: \$267,000 to construct new roadway for SW 2<sup>nd</sup> Street between Elm and Gardenia
- SE Anchor Storm Improvements: \$354,000 to install new storm drain on SE Anchor south of 1<sup>st</sup> St, waterlines on Anchor Ave/3<sup>rd</sup> Street, and rebuild roadway
- SW Alder Ave Reconstruction Project: \$185,000 to rebuild SW Alder Ave with curbs from 1<sup>st</sup> St to 2<sup>nd</sup> St and grind and overlay from 2<sup>nd</sup> St to 3<sup>rd</sup> St

**2018-19**

- Quick Fix Funds: \$100,000 to install sidewalk improvements along ODOT rights of way
- SE Main Court Reconstruction Project: \$107,000 to rebuild SE Main Court between SE 9<sup>th</sup> St and SE 11<sup>th</sup> St

**2019-20**

- Quick Fix Funds: \$100,000 to install sidewalk improvements along ODOT rights of way
- SE 2<sup>nd</sup> St Improvement Project: \$281,000 to rebuild SE 2<sup>nd</sup> St between Fort Stevens Highway 104 and SE Anchor
- Fort Stevens Highway 104 and SW 14<sup>th</sup> Place sidewalks: \$24,000 to provide sidewalks on Fort Stevens Highway 104 and SW 14<sup>th</sup> Place

**2020-21**

- Quick Fix Funds: \$100,000 to install sidewalk improvements along ODOT rights of way

## City transportation projects constructed since 2004

Major transportation projects constructed in the City since 2004 include the following:

- Ensign Lane Improvements. This project included installing a traffic signal at US 101/SE Ensign Lane and constructing a new roadway between OR-104S (Fort Stevens Spur) and US 101 Business
- US 101 Business Improvements: This project included realigning the US 101/US 101 Business intersection and installing a traffic signal
- New Neighborhood Construction: Roads were built for new residential construction: Salal Loop, SE Willow Drive, SE Azalea Ave, SE Huckleberry Ave, and the SW Juniper Ave/SW Gardenia Ave area

## Transportation Funding

The City of Warrenton currently has the following transportation funding mechanisms:

Funding Sources (Past 5 Years)					
	2011-12	2012-13	2013-14	2014-15	2015-16
<b>State Tax Street Funds</b>	\$1,499,595	\$1,510,465	\$1,719,455	\$2,013,543	\$1,741,391
<b>Streets SDC Fund</b>	N/A	\$126,985	\$167,559	\$71,698	\$550,650

The State Tax Street Funds are provided by the Oregon Department of Transportation, the State Highway Trust Fund, and the City 0.03 cent fuel tax. One percent of all gas tax receipts are set aside for bicycle lanes and pedestrian paths. The City fuel tax will net approximately \$288,000 in fiscal year 2015-16. The City fuel tax is used to pay for rebuilding and overlaying city streets, with the remaining balance going towards street maintenance, street repair, and street lighting.

The Streets SDC Fund may be used for transportation improvements “including but not limited to streets, sidewalks, bike paths, street lights, trees, mass public transportation, vehicle parking, and bridges.”<sup>1</sup>

The proposed expenditures for 2015-16 include the following:

- Personnel Services - \$75,643
- Materials and Services - \$374,033
- Capital Outlay - \$1,488,976
- Contingency - \$89,535

The total expected funding for 2015-16 is \$2,292,041 and the total expected expenditures are \$2,026,187, leaving an expected balance of \$265,854.

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<sup>1</sup> City of Warrenton. *Draft Report for System Development Charges*. Prepared by FCS Group. December, 2011.

## State Plans, Policies, and Regulations

The following sections summarize state plans, policies, and regulations.

### Oregon Transportation System Plan Guidelines

ODOT's Transportation System Plan Guidelines is comprised of four chapters: an overview of transportation system planning (Chapter 1); guidance for the preparation of a jurisdiction's first TSP and of TSP updates (Chapters 2 and 3); and policy guidance on transportation and land use issues in a series of technical appendices (Chapter 4). The 2008 Guidelines differ from the 2001 Guidelines in that they focus more on TSP updates, make stronger connections between local transportation needs and the availability of transportation funding, and provide more guidance related to mobility standards, the OTP, and project financing in the technical appendices, in addition to new electronic links throughout the document for easy access to additional resources.

