

Oregon Commodity Flow Database

final report

prepared for

Oregon Department of Transportation

prepared by

Cambridge Systematics, Inc.

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1.0 Oregon Commodity Flow - 1997 Baseline Estimates

■ 1.1 Purpose of the Report

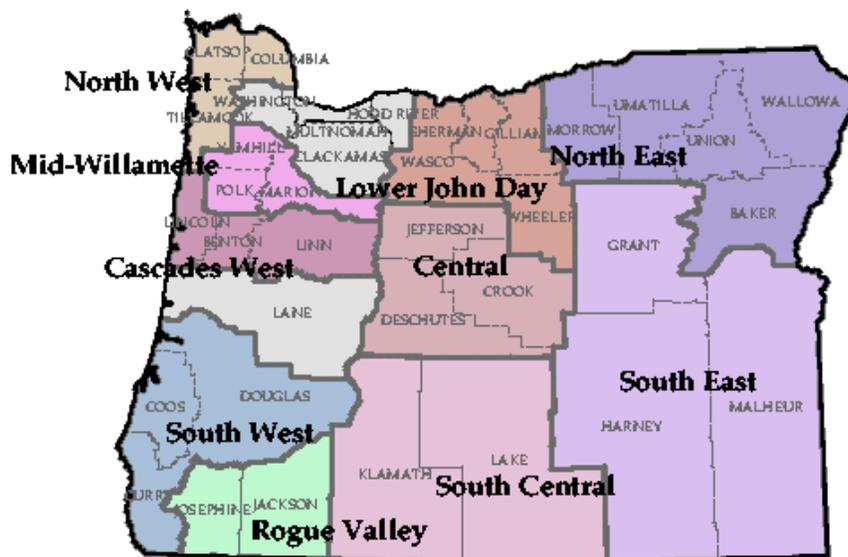
This report describes the development of commodity flow estimates for Oregon and each of its regions for 1997. These estimates were used to develop forecasts to 2030 for the State and regions. The estimates use 1997 as a baseline year for comparability with other recent work completed for the Portland metropolitan area. The Port of Portland, with ODOT and Metro as partners, recently developed commodity flow estimates and forecasts for the Portland metropolitan area (see Appendix A for citations to references). The Port effort was an update to previous commodity flow forecasts that used 1997 as the base year. In addition, the most recent available data from the national Commodity Flow Survey (CFS) is from 1997. The CFS is an important data set used by the U.S. Department of Transportation and state and region transportation agencies to conduct freight planning.

The basic methodology outlined here was created for the Portland metropolitan area commodity flow forecast. For the statewide estimates, the methodology was refined to take into account newly available data sources to address issues with estimating flows of specific commodities. These methodological enhancements are described in detail in Appendix B. In addition to these improvements, there is one other difference between the two studies. The data developed for this study uses the Standard Transportation Commodity Classification (STCC) codes, while the previous study developed data in both STCC and Standard Classification of Transported Goods (SCTG) codes. Because both formats are available for the Portland metropolitan area study, it is relatively straightforward to compare the two.

■ 1.2 Geographic Coverage

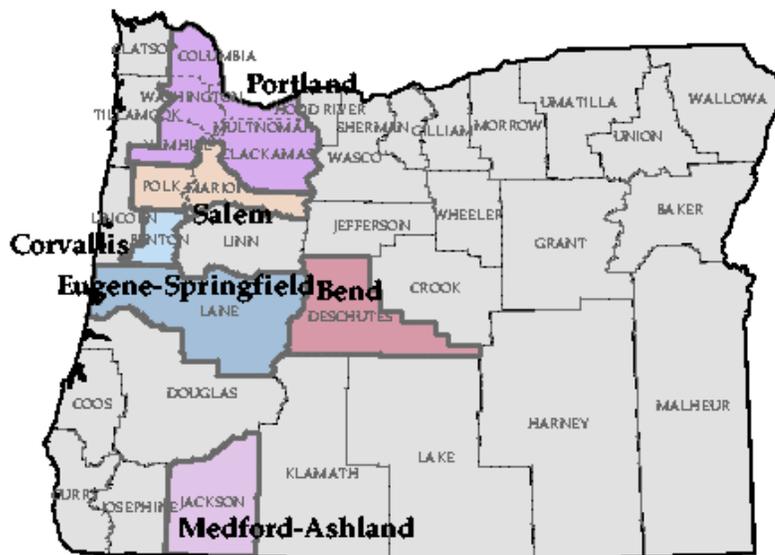
Baseline commodity flow data were estimated for Oregon, Area Commissions on Transportation (ACT) areas (Figure 1.1), and metropolitan areas (Figure 1.2). In addition, commodity flow estimates were generated for Hood River County, because it is part of neither an ACT nor a metro area, and for three counties in the Portland Metropolitan area (Columbia, Washington, Yamhill) that overlap multiple ACT areas. The definition of the North West Oregon ACT includes the western portion of Washington County. Because the population of this county is concentrated in the eastern half, closer to Portland, Washington County was not included in the estimates for the North West ACT.

Figure 1.1 Oregon Area Commissions on Transportation



Note: The western half of Washington County is included in the North West ACT.

Figure 1.2 Oregon Metropolitan Areas



■ 1.3 Methodology

The baseline commodity flow data include all commodity movements by tonnage and value of shipments to a particular region by direction (inbound, outbound, internal, and through) for each of the geographic aggregations described above. Commodity movements are provided using Standard Transportation Commodity Classification (STCC) codes at the two-digit level (Table 1.1). These two-digit codes are aggregations of more detailed STCC codes, provided in Appendix C. Commodity movements were estimated for the following modes: truck, rail carload, rail intermodal, water, air, and pipeline.

Table 1.1 Two-Digit STCC Codes

STCC	Description	STCC	Description
1	Farm Products	31	Leather Or Leather Products
8	Forest Products	32	Clay, Concrete, Glass Or Stone
9	Fresh Fish Or Marine Products	33	Primary Metal Products
10	Metallic Ores	34	Fabricated Metal Products
11	Coal	35	Machinery
13	Refined Petroleum (Incl. Natural Gas)	36	Electrical Equipment
14	Nonmetallic Minerals	37	Transportation Equipment
19	Ordnance Or Accessories	38	Instruments, Photo Equipment
20	Food Or Kindred Products	39	Misc. Manufacturing Products
21	Tobacco Products	40	Waste Or Scrap Materials
22	Textile Mill Products	41	Misc. Freight Shipments
23	Apparel Or Related Products	42	Shipping Containers
24	Lumber Or Wood Products	43	Mail Or Contract Traffic
25	Furniture Or Fixtures	44	Freight Forwarder Traffic
26	Pulp, Paper Or Allied Products	45	Shipper Association Traffic
27	Printed Matter	46	Misc. Mixed Shipments
28	Chemicals Or Allied Products	47	Small Packaged Freight Shipments
29	Petroleum Or Coal Based Products	48	Waste Flammable Liquids
30	Rubber Or Misc. Plastics	49	Toxic Waste

Several data sources were used to develop the baseline estimates. Reebie TRANSEARCH data provided the basis for much of the commodity flow estimates. To provide a more refined picture of goods movement in Oregon, these data were enhanced using commodity and mode specific estimates of flows. Commodities were identified for enhancement by comparing the TRANSEARCH data to the 1997 Commodity Flow Survey (CFS) and statewide data from the 1998 U.S. DOT Freight Analysis Framework (FAF).

The primary data enhancements were to truck movements of agricultural goods, petroleum products, non-metallic minerals, and waste. In addition, estimates of commodity movements by rail, water, and pipeline were generated from mode-specific data sources, including the Surface Transportation Board (STB) Rail Waybill sample, the U.S. Army Corps of Engineers Waterborne Commerce Series, and the Energy Information Administration's (EIA) pipeline data. Appendix B describes the detailed work steps used to enhance the TRANSEARCH data by mode and, in some cases, commodity. Appendix D shows commodity flows for:

- The State of Oregon;
- Oregon's six metropolitan areas;
- Oregon's 10 Area Commission on Transportation (ACT) areas; and
- Four counties which are a) not in an ACT area (i.e., Hood River County), b) split between a metropolitan area and an ACT area (i.e., Washington County), or c) in ACT areas separate from the metropolitan area within which the counties are located (i.e., Columbia and Yamhill).

