

**Freight Route Analysis Project (FRAP)**  
**Staff Report**  
September 1, 2004

## **I. Introduction**

The staff report below is in response to a request the Oregon Transportation Commission (OTC) made at its January 2004 Commission meeting. At that meeting, the OTC approved the changes to Policy 1B of the 1999 Oregon Highway Plan (OHP). The key components of this revision were to simplify the highway segment designation process by recognizing existing characteristics and requiring written local government support prior to the designations. It was during this process working with a variety of stakeholders that concern was expressed about the impact of these and future highway segment designations on freight routes. Both the stakeholders and the OTC felt that with the revisions to the 1B policy it was also appropriate to evaluate both the actual designations of the freight routes and the methodology that was used to determine their designation.

As part of that effort, an advisory committee was formed to participate in the discussion and designation of new freight routes on state highways. Freight Route Analysis Project (FRAP) committee members include representation from the Oregon Trucking Associations, local government, a Metropolitan Planning Organization (MPO), Freight Advisory Committee, an Area Commission on Transportation member, a port representative, Department of Land Conservation and Development, Association of Oregon Counties, Federal Highway Administration, League of Oregon Cities, and the Retail Task Force. This led to a series of meetings with the committee. As part of their recommendations they provided input on what might need to be considered in designating freight routes. Through these discussions, members also advanced routes to be considered for designation beyond those recommended by staff.

The report below summarizes the work to date with recommended changes to both freight route designations and associated OHP policies. The staff report highlights information from the current OHP as it relates to freight policy and definition. It also summarizes the methodology used in that process. The information following that discussion highlights the significance of the freight designation to other aspects of transportation, such as planning and highway design issues. The report then discusses the criteria and factors that were used in the evaluation of the additional freight routes being proposed. The revisions, both to the analytical work and the designations, require amending the language of the freight policies. The proposed policy changes are highlighted in Section VI of the report. Finally, there is a discussion of the proposed designations and their potential impacts to the transportation system.

The State Highway Freight System, along with the freight systems established at the regional (MPO), county and city levels, link together and identify the roadways within the state that are important for the movement of freight. Because the policy implications of the State Highway Freight System and its relationship to other highway plan policies applies to state highways, the specific designation recommendations in this report apply only to state highways. In order to recognize the interrelated characteristics of the freight system, there are proposed changes to the policy actions to recognize the coordination necessary with local government (see Action 4.A.B).

The next steps are to provide this information to interested stakeholders for their review and comment. Those comments will be forwarded to the FRAP committee for their consideration. The final product will be a recommendation to the OTC which will require a public hearing before the Commission. This public hearing is tentatively scheduled for the December OTC meeting, ultimately resulting in an amendment to the OHP.

## II. 1999 Oregon Highway Plan Freight System Policy and Definition

According to the 1999 Oregon Highway Plan, the purpose of the State Highway Freight System is “...to ensure that freight is able to move efficiently on the state’s major trucking routes.” The key criteria for freight route designations were freight volume, tonnage, connectivity, and linkages to National Highway System (NHS) intermodal facilities as documented in the OHP. This freight system, made up of the Interstate Highways and certain Statewide Highways on the NHS includes routes that carry significant tonnage of freight by truck and serve as the primary interstate and intrastate highway freight connection to ports, intermodal terminals, and urban areas.” The current OHP designates 2,092 miles of Interstate and Statewide Highways as State Freight Routes. About 1.5 miles are on District Highways.

The OHP states in Policy 1C – State Highway Freight System that:

“It is the policy of the State of Oregon to balance the need for movement of goods with other uses of the highway system, and to recognize the importance of maintaining efficient through movement on major truck freight routes.”

Its four actions call for the following:

1. Applying performance standards appropriate to the movement of freight on freight routes.
2. Preparing a statewide freight study to address the role of trucks and other freight modes in Oregon’s economy.
3. Working with local governments to examine options
  - To treat designated freight routes as Expressways; and
  - To recognize and balance freight needs with needs for local circulation, safety and access in Special Transportation Areas.
4. Considering the importance of timeliness in freight movements in developing and implementing plans and projects on freight routes.

### A. Development of the 1999 Oregon Highway Plan Freight Policy

When the 1999 Oregon Highway Plan was being developed, the System Definition Policy Committee examined the statewide highway classification system and its functions. The committee decided that the 1991 Highway Plan Access Oregon Highway system was no longer relevant, that the new federal NHS and OHP Statewide Highways were essentially the same, and that one classification system with overlays was needed. With an overlay, this additional distinction provided a heightened awareness of one of the primary management objectives of that highway segment. Ultimately, this committee kept the basic classification system of Interstate, Statewide, Regional and District Highways and developed overlays for lifeline routes, scenic byways, freight and land use as well as expressways. Later, prior to adoption, the OTC added Local Interest Roads to the system.

During development of the 1999 OHP, the role of investment was modified and management strategies were outlined in the OHP Background statement saying:

‘Highway efficiency for goods movement in an expanding economy will require public and private investments in infrastructure as well as changes in road operations to reduce congestion on freight routes. Designating a network of freight routes of *primary importance* to the state will help ensure that these investments are coordinated in a way that reinforces the unique needs of the freight system. . . .’ (italics added for emphasis)

## B. Balancing Interests in the 1999 Oregon Highway Plan

The 1999 policies, along with amendments adopted in January 2004, carefully balance the interests of freight and other long-distance travelers with the interests of communities that the highway runs through. Mobility interests are served by the OHP freight routes and Expressways. OHP freight routes on Statewide Highways have higher mobility standards, that is, they allow less congestion. In urban areas, the mobility standard is .05 v/c higher on Statewide Freight Routes than on Statewide Non-Freight Routes. Expressways also have higher standards. Management plans are required for Special Transportation Areas (STAs) and Urban Business Areas (UBAs) on OHP and Regional freight routes in order to meet the needs of freight interests as well as the local community. Special Transportation Areas have lower mobility standards, allowing more congestion.

