ODOT Freight Plan Freight Infrastructure and Traffic Working Group

Local Government Center
1201 Court Street, NE, Salem, Room 117

Monday, May 18, 2009
9:00 AM – 12:00 PM

Meeting Agenda

FOR MEMBERS ATTENDING VIA CONFERENCE CALL, PLEASE DIAL IN AT (503) 945-7174

9:00 am	Welcome and Introductions	Jack Lee, Manager ODOT Freight Mobility Section Ric Young, Working Group Chair ODOT Region 14 Manager
9:05 am	Overview of The Freight Plan	Michael Bufalino, Senior Freight Planner ODOT Freight Mobility Section
9:15 am	Meeting Purpose and Expectations	Lloyd Fobi, Freight Planner ODOT Freight Mobility Section
	Questions.…….	***All Working Group Members***
9:25 am	Overview of Cambridge Work Order	Mark Jensen, Cambridge Systematics, Inc.
9:45 am	Task 3 (Literature Review) and Task 5 (Inventory Existing Conditions)	Deborah Redman, HDR
	Discussion…….	***All Working Group Members***
10:40 am	Task 4 (Define Strategic Freight Infrastructure)	Mark Jensen, Cambridge Systematics, Inc.
	Discussion…….	***All Working Group Members***
11:35 am	Forthcoming Deliverables	Mark Jensen, Cambridge Systematics, Inc.
	Discussion…….	***All Working Group Members***
11:45 am	Next Steps	Lloyd Fobi, Freight Planner ODOT Freight Mobility Section
12:00 pm	Adjourn	

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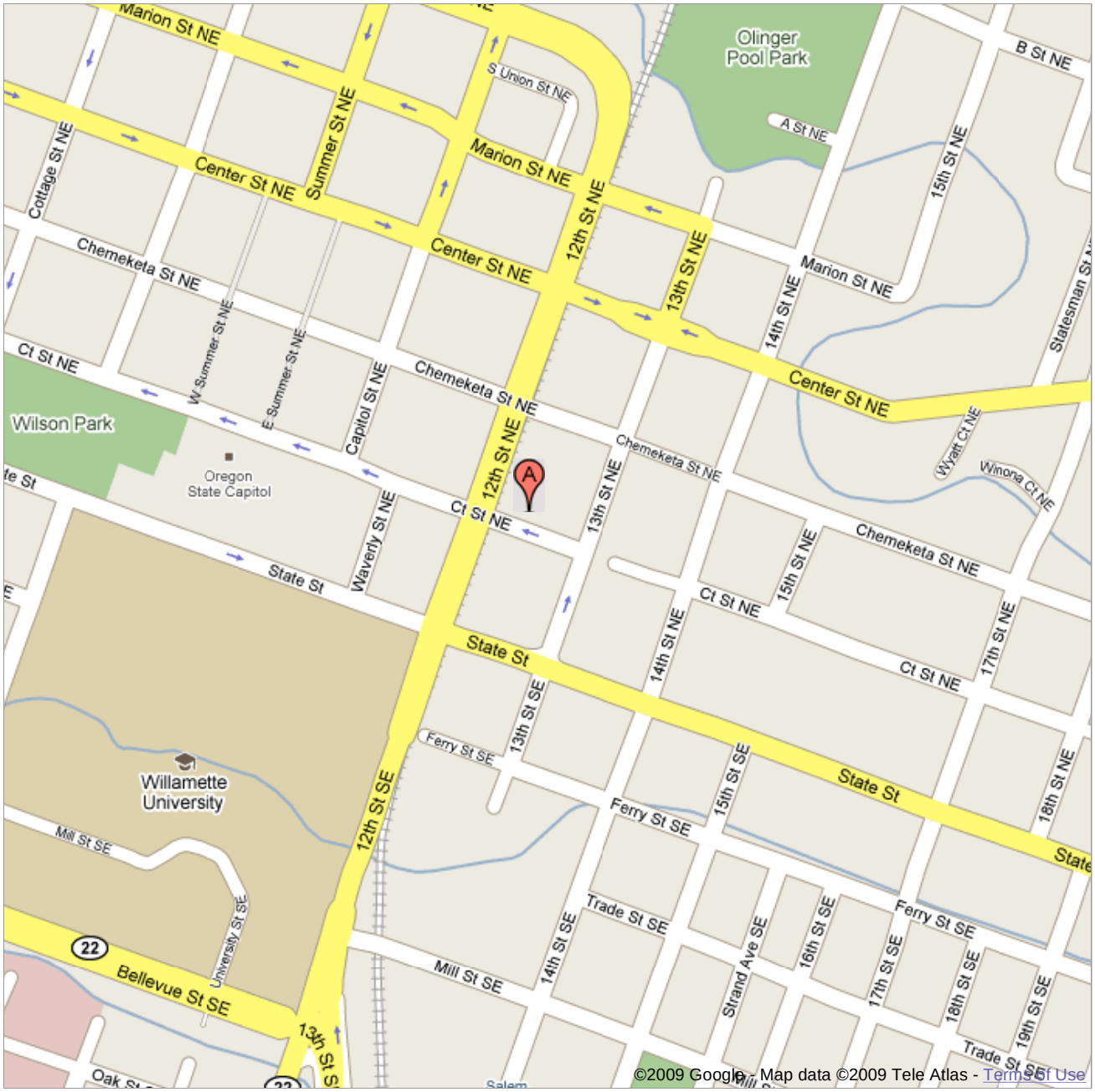
Salem, OR 97301