The baseline estimates are trip based. That is, they are oriented to a particular geographic region, whether it is the State, a metropolitan area, an ACT, or a county. Because the flows are directional, flows inbound to a particular region will be outbound from another region, as well as from outside the State. As a result, commodity flow estimates for the regions defined in the attached tables cannot be aggregated to form commodity flow estimates for larger regions. Furthermore, flows to or from particularly populous regions, such as the Portland metropolitan area, could be higher than inbound or outbound flows for the State as a whole. This occurs because for some commodities, inbound and outbound flows to the State originate and terminate outside of the State, but inbound and outbound flows to Portland originate and terminate both outside the State and in other regions of the State. For example, in 1997, about 52 million tons of freight moved outbound by truck from the Portland metropolitan area, but only 40 million tons moved outbound by truck from Oregon. The higher total for the Portland area means that substantial tonnage leaving the Portland area went elsewhere in Oregon, but did not pass beyond the State's borders. Similarly, about 1.7 million tons moved outbound by pipeline from the Portland metropolitan area, but none moved outbound by pipeline from the State as a whole.

Baseline commodity movements by value were estimated directly from the tonnage movements using data from the 1997 Commodity Flow Survey about the average value of specific commodities for Oregon. Estimates of value provide a means to show the economic importance of high value, low tonnage commodities such as those in the high-technology industries.

The baseline estimates of commodity movements presented in this report and appendices were assembled from the best data available to the research team given constraints of time and budget. Numerous refinements were made using published data and individual contacts to industry associations and, in some cases, individual firms to identify key flows

in individual regions of Oregon. Because the study examines multiple geographic areas and the entire State, the data used here vary by quality across several dimensions, including mode, geographic area, and direction.

Mode

Data were assembled separately for each mode and not all of these data were of equal quality. For example, data for rail carload movements were taken from the rail waybill sample produced by the Surface Transportation Board. Because the data are a sample of actual rail movements as described in a bill of lading, they are likely to be reasonably accurate for regions with large numbers of rail movements. In these cases, the sample will likely capture movements of all or most commodities. By contrast, though total rail intermodal data are available from the waybill sample (e.g., containers shipped by rail), the specific commodities were estimated using economic data. The waybill sample only records that containers are being transported, not the contents of these containers. As a result, these data are less precise than the carload data.

Geographic Area

In general, data quality is better for larger areas than for smaller areas, especially smaller areas that have relatively little economic activity. The economic models used to estimate transportation flows will have relatively less data to work with in small areas because published data are often withheld for confidentiality reasons. For example, if a given county has a single business that dominates the manufacturing sector, economic data such as the number of employees and the volume of sales will likely be withheld for all manufacturing activity in that county.

Direction

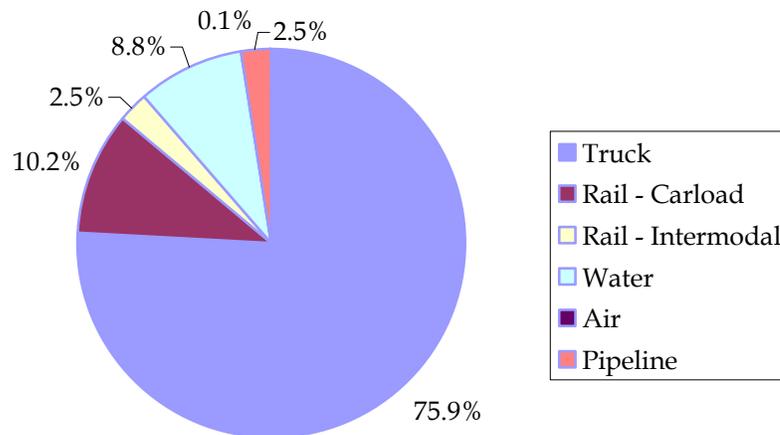
Commodity movements were estimated separately for inbound, outbound, internal, and through flows for each of the geographic regions described above. The first three of these directions were adjusted using detailed data related to production and consumption in Oregon and the United States. Through movements, however, cannot be adjusted without building a complete regional or national model of commodity flows that is well beyond the scope of this study.

■ 1.4 Major Trends

Nearly 435 million tons of goods were moved to, from, within, and through Oregon in 1997. In economic terms, this represented \$512 billion dollars worth of goods moved. These movements include all transportation modes, commodities, and directions. Trucks

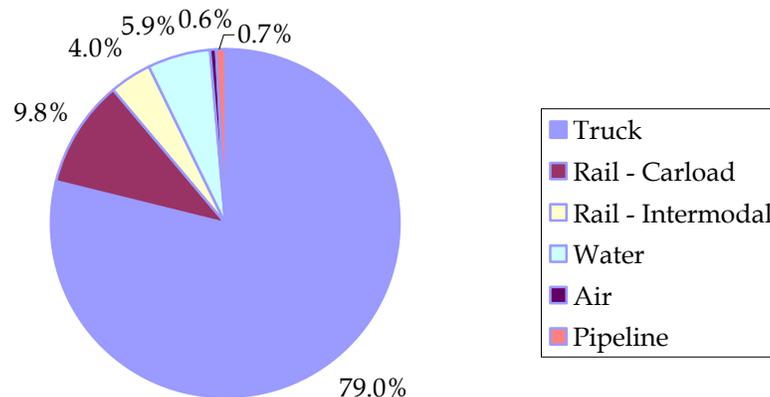
moved 76 percent of all tons (Figure 1.3). Rail movements accounted for an additional 13 percent, and water moved nine percent. Air and pipeline movements each accounted less than three percent of total tonnage moved.

Figure 1.3 Total Tonnage Moved by Mode, 1997



A larger percentage of the total value of goods moved by truck in 1997 (Figure 1.4). By value, the percentage of commodities moved by rail is slightly higher. The percentages of movements by water and pipeline are all slightly lower for value than they are for tonnage. Movements by air are of greater value (0.6 percent) than they are of total tonnage (0.1 percent), though the totals for both tonnage and value are low.

Figure 1.4 Total Value Moved by Mode, 1997



The nearly 118 million tons of lumber and logs moved in 1997 was more than twice as much as the tonnage moved in any other commodity group (Figure 1.5). Non-metallic minerals (stone, aggregate, and related), with over 55 million tons moved, was the second most important commodity grouping, followed by farm products (48 million tons) and food products (44 million tons) and clay, concrete, and glass products (with 27 million tons moved). A different picture characterizes commodity movements by value (Figure 1.6). The top 5 commodities by tonnage accounted for 68 percent of the tonnage moved to, from, within, and through Oregon, but represented only 20 percent of the total value of commodities moved in 1997. High value commodities for the State included electrical equipment, transportation equipment, and chemical products (each representing \$75 to \$80 billion worth of commodities moved in the State); food and kindred products (with more than \$50 billion worth of commodities moved); and machinery and instruments (each with just over \$30 billion worth of commodities moved). Lumber and logs, which ranked first in tonnage, ranked seventh in value with \$28 billion worth of commodities moved.