## **III. Implications and Significance of Oregon Highway Plan Freight Route Designation**

### A. Implications

The 1999 OHP policies were also examined for implications if additional routes are included into the existing system, especially if they are classified as Regional or District Highways. The following was identified:

- The 1999 Highway Plan envisions freight routes as a subset of—having higher priority—than other NHS Statewide Highways and is used to guide investment and management decisions.
- The roadway classification system is a hierarchy from Statewide to Regional to District. The management objective of each is different and this is highlighted below. Additions of Regional and District Highways to the State Highway Freight System could undermine the hierarchy of the classification system which is also used to guide management and investment decisions.
  - The management objective of State Highways is to provide safe and efficient, high-speed, continuous-flow operation.
  - The management objective of Regional Highways is to provide safe and efficient, high-speed, continuous-flow operation in rural areas and moderate to high-speed operations in urban and urbanizing areas. A secondary function is to serve land uses in the vicinity of these highways.
  - The management objective of District Highways is to provide for safe and efficient, moderate to high-speed continuous-flow operation in rural areas reflecting the surrounding environment and moderate to low-speed operation in urban and urbanizing areas for traffic flow and for pedestrian and bicycle movements.
- If Regional and District Highways are included in the State Highway Freight System, either the highway mobility standards should be changed to reflect the additions or those routes will not enjoy one of the benefits of being OHP freight routes. If the standards are changed, local plan amendments and zone changes will be held to a higher standard of review for mobility standards.
- Any investment strategy for OHP freight routes could be diluted with too expansive a system that does not clearly articulate a classification system that guides ODOT priorities for system investment and management. Funding limitations, of necessity, require the department to prioritize investment opportunities and needs.

- A number of jurisdictions will need to prepare management plans for STAs and UBAs now on OHP and Regional freight routes. Jurisdictions having STAs and UBAs already designated will have to go back and do management plans. Funding for preparation of management plans will have to be balanced with other planning needs that exist at the state and local level.

**B. Significance of State Highway Freight Route Designation**

The table below was developed to help clarify the significance of an OHP freight route designation. A variety of issues ranging from planning to highway design were analyzed and the significance of the designation ranges from little or no impact to significant impact. The judgment of significance relied on practice, cost and changes in decision making.

The significance of the state highway freight route designation and the implications to other existing OHP policies is essential information to incorporate into both in framing the discussion as to which freight routes should be designated and the overall direction of the Oregon Highway Plan as it seeks to find that balance between freight needs and the other users of system. The level of impact is shown in the table utilizing the following symbols.

○ - Little or No Impact      ◐ – Moderate Impact      ● – Significant Impact

**Significance of Oregon Highway Plan Freight Route Designation**

	<b>Issue</b>	<b>Significance of Impact</b>	<b>Comments</b>
1.	<b>Planning</b>	◐	<p>The freight routes are recognized as a system of state highways that facilitate efficient and reliable interstate and intrastate truck movements. These are primarily state highways that carry a significant tonnage of freight by truck and/or serve as the primary interstate and intrastate highway freight connections to ports, intermodal terminals, urban areas and other states.</p> <p>The Oregon Highway Plan (OHP) recognizes the importance of maintaining efficient through movement on these major truck freight routes but at the same time policies within the OHP work to balance the need for movement of goods with other uses of the highway system.</p>

	<b>Issue</b>	<b>Significance of Impact</b>	<b>Comments</b>
2.	<b>Highway Segment Designations</b>	●	<p>The OHP states that in Special Transportation Areas (STA), the highway's function as a freight route should be balanced with local accessibility and circulation. STA management plans are required for STAs on the State Highway Freight System and regional freight routes designated by MPOs.</p> <p>Urban Business Areas (UBA) management plans are required for UBAs on the State Highway Freight System and regional freight routes designated by MPOs. Mobility and access interests need to be balanced through the management plan.</p> <p>See OHP Action 1B.3 for the timing of management plans. The potential exists that without timely completion of a management plan, existing highway segment designations could be revoked.</p>
3.	<b>Expressways</b>	◐	<p>Being part of the State Highway Freight System is one of the criteria used for highways proposed as Expressways. The intent of an expressway is travel with minimal interruptions, have controlled access, limited private accesses and pedestrian facilities, and medians are encouraged.</p>
4.	<b>Funding</b>	●	<p>The OHP states that the State Highway Freight System designation does not guarantee additional state investment in these routes. The STIP Project Eligibility Criteria and Prioritization Factors recommend that OHP Policies including 1C, State Highway Freight System, be considered for D-STIP, Modernization and Preservation project prioritization. Priority shall also be given to DSTIP, Modernization, Preservation and Bridge projects that leverage other funds and public benefits. An example of leverage is direct benefit to multiple modes of travel. The state bridge eligibility criteria focus on Interstate Highways and OHP freight routes.</p> <p>HB 2041 states in Section 37 that in developing the STIP ODOT shall give priority to freight mobility projects that are located on identified freight routes of statewide or regional significance. The definition of freight mobility projects in HB2041 is more encompassing than the OHP freight routes definition, as evident in projects selected, which include state and local roadways other than the OHP freight routes.</p>