The chapter on TSP updates is divided into three steps: determining if an update is needed and scoping the update project; preparing an assessment; and addressing recent regulatory and policy changes, the latter two of which are most applicable to the Warrenton TSP update.

The TSP Guidelines direct TSP updates to address recent policy and regulatory changes, and calls out recent changes to the Oregon Transportation Plan (OTP), The Oregon Highway Plan (OHP), and the Transportation Planning Rule (TPR). Since adoption of the 2004 Warrenton TSP, the OTP was updated (2006) to emphasize maintaining assets in place, optimizing existing system performance through technology and better system integration, creating sustainable funding, and investing in strategic capacity enhancements. Policy 1F (Mobility Standards) of the OHP was amended to allow for the adoption of alternative mobility standards where "practical difficulties make conformance with the highway mobility standards infeasible," as was Appendix C (Access Management Spacing Standards) to be consistent with amendments to the Access Management Rule, OAR 734-051. Amendments to the TPR are described in the section of this memorandum that reviews the TPR.

### Oregon Transportation Plan

An update of the Oregon Transportation Plan (OTP) was adopted by the Oregon Transportation Commission (OTC) in 2006. The OTP is a comprehensive plan that addresses the future transportation needs of the State of Oregon through the year 2030. It considers all modes of transportation, including airports, bicycle and pedestrian facilities, highways and roadways, pipelines, ports and waterway facilities, public transportation, and railroads.

The following seven goals with associated policies and strategies are provided in the plan to address the core challenges and opportunities facing transportation in Oregon:

- Goal 1 – Mobility and Accessibility
- Goal 2 – Management of the System
- Goal 3 – Economic Vitality
- Goal 4 – Sustainability
- Goal 5 – Safety and Security
- Goal 6 – Funding the Transportation System
- Goal 7 – Coordination, Communication and Cooperation.

There are also six key initiatives identified to reflect the desired direction of the plan and to frame the plan implementation. These initiatives are:

1. Maintain the existing transportation system to maximize the value of the assets. If funds are not available to maintain the system, develop a triage method for investing available funds.
2. Optimize system capacity and safety through information technology and other methods.
3. Integrate transportation, land use, economic development and the environment.
4. Integrate the transportation system across jurisdictions, ownerships and modes.
5. Create a sustainable funding plan for Oregon transportation.
6. Invest strategically in capacity enhancements.

The TSP update will be developed to be consistent with the goals and policies of the OTP. It will emphasize, as the updated OTP has, maintaining and building upon existing investments and using system management, technology, and transportation options to maximize the existing state highway system in the city.

## Oregon Highway Plan

The Oregon Highway Plan (OHP) was originally adopted in 1999 and was reaffirmed as a modal element of the 2006 Oregon Transportation Plan (OTP). The OHP defines policies and investment strategies for Oregon's state highway system. The plan contains three elements: a vision element that describes the broad goal for how the highway system should look in 20 years; a policy element that contains goals, policies, and actions to be followed by state, regional, and local jurisdictions; and a system element that includes an analysis of needs, revenues, and performance measures.

The OHP addresses the following issues:

- Efficient management of the system to increase safety, preserve the system, and extend its capacity
- Increased partnerships, particularly with regional and local governments
- Links between land use and transportation
- Access management
- Links with other transportation modes
- Environmental and scenic resources

The policy element contains several policies and actions that are particularly relevant to the Warrenton TSP, described in the following subsections.

### Policy 1A (State Highway Classification System)

Action 1A.1 categorizes state highways for planning and management decisions. US 101 (No. 9) in Warrenton is classified as a Statewide Highway, part of the National Highway System (NHS), a Truck Route, and a Scenic Byway. US 101 Business (No. 105), Fort Stevens Highway 104, and OR-104S (Fort Stevens Spur) are classified as District Highways with no other designations.

According to OHP policy, statewide highways are intended to provide inter-urban and inter-regional mobility and connections to larger urban areas, ports and major recreational areas not directly served by Interstate highways. District highways are intended to provide connections between small urbanized areas, rural centers, and also serve

local access. Updates to the TSP will support the existing highway classifications and will enhance the ability of the highways in Warrenton to serve in their defined functions.