Figure 1.5 Estimated Tonnage Moved of Selected Commodities, 1997

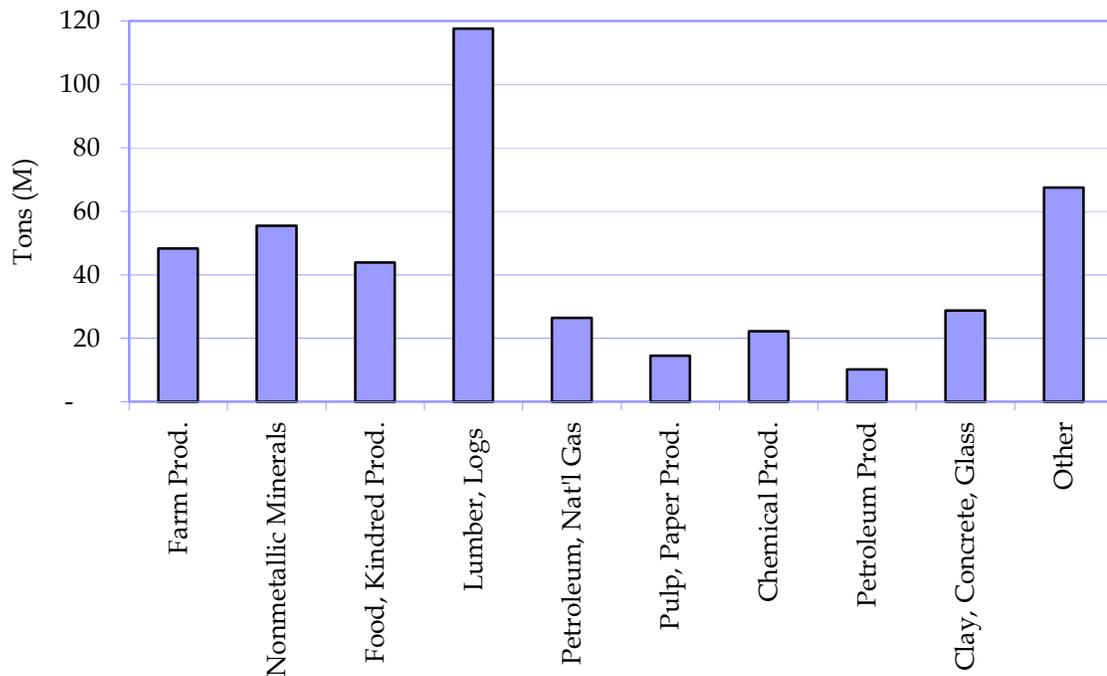
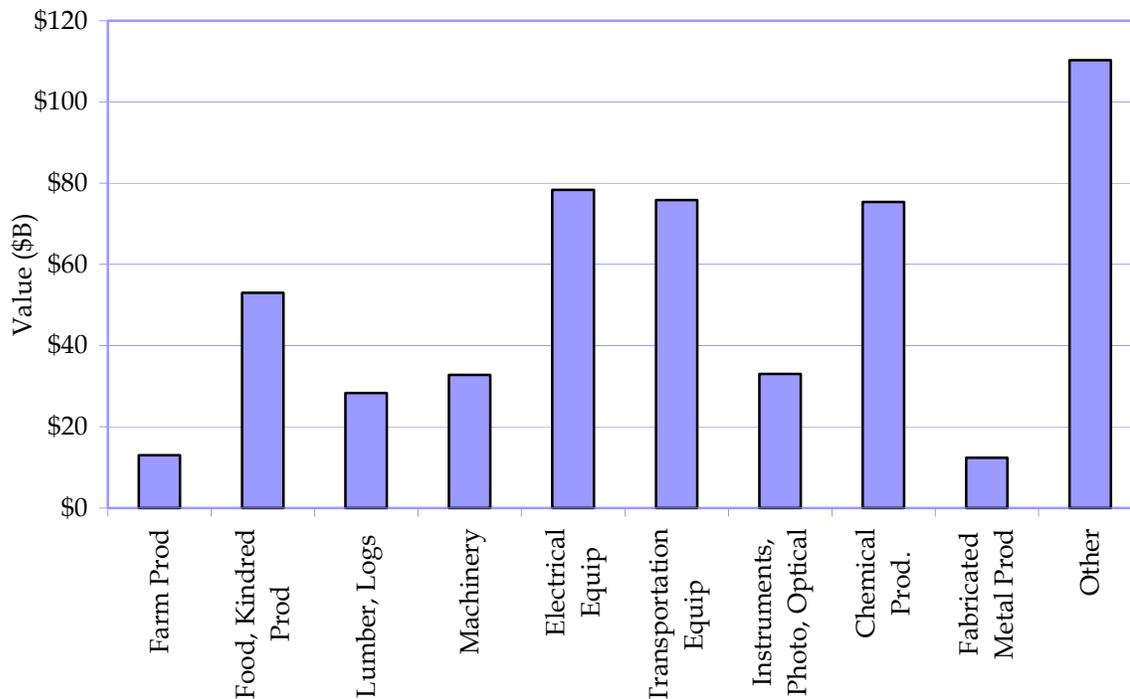
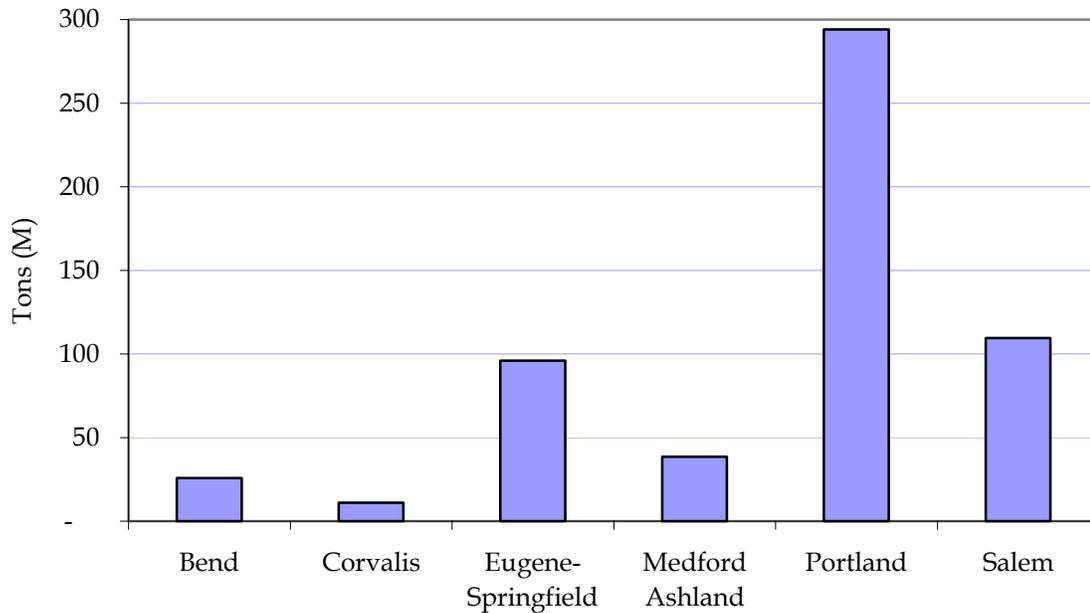


Figure 1.6 Estimated Value Moved of Selected Commodities, 1997



Among Oregon’s six metropolitan areas, the Portland area, with 294 million tons moved, accounted for about three times as much tonnage moved as each of the next two largest areas, Salem and Eugene-Springfield, in 1997 (Figure 1.7). Tonnage moved in the other three metropolitan areas ranged from 11 million tons in the Corvallis area to 39 million tons in the Medford-Ashland area. By value, commodity movements for the Portland metropolitan area were about \$364 billion, compared to \$94 billion for the Salem area, \$81 billion for the Eugene-Springfield area, and \$6 billion to \$50 billion for the Corvallis, Bend, and Medford-Ashland metro areas.

Figure 1.7 Total Tonnage by Metropolitan Area, 1997

Examining the direction of commodities moved, one-half of all commodity movements was internal (Figure 1.8). Inbound and outbound movements were relatively balanced with 18 to 19 percent each, while another 13 percent of commodities passed through the State. The percentage of movements that was pass through varied substantially among geographic subareas. For example, outside the Portland area, percentages of through traffic generally were greater than 50 percent in metropolitan areas and ACT areas that are located along major interstate highways, rail lines, and/or navigable waterways (Table 1.2).

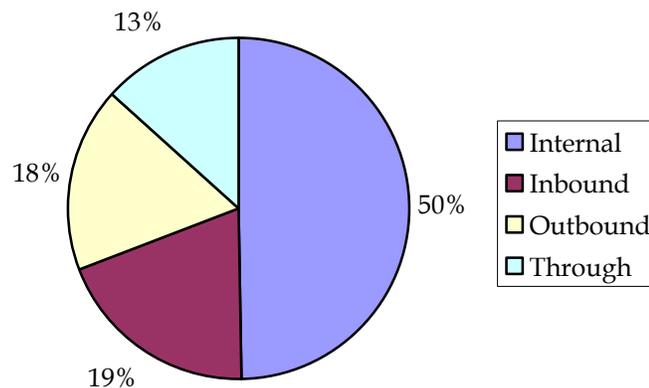
Figure 1.8 Tonnage by Direction, 1997

Table 1.2 Through Movement Tonnage as a Percentage of Total Tonnage, by Metropolitan and ACT Areas, 1997

Area	Percent Through Movements
Oregon	13%
Metro Areas	
Bend	56%
Corvallis	29%
Eugene-Springfield	56%
Medford-Ashland	49%
Portland	15%
Salem	73%
ACT Areas	
Cascades West	72%
Central Oregon	38%
Lower John Day	92%
Mid-Willamette Valley	64%
North East	74%
Northwest	72%
Rogue Valley	42%
South Central	52%
South East	82%
South West	51%

Appendix A

References

Appendix A. References

Federal Highway Administration. Office of Freight Management and Operations. "Freight Analysis Framework."