	<b>Issue</b>	<b>Significance of Impact</b>	<b>Comments</b>
5.	<b>Mobility Standards</b>	●	The OHP requires slightly higher mobility standards (maximum volume-to-capacity ratios) for freight routes than other Statewide Highways. This means that slightly less congestion is to be planned for the OHP freight routes. For example, the maximum volume to capacity ratio for a Statewide Highway inside an urban growth boundary on a freight route is .75, while a Statewide Highway inside an urban growth boundary not on a freight route is .80. This will lead to a more rigorous standard for review of plan amendments and zone changes. <i>(This particular example is based on Table 6, page 80 of the OHP (Non-MPO outside of STAs where non-freeway speed limit &lt; 45 mph).</i>
6.	<b>Pavement Preservation</b>	○	The OHP states that ODOT will invest in thicker highway pavements on designated freight routes. It also says that Statewide Highways should be maintained at a higher condition than Regional and District Highways. However, due to limited funding, being part of the State Highway Freight System is not a major factor in pavement management or maintenance. In practice, pavement thickness is primarily based on field tests, condition of the roadway, truck counts and truck configurations.
7.	<b>Highway Design</b>	●	Being part of the State Highway Freight System is a factor in roadway design and is addressed in the Highway Design Manual. In designing a roadway, the Highway Design Manual takes into consideration highway functional classification, the State Highway Freight System, truck volumes and configurations, mobility standards and other factors. Highway design issues impacted by the State Highway Freight System designation include typical roadway section widths, median barrier, weigh stations and intersection design and their attendant cost implications. Depending on the circumstances, a design exception may be needed to the Highway Design Manual standards. HB2041 (ORS 366.215) states that the Oregon Transportation Commission may not permanently reduce the vehicle-carrying capacity of an identified freight route when altering, relocating, changing or realigning a state highway unless safety or access considerations require the reduction. <i>(An exemption can be granted if commission finds it in the best interest of the state and freight movement is not unreasonably impeded.)</i>

	<b>Issue</b>	<b>Significance of Impact</b>	<b>Comments</b>
8.	<b>Access Management</b>	◐	Permitting standards do not change just because a highway section is designated part of the State Highway Freight System. Permitting standards are based on State Highway Classifications, highway segment designations and whether or not the segment is urban or rural or an expressway. Higher mobility standards required by an OHP freight route designation will impact design and spacing considerations for access management approach permits.

#### **IV. Criteria and Factors for Consideration**

In the 1999 OHP, highways were included in the State Highway Freight System if annual truck tonnages were moderate (4 to 9.99 million) to high (10 million and over), and/or if they provided connectivity with significant freight generating areas in Oregon. While routes important to the movement of freight include state, regional and local roads, the State Highway Freight System that is part of the Oregon Highway Plan includes only state highways. One of the earliest recommendations of the committee members was an identification of other factors that should be addressed when analyzing potential freight routes for this work effort. The table below contains information on the 1999 criteria. Maps attached to this report provide information about the state highway system with respect to the 1999 criteria and other factors of consideration.

#### **1999 OHP Freight Route Criteria**

<b>Criteria</b>	<b>Comments</b>
Tonnage	In the 1997 report, generally, highways or highway segments were included where a majority of the mileage experienced 4 million tons or more annually. See Map 1.
Connectivity (within Oregon)	In the 1997 report, several routes were added for their connectivity with freight generating areas, primarily major intermodal facilities. See Map 1.

In addition to these criteria, the committee identified additional factors that were used in the analysis of the proposed freight routes. Below is a summary of other factors the committee requested be incorporated in the review of potential freight route designations and how data was obtained and considered in the evaluation of proposed routes.

<b>Factors of Consideration</b>	<b>Comments</b>
NHS Highways	See Map 1 which identifies the NHS designated highways. The National Highway System (NHS) consists of interconnected urban and rural principal arterials and highways which serve major population centers, international border crossings, ports, airports, public transportation facilities and other major transportation destinations; meet national defense requirements; and serve interstate and interregional travel.

<b>Factors of Consideration</b>	<b>Comments</b>
Freight routes in adjacent states	See Map 2 which identifies designated freight routes in adjacent states. Connectivity of Oregon's freight routes with freight routes in adjacent states is important for interstate freight movements.
Percent trucks	See Map 3 which illustrates the percentage of trucks utilizing a given state route compared to the overall traffic composition. Many rural routes do not carry the higher tonnage of freight seen in urban areas but do experience a high percent of trucks. The significance of truck movements on these highways may not be fully represented on the tonnage map (Map 1).
Truck volumes	See Map 4 which illustrates the average truck volumes on state highways. Many trucks like those serving high-tech industries carry high value/low weight freight. The truck movements on these highways may not be adequately represented on the tonnage map (Map 1). A statewide map was developed showing 2002 truck volumes which was used to help equalize disparities between trucks of different weights by taking the weight of the trucks out of the picture.
Regional freight systems	See Map 5 which depicts the State Highway Freight System along with state highways that are part of regional freight systems. These regional freight systems currently exist in the Metro, SKATS, Central Lane and Rogue Valley MPOs.
Truck length restrictions	See Map 6 which identifies state routes with truck length restrictions. Due to road curvature, lane width and other factors, ODOT's Motor Carrier Transportation Division restricts truck configurations and lengths on some highways.
STAs, UBAs and main streets	See Map 7 which identifies communities with either existing or potential highway segment designations. The freight route designation may impact highway segments that are or have the potential to be STAs and UBAs and create conflicts with respect to downtown community development objectives. It may also impact highway sections that function as main streets to cities and towns.
Freight generating sites	The truck tonnage, truck volumes and percent trucks maps (Maps 1, 3 and 4) were reviewed to identify highways impacted by freight generating sites. Truck traffic generated by major industrial and commercial developments impacts state highways.
NHS intermodal connectors	See Map 8 which identifies the freight intermodal connectors in Oregon. NHS Intermodal connectors are not part of the State Highway Freight System. A proposed Action in the OHP (Action 4A.4) recognizes the importance of these roadways and the revised State Highway Freight System will incorporate information recognizing a complete freight system that takes into account these local intermodal connectors that are primarily local facilities. Map 9 includes information on where to view large-scale maps on ODOT's website.