### **Policy 1B (Land Use and Transportation)**

Policy 1B, recognizes the need for coordination between state and local jurisdictions. Action 1B.7 gives special highway segment designations for specific types of land use patterns to foster compact development. The three segment designations available are Special Transportation Area, Commercial Center, and Urban Business Area.

### **Policy 1C (State Highway Freight System)**

Policy 1C addresses the need to balance the movement of goods and services with other uses. In addition, Action 1C.4 states that the timeliness of freight movements should be considered when developing and implementing plans and projects on freight routes. There are currently no freight routes through Warrenton.

### **Policy 1F (Highway Mobility Standards)**

Policy 1F sets mobility standards for ensuring a reliable and acceptable level of mobility on the highway system. Pursuant to Policy 1F, Table 6:

- Statewide highways inside Urban Growth Boundaries (UGBs) in non-MPO areas that are freight routes but do not have special OHP land use designations (US 101 in Warrenton) have a mobility standard requiring that the highway operate at or below a volume to capacity (v/c) ratio of 0.80
- Statewide highways inside UGBs in non-MPO areas that are not freight routes or do not have special OHP land use designations have a mobility standard requiring that the highway operate at or below a volume to capacity (v/c) ratio of 0.80-0.90 depending on the posted speed
- District highways inside UGBs in non-MPO areas that are not freight routes or do not have special OHP land use designations (US 101 Business, Fort Stevens Highway 104, OR-104S (Fort Stevens Spur) in Warrenton) have a mobility standard requiring that the highway operate at or below a volume to capacity (v/c) ratio of 0.85-0.90 depending on the posted speed
- Unsignalized side street approaches to state highways are required to meet the district highway standards

### **Policy 1G (Major Improvements)**

Policy 1G requires maintaining performance and improving safety by improving efficiency and management before adding capacity. The intent of policy 1G and Action 1G.2 is to ensure that major improvement projects to state highway facilities have been through a planning process that involves coordination between state, regional, and local stakeholders and the public, and that there is substantial support for the proposed improvement.

### **Policy 2B (Off-System Improvements)**

Policy 2B establishes ODOT's interest in improvements on local roads that maintain or improve safety and mobility performance on state roadways, and supports local jurisdictions in adopting land use and access management policies. The TSP will include sections describing existing and future land use patterns, access management, and implementation measures.

## **Policy 2D (Public Involvement)**

Public involvement in transportation planning and project development will be a critical part of the TSP process.

## **Policy 2F (Traffic Safety)**

Policy 2F identifies the need for projects in the state to improve safety for all users of the state highway system through engineering, education, enforcement, and emergency services. One component of the TSP is to identify existing crash patterns and rates and to develop strategies to address safety issues. Proposed improvements will aim to reduce the vehicle crash potential and/or improve bicycle and pedestrian safety by providing upgraded facilities that meet current standards.

## **Policy 3A (Classification and Spacing Standards)**

Policy 3A sets access spacing standards for driveways and approaches to the state highway system. The TSP will address local access management policies and standards for inclusion in the Warrenton Development Code and will identify recommended traffic signal spacing guidelines.

## **Policy 4B, Action 4B.4 (Alternative Passenger Modes)**

Action 4B.4 requires that highway projects encourage the use of alternative passenger modes to reduce local trips. The TSP will develop ways to support and increase the use of alternative passenger modes to reduce trips on highways and other facilities. This will include improvement to bicycle and pedestrian facilities and consideration of transit movement along roadways.

## **Oregon Bicycle and Pedestrian Plan**

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, which is an element of the Oregon Transportation Plan (OTP). The plan identifies actions that will assist local jurisdictions in understanding the principles and policies that ODOT follows in providing bikeways and walkways along state highways. In order to achieve the plan's objectives, the strategies for system design are outlined, including:

- Providing bikeway and walkway systems and integrating with other transportation systems
- Providing a safe and accessible biking and walking environment
- Developing educational programs that improve bicycle and pedestrian safety

The plan is currently comprised of two parts: the Policy and Action Plan and the Oregon Bicycle and Pedestrian Design Guide. The Policy and Action section contains background information, legal mandates and current conditions, goals, actions and implementation strategies ODOT proposes to improve bicycle and pedestrian transportation. Originally adopted in 1995 and reaffirmed as an element of the OTP in 2006, this section is currently being updated as the "Bicycle and Pedestrian Mode Plan." The Design Guide is the technical element of the plan that guides the design and management of bicycle and pedestrian facilities on state-owned facilities. It has been designated as a companion piece to the Highway Design Manual and includes updated and innovative pedestrian and bicycle treatments. The Design Guide was updated in 2011 and will remain separate from the policy portion of the plan .