Notes A PARKING PASS MUST BE PICKED UP FROM ODOT STAFF.



ODOT Statewide Freight/Multimodal Planning Initiative (WOC #2)

May 4, 2009

Task 3.0 Draft Technical Outline

I. Purpose of this Draft Technical Outline

As part of the Work Order Contract (WOC) #1 of this Price Agreement with Oregon Department of Transportation (ODOT) a survey of potential multi-modal and mode-specific freight data and commodity flow sources of information was conducted. This Draft Technical Outline is intended to identify which specific sources of data will be now used to provide the most accurate, comprehensive understanding of Oregon's freight inventory and freight flows, in both text/table format and in GIS compatible electronic tables that will be produced as part of WOC #2. The data sets identified will support the development of freight inventory, conditions assessment, establishment of strategic freight network elements, and other related subtasks, such as bottleneck identification.

This draft version of the Technical Outline, coming at the beginning of this work effort, is certain to be modified as data is further provided, reviewed and assessed. However, this early submittal is intended to allow ODOT and its freight stakeholders (including the Freight Plan Steering Committee) to review and comment on preliminarily identified data sources. It is hoped that stakeholders will provide direction in the form of data source updates, corrections or suggestions based on their special knowledge and expertise. Such new information will be folded in to this work effort as it surfaces and is appropriate, after consultation with the Cambridge Systematics and ODOT Project Managers.

II. Preliminary Findings

"State of the Practice"-Oregon Freight Data

Since the seminal *Freight Moves the Oregon Economy* (1999), the state of Oregon, led by ODOT, has been steadily expanding and deepening its freight data sets, and its understanding of and commitment to an efficient, reliable and safe intermodal freight network. Oregon has been observing its neighbors to the north and south, and taking best practices into consideration from national sources; it has engaged in extensive efforts to understand the new logistics chains, shippers' business models, and the implications for Oregon's trade and transportation-dependent economic sectors. Additionally, ODOT has participated in such regional freight planning and advocacy ventures as the West Coast Corridor Coalition, designed to substantiate and validate the case for larger national support of West Coast needs related to international trade and through-movements of commodities.

Data Updates Now Underway

As an example of the commitment to accurate and useful freight network and commodity flow information to use in planning and investment decision-making, ODOT is currently undertaking three major freight initiatives in conjunction with this Work Order Contract (WOC) #2. To aid in the coordination of ODOT has provided the scopes of work for several data gathering and updating efforts associated with statewide freight and rail planning tasks.

The related WOCs that are discuss below target county-level disaggregation of data. Since one of the problems with current national data is the general (statewide or higher) level of aggregation, these work efforts will greatly increase ODOT's ability to plan, monitor and invest in freight infrastructure over time.