<b>Factors of Consideration</b>	<b>Comments</b>
Major freight routes on local facilities	Routes important to the movement of freight include state, regional and local roads. There may be some local facilities that carry significant truck tonnage and function as major freight routes in the region. The State Highway Freight System that is part of the OHP contains policies and actions that direct ODOT in the management of its highways that are important to freight. The importance of local facilities that carry significant truck tonnage or allow for truck movements that can not take place on the State Highway Freight System (like over-dimensional loads) will be acknowledged in proposed Action 4A.8. Such roads should be included as part of a regional freight system (if in an MPO).
Urban/rural differences	See Map 3 which depicts the average percentage of trucks traveling on a state route compared to the overall traffic composition. Rural areas may not have the tonnage or volumes seen in the urban areas, but the truck traffic they do have is very important to the economy in the area. One way to address these differences is to look at the percent of trucks on highways. Those highways with a relatively high percent of trucks (over 25% trucks) help identify rural highways important to the economy in the area.
Seasonality	See Map 4 which illustrates the average truck volumes on state highways. On some highways, truck traffic is greater during certain months of the year. Vehicle counts (including trucks) are collected during April or September. These months are used because the average daily traffic during these months approximates the average annual daily traffic at that site. Traffic counts are completed every three years and ODOT will monitor the truck traffic counts on all highways to determine if any warrant inclusion to the State Highway Freight System.

Utilizing these additional factors for consideration (in addition to the 1999 criteria) to help identify candidate highways or highway segments for inclusion to the State Highway Freight System is not solely an objective process. However, the application of the factors for consideration was as thorough as possible in development of the recommended additions to the OHP freight routes to facilitate truck movements in and through Oregon. Every route was reviewed with respect to these factors, OHP freight system policy, and implications and significance of adding more routes to the State Highway Freight System. In the evaluation process, not all of the factors were applicable to every request. Even within the applicable considerations, it was important to be mindful of identifying a network grid of state highways for the major truck movements in the state. The State Highway Freight System, along with the freight systems established at the regional, county and city levels, link together.

For some factors that the committee requested be considered in evaluating potential freight routes, the data does not exist to accurately address the issue. In these situations, staff has relied upon other relevant available data to help evaluate the route with respect to that area of consideration. Three of the 15 factors of consideration suggested by committee members were addressed differently in evaluating potential freight routes.

The recommendations for state highway freight designations recognize that factors of considerations will be weighed differently in different parts of the state. For example, a truck volume that is quite important in a rural part of the state may be less significant in an urban part of the state. Therefore these criteria and

factors of considerations must be applied with an understanding of how the context fits to the system across the state and is not dependent on an absolute evenness of determination in each case.

One suggested consideration was to include a highway if it is located near an “Opportunity Site”. This consideration was addressed to some degree during the selection of the Opportunity Sites earlier this year. HB 2011, which will provide assistance to communities for local economic development efforts, identified approximately 25 Opportunity Sites for industrial or traded sector uses. The importance of having the State Highway Freight System, or highways or local roads designated as NHS intermodal connectors, or other highways and roadways with a high volume or percentage of trucks near the Opportunity Site was considered as part of the project selection for funding consideration.

Another suggested consideration was to project truck tonnage out 20 years. It would be very difficult to accomplish this because of several uncertainties including obtaining data on future route selection by freight carriers. Other states, including California and Washington, have realized the difficulties in projecting statewide truck tonnage estimates and have decided to base management of their freight systems on current tonnage data. To address this issue, ODOT will monitor truck tonnage data when truck count information is completed (every three years). The OHP is amended on a regular basis and a review of tonnage information on a routine basis could lead to additional freight route designations in the future. Proposed Action 4A.9 recognizes the need to establish an OHP amendment process for State Highway Freight System designations.

Another suggested consideration was to compensate for variability in the number of trucks (and tonnage) on certain highways. This variability is difficult to pinpoint. As stated above, updates of the plan will occur at appropriate intervals and the tonnage data for a particular route could be used in assessing its potential as a future freight route.

The table below identifies the segments considered for inclusion and the key considerations for their inclusion. Inclusion in the State Highway Freight System was limited to state highways because the OHP policies and actions are focused on the state’s management of its highways. Other segments were analyzed but not recommended for inclusion and that information is provided at the end of the table. In applying the factors for considerations to a particular route to determine whether or not it should be recommended, it was recognized that some factors under consideration weigh more heavily than others, depending upon which part of the state the highway lies in.

### **Applied Criteria & Factors of Consideration Table**

#### **Recommended Additions to the 1999 Adopted OHP Freight Routes**

	<b>Highway Name</b>	<b>State Highway Classification</b>	<b>Limits</b>	<b>Key Considerations</b>
1	OR 126	Statewide	US 101 to Eugene (Florence to Eugene)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• No potential, recommended or adopted STAs or UBAs</li> <li>• Connectivity between two major freight routes (US 101 and I-5)</li> </ul>

	<b>Highway Name</b>	<b>State Highway Classification</b>	<b>Limits</b>	<b>Key Considerations</b>
2	OR 126	Statewide	I-5 to OR 126/US 20 (Springfield to just south of Santiam Pass)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• No potential, recommended or adopted STAs or UBAs</li> <li>• Connectivity between 2 major freight routes (I-5 &amp; OR 22/US 20)</li> </ul>
3	US 20	Statewide	OR 126/US 20 Junction to Junction of US 20/OR 22 (Santiam Pass)	<ul style="list-style-type: none"> <li>• This 4 mile section of US 20 near Santiam Pass is needed to connect the proposed freight route above (OR 126) with US 20/OR 22, an existing freight route</li> <li>• NHS</li> </ul>
4	OR 62	Statewide	I-5 to OR 140	<ul style="list-style-type: none"> <li>• NHS</li> <li>• High truck tonnage (4 to 9.99) and volumes (1,500 to 2,999)</li> <li>• On MPO freight system</li> </ul>
5	OR 140	Statewide	OR 62 to Klamath Falls (White City to Klamath Falls)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• No potential, recommended or adopted STAs or UBAs</li> <li>• Connectivity to Central Oregon and US 97</li> </ul>
6	OR 140	Statewide	US 97 to US 395 (Klamath Falls to Lakeview)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• No potential, recommended or adopted STAs or UBAs</li> <li>• Connectivity to Central OR (US 97 &amp; US 395)</li> </ul>
7	US 26	Regional	US 97 to Prineville (Madras to Prineville)	<ul style="list-style-type: none"> <li>• Medium truck tonnage (1 to 3.99)</li> <li>• No potential, recommended or adopted STAs or UBAs</li> <li>• Connectivity to (US 26 to Portland and US 97 north)</li> </ul>
8	US 395	Statewide	CA border to WA border	<ul style="list-style-type: none"> <li>• NHS</li> <li>• Connectivity within eastern Oregon &amp; to adjacent states</li> <li>• Designated as a High Priority NHS Corridor by FHWA</li> </ul>