<http://www.ops.fhwa.dot.gov/freight/adfrmwrk/index.htm>

Global Insight and BST Associates. *Commodity Flow Forecast Update and Lower Columbia River Cargo Forecast*, June 30, 2002.

http://www.portlandairportpdx.com/pdfpop/MTMP_LCR_Commodity_Flow_Final_Report_2002.pdf

http://www.portlandairportpdx.com/pdfpop/MTMP_LCR_Cargo_Forecast_Final_Report.pdf

Oregon Department of Energy. *Power Plants in Oregon*.

<http://www.energy.state.or.us/siting/power.htm>

Oregon Department of Environmental Quality. *Oregon Industrial Solid Waste Facilities*.

<http://www.deq.state.or.us/wmc/solwaste/data/swmsindfacilities.html>

Oregon Department of Geology and Mineral Industries. *An Economic Analysis of Construction Aggregate Markets and the Results of a Long-Term Forecasting Model for Oregon* (Special Paper 27).

<http://sarvis.dogami.state.or.us/news&events/archives/9702-rel.htm>

Oregon Department of Transportation. "Area Commissions on Transportation."

<http://www.odot.state.or.us/otc/ACT.htm>

Reebie Associates. "TRANSEARCH Freight Market Data."

<http://www.reebie.com/images/TRANSEARCH.asp>

Surface Transportation Board. *Waybill Sample*.

http://www.stb.dot.gov/stb/industry/econ_waybill.html

U.S. Army Corps of Engineers. *Ports and Waterways Facilities*.

<http://www.iwr.usace.army.mil/ndc/ports/ports.htm>

U.S. Army Corps of Engineers. *Waterborne Commerce of the United States*.

<http://www.iwr.usace.army.mil/ndc/wcsc/wcsc.htm>

U.S. Bureau of the Census. *1997 Commodity Flow Survey, Oregon*, December 1999.

<http://www.bts.gov/ntda/cfs/cfs97states/97tcf-or.pdf>

U.S. Bureau of the Census. *1997 Census of Wholesale Trade, Oregon*, March 2000.

<http://www.census.gov/prod/ec97/97w42-or.pdf>

U.S. Bureau of the Census. *County 1990 to 1999 Annual Time Series of County Population Estimates*. http://eire.census.gov/popest/archives/county/co_cas.php

U.S. Department of Agriculture. *1997 Census of Agriculture, Oregon*.
<http://www.nass.usda.gov/census/census97/volume1/or-37/toc97.htm>

U.S. Department of Agriculture. *Weights, Measures, and Conversion Factors for Agricultural Commodities and Their Products*. http://www.usda.gov/nass/pubs/agr00/00_intro.pdf

U.S. Department of Agriculture, Economic Research Service. *Food Consumption, Prices, and Expenditures, 1970-1997*. <http://www.ers.usda.gov/Data/foodconsumption/>

U.S. Department of Agriculture, Forest Service. *Composition, Volume, and Prices for Major Softwood Lumber Types in Western Oregon and Washington, 1971-2020*.

U.S. Department of Energy, Energy Information Administration. *Natural Gas Annual, 1997*.
http://www.eia.doe.gov/pub/oil_gas/natural_gas/data_publications/natural_gas_annual/historical/1997/nga_1997.html

U.S. Department of Energy, Energy Information Administration. *Petroleum Marketing Annual, 1997*.
http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/petroleum_marketing_annual/historical/1997/pma_1997.html.

U.S. Department of Transportation, Federal Aviation Administration. "Airport Activity Statistics of Certificated Route Air Carriers."

Appendix B

Oregon Commodity Flow Database Work Steps

Appendix B. Oregon Commodity Flow Database Work Steps

This appendix describes the methodology used to generate 1997 baseline data for the Oregon Department of Transportation (ODOT) Commodity Flow study.

■ B.1 Rail Movements

Generating baseline rail data required four basic work steps:

1. Acquire Rail Waybill data to serve as the basis for commodity flows by rail;
2. Assign these data to origins and destinations using TRANSEARCH data;
3. Distribute these data to carload and intermodal movements using TRANSEARCH data; and
4. Estimate rail through movements from the Rail Waybill and TRANSEARCH data.

Step 1 – Acquire Rail Waybill Data

ODOT provided the following Rail Waybill sample data to use as the basis for both carload and intermodal rail data:

1. Oregon county-to-county total rail flows by two-digit STCC code;
2. Other state to Oregon county total rail flows by two-digit STCC code;
3. Oregon county to other state total rail flows by two-digit STCC code; and
4. Total rail flows passing through Oregon by two-digit STCC code, without county detail.

Step 2 – Assign to Origins and Destinations

The Waybill data provided detailed origin and destination data for Oregon counties, including county-to-county flows. Movements between counties and other states or passing through the State included no information about the external region. These were assigned to particular external regions using the distribution of rail commodity movements between Oregon counties and external regions in the TRANSEARCH data.

Step 3 – Distribute to Carload and Intermodal

As a last step, we used the TRANSEARCH data as a template to split the Waybill rail tonnages into carload and intermodal tonnages for each unique origin, destination, and two-digit STCC code. We calculated the percentage of rail tons moved by carload and intermodal conveyances for each TRANSEARCH record (tons moved for each unique origin, destination, and STCC code grouping) and applied to the Waybill data. In some cases, the Waybill data did not match the TRANSEARCH data (i.e., TRANSEARCH did not report data for a particular commodity and origin-destination pair included in the Waybill data). In that circumstance, we used a proximate origin-destination pair to estimate the split between carload and intermodal movements.

Step 4 – Estimate Through Movements

TRANSEARCH provides the primary data for through movements and routing. For the county, metro, and ACT aggregations, this includes movements that have either an origin or destination in Oregon, but are going to or coming from an external region (i.e., another state). They also include all movements that both originate in and are destined for external regions. We use routing data from TRANSEARCH to determine the counties that receive through movements. For multi-county regions and the State, we eliminated duplicate records (i.e., the same tonnage moving through multiple counties) to develop an estimate of total tons moved for each commodity passing through that region.

The Rail Waybill sample provides total flows that pass through the State by two-digit STCC code. We used these flows as control totals and used the TRANSEARCH distribution of rail flows to counties and regions, as well as to intermodal and carload flows. Through movements statewide for the Waybill data and the TRANSEARCH data were within 100,000 tons, which is less than one percent of the total through tonnage by rail.

■ B.2 Water Movements

Generating baseline estimates of commodity movements by water required three basic work steps:

1. Use data generated by the Portland commodity flow study for marine terminals in the Portland area and elsewhere along the lower Columbia River;
2. Acquire U.S. Army Corps of Engineers Waterborne Commerce data for locations outside the Lower Columbia River (e.g., Coos Bay, Umatilla, others); and
3. Estimate water through movements from the Waterborne Commerce data and the database generated in Steps 1 and 2.

Step 1 – Use Portland Data

As part of the Portland metropolitan area study, the Port of Portland participated in the development of baseline estimates and forecasts of commodity movements for the Columbia River from Portland and Vancouver to its mouth. These data are used for the relevant Oregon counties along the lower Columbia River.

Step 2 – Acquire Waterborne Commerce Data

The Army Corps of Engineers maintains extensive data about waterborne commerce in the United States. The Waterborne Commerce series provides various levels of detail depending on the size of the port. For larger ports, it provides detailed commodity information and total tonnage moved by direction (inbound, outbound, internal, and through). For some smaller ports, it provides only total commodity movements. We used the most detailed available data from the Waterborne Commerce series and supplemented with information obtained through telephone calls to ports.

For three smaller ports in Oregon (The Dalles, Arlington, and Morrow), the Waterborne Commerce series only provides summary data for two stretches of the Columbia River (Vancouver, WA to The Dalles and The Dalles to McNary Dam). For these ports, we used the Corps' Port Facilities database to estimate the specific commodities moving to and from each of these ports. The Port Facilities database identifies the major cargo handling facilities (e.g., grain terminals, container storage) at each port in the United States. First we subtracted data from ports in the stretch with known tonnages (e.g., the Port of Vancouver from the Vancouver to The Dalles section of the Columbia River). Then, we estimated the volume handled by each of the other ports from Vancouver to McNary Dam by using the capacity of all known port's facilities to handle a particular commodity (e.g., grain silos). Except for Vancouver, all major ports along this stretch of the Columbia River are on the Oregon side of the river, and account for the bulk of waterborne commodity movements with origins and destinations there.