Oregon Commodity Flow Forecast (Price Agreement #26963; WOC #3)/Freight Rail Component (Price Agreement #26963; WOC #5)

ODOT has a consultant under contract (through the related WOCs, identified above) to update Oregon's commodity flow forecast, beginning with a baseline year 2002, and providing forecasts in five year increments between 2010 and 2035. Under WOC #3, this extensive work will include compilation of such data as Columbia River Locks tonnage and number of crafts; imports and exports through Oregon's deep-water ports; truck volume and other information available from the weigh stations and port of entry waybills, and the waybills and tonnage reports coming to ODOT Rail Division from both Class 1 and shortline railroads. The work is expected to be conducted between approximately April and September, 2009.

Between May and August 2009, the freight rail element (WOC#5) will result in identification of network features including "rail at risk" segments or areas (down to the county level). It will also identify underserved areas within the state, capacity constraints and infrastructure investments as part of a comprehensive railroad overview. It will identify primary and secondary freight rail corridors, as well as suggest areas where new rail facilities could be strategically located to support the growth of emerging or existing regional rail business.

Oregon Statewide Port Strategic Plan (Price Agreement #26963; WOC #4)

ODOT and the Oregon Economic and Community Development Department (OECDD) are collaborating between their ongoing freight studies (the Statewide Freight/Multimodal Planning Initiative and the Statewide Strategic Port Plan, respectively) to allow efficient updating of Oregon port information, as described in the scope of work for WOC#4 for this Price Agreement. That update will include research and data collection to refine the understanding of current and projected port operations, economic and commodity trends, and regulatory, policy and governance issues. This effort will include up to 35 on-site port interviews, to obtain the most accurate and complete data on existing port activities, functions, volume and revenue, strategic plans and business or capital plans, and inventory of port infrastructure and assets. A more detailed picture of the potential for freight generation will result from tasks that will identify land availability, commercial fishing opportunities, and the condition and capacity of landside connections to rail and highways.

HDR Recommendation for Commodity Flow Data

HDR will reference and summarize the most recent publicly available commodity flow data, as ODOT has directed. Given the extensive scope and level of effort now being expended via

these three WOCs, it is HDR's recommendation to ODOT that no "throw-away" work efforts be expended at this time in duplicative compilation, investigation or assessment of the existing patchwork of mode-specific commodity flow data that is widely recognized as partial, often aggregated at a level that is not very useful, and sometimes stale and/or inaccurate. HDR assumes that, through ODOT's WOC planning and coordination process, freight data sets coming from related WOCs will be ODOT compatible and will be easily included in the WOC #2 GIS compatible electronic tables being created by HDR. These forthcoming data sets will provide the foundation for updated mapping and graphic display of the commodity flow information being developed under WOCs #3-5.

Current state and (in some cases) county- or facility-specific freight volumes are widely available, if interim figures are needed. These data sources were provided as part of Appendix A in WOC #1 for this overall Price Agreement. HDR recommends using the 2002-based Oregon Commodity Flow Data as the placeholder for aggregate multi-modal volume data, and are identified below, as well.

Identified Data Gaps or Issues

Most infrastructure data has been obtained, and is now being examined. As data assessment continues, a revised summary of data gaps may be provided to the ODOT Project Manager.

Pipeline Data and Security Issues

Pipeline data appears difficult (perhaps impossible) to obtain without purchase. National security concerns have rendered publicly accessible pipeline maps unavailable. Options raised through discussions with ODOT include purchasing Penwell data for major Oregon transmission pipelines (in a cost range of $5,000) and/or querying the state's major pipeline owners to provide voluntary data or guidance on determining "strategic" thresholds.

Aging Data, Volatile Commodity Flow Trends and Related Work Order Contracts

As in most data compilation tasks, this effort has encountered instances of stale or incomplete information, and the lack of recent, sufficiently disaggregated commodity flow data. It is also important to note that, given the severe economic downturn, historic mode-specific freight volume data from 2000-2007 or 2008 is no longer reliably indicative of future trends, and at the same time, current year volumes are similarly suspect because they represent such a substantial discontinuity. Because the issues affecting commodity flow and demand for freight services are being investigated by other contractors through work in WOCs #3-5, they will not unduly impact HDR's work effort. HDR's GIS tasks will provide an electronic data structure to accommodate updated freight volumes and commodity data.