	<b>Highway Name</b>	<b>State Highway Classification</b>	<b>Limits</b>	<b>Key Considerations</b>
9	OR 78	Regional	US 20 to US 95 (Burns to Burns Junction)	<ul style="list-style-type: none"> <li>• Connectivity within southeastern Oregon and to adjacent states ( connects with US 95 which is a recommended route and is designated as an Interstate Priority Corridor in Idaho)</li> <li>• Medium to high percent trucks (10 to 39.9)</li> </ul>
10	OR 22	Statewide	I-5 to OR 18 (Salem to Valley Junction)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• Designated as an MPO freight route</li> <li>• Medium to very high truck tonnage (1.0 to over 10) and truck volumes (500 to over 3,000)</li> </ul>
11	Salem Parkway/ OR 99E	Regional	I-5 to OR 22	<ul style="list-style-type: none"> <li>• Designated as an MPO freight route</li> <li>• Medium to very high truck tonnage (1.0 to over 10) and truck volumes (500 to over 3,000)</li> </ul>
12	Beltline Hwy	Statewide	I-5 to OR 126	<ul style="list-style-type: none"> <li>• NHS</li> <li>• Designated as an MPO freight route</li> <li>• High to very high truck tonnage (4.0 to over 10) and truck volumes (500 to over 3,000)</li> </ul>
13	OR 34	Regional	I-5 to US 20 (I-5 through Lebanon)	<ul style="list-style-type: none"> <li>• Medium to high truck tonnage (1.0 to 9.99) and truck volumes (500 to 2,999)</li> </ul>
14	US 20	Regional	OR 34 to Sweet Home (Lebanon to Sweet Home)	<ul style="list-style-type: none"> <li>• Medium truck tonnage (1.0 to 3.99) and truck volumes (500 to 1,499)</li> </ul>
15	OR 35	Statewide	US 26 to I-84 (US 26 to Hood River)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• No potential, recommended or adopted STAs or UBAs</li> <li>• Alternate route during fire/ice conditions on I-84</li> </ul>

	<b>Highway Name</b>	<b>State Highway Classification</b>	<b>Limits</b>	<b>Key Considerations</b>
16	OR 126	Statewide	US 20 to US 97 (Sisters to Redmond)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• Connectivity in Central Oregon</li> <li>• No potential, recommended or adopted STAs or UBAs</li> </ul>
17	US 95	Statewide	California to Idaho	<ul style="list-style-type: none"> <li>• NHS</li> <li>• Connectivity to a designated freight route in Idaho</li> <li>• High to very high percent trucks (25 to 50%)</li> </ul>
18	US 97/ Bend Parkway	Statewide	US 20 to US 97 Bus	<ul style="list-style-type: none"> <li>• Parkway was built after the State Highway Freight System was established and the old alignment (US 97) was an OHP freight route</li> </ul>
19	OR 126	Statewide	US 97 to Prineville (Redmond to Prineville)	<ul style="list-style-type: none"> <li>• NHS</li> <li>• Medium to high truck tonnage (1.0 to 9.99)</li> <li>• No potential, recommended or adopted STAs or UBAs</li> </ul>
20	OR 99W	Regional	OR 18 to OR 99E (McMinnville to Junction City)	<ul style="list-style-type: none"> <li>• Medium to high truck tonnage (1.0 to 9.9)</li> </ul>
21	OR 99	Regional	OR 99W to Belt Line Hwy (Junction City to Belt Line Hwy)	<ul style="list-style-type: none"> <li>• High truck tonnage (4.0 to 9.9)</li> <li>• No potential, recommended or adopted STAs or UBAs</li> </ul>
22	Hwy 331	District	OR 11 to I-84	<ul style="list-style-type: none"> <li>• This short highway (4 miles) connects OR 31 with I-84.</li> <li>• It is currently signed and used by trucks because the OR 11/I-84 connection is not conducive for trucks</li> </ul>
23	US 730	Regional	I-82 to WA border (Umatilla to WA border)	<ul style="list-style-type: none"> <li>• Connectivity to a designated freight route in WA</li> <li>• High to very high truck tonnage (4.0 to over 10.0)</li> <li>• High truck percents (25 to 39.9%)</li> </ul>

	<b>Highway Name</b>	<b>State Highway Classification</b>	<b>Limits</b>	<b>Key Considerations</b>
24	US 199	Regional	I-5 to CA border (Grants Pass to CA border)	<ul style="list-style-type: none"> <li>• Low to medium percent trucks (under 25%)</li> <li>• Low to medium truck volumes (under 1,499)</li> <li>• NHS</li> <li>• Not a designated freight route in California</li> </ul>
25	OR 11	Statewide	WA border to Hwy 331	<ul style="list-style-type: none"> <li>• Connectivity to a designated freight route in WA</li> <li>• Medium truck tonnage (1 to 3.99)</li> </ul>
26	OR 34	Regional	4 <sup>th</sup> St. in Corvallis to Corvallis Bypass	<ul style="list-style-type: none"> <li>• High truck tonnage (4 to 9.99) and volumes (1,500 to 2,999)</li> <li>• This short highway (4 miles) connects OR 99W with OR 34.</li> </ul>