## Oregon Public Transportation Plan

The Oregon Public Transportation Plan (OPTP) constitutes the transit modal plan of the Oregon Transportation Plan. The plan contains goals, policies, and strategies relating to the statewide public transportation system. The plan is intended to provide guidance for ODOT and public transportation agencies regarding the development of public transportation systems. The vision guiding the Public Transportation Plan is as follows:

- A comprehensive, interconnected and dependable public transportation system, with stable funding, that provides access and mobility in and between communities of Oregon in a convenient, reliable, and safe manner that encourages people to ride
- A public transportation system that provides appropriate service in each area of the state, including service in urban areas that is an attractive alternative to the single-occupant vehicle, and high-quality, dependable service in suburban, rural, and frontier (remote) areas
- A system that enables those who do not drive to meet their daily needs
- A public transportation system that plays a critical role in improving the livability and economic prosperity for Oregonians.

The OPTP Implementation Plan directs ODOT investments towards commuter and mobility needs in larger communities and urban areas and also in smaller communities where warranted. It also directs investments towards intercity connections statewide. Long-term implementation and funding will support both modernization and preservation projects while, in the short term, funding will likely be available for preservation projects.

An assessment of existing transit conditions in Warrenton and, potentially, proposed improvements will be included in the TSP update process, and will be guided by the vision and implementation plan set forth in the Oregon Public Transportation Plan.

## Oregon Rail Plan

The Oregon Rail Plan, another modal plan within the OTP, addresses long-term freight and passenger rail planning in Oregon. The plan includes a freight element and passenger element that describes infrastructure and service conditions historically and at the time the plan was prepared. In terms of freight rail, a branch line once provided freight rail service from Astoria to Seaside; however, this line has been abandoned. In terms of passenger rail, Amtrak does not provide service to Warrenton, but there is established intercity bus service between Warrenton and other cities in Northwest Oregon.

The Oregon Rail Plan also includes a chapter on rail policies and planning. General policy is set for passenger rail: “This system shall consist of an efficient operation, reliable service, access to all potential users, and compliance with state environmental and land use standards. Convenient connections with other modes should integrate passenger train service into a network linking all areas of the state, nation, and the world.” Policies for freight rail include the following

- Increase economic opportunities for the State by having a viable and competitive rail system.
- Strengthen the retention of local rail service where feasible.
- Protect abandoned rights-of-way for alternative or future use.

- Integrate rail freight considerations into the State's land use planning process.

Since there are already several rails-to-trails in Warrenton with plans for expansion, the policy regarding protecting abandoned rights-of-way for alternative use will be important in updating the Warrenton TSP.

## Transportation Planning Rule (OAR 660.012)

The Transportation Planning Rule (TPR) implements Oregon Statewide Planning Goal 12, which supports transportation facilities and systems that are safe, efficient, and cost-effective and are designed to reduce reliance on single-occupancy vehicles. The objective of the TPR is to reduce air pollution, congestion, and other livability problems, and to maximize investments made in the transportation system. The following subsections of the TPR are relevant to the Warrenton TSP update.

### **660-012-0020 – Elements of Transportation System Plans**

Section 0020 of the TPR specifies what is required in a TSP, including an inventory and assessment of existing conditions; forecasts of transportation needs; a road system plan; a public transportation plan; a bicycle and pedestrian plan; air, rail, water, and pipeline plans as applicable; transportation system and demand management plans; a financing program; and implementing policies and land use regulations.

### **660-012-0035 – Evaluation and Selection of Transportation System Alternatives**

Section 0035 describes standards and alternatives available to agencies evaluating and selecting transportation projects, including benefits to different modes, land use alternatives, and environmental and economic impacts.

### **660-012-0045 – Implementation of the Transportation System Plan**

The TPR requires local governments to adopt land use regulations consistent with state and federal requirements "to protect transportation facilities, corridors and sites for their identified functions." This is achieved through a variety of measures, including locally adopting access control measures, standards to protect future operations of roads, expanded notice requirements and coordinated review procedures for land use applications, processes to apply conditions of approval to development proposals, and regulations ensuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities, and performance standards of facilities identified in the TSP.