Establishing Links between GIS/Non-GIS Based Data

HDR will work with ODOT GIS staff to identify specific identifying segments or locations to associate non-GIS data in the form of tables. A typical example would be Port of Portland's air and marine cargo data that will be associated with the Port or Portland International Airport using an existing unique ID that exists in ODOT's data layers.

Establishing the System-Level Significance Threshold

HDR will work closely with Cambridge Systematics and ODOT staff to establish the level of significance with respect to particular data sets. Freight system corridors will also be

informed by efforts of the related WOCs. For example, the Rail WOC#5 will provide a two-tiered freight rail network, based on the information flowing from that work. HDR's GIS electronic tables will provide a structure for inputting that type of system information when it becomes available from the consultant and/or ODOT.

III. Oregon Freight Policy Documents

Policy documents that will be further reviewed and discussed as the basis for analytical direction, include most, but not all, of those listed in the scope of work for this task :

- Oregon Transportation Plan (2006)-including Freight Update
- Oregon Highway Plan (1999)
- Oregon Aviation Plan (2007)
- Freight Moves the Oregon Economy (1999)
- Principles for Government Involvement in Freight Infrastructure (1998)
- Portland Metro Regional Freight Task Force Plan (currently in draft form)
- City of Portland Freight Master Plan (February 2006)

These materials will be reviewed for relevant policies, goals, strategies and objectives, as well as freight-related performance measures. Additional data sources or information on conditions will be folded in to the GIS efforts. The results of this review will inform Tasks 4 and 5.

If it becomes available during the duration of relevant tasks, NCFRP 03 Performance Measures for Freight Transportation, review of draft or final versions will also be included.

For the purpose o developing the freight infrastructure inventory (Task 5), more limited use of the following studies may be made :

- Freight Rail and the Oregon Economy (2004)
- Port of Portland Trade and Transportation Studies

IV. Freight Data Availability by Mode

This section summarizes the key information and data sets (GIS and non-GIS) that will likely be useful presented in the table that concludes this Draft Technical Outline. A separate table for each mode is included below. The tables begin with intermodal/multi-modal data sets. These include non-freight-specific GIS files and other data that will or could be used as a foundation for all GIS freight analysis and mapping—such as political boundaries and major highways. It also includes "intermodal" facilities such as rail terminals and grain elevators. Arguably, ports themselves could be included here, but data related to ports is provided in the separate summary of marine data.

Some of the data sets are overlapping. As the GIS compatible electronic tables and other non-GIS data is compiled, HDR will consult with Cambridge Systematics and ODOT staff to determine specific sets or subsets of data for inclusion.

As mentioned above, pipeline data is still being pursued, but may have limited availability.

Table 1: Multimodal/Intermodal Data Availability Summary

Data Type	Source/Data Collection Notes	Data Indices or Units of Measure	Notes (Availability or Limitations)
Background Data (common to all modes)			
Area Commissions on Transportation	ODOT GIS Layers	Location and name of each of the 12 ACT	2008 ACT file available, and received from ODOT
State boundary	GEO spatial data library	Location	Files on GIS server
County boundaries	GEO spatial data library	Location and name	Files on GIS server
City limits	GEO spatial data library	Locatiaon and name	Files on GIS server
Infrastructure			
Intermodal Terminal Facilities	Bureau of Transportation Statistics (BTS) National Transportation Atlas Databases (NTAD) http://www.bts.gov/programs/geographic_information_services/	Key attributes in table include primary function of the facility, such as whether it serves rail, port, air, or truck. Also includes all of the modes that are affiliated with the facility such as rail & truck or air & truck. A description of the commodities at each facility is listed in the attribute table as well. Examples of commodities are forest products, mechanical machinery, textiles, etc. The city and state location of the facilities are shown in the attribute table as well.	Have file from 2008 NTAD data, however, the data was created in 2003
National Highway System Official Intermodal Connectors	http://www.fhwa.dot.gov/planning/nhs/intermodalconnectors/oregon.html	Identifies approximately 59 miles of intermodal connectors in Oregon; indicates type (e.g., truck/rail; port/pipeline, Airport); description, length and facility ID.	In table format at BTS website. Information contains Facility ID which could be used in data tables to supplement BTS NTAD data.
Grain Elevators	Grain Elevator Data Sets http://www.farmnetservices.com/farm/search-1.php?pkey=&location=51&submit=Search UPRR Grain Elevator Database:	Locations and contact information for 18 Oregon Grain Elevators UPRR Database includes 28 Oregon grain elevators served by UP; available Facilities and Destination Information varies, but fields include facility address, contact, business type, products or grains handled, shuttle status, type	No GIS files. Non-GIS data sets are available online.