#### **Freight Route Requests Not Being Recommended**

	<b>Highway Name</b>	<b>State Highway Classification</b>	<b>Limits</b>	<b>Key Considerations</b>
27	US 101	Statewide	US 30 to OR 6 (Astoria to Tillamook)	<ul style="list-style-type: none"> <li>• Segment contains several adopted STAs and UBAs and potential or Retail Task Force recommended segments</li> <li>• Mostly low (under 10%) percent trucks</li> </ul>
28	US 101	Statewide	OR 22 through Lincoln City	<ul style="list-style-type: none"> <li>• Segment contains adopted STAs and a potential STA</li> <li>• Low (under 10%) percent trucks</li> </ul>
29	US 101	Statewide	OR 126 to OR 38 (Florence to Reedsport)	<ul style="list-style-type: none"> <li>• Segment contains several adopted STAs and UBAs and potential or Retail Task Force recommended segments</li> <li>• Low (under 10%) percent trucks</li> </ul>
30	US 101	Statewide	OR 42 to CA border	<ul style="list-style-type: none"> <li>• Segment contains several adopted STAs and UBAs and potential or Retail Task Force recommended segments</li> <li>• Several overlength truck restrictions</li> <li>• Low to medium truck volumes (0 to 1,499)</li> </ul>

	<b>Highway Name</b>	<b>State Highway Classification</b>	<b>Limits</b>	<b>Key Considerations</b>
31	US 101	Statewide	US 30 to OR 6 (Astoria to Tillamook)	<ul style="list-style-type: none"> <li>• Segment contains several: potential, Retail Task Force recommended and adopted STAs and UBAs</li> <li>• Mostly low (under 10%) percent trucks</li> </ul>
32	OR 62	Regional	OR 140 to US 97	<ul style="list-style-type: none"> <li>• Mostly low truck tonnage (under 0.99) and truck volumes (under 499)</li> <li>• Traverses Crater Lake National Park</li> </ul>
33	Millican Road	None	OR 126 to US 20 (Prineville to Millican)	<ul style="list-style-type: none"> <li>• Not a state highway</li> </ul>
34	OR 31	Regional	US 97 to US 395 (La Pine to Valley Falls)	<ul style="list-style-type: none"> <li>• Low truck tonnage (under 0.99) and truck volumes (under 499)</li> <li>• The addition of OR 140 as an OHP freight route will provide increased connectivity in the region</li> </ul>

## **V. Highway Segment Designations and Management Plans**

One of the key reasons for the evaluation of additional freight routes is to assess the objective of maintaining a safe and efficient system and the recognition that many communities have grown up along these statewide travel routes. Policy 1B of the 1999 Oregon Highway Plan recognizes that state highways serve as the main street of many communities and it strives to maintain a balance between serving these main streets and the through traveler. Policy 1B applies to all state highways and provides guidance to ODOT regarding system management planning and implementation activities. It is designed to clarify how ODOT will work with local governments and others to link land use and transportation in transportation plans, facility and corridor plans, plan amendments, access permitting and project development. The role of ODOT and local governments in designating highway segments is to work together so that planned community development patterns are individually tailored yet also meet statewide highway needs for safety and mobility.

Highway Segment Designations include Special Transportation Areas (STA), Urban Business Areas (UBA), and Commercial Centers (CC). The process for designating highway segments begins with the identification of an area in a local transportation system plan, facility plan, downtown plan or other adopted plan. Through communication and cooperation, the local jurisdiction and ODOT reach agreement on the specifics of the designation. ODOT will not proceed without written support by the local government for the designation. Once the parties have reached agreement, the OTC formally designates the segment. For segments not on OHP freight routes or MPO/Metro RTP freight systems, the process ends with the Commission's action.

In January the OTC adopted 133 segment designations around the state, most of them in downtown areas of small and medium sized cities. Most of them are not located on currently designated freight routes,

however several would be affected by some of the proposed additions to the state freight system. The development of management plans would become a requirement in those communities as part of their next planning update.

When a highway segment is designated on an OHP freight route or a freight system designated in a Regional Transportation Plan (RTP), in addition to the general process, a management plan is required. ODOT staff is working on developing further guidance on the development of Highway Segment Designation Management Plans. The OHP identifies the elements of a Highway Segment Designation Management Plan which are outlined in the following table:

### **Elements of a Highway Segment Designation Management Plan**

The column on the left reflects the required, as applicable, elements of a management plan as specified in the Oregon Highway Plan. The list on the right includes examples of how the issues might be considered. How the issues are addressed may vary depending on the unique circumstances of the designation and whether it is an STA or UBA. Factors such as existing plans and Highway Design Manual specifications could moderate the content needed to meet the obligations.

<b>Goals and Objectives</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Pertaining primarily to the function of the roadway.</li> <li><input type="checkbox"/> Setting out local priorities for the segment area.</li> <li><input type="checkbox"/> A commitment that through traffic will be served:             <ul style="list-style-type: none"> <li><input type="checkbox"/> By operational priorities within the designated segment area.</li> <li><input type="checkbox"/> By operational priorities outside of the designated segment area.</li> </ul> </li> </ul>
<b>Transition Areas</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider how to slow traffic entering the segment area adequately for a safe transition:             <ul style="list-style-type: none"> <li><input type="checkbox"/> Physical improvements in the transition area;</li> <li><input type="checkbox"/> Signage;</li> <li><input type="checkbox"/> “Gateway” treatments, etc.</li> </ul> </li> </ul>
<b>Design Standards to Support Both Mobility and Local Access</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Accommodation of pedestrians, bikes and transit consistent with the 1B characteristics for the applicable designation.</li> <li><input type="checkbox"/> Consideration whether those standards adequately address the needs of through traffic, particularly large trucks.</li> </ul>
<b>Strategies for Freight and Through Traffic</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Signal spacing and timing to serve through traffic.</li> <li><input type="checkbox"/> Access management measures.</li> </ul>