### **660-012-0050 – Transportation Project Development**

Section 0050 requires that transportation projects be reviewed for compliance with local and regional plans and, when applicable, undergo a NEPA environmental review process. Amendments to Section 0050 made since adoption of the 2004 Warrenton TSP protect determinations of need, mode, function and general location for projects identified in TSPs.

### **660-012-0060 – Plan and Land Use Regulation Amendments**

Amendments made to Section 0060 in 2005 are among the most significant changes that have been made to the TPR since adoption of the City's TSP in 2004. The amendments require local jurisdictions to balance the need for development with the need for transportation improvements, establish the end of the planning period as the measure

for determining “significant effect”, define the transportation improvements that a local government can consider in determining significant effect, and identify methods for local jurisdictions in determining whether a needed transportation facility is reasonably likely to be provided within the planning horizon.

## US 101 Condition Report – 2005

The US 101 Conditions Report provides physical and traffic operational information about the US 101 corridor, including the portion through Warrenton, in graphical format. It covers material such as land use, traffic operations, facility inventory, safety, approach inventory, and geometrics data of the highway by mile-point. The report also provides a video log by mile-point for the north and southbound directions of the highway. The data from this plan will be considered in compiling existing conditions information for this TSP update.

## State Transportation Improvement Program

There is currently one project in Warrenton on 2015-2018 Oregon State Transportation Improvement Program funding list. The US 101: New Youngs Bay Bridge Repair project consists of applying a deck overlay and cathodic protection, which will cost approximately \$12.5 million and is scheduled for construction in 2018.

## Key Projects

The following sections summarize key projects recommended from the prior plans and studies.

## City of Warrenton Transportation System Plan

### Motor Vehicle Improvements

- Intersection improvements at US 101, Fort Stevens Highway 104, and Perkins Lane (Cost: \$10,000)
- 105 AA Connect/SE Neptune Ave – Signalize intersection (Cost: \$300,000)
- Fort Stevens Highway 104 and US 101 Business – Signalize intersection, reconfigure geometry, and improve pedestrian crossings (Cost: \$1,000,000)
- DeLaura Beach Lane – Upgrade roadway width with shoulders (Cost: \$775,000)
- Realign US 101 Business and SE 12<sup>th</sup> Place/Airport (Cost: \$500,000)
- DeLaura Beach Lane/Ridge Road – Improve intersection geometry (Cost: \$500,000)
- Extend SW 2<sup>nd</sup> St to connect with SW Juniper Ave (Cost: \$685,000)
- Construct curb, sidewalk, and new local roadway along SE 7<sup>th</sup> St from Fort Stevens Highway 104 to US 101 Business (Cost: \$3,530,000)
- Connect Juniper Ave with Ridge Road (Cost: \$550,000)
- Fort Stevens Highway 104 and SE 5<sup>th</sup> Street – Improve intersection geometry (Cost: \$200,000)
- Realign US 101/Fort Stevens Highway 104 (Cost: \$1,000,000)
- Improve intersection geometry at US 101/SE Dolphin Ave (Cost: \$400,000)
- Improve intersection geometry at Fort Stevens Highway 104 and 7<sup>th</sup> Ave (Cost: \$250,000)
- Add turn lanes at 105 AA Connect/US 101 Business and signalize intersection (Cost: \$550,000)
- Add turn lanes to US 101 Business at US 101 (Cost: \$300,000)

### Pedestrian and Bicycle Improvements

- 105 AA Connect from US 101 to Marlin Dr – add bike lanes and sidewalks (Cost: \$490,000)