Step 3 – Estimate Through Movements from Commerce Data

Water through movements are based directly on Waterborne Commerce data, where available. For ports where Waterborne Commerce data were not available, through movements were estimated from the total flow entering or exiting the river, subtracting out commodities that were known to go to ports lower on the Columbia River. For example, international flows to and from the Port of Portland would be a through movement for Clatsop County. Vancouver flows were considered a through movement for Multnomah County in this formulation.

■ B.3 Air Movements

Generating baseline air data required two basic work steps

1. Use data generated by the Portland commodity flow study for Portland International Airport (PDX); and
2. Use data from TRANSEARCH and the U.S. Department of Transportation (DOT) to estimate commodity movements for the remaining airports in Oregon.

Step 1 – Use Portland Data

As part of the Portland metropolitan area study, we generated estimates of data on air movements for Multnomah County. The Port of Portland provided control totals for Portland International Airport (PDX) freight and mail movements that were distributed to commodities using TRANSEARCH data. For the statewide study, we used the same PDX data that were used for the Portland area study. PDX represents roughly 94 percent of total airport freight movements in Oregon.

Step 2 – Acquire Other Airport Data

TRANSEARCH provides freight movements for airports in Coos, Deschutes, Jackson, Klamath, Lane, and Umatilla Counties. These data were used for these smaller airports as they were received from Reebie. For Corvallis and Roseburg Airports in Benton and Douglas Counties, respectively, the U.S. DOT provides total flows enplaned in 1997. For these two airports, we estimated total deplaned flows based on the ratio of enplaned to deplaned flows in the Reebie data for the other similar sized airports noted above. We also estimated the commodity mix for both enplaned and deplaned flows from Reebie data. These two airports handled less than 500 total tons in 1997.

■ B.4 Pipeline Movements (STCC 13)

Pipelines are used to transport crude petroleum, refined petroleum (such as gasoline and aviation fuel), and natural gas. All of these commodities are listed under a single 2-digit commodity code in the Standard Transportation Commodity Classification – STCC 13. Manufactured products that use petroleum as their base (such as paving materials and asphalt coatings) are listed under STCC 29. Generating baseline pipeline data required three basic work steps:

1. Acquire the Energy Information Administration (EIA) data to serve as the basis for commodity flows by pipeline;
2. Distribute these data as inbound flows to counties based on population and other information from the EIA regarding pipeline flows; and
3. Estimate through flows for natural gas and pipelines using EIA data.

Step 1 – Acquire Pipeline Data

Two main types of petroleum products (not including manufactured petroleum products in STCC 29) are moved within the State: 1) natural gas and 2) refined petroleum products. Natural gas moves almost exclusively by pipeline. A small percentage (i.e., propane) moves by truck and rail. For confidentiality reasons, the EIA withholds data on propane flows for Oregon. To estimate the truck portion of natural gas movements, we used EIA’s estimate of the percentage of natural gas that is propane for Washington State (1.15 percent).

According to EIA and other sources, all petroleum products first arrive in the State either via the Olympic pipeline from Washington to the Portland Delivery Station (PDS) or by ship. From the PDS, refined petroleum products (including gasoline, aviation fuel, and others) are distributed either by truck, barge, or by a second pipeline movement to truck terminals, airports, and other users. In addition, one petroleum pipeline (in Northeastern Oregon) and two natural gas pipelines (one in Northeastern and one in Central Oregon) provide movements of petroleum products through the State (see Step 3 for through movements). The natural gas pipeline through central Oregon also serves communities in Crook, Deschutes, Gilliam, Jefferson, Klamath, Morrow, Sherman, Umatilla, and Wasco Counties. The natural gas pipeline in Northeastern Oregon serves communities in Malheur, Baker, Union, and Umatilla Counties.

Table B.1 provides an overview of the movements of refined petroleum products and natural gas to and within Oregon by mode. Through movements are calculated relative to a particular region as described in Step 3 below.

Step 2 – Distribute Data to Counties

Natural gas moves almost exclusively by pipeline from origin to final destination. The EIA provides data on the final use of natural gas – industrial, residential/commercial, and power plant. Industrial flows were distributed to counties with natural gas lines based on manufacturing employment, residential/commercial flows were distributed to counties with natural gas lines based on population, and flows to powerplants were distributed based on the megawatts of gas-fired powerplants operating in Oregon in 1997 (from the Oregon Department of Energy).

Table B.1. Refined Petroleum and Natural Gas (STCC 13) Moved To and Within Oregon by Mode, 1997

Commodity and Mode	Volume	Tons*
Crude petroleum	0	0
Natural gas (million cubic feet)	185,069	3,701,380
Pipeline	182,756	3,655,113
Truck (@1.15%, based on Washington distribution of propane**)	2,313	46,267
Refined petroleum products (thousand barrels)	54,046	6,939,895
Pipeline	54,046	6,939,895
Barge	2,600	333,857
Truck (secondary movement)	46,946	6,048,417
Jet Fuel to PDX (using Chevron pipeline)	4,500	557,621
Ship (estimated as described in Section B.3)		6,390,943
Total pipeline		10,595,008
Total barge		333,857
Total truck		6,094,685
Total water		6,732,800
Total***		23,748,349

Note: This table does not include through flows for either refined petroleum products or natural gas.

* For natural gas, 1 cubic foot = 0.00002 tons; for gasoline, 1 ton = 7.74 barrels; and for aviation fuel, 1 ton = 8.07 barrels.

** A small portion of propane also moves by rail.

*** Total tonnage is based on trips and can include multiple moves of the same petroleum products by different modes.

For refined petroleum products with a destination in Oregon, all movements are first inbound to the PDS in Multnomah County. In addition, petroleum moves by several secondary pipelines, including the Kinder Morgan Energy Partners (KMEP) pipeline to

Eugene, a pipeline from the Port of Umatilla to Union Pacific's Hinkle rail facility near Hermiston; and the Chevron pipeline transporting jet fuel to PDX. KMEP estimates that 13 million barrels (1.7 million tons) of gasoline were transferred in 1997 from PDS to the KMEP pipeline to Albany and Eugene. Albany received 1.4 percent of these shipments in the first half of 1997 before the Albany station was permanently shut down. The pipeline from the Port of Umatilla to the Hinkle rail facility transferred roughly 336,000 tons internally within Umatilla County in 1997. The Chevron pipeline transferred 4.5 million barrels internally within Multnomah County (558,000 tons).

Step 3 - Estimate Pipeline Through Movements

One petroleum pipeline and two natural gas pipelines provide movements of refined petroleum products and natural gas through the State. The petroleum pipeline passes through the northeastern corner of the State (Baker, Malheur, Umatilla, and Union Counties). According to EIA estimates, the total capacity of this pipeline is 5.0 million barrels per year, or 650,908 tons. This total amount was assumed to pass through the four counties in 1997. Given that the pipeline may not always operate at capacity, this value better reflects the maximum possible through flows than the actual flows.

For natural gas, EIA provides total movements that enter and exit the State - the difference between these two movements is what remains in the State for consumption or storage (also provided by EIA). Because little or no natural gas was produced in Oregon in 1997, the volume that exits the State is assumed to be a through movement (removals from storage are identified separately). One pipeline carries natural gas through the center of the State and provides service to communities in Crook, Deschutes, Gilliam, Jefferson, Klamath, Morrow, Sherman, Umatilla, and Wasco counties. A second pipeline carries natural gas through the Northeastern corner of the State and provides service to communities in Malheur, Baker, Union, and Umatilla Counties. According to data from the EIA, the central Oregon natural gas pipeline handled about 770,000 tons and the Northeastern pipeline roughly 100,000 tons of natural gas movements through Oregon in 1997. The total volume of through movements on a given pipeline was assumed to pass through each of the counties crossed by that pipeline.

Pipeline through movements were also estimated for individual regions of the State in addition to the State as a whole. Using locations of existing pipelines and the estimates of natural gas and refined petroleum product pipeline flows described in Steps 1 and 2 above, we estimated through movements for each of the individual regions described in Section 1.0. Almost refined petroleum products and natural gas with destinations in Oregon are assumed to move from North to South, though some natural gas does move from South to North through the natural gas pipeline that passes through the Northeastern corner of the state. If a pipeline passes through a particular region, any product destined for counties to the South of a region in question was assumed to pass through that region.