<b>Parking Strategies</b>	<p>The approach to parking will be different for each of the three segment types:</p> <ul style="list-style-type: none"> <li>❑ In an STA, a parking plan will probably include counting on-street spaces to help meet minimum parking requirements, and adopting maximum parking standards.</li> <li>❑ In a UBA, strategies should include, at a minimum, cross-connections between lots and safe passage through parking areas for pedestrians.</li> <li>❑ For a Commercial Center, the impacts on the function of the roadway will typically be concentrated on one intersection, with parking located within the Commercial Center.</li> </ul>
<b>Local Street Network</b>	<ul style="list-style-type: none"> <li>❑ Identify the relationship between the local street system and the function of the state highway.</li> <li>❑ Provide for connectivity on local streets to support better mobility on the state highway by keeping some local trips off of the highway.</li> </ul>
<b>Traffic and Safety Impacts of Segment Designation</b>	<p>This section will typically be new planning work, specifically related to the decision to designate the segment.</p> <ul style="list-style-type: none"> <li>❑ Identify existing or new safety issues related to the segment designation.</li> <li>❑ Identify appropriate mitigation measure to address safety concerns.</li> </ul>
<b>Maintenance and Operational Strategies</b>	<ul style="list-style-type: none"> <li>❑ Identify the party or parties responsible for ongoing maintenance and operations tasks.</li> <li>❑ Identify maintenance and operational strategies, to be developed in coordination with ODOT.</li> </ul>

Map 7 identifies the general locations of the segments designated in January 2004. The map also depicts other locations under review for highway segment designations. Any additional designations beyond that list will not be considered until completion of this effort. These future designations would require a management plan prior to designation if located on a freight route.

## VI. Oregon Highway Plan Policy Changes

Due to the revisions proposed to the criteria and the OHP freight routes, modifications to the Oregon Highway Plan are anticipated and revised text of the OHP language change is outlined below. See Attachment A for amendments showing track changes.

- Page 41 of the OHP:
  - Regional Highways** typically provide connections and links to regional centers, Statewide or Interstate Highways, or economic or activity centers of regional significance. The management objective is to provide safe and efficient, high-speed, continuous-flow operation in rural areas and moderate to high-speed operations in urban and urbanizing areas. A secondary function is to serve

land uses in the vicinity of these highways. If not on a designated OHP freight route, local access is a priority inside STAs. Inside Urban Business Areas, mobility is balanced with local access.<sup>1</sup>

**District Highways** are facilities of county-wide significance and function largely as county and city arterials or collectors. They provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic. The management objective is to provide for safe and efficient, moderate to high-speed continuous-flow operation in rural areas reflecting the surrounding environment and moderate to low-speed operation in urban and urbanizing areas for traffic flow and for pedestrian and bicycle movements. If not on a designated OHP freight route, local access is a priority inside STAs. Inside Urban Business Areas, mobility is balanced with local access.

- Page 63 of the OHP:

### **Background**

According to the 2002 Federal Highway Administration's Analysis Framework trucks carried nearly 76 percent of the total freight tonnage and 82 percent of the total freight value for the year. To ensure that freight is able to move efficiently on the state's major trucking routes, this plan designates a state highway freight system (Table 5, page 56). There are other routes at the regional and local level that are linked to the state highways and form a network important to the movement of freight. The OHP designated routes, policies and actions direct ODOT in the management of state highways that are important to the movement of freight. The importance of the regional and local freight routes and the connections to the state system is illustrated, in part, by the map showing NHS intermodal connectors that are part of the regional or local system. The key criteria of freight volume, tonnage, connectivity and linkages to the National Highway System intermodal facilities were augmented in the 2004 Freight Route designation update. Other factors that were considered included connectivity to regional freight routes and freight routes in other states, percent of trucks on state highways to reflect urban/rural characteristics, freight generating sites and implications to highway segment designations.

The primary purpose of the State Highway Freight System is intended to facilitate efficient and reliable interstate, intrastate, and regional truck movement through a designated freight system. . This freight system, made up of the Interstate Highways and certain Statewide, Regional and District Highways on the National Highway System, includes routes that carry significant tonnage of freight by truck and serve as the primary interstate and intrastate highway freight connection to ports, intermodal terminals, and urban areas. It supersedes and replaces the designation of primary freight corridors in the Oregon Transportation Plan. However, freight routes designated on Regional or District Highways will be managed according to their highway classification.

Freight depends upon timely and dependable movement of goods over the system; some industries structure their facilities and processes on just-in-time deliveries. Highway efficiency for goods movement in an expanding economy will require public and private investments in infrastructure as well as changes in road operations to reduce congestion on freight routes. Designating a network of freight routes of primary importance to the state will help ensure that these investments are coordinated in a way that reinforces the unique needs of the freight system.

Improving and maintaining the efficiency of highway operations requires balancing the needs of freight movement with the needs of other users of the highway system. Some state highways that are important goods movement corridors also serve as communities' main streets and may be designated as Special Transportation Areas. It may be the objective of local officials to reduce or slow traffic passing through the town, with potentially adverse impacts on long distance freight transportation. Therefore, a management

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<sup>1</sup> See Oregon Highway Plan Action 1B.3 regarding the requirement for management plans.

plan will be developed that combines local land use planning needs while recognizing the special significance of the designed State Highway freight system. See Policy 1B which requires a highway segment designation on a designated OHP Freight Route or Region Freight System include the development of a management plan approved by both ODOT and the local government. The design of designated freight routes will impact highway designs involving roadway section widths, median barriers, intersection designation and will require higher mobility standards for Statewide Highways. Regional and local jurisdictions may designate their own freight route systems, but these designations should be compatible with or complementary to the designation of routes in the State Highway Freight System.

The State Highway Freight System designation does not guarantee additional state investment in these routes. However, three special management strategies are available:

- Highways included in this designation have higher highway mobility standards than other Statewide Highways (see Policy 1F).
- The highway's function as a freight route should be balanced with local accessibility in Special Transportation Areas and Urban Business Areas. This balance is defined through a management plan developed jointly by the local government and ODOT.
- Freight system routes may be treated as Expressways outside of urban growth boundaries and unincorporated communities. (See Action 1C.3 and the definition of Expressways in Action 1A.2.)

Editors Note: The following additional changes will be made to conform these amendments to the Oregon Highway Plan.