- Connect Hammond to Fort Stevens State Park with bike path (Cost: \$205,000)
- Stripe 6' bike lanes on both sides of Hwy 104 Spur (Cost: \$25,000)
- US 101 Business – Construct sidewalk and bike lane on both sides of US 101 Business (Cost: \$460,000)
- SW 9<sup>th</sup> St – Upgrade width, add bike lanes and sidewalks (Cost: \$1,700,000)
- Construct sidewalks on NW Warrenton Drive from NW 14<sup>th</sup> St to NW 1<sup>st</sup> St (cost not estimated)
- Construct sidewalks on east side of Ridge Road from SW 9<sup>th</sup> St to soccer fields (cost not estimated)
- SE Neptune Ave from 105 AA Connect to US 101 – add curb and sidewalk on both sides (Cost: \$670,000)
- SE Neptune Drive – add sidewalks and bike lanes on both sides (Cost: \$280,000)
- Fort Stevens Highway 104 – Install curb and sidewalks both sides from MP 0.1 to 1.17, 3.28 to 3.4, and 4.73 to 4.82 (Cost: \$1,400,000)
- US 101 Business – Install curb and sidewalks on both sides from MP 0 to 0.87 (Cost: \$950,000)
- Construct curb and sidewalks on both sides of OR-104S (Fort Stevens Spur) (Cost: \$920,000)
- Pave top of dike from Fort Stevens Highway 104/US 101 Business to Hammond (Cost: \$325,000)

### Transit, Sea, and Air Improvements

- Install shelters and kiosks on US 101 north and south of the New Youngs Bay Bridge (Cost: \$20,000)
- ADA compliance at transit stops
- Improve service between Cannon Beach and Astoria and Astoria and Warrenton
- Provide covered shelters, signage, bus pullouts
- Improve efficiency of dial-a-ride

## Clatsop County Transportation System Plan

### Recommended Improvements

The current Warrenton TSP update will determine how to address the recommended Clatsop County improvements listed below:

- Warrenton-Miles Crossing Off-Highway Shared Use Path Study (Cost: \$150,000)
- US 101 New Youngs Bay Bridge – pedestrian and bicycle improvements (Cost: \$1,000,000)
- US 101/Fort Steven Highway 104 – install advance warning signing on US 101 (Cost: \$75,000)
- US 101/Fort Steven Highway 104 – add eastbound right turn lane (Cost: \$450,000)
- Add bicycle route designation signage on Hwy 105 (Cost: \$10,000)
- Add shoulders to DeLaura Beach Lane (Cost: \$775,000)
- Intersection improvements at US 101, Fort Stevens Hwy 104, and Perkins Lane (Cost: \$10,000)
- Install shelters and kiosks on US 101 north and south of the New Youngs Bay Bridge (Cost: \$20,000)
- Add parking at Warrenton Mooring Basin

## Greater Astoria – Warrenton Area Regional Transportation System Refinement Plan

### Recommended Improvements

The current Warrenton TSP update will determine how to address the recommended improvements listed below:

- Install traffic signal at Fort Stevens Highway 104/US 101 Business and Fort Stevens Highway 104/Skipanon Drive and add turn pockets
- 105 AA Connect/Neptune – modify intersection to be right-in/right-out by installing a raised island
- Install traffic signal or roundabout at 105 AA Connect/US 101 Business
- US 101 Business between 105 AA Connect and US 101 – add shoulders, bike lanes, and sidewalks
- Eliminate southbound left turns at US 101/OR-104S (Fort Stevens Spur)
- Modify US 101/Perkins Road intersection to improve mobility and safety
- Construct new roadway in North Coast Business Park area
- Realign Dolphin Road to connect with the new US 101 Bus alignment and eliminate Dolphin Rd/US 101 intersection
- Replace the New Youngs Bay Bridge with a new 4 lane facility with bike and pedestrian facilities

## Hammond Marina Master Plan Update - 2005

### Recommended Improvements

The current Warrenton TSP update will determine how to address the recommended improvements listed below:

- Construct parking lot to accommodate 160 cars and up to 200 cars in the future
- Install planted barrier between through lane and stacking lane for boat trailers on Lake Drive
- Install signage in Warrenton directing users to the site

## Warrenton Downtown and Marina Master Plans - 2010

### Recommended Improvements

The current Warrenton TSP update will determine how to address the recommended improvements listed below:

- Improve Harbor Drive – add street trees, lighting, sidewalks, crosswalks, and bike lanes.
- Improve pedestrian facilities on Skipanon River Bridge
- Harbor Drive/S Main Ave Improvements – consider installing wider sidewalks, street trees, new lighting, new crosswalks, and curb extensions when improving this intersection
- Install wider sidewalks on S Main Ave, narrow the travel lanes and parking stalls. Consider adding curb extensions at crosswalks and street trees
- Strengthen street grid by extending existing streets to areas of future redevelopment
- Expand and enhance Skipanon Trail
- Plan truck routing to discourage trucks from driving through downtown