■ B.5 Truck Movements

Generating baseline truck data required six basic work steps:

1. Acquire Reebie TRANSEARCH data to serve as the basis for commodity flows by truck;
2. Develop estimates of flows for several commodities that appear to be under-represented in the Reebie TRANSEARCH data;
3. Reconcile truck commodity movements with movements for other modes;
4. Assign secondary and truck-portion-of-intermodal movements to commodities;
5. Adjust Portland truck internal movements for consistency with previous work for the Port of Portland; and
6. Estimate through movements by truck from TRANSEARCH, accounting for the adjustments made in Steps 1 through 5.

Though this section is labeled as truck movements, many of the work steps here involve generating new estimates for total movements for goods of a given type. These adjustments are included in this section, but apply to multiple modes.

Step 1 – Use TRANSEARCH Data

Reebie TRANSEARCH data serves as the basis for the estimate of truck flows. The purpose of the methodology described here is to supplement this database to better account for commodities that have traditionally been under-represented in the TRANSEARCH data. Typically, these are non-manufacturing commodities, including agriculture, non-metallic minerals, crude petroleum, waste, and others. The discussion below also includes estimates for two processed or manufactured commodities: refined petroleum products and lumber and wood products.

Step 2 – Estimate Flows for Selected Commodities

The second step is the most detailed and complex of the process described here. Though this step is discussed here under adjustments to movements by truck, these commodities adjustments affect all modes. Five commodities from the Reebie database were examined for potential adjustment; flows for four of these were adjusted in the baseline estimates:

1. Agricultural products (STCC 01);
2. Petroleum products (STCC 13);

3. Non-metallic minerals (STCC 14);
4. Lumber and wood products (STCC 24); and
5. Waste (STCC 40).

Agricultural Products

Agricultural products include unprocessed farm products such as grains, fresh fruits and vegetables, livestock, raw cotton, and other similar commodities. We estimated inbound, outbound, and internal movements for agricultural products from estimates of production, consumption, and export. Table B.2 overviews the total agricultural products that were produced, consumed, or exported overseas in 1997. The truck portion of outbound movements is based on commodities produced in the State. The truck portion of inbound movements is based on consumption within the State, as well as overseas exports (the truck portion of these movements is an inbound movement to a region with a port, such as Portland). All three (production, consumption, and exports) contribute to internal movements of agricultural products by truck.

Production. The U.S. Census of Agriculture (1997) provides total agricultural production for each Oregon county by detailed commodity type (i.e., type of livestock or type of grain). These data are provided in metrics specific to each commodity (e.g., bushels of wheat, head of cattle). We converted these data to tons using commodity-specific conversion factors used by the U.S. Department of Agriculture (USDA) and commodity exchange brokers. We assume that truck movements from local agricultural production are either internal to the State or outbound to other states or to Canada or Mexico.

Table B.2. Agricultural Production and Consumption in Oregon, 1997

Data	Source	Tons (M)	Distribution of Truck Movements
Production	Census of Agriculture	9.8	Outbound and internal
Consumption	USDA Economic Research Service	4.6	Inbound and internal
Overseas international exports	Water Estimates	8.9	Inbound and internal
<i>Consumption and Export</i>		13.5	

Consumption. For total local consumption, we used data from the USDA's Economic Research Service. They estimate that in 1997 each person consumed 1.43 tons of agricultural products. This estimate includes products used for processing, as well as those consumed directly. Multiplying 1.43 tons per person by 1997 county population produced

the total consumption of agricultural products for that county. Truck movements for consumed products are either internal to the State or inbound from other states or Canada or Mexico.

Export. Finally, we know total international overseas exports directly from the Water data (described above). The truck movements for these data are similar to consumed products – they either come from within Oregon or from another state before they are exported to other countries. Note that an imported product consumed in Oregon (that was trucked from the port to its final destination) would have an internal (within Oregon) truck movement. Similarly, an exported product that arrived at the port by truck would have an inbound or internal truck movement. Export here explicitly excludes movements to Canada and Mexico by truck and rail. These movements are included in the domestic truck and rail estimates as described in this section.

In addition to generating production and consumption data, we also estimated inbound and outbound flows for agriculture using data from the Freight Analysis Framework (FAF). The FAF data use a different base year (1998) than the TRANSEARCH data used in this study (1997). However, the 1998 FAF data are based on the 1997 data and, with very few exceptions, the 1997 data and the 1998 data are exactly the same. We assume that total production is either consumed internally or is an outbound flow.

Production = Consumption + Outbound

For the State, we estimate the percentage of agricultural commodities that are outbound and internal using the relative proportions of outbound and internal movements in the FAF data (Table B.3). The FAF estimates five million tons of agricultural products outbound to other states and 6.4 million tons internal to Oregon. Using the ratio between these two types of flows and applying it to production data by county from the Census of Agriculture provides an estimate of 4.3 million tons outbound to other states and 5.5 million tons internal to Oregon.

Table B.3. Estimated Total Statewide Agricultural Flows by Direction

Direction	Method	Tons (M)
Outbound (to other states, Canada and Mexico)	Use control totals from production data (Census of Agriculture), distributed to internal and outbound moves using the ratio of FAF internal and outbound	4.3
Internal (to Oregon)		5.5
Outbound (for overseas export)	Use water estimates from Table B.3	8.9
Inbound (from other states, Canada, and Mexico)	Estimated as the total of local consumption and exports (Table B.2) minus internal movements	8

Finally, commodities were distributed to origin-destination pairs using the distribution of agricultural movements within the base TRANSEARCH data. We calculated these distributions separately for movements that are internal to Oregon (county-county flows) and those that involve an external region (Oregon county to and from another state). We used an iterative process to ensure a balance between production and outbound (including internal) movements and consumption and inbound (including internal) movements. County-to-county flows are based on the distribution in the TRANSEARCH data. Commodity flows between Canada or Mexico and Oregon are handled the same way as truck movements to or from other states. TRANSEARCH provides estimates of truck flows for Canadian and Mexican origins and destinations that were used, along with estimates to other states in the U.S., to distribute to origin-destination pairs as described here.

Refined Petroleum and Natural Gas (STCC 13)

The truck portion of petroleum movements is a function of the total petroleum products moved in the State by pipeline, ship, and barge (estimated in Section B.4). For natural gas, we assumed that 1.15 percent of the total movements occurred by truck for transporting propane around the State. These movements were distributed to counties based on population.

For gasoline and other refined petroleum products, we assumed that trucks move the portion of these products delivered to the PDS that are neither moved by pipeline to other locations in the Willamette Valley nor sent by barge to Umatilla (Table B.1). In 1997, three counties – Multnomah, Linn, and Lane – generated these truck movements. The EIA estimates that 462 million gallons (1.4 million tons) of gasoline traveled out of state from PDS in 1997; this volume is counted as an outbound truck flow from Multnomah County. The remaining flows were assumed to be either internal or outbound flows for Multnomah, Linn, and Lane counties. We estimated gasoline consumption using population. Flows were distributed as either internal flows (within one of the three counties with a pipeline terminal) or inbound flows (to one of the 33 other counties) using the population-based estimate of consumption. We assumed that gasoline moves internally first, and then outbound to the 33 other counties.

The Port of Umatilla also has a petroleum truck terminal to transfer from barge to truck. The amount of tonnage moving by truck from this terminal is assumed to be negligible.

Non-Metallic Minerals

Often referred to as aggregate, non-metallic minerals include stone and gravel used in construction and other industries. We estimate the production and consumption of aggregates based on a study conducted by the Oregon Department of Geology and Mineral Industries (DOGAMI). These data provide historical figures and projections of aggregate production and consumption for each county, excepting production for Columbia County, for 1997. We estimated Columbia County production data from the other counties in the Portland metropolitan area, using an average aggregate consumption per person ratio.

The DOGAMI data provides only high-level data on origins and destinations. To estimate the truck portion of aggregates moved, we used the DOGAMI data for counties as control totals and subtracted out movements that we estimated from other sources for rail and water (see sections B.1 and B.2 above). We assumed that the remainder of the total aggregate moved by truck. We also assumed that aggregate – a heavy, low-value commodity – generally moved the shortest distance possible, staying within the county where it was produced (an internal movement) if possible. We assumed that any non-metallic minerals produced in a particular county are either internal or outbound from that county and that products moved internally within a county first. Counties with greater production than consumption were assumed to export the remainder of their aggregate to other counties (an outbound move). Counties with consumption greater than production were assumed to import the remainder of their aggregate from other counties (an inbound move).