	http://dx01.my.uprr.com/pubdir%5Cgraindir.nsf/$$Search?OpenForm BNSF Grain Elevators: http://www.bnsf.com/markets/agricultural/elevator/menu/orlist.html	and size, serving roads, whether it is open or closed to reciprocal switching, spot size (i.e., track capacity) elevator capacity (bushels); scales at facility, origin weight capability. The last update of information also varies by facility, and is not guaranteed for accuracy by UP. BNSF includes 10 elevators, 4 of which are also included in UP's directory. BNSF directory has links to each facility with location; contact info; capacity (bu.) track capacity (cars); handling mode (e.g., shuttle unloader); scales and Kind (e.g., Track Certified); Railroad service; grains handled.	
Certified Industrial Sites	Oregon Economic and Community Development Department, Community Development Division http://www.oregon.gov/ECDD/IF/certsites/certSites.jpg		
Volumes/Commodity Flow/Freight Generators			
Commodity Flow Data	US Census 2002 Oregon Commodity Flow Survey Data http://www.census.gov/prod/ec02/ec02tcf-or.pdf	Quick Summary in pdf format at http://www.ops.fhwa.dot.gov/freight/freight_analysis/faf/state_info/faf2/pdfs/or.pdf Value, Ton and Ton-miles for shipments, by mode, at the state level. For 2002 and forecast year 2035; within state/from state and to state. Indicates top commodities by weight and value, as well as top trading partners..	HDR recommends providing summary statewide data, pending completion of related Work Order Contracts begun in spring 2009 (noted above).
Truck Usage/Characteristics	US Census 2002 http://www.census.gov/prod/ec02/ec02tv-or.pdf	Truck mileage by, type, weight, etc.	May be useful in describing truck operations

Table 2: Road/Highway Data Availability Summary

Data Type	Source/Data Collection Notes	Data Indices or Units of Measure	Notes (Availability or Limitations)
Infrastructure			
Freight System Highways	ODOT GIS Layers	Attribute table includes the highway name, number and milepost segments for all freight highways in Oregon. Line segments are separated by mileposts.	2007 file available, and received from ODOT
Integrated Transportation Information System (IT IS) data	ODOT Transportation Data Section, Roadway Inventory and Classification Services Unit http://www.oregon.gov/ODOT/TD/TDATA/otms/OTMS_ITIS_Field_Definitions.shtml	Detailed data on lanes, vertical grade, horizontal curve, pavement, capacity, vehicle classification, bikeways, sidewalks, crosswalks, etc. Also provides official source for state highway milepoints and mileage statistics.	HDR currently waiting for full data set from ODOT; will explore all available sources for roadway inventory data.
Roadway Conditions (State Highways)	ODOT GIS Layers? PDF Map/Report (ODOT Pavement Services Division) http://www.oregon.gov/ODOT/HWY/CONSTRUCTION/docs/pavement/2008_pavement_condition_report_maps.pdf	GFP ratings (Very Good to Very Poor) for all state highways; report includes pavement treatment and details of conditions, by State and ODOT Region/District roadway. Segments identified by beginning/ending MP. Comparison with 2006 conditions is provided.	Do not have GIS files of this data. Will request this from ODOT.
Weight Restricted Bridges	ODOT GIS Layers	Bridge restriction data such as maximum allowable weight per axle and superload are listed for certain bridges in the State of Oregon. Structural information such as length, width, material, and structure type are listed in the attribute table. Additional table information includes status on whether the bridge is restricted or posted, location of bridges, milepost location of bridge, and bridge name.	2006 file available, and received from ODOT.