- Page 65 of the OHP:  
Update the map that depicts the State Highway Freight System.
- Page 66 of the OHP:  
Delete Table 5. (A more accurate listing of the highway segments associated with the OHP freight routes can be found in Appendix D of the OHP.)
- Page 121 of the OHP:  
Revise Action 4A.4 Efficiency of Freight Movement

#### **Action 4A.4**

Maintain and improve roadway facilities serving intermodal freight facilities that are part of Oregon's Intermodal Management System, and support development of new intermodal roadway facilities where they are part of a local or regional transportation system plan. Recognize National Highway System intermodal connectors as part of the freight network in transportation planning and funding considerations. Manage state-owned intermodal connectors according to their state highway classification as Regional or District Highways.

#### **Add new Action: Action 4A.8**

Recognize that local truck routes are important linkages in the movement of freight throughout the state. ODOT will develop a process to consider requests to establish local government designated truck routes which will serve to detour trucks off the state highway system. ODOT will coordinate with local jurisdictions when designating, managing and constructing a project on a local freight route.

**Add new Action: Action 4A.9**

Develop an amendment process for the identification of additional routes to the State Highway Freight System.

- Page 204 of the OHP:  
Update Appendix D Highway Classification by Milepoint.

**VII. Recommended Revisions to the State Highway Freight System**

Recommended revisions to the State Highway Freight System have been developed based on the application of the criteria and other factors of consideration. Map 9 depicts the draft recommended revisions to the State Highway Freight System. Provided below is a summary of the mileage associated with the recommended revisions to the State Highway Freight System.

**Summary Table**

	<b>Existing System</b>	<b>Recommended Additions</b>	<b>Percent Increase</b>
<b>Total Oregon Highway Mileage</b>	7,448 Miles	NA	NA
<b>Total Oregon NHS Mileage*</b>	3,654 Miles	NA	NA
<b>State Highway Freight System</b>	2,092 Miles	Approximately 919 Miles New Total: 3,011 Miles	43%
<b>NHS Mileage that is part of State Highway Freight System*</b>	2,091 Miles  Freight System includes 57% of the NHS in Oregon	Approximately 642 Miles New Total: 2,734 Miles  Freight System would include 76% of the NHS in Oregon	32%
<b>Non -NHS Mileage that is part of State Highway Freight System</b>	1 Mile	Approximately 233 Miles New Total: 234 Miles	234%

\*Does not include NHS Intermodal Connectors that are local facilities.

## VIII. Next Steps

The next steps will include informing interested stakeholders, including affected jurisdictions of proposed freight routes. The following is a list of local governments that would potentially be impacted by the proposed freight route designations.

### Jurisdictions Located on Proposed Freight Routes

Highway	Limits	Affected Jurisdiction
OR 99W	McMinnville to Junction City	McMinnville, Amity, Monmouth, Adair Village, Corvallis, Monroe. Yamhill, Polk and Benton Counties
OR 99	Junction City to Belt Line Hwy	Junction City, Eugene. Lane County
OR 126	US 101 to Belt Line Hwy	Florence, Veneta, Eugene. Lane County
	I-5 to OR 126 Bus	Springfield. Lane County
	OR 126 to US 20	Lane and Linn Counties
	Sisters to Redmond	Sisters, Redmond. Deschutes County
	Redmond to Prineville	Redmond, Prineville. Deschutes and Crook Counties
US 199	I-5 to CA border	Cave Junction. Josephine County
OR 22	I-5 to OR 18	Salem. Marion and Polk Counties
OR 99E Bus (Salem Parkway)	I-5 to OR 22	Salem. Marion County
Beltline Hwy	I-5 to OR 126	Eugene. Lane County
OR 35	US 26 to I-84	Hood River. Hood River County
OR 34	I-5 through Lebanon	Lebanon. Linn County
US 20	Lebanon to Sweet Home	Sweet Home. Linn County
	OR 126 to OR 22	Lane and Linn Counties
OR 62	I-5 to Hwy 140	Medford. Jackson County
US 97/ Bend Parkway	US 20 to US 97 Bus	Bend. Deschutes County

<b>Highway</b>	<b>Limits</b>	<b>Cities and Counties</b>
OR 140	OR 62 to Lakeview	Eagle Point, Klamath Falls, Lakeview. Jackson, Klamath and Lake Counties
US 26	Madras to Prineville	Prineville, Madras. Jefferson and Crook Counties
US 730	Umatilla to WA border	Umatilla County
US 395	WA border to I-84	Hermiston, Stanfield. Umatilla County
	I-84 to US 26	Pilot Rock, Long Creek, Mt. Vernon. Umatilla and Grant Counties
	US 26 to US 20	John Day, Canyon City, Seneca, Burns. Grant and Harney Counties
	US 20 to CA border	Lakeview. Harney and Lake Counties
OR 11	OR 331 to WA border	Milton-Freewater, Umatilla County
Hwy 331	I-84 to Hwy 11	Umatilla County, Confederated Tribes of the Umatilla Indian Reservation
US 95	CA border to ID border	Jordon Valley. Malheur County
OR 78	US 20 to US 95	Burns. Harney and Malheur Counties

The input from the cities and the input from affected counties, Area Commissions on Transportation, MPOs, and other stakeholders will be solicited during the month of September. The comments will be compiled and incorporated into a set of recommendations to be considered by the Freight Route Advisory Committee at the end of October/ early November. As this is an amendment to the OHP, a public hearing before the Oregon Transportation Commission will need to be held. It is hoped that the Commission could take action before the end of the year to finalize this work effort.

### **List of Attachments**

Attachment A – OHP Policy Amendments Showing Track Changes

Map 1 -Tonnage

Map 2 - Connectivity to other States

Map 3 - Percent Trucks

Map 4 - Truck Volumes

Map 5 – OHP & MPO Freight Routes

Map 6 – Truck Length Restrictions

Map 7 – Highway Segment Designations

Map 8 – NHS Intermodal Connectors

Map 9 - Recommended Routes