A rough estimate of non-metallic mineral routing was generated to ensure that inbound and outbound moves were not overestimated for regions (metro areas, ACTs, as opposed to counties). Non-metallic minerals were assumed to take the shortest path between any two counties. If a county produced no non-metallic minerals, we assumed its non-metallic minerals were imported from a neighboring county with transportation links.

Lumber and Wood Products

Although TRANSEARCH tends to underestimate flows for some commodities, it seems to overestimate flows for lumber and wood products relative to other sources (e.g., the Commodity Flow Survey). A closer investigation of detailed forest production and consumption of data for lumber, however, was not very useful for understanding total lumber and wood product commodity flows.

Timber is typically measured in million board feet (MBF), an estimate of the total lumber that will be produced from a given type of tree. There are several scales for making this calculation. Directly converting board feet into tons is a complicated process and was not attempted here.

Because of challenges in using local and regional sources to derive estimates of tons of lumber harvested, we have not made any adjustments to the base TRANSEARCH data for this commodity. For the Portland study, we reduced the total volume of lumber inbound to the State from external regions, because it appeared over-estimated. Upon further examination, we elected not to adjust the data for this study, creating a substantial difference between this study and the Port study. A further explanation of the differences between the Oregon Commodity Flow database and the Portland metropolitan area Commodity Flow Database can be found in Section B.7.

Waste

Waste handling facilities are categorized according to municipal solid waste, material recovery, and industrial waste. The Oregon Department of Environmental Quality (ODEQ) provides total tons of waste consumed (i.e., landfill data) for each of these three types of waste for every landfill in Oregon. Any waste sent to a landfill was assumed to

be either an internal or an inbound move. ODEQ also provides the total flow of solid waste for each landfill that originates in another state and provides data for landfills outside of Oregon that accept waste from Oregon. Movements from within Oregon will have an outbound movement in one Oregon county or region and an inbound movement in another. All of these movements are considered internal movements at the state level.

Outbound and internal flows were generated from estimates of waste production. We estimated production of waste that is sent to municipal solid waste and material recovery facilities using county population. To estimate the production of industrial waste, we used the percent of manufacturing employment in the county. As with non-metallic mineral products, we assumed that waste products moved the shortest distance possible, to a local landfill in the same county in which the waste was produced. If a county had no landfills, we assumed its waste was exported to a neighboring county with transportation links. The general exception to this is for waste that is sent to Oregon from other states and waste exported out of state. For imported waste, we know the total volume of flows and the locations of landfills for these flows from the ODEQ data. For exported waste, we assume the waste was generated in the Portland metropolitan area. For waste that remains within the State, we assume that counties with greater landfill space than waste generated import waste from other counties (an inbound move). Counties with greater waste generated than landfill space were assumed to export waste to other counties (an outbound move).

A rough estimate of waste routing was generated to ensure that inbound and outbound moves were not overestimated for regions (metro areas, ACTs, as opposed to counties). Waste was assumed to take the shortest path between any two counties.

Step 3 – Reconcile With Other Modes

Each of the commodities adjusted above includes movements of commodities by modes other than truck. Most of the methods described above use estimates of production and consumption to generate total inbound, outbound, and internal flows. To generate the truck portion of these commodities, we first subtract out the commodity movements by rail, water, and pipeline (as described in Sections B.1, B.2, and B.4). We assume that the remaining portion of a given commodity moves by truck.

Step 4 – Distribute Secondary Movements to Commodities

Secondary movements refer to commodities that are known to move at least twice without being altered by some sort of manufacturing process. Examples include truck movements to warehouses and distribution facilities and rail movements to intermodal terminals that transfer shipments to trucks. TRANSEARCH uses generic commodity codes for three types of secondary movements:

1. 5010 – Warehouse and Distribution Center (truck to truck movements);
2. 5020 – Rail Intermodal Drayage (rail containers also moved by truck); and
3. 5030 – Air Freight Drayage (air freight also moved by truck).

Other modes also often have secondary movements, but TRANSEARCH does not use the same methodology for these movements. For water exports, for example, TRANSEARCH records the truck, rail, or barge portion of the move that got the commodity to the port. For pipeline moves, we assumed that nearly all gasoline has a secondary movement by truck to reach its final destination.

We assume that the total volume of each of these commodity groups in TRANSEARCH is correct; they are only missing commodity-specific information. We distribute the TRANSEARCH flows for each of these three generic commodities to specific STCC commodity codes using a method specific to the type of movement.

Warehousing and Distribution

For the Portland metropolitan area study, we used the Port of Portland’s Freight Facilities database, which includes information on square footage of space, employees, sales, and other firm data, as well as some basic information about the types of commodities handled by the facility. We averaged the percentage of total square footage and the percentage of total sales for a given commodity type in the database to generate an initial distribution of secondary movements for the given commodity. We then averaged this distribution with a similar distribution produced from the Census of Wholesale Trade on total sales and employees (i.e., a given commodity’s percentage of total sales and employees) to generate a distribution for TRANSEARCH secondary movements.

For the statewide study, we used the Portland area method described above to distribute secondary movements in the five Portland metropolitan counties. For the remaining counties, we used a distribution based on the average distribution of Census of Wholesale Trade employees and sales, by commodity. The U.S. Bureau of Census provides wholesale trade data by NAICS codes, which were converted to STCC codes using the conversion developed for the Portland metropolitan study.

For each county, we distributed the TRANSEARCH total tonnage moved in the 5010 commodity code to specific STCC commodities using the appropriate distribution provided in Table B.4. For example, if Multnomah County had 1,000 tons of flows to and from warehouses and 49 percent of the products handled by warehouses were food products (based on the average distribution of square footage and sales from the freight facilities database and employees and sales from the Census of Wholesale Trade), then 490 tons of secondary flows to and from Multnomah County would be considered food products. For a flow that took place entirely outside the Portland metropolitan area, we used the same basic procedure, but the distribution was based only on the percentage of employees and sales of a given commodity type from the Census of Wholesale Trade.

The two different methods (with and without the Freight Facilities database) produced different results for several commodities (e.g., STCCs 20, 24, 35, 36, and 37). The Portland method uses additional data that are not available for the rest of the State. As a result, this distribution is likely more accurate for Portland than for the rest of the State. Because the Portland region differs from the rest of the State in several notable ways – it has a major Port, is the largest metro area in the State, and has different types and numbers of businesses – we chose not to estimate secondary movements for the rest of the State using the Portland distribution in Table B.4. More detailed data on freight facilities would improve ODOT’s understanding of these types of movements.

Table B.4. Secondary Movements Distributions for Warehouses and Distribution Centers

STCC Code	Description	Oregon (Excluding Portland)	Portland
1	Farm Products	8%	11%
13	Petroleum, natural gas		8%
14	Nonmetallic minerals	1%	1%
20	Food or kindred products	20%	49%
21	Tobacco products		2%
22	Textile mill products		14%
23	Apparel or related products	1%	
24	Lumber or wood products	11%	1%
25	Furniture or fixtures	1%	1%
26	Pulp, paper, or allied products	4%	4%
27	Printed matter	1%	1%
28	Chemicals or allied products	4%	2%
29	Petroleum or coal products	4%	
32	Clay, concrete, glass, or stone		0%
34	Fabricated metal products	3%	2%
35	Machinery	11%	0%
36	Electrical equipment	14%	1%
37	Transportation equipment	12%	2%
38	Instruments, photo equipment, optical equipment		1%
39	Miscellaneous manufactured products	3%	
40	Waste or scrap materials	2%	0%
Total		100%	100%

Rail Intermodal Drayage

We distributed TRANSEARCH rail drayage (truck) movements to particular commodities using the rail intermodal data generated from the Waybill data, as described in the Rail Movements section of this report. If the drayage movement by truck was outbound for a particular county, we used the commodity distribution of inbound rail intermodal movements to that county. For example, if Multnomah County had 1,000 tons of outbound intermodal drayage by truck to Washington County, we examined the percentage of each commodity that had inbound rail intermodal movements to Multnomah County and distributed the 1,000 tons accordingly.