Bridge Conditions	ODOT GIS Layers	Table includes data on overall condition of bridges in the State of Oregon. Condition categories include fair or better and poor condition. Structural information such as length, width, material, and structure type are also included in the attribute table. Other data in the attribute table includes bridge class (local, collector, arterial), bridge location by city and county, and name of the bridge.	2005 file available, and received from ODOT. Data may be outdated, as it is 4 years old.
Truck Corridors	ODOT GIS Layers	Table describes to/from information for truck corridors in the State of Oregon. A beginning and end milepost is given to each field to locate where on a particular state highway each corridor is located.	File available and received from ODOT, but year of data unknown. HDR will clarify what ODOT description of "Truck Corridor" entails
Truck Crash Corridors	ODOT GIS Layers	Description pending receipt and examination of file.	File available from ODOT, but have not yet received. Data may be outdated, as latest year of data according to ODOT Data Directory is 2003
Truck Stop Locations on Major Oregon Highways	ODOT Motor Carrier Transportation Division, Field Services http://www.oregon.gov/ODOT/MCT/STOPS.shtml	Fax-Equipped Truck Stops; locations and contact information on Major Routes: I-5, I-84, US 730, US 395, US 20, US 97, US 95 and OR 11	Revised January 2009; is not a complete listing, is limited to those truck stops that have a fax service truckers can use to have credentials sent to them. Includes stops on I-5
Volumes/Commodity Flow/Freight Generators			
2007 Traffic (including Truck) Volumes	ODOT Updated every three years on rotating basis. Sources include WIM, manual and automatic counts.	AADT truck flow by class. Table also includes highway location and mileposts.	State Highways only; Vehicle classification 2007 file available, and received from ODOT
Vehicle Crashes	ODOT GIS Layers	Table data for this file is derived from the ODOT Motor Vehicle Traffic Crash Analysis and Code Manual. Crash types such as angle, head-on, rear-end, and fixed-object crashes are described in the table. Additional crash data in the table include crash severity (injury, fatality, etc.), type of vehicle or non-vehicle involved in crash (auto, pedestrian,	2007 file available, and received from ODOT. Need to determine if truck crashes can be parsed out of table.

		animal, etc.), highway location and milepost of accident.	
Freight Truck Flow	ODOT GIS Layers	Freight truck flow tables are identical to that of the overall traffic flow file, with the exception that the truck traffic is selected out from all other traffic. Traffic flow totals are given by highway and milepost segment. AADT numbers are broken down into ranges such as 0-500 and 500-1,000, and a truck percentage of overall traffic flow is given for each field.	2007 file available, and received from ODOT

Table 3: Rail Data Availability Summary

Data Type	Source	Data Indices or Units of Measure	Notes (Availability or Limitations)
Infrastructure			
Railroads Operating in Oregon	ODOT Rail Division http://www.oregon.gov/ODOT/RAIL/docs/freightrr.pdf	List of Class 1 and shortline railroads in Oregon. Contact and mailing information.	Available in text/table format.
Railroads	ODOT GIS Layers	Rail line owner such as BNSF, UP, and P&W are described for each line segment in addition to railroad status (active, MAX, etc.).	2008 file available, and received from ODOT. File is basic, and table data does not include volumes, or any other cargo information.
Rail Crossings	ODOT GIS Layers	Major table attributes include location and name of crossing, along with railroad owner (BNSF, UP, etc.), railroad milepost location of crossing, and unique US DOT # for each crossing.	2007 file available, and received from ODOT
Volumes/Commodity Flow/Freight Generators			
Rail Shipments (statewide)	Freight Analysis Framework (FAF 2.2)	Rail shipments in tons/value.	2002 data; is aggregated to the state level
Rail Line Density (volumes)	West Coast Corridor Coalition Trade and Transportation Report	Not in GIS format; will be indicated for identified segments on Class 1s.	2007 data based on conversations with BNSF and UP; available for Class 1s only. Per ODOT Rail, HDR will not duplicate work of other consultants to update of refine this data.
Rail-Related Accidents	FRA State Reporting http://safetydata.fra.dot.gov/officeofsafety/publicsite/Query/stateoverview.aspx	Accident data, reports by year (or specified time period) through Feb 09 for highway/rail and trespass accidents; fatality	Available from FRA in text form.

Table 4: Marine Data Availability Summary

Data Type	Source	Data Indices or Units of Measure	Notes (Availability or Limitations)
Infrastructure			
Oregon Ports	ODOT GIS Layers	Attribute table includes data such as city and county location and name of each port.	2006 file available, and received from ODOT. Cargo data will need to be added to table.
Volumes/Commodity Flow/Freight Generators			
Port of Portland Cargo Volumes	Marine Terminal Cargo Statistics: http://www.portofportland.com/Marine_Stat.aspx	Commercial flight operations, enplaned and deplaned air freight (tons), mail (tons), split by domestic and international, + cargo records, by carrier.	Available in table format.
Port of Portland Cargo Volumes	Marine Fast Facts: http://www.portofportland.com/FastFacts_Marine.aspx	2008 cargo volumes by major commodity, container and break bulk. Includes Terminal acreage and other key data	Available in list format

Table 5: Aviation Data Availability Summary

Data Type	Source	Data Indices or Units of Measure	Notes (Availability or Limitations)
Infrastructure			
Public Use Airports	ODOT GIS Layers	Key attributes included in data include location, name, and type of aviation facility such as commercial service, local general aviation, regional general aviation, and urban general aviation.	GIS file available and received from ODOT, but date of data is unknown. Passenger and cargo data will need to be added to tables.
Oregon Statewide Inventory of Aviation Facilities	ODOT	-Activity levels; airfield capacity, user types, physical airport characteristics, etc.	Updated in 2007; in text form
Volumes/Commodity Flow/Freight Generators			
Portland International Airport (PDX) Air Cargo (and Passenger) data	Port of Portland/PDX Monthly Traffic Report	-Air terminal cargo data and forecasts -Enplaned and deplaned air cargo tonnage (air freight/mail) -Domestic vs. international air cargo tonnage -cargo tonnage by carrier	-Not available in ODOT GIS Data Dictionary. - Excel tables available on Port of Portland website at: http://www.portofportland.com/aviation_stat.aspx

Table 6: Pipeline Data Availability Summary

Data Type	Source	Data Indices or Units of Measure	Notes (Availability or Limitations)
Infrastructure			
State Oil, Gas, Energy Map	Pennwell Maps http://www.mapsearch.com/paper_products.html#state_maps	Pipeline companies, type, interconnecting freight modes.	These must be purchased; they include oil and gas and energy infrastructure pipelines, and can be developed for an individual state. Available (for purchase) in GIS format: http://www.mapsearch.com/digital_products.html#inventory
General Pipeline Data for Oregon	Pipeline Safety Trust (Advocacy Group) http://pstrust.org/oregon/maps/index.htm	Miles of pipe in Oregon; by type, with interstate and intrastate mileage distinguished. guidance for individual and local governments.	HDR will discuss pipeline data availability with ODOT, since neither the State of Oregon or the federal Office of Pipeline Safety makes pipeline maps of Oregon available to the public.
Volumes/Commodity Flow/Freight Generators			
State Volumes	Freight Analysis Framework	Tons/Value	State totals included in FAF2.2 Pipeline data is "statistically uncertain"

Oregon Department of Transportation (ODOT) WOC #2: Oregon's Critical and Strategic Freight Infrastructure

Task 4: Define Strategic Freight Infrastructure- Working Outline

Purpose

This outline is to guide the development of a technical memorandum for Task 4 of ODOT Work Order Contract (WOC) #2: Oregon's Critical and Strategic Freight Infrastructure. Task 4 will build on the work completed in the Task 3 Literature Review as well as other data sources from Phase I of ODOT's freight planning effort, the Oregon Aviation Plan, the Oregon Statewide Strategic Ports Plan, and the rail study under development by ODOT. The objective of Task 4 is the following:

- To identify best practices in other states that have defined their strategic freight infrastructure, including the extent of those networks and the criteria and thresholds used to define them, as well as data requirements;
- To analyze the implications of including specific criteria identified by ODOT in the definition of "strategic freight infrastructure"; and
- To recommend specific criteria and thresholds for inclusion in the ODOT list of strategic freight infrastructure based on metrics such as capacity, rate of use, and importance to the efficient statewide movement of goods.

This technical memorandum will be organized into the following four sections:

1.0: Introduction

The introduction will introduce the scope and structure of the technical memorandum. Specifically, the section will include:

- Discussion of why it is important for states to define a strategic freight system, and how looking at what other states have done in this realm can help Oregon develop its own strategic freight infrastructure;

- A review of the relevant commodity flow, network, transportation system performance data as well as discussion of other ongoing freight planning efforts in Oregon (derived from the Literature Review completed in Task 3); and
- Summary of the structure of the technical memorandum.

2.0: Review of Other States' Strategic Freight Networks

2.1: Practices of Other States

This section will introduce the peer states identified by the CS team and describe their strategic freight networks. For each state, we will provide background information on its strategic freight planning efforts and describe any specific classification schemes used to group freight infrastructure (e.g., hubs, connectors, intermodal corridors). The states identified for consideration include:

- Florida's Strategic Intermodal System (SIS);
- North Carolina's Multimodal Investment Network (MIN);
- Ohio's Macro-Level System;
- Washington's statewide transportation system; and
- Wisconsin's Translinks 21 plan.

2.2: Criteria and Thresholds Used by Other States

This section will describe the specific criteria that other states have used to define their strategic freight transportation networks, as well as the thresholds they use to identify specific infrastructure as "strategic". Examples of the criteria used by other states include:

- Percentage of total U.S. freight activity for airports or seaports (Florida);
- Average daily commercial truck traffic (Ohio) or percentage of trucks in the traffic mix (Florida);
- Rail line density in gross ton-miles (Ohio and Florida);
- Population and employment levels (Wisconsin and Ohio);
- Presence of natural resource, agribusiness, or manufacturing centers (Florida, Ohio, and Wisconsin);
- Other relevant criteria identified through the Literature and examination of other states' best practices.

2.3: Types of Data Used by Other States

This section will describe the specific types of data required and used by the five states identified above to define their strategic freight networks. Among the states that have done this type of analysis, there is considerable variation in terms of the level of detail and sophistication involved in designating a strategic freight network. For example, the designation of Florida's Strategic Intermodal System (SIS) was the culmination of a multi-year effort involving extensive data collection, analysis, and public involvement. As a result, there are more than 40 different criteria/thresholds that the Florida DOT uses to define SIS components, such as: Passenger enplanements (airports) or embarkations (seaports); freight volume at airports, seaports, and intermodal facilities; clusters of freight-dependent industries; rail line density; projected population growth at the county level; and many others. By contrast, Wisconsin's Translinks 21 plan is primarily focused on "backbone" highways, which are defined using just a few data parameters such as projected traffic volumes, county population and employment patterns, county economic and industry makeup, and average daily truck volumes.

This discussion will serve two primary purposes. First, it will link the data needed in order to employ various criteria and thresholds with the data that is available to ODOT for this planning effort. Secondly, it will allow ODOT and the project team to put together an approach to defining Oregon's strategic freight network that best meets ODOT's needs, given available data, time, and budgetary constraints.

3.0: Implications of Using Additional Freight-Specific Criteria to Define the Strategic Freight Network

This section will review the specific implications of utilizing the following additional criteria (identified by ODOT) in the proposed definition of "strategic freight infrastructure":

- Volume of cargo transported on a particular route, including commodity flow maps;
- Volume of freight transported compared to its value;
- Geographic influence area of the freight system (i.e., the hinterland served by a particular freight facility and the radius in miles of it's market area); and
- Evaluation of the economic value of a strategic freight system to the Oregon economy and the associated implications for statewide economic vitality.

4.0: Recommendation of Strategic Freight Infrastructure Criteria and Thresholds

Based upon the evaluation of other states' best practices and strategic freight transportation networks, this section will recommend specific criteria that, in the judgment of the project team, represent the best way to define a strategic freight system within the Oregon context. It will also define quantitative and/or qualitative thresholds that will be used to screen infrastructure elements for inclusion in Oregon's strategic freight transportation system. The identification of specific criteria and associated thresholds will be included in future drafts of this Technical Memorandum, pending completion of the Task 3 Literature Review.