Other directions were handled in the same fashion. If the drayage movement was inbound, we used outbound rail intermodal flows. If the drayage movement was between two Oregon counties with rail intermodal traffic, we used the average distribution of intermodal movements for those two counties.

Air Intermodal Drayage

We used the same method to distribute air drayage movements as for rail drayage movements, except that we used the air data (described in the Air Movements section of the memorandum) as the source of distribution. Again, we attempted to match inbound air with outbound drayage movements and outbound air with inbound drayage movements. Because Portland International Airport accounts for more than 90 percent of air cargo movements in Oregon, we assumed that any drayage movement associated with Multnomah County would be distributed to specific commodities based on the distribution of inbound and outbound air flows to Multnomah County, depending on the direction of the drayage movement. Estimates of inbound drayage movements were based on outbound air flows and estimates of outbound drayage movements were based on inbound air flows. For example, if Multnomah County had 1,000 tons of outbound intermodal drayage to Washington County, we examined the percent of each commodity that had inbound air intermodal movements to Multnomah County and distributed the 1,000 tons accordingly.

Step 5 – Adjust Internal Flows

For the Portland metropolitan area study, we adjusted the total internal flows for the Portland area, using the volume of internal flows in the Commodity Flow Survey (CFS) as a control total. An examination of the pattern of internal flows in the CFS suggested that the 1997 TRANSEARCH data for the Portland area vastly under-estimated this important component of commodity flows. Because the CFS does not contain breakdowns of internal movements by commodity, we distributed these flows to each commodity in proportion to the commodity's total internal movements for the Portland metropolitan area, except for those commodities for which flows were adjusted using external data sources (as described in Step 2 above). For example, if there were 1,000 more tons of internal movements in 1997 in the CFS data than in the TRANSEARCH data, we distributed these

1,000 tons to particular commodities, based on the percentage of total internal movements for this commodity (as defined in Steps 1 through 4 above).

For this study, we have included this adjustment for internal flows in the Portland area. These flows were assigned to particular county pairs within the region, based on the distribution of county-to-county commodity flows within the TRANSEARCH data. For the remainder of the State, we did not make an adjustment. The Portland metropolitan area flows were adjusted because internal truck movements were substantially lower in the TRANSEARCH data than in the CFS. For Oregon as a whole, however internal truck movements were actually slightly higher in TRANSEARCH than in the CFS. No additional data were available to support making an adjustment to the state internal flows.

Step 6 – Estimate Through Movements

TRANSEARCH provides the primary data for through movements and routing. For the county, metro, and ACT area aggregations, this includes movements that have either an origin or destination in Oregon, but are going to or coming from an external region (i.e., another state, Canada, or Mexico). They also include all movements that both originate in and are destined for other states, Canada, and Mexico. We use routing data from TRANSEARCH to identify the counties with through movement tons. For multi-county regions and the State, we eliminated duplicate records (i.e., the same tonnage moving through multiple counties) to develop an estimate of total tons moved for each commodity passing through that region.

Freight flows for several commodities were adjusted using the process described above. Where we had usable origin and destination data for a particular commodity, we adjusted the through movements to reflect what we knew about updated commodity movements. For example, using the procedure described above in Step 2, we generated new control totals of inbound flows for agricultural movements. We distributed these to other states, Canada, and Mexico using the existing TRANSEARCH distribution to these areas. These adjusted data were assumed to follow the same routing patterns as indicated in the TRANSEARCH data. For the State as a whole, we have no additional information to adjust through flows – only commodities with an origin or destination in the State were adjusted using the process described above.

■ B.6 Developing Estimates of the Value of Commodity Movements

In addition to developing estimates of tons of commodities moved by mode, we also estimated the total value of these commodities. Values were estimated using weight and value data from the CFS. The CFS records the total value and total tons of each commodity moved in every state by two-digit SCTG codes. Dividing the tons by the value produces a value-to-weight ratio that can be used to estimate total value for the tonnages

developed in Sections B.1 to B.5. These were converted to 2-digit STCC codes using the conversions developed for the Port of Portland study.

For most commodities, these value-to-weight ratios are calculated at the state level, but the CFS does not provide both tonnage and value data for every commodity in Oregon (Table B.5). For some commodities, we estimate the value-to-weight ratio at a higher level of aggregation. The CFS provides value and weight data for Census divisions and regions and for the nation as a whole. Oregon is grouped in the Pacific Division (with Washington, California, Alaska, and Hawaii) and the West Region (with the above states and Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada). For several commodity codes, however, the CFS is missing either tonnage or value data even at the national level. The relevant STCC codes to which this applies are 8, 21, 22, 31, 41, 42, 43, 44, 45, 46, 47, 48, and 49. For these cases, we have estimated the value-to-weight ratios using data from other commodity codes. For example, we have estimated the value-to-weight ratio for tobacco products (STCC 21) from food products (STCC 20). For commodity groups that represent multiple commodities (e.g., small package shipments, freight forwarder traffic), we used the average value-to-weight ratio for all commodities moved in Oregon. A complete list of the assumptions can be found in Table B.5

Finally, several commodities had value-to-weight ratios for Oregon that were considerably higher or lower than the ratios for the Pacific Division or West Region. For these commodities, we applied different value-to-weight ratios depending on the specific region analyzed. Table B.6 presents the variation in value-to-weight ratios by the major CFS aggregations: Oregon, Pacific Region, Western Division, and U.S. total. (Note: Table B.6 excludes commodities where value-to-weight ratios could not be calculated for any of these CFS aggregations.)

The top panel of Table B.6 shows the commodities that were adjusted on a region-by-region basis. For STCC codes 23, 27, and 28 (Apparel, Printed Matter, and Chemical Products), we used the Pacific Division value-to-weight ratio for all areas outside of the Portland metropolitan area. These commodities are high-value commodities that are more frequently found in the Portland metropolitan area. For example, Portland is a major center of apparel manufacturing (e.g., Nike, Columbia Sportswear) and is therefore likely to be shipping higher value apparel commodities than in the rest of the State. Because Portland is the major economic region of the State, we assumed that using the State value for all regions and counties would over-estimate the value of apparel moved in the rest of the State.

Table B.5 Value-Weight Ratios Used to Estimate Value of Commodities

STCC	Commodity Description	CFS - Oregon (\$/Ton)	Study Assumptions
1	Farm products	0.27	Use CFS Oregon Ratio
8	Forest products	No data	Use ratio for STCC 1
9	Fresh fish or marine products	2.61	Use CFS Oregon Ratio
10	Metallic ores	No data	Use ratio for West Region
11	Coal	No data	Use ratio for West Region
13	Petroleum, natural gas	0.36	Use CFS Oregon ratio
14	Nonmetallic minerals	0.01	Use CFS Oregon ratio
19	Ordinance or accessories	No data	Use CFS Oregon ratio
20	Food or kindred products	1.21	Use CFS Oregon ratio
21	Tobacco products	No data	Use ratio for STCC 20
22	Textile mill products	No Data	Use average ratio for Oregon
23	Apparel or related products	30.04	Adjust by region (Table B.6)
24	Lumber or wood products	0.24	Use CFS Oregon ratio
25	Furniture or fixtures	5.02	Use CFS Oregon ratio
26	Pulp, paper, or allied products	0.67	Use CFS Oregon ratio
27	Printed matter	4.33	Adjust by region (Table B.6)
28	Chemicals or allied products	2.98	Adjust by region (Table B.6)
29	Petroleum or coal products	No data	Use ratio for Pacific District
30	Rubber or miscellaneous plastics	2.59	Use CFS Oregon ratio
31	Leather or leather products	No data	Use ratio for STCC 23
32	Clay, concrete, glass, or stone	0.13	Use CFS Oregon ratio
33	Primary metal products	0.77	Use CFS Oregon ratio
34	Fabricated metal products	2.98	Use CFS Oregon ratio
35	Machinery	11.27	Use CFS Oregon ratio
36	Electrical equipment	26.29	Adjust by region (Table B.6)
37	Transportation equipment	10.51	Use CFS Oregon ratio
38	Instruments, photo, and optical equipment	73.30	Use CFS Oregon ratio
39	Miscellaneous manufacturing products	5.05	Use CFS Oregon ratio
40	Waste or scrap materials	0.19	Use CFS Oregon ratio
41	Miscellaneous freight shipments	No data	Use average ratio for Oregon
42	Shipping containers	No data	Use average ratio for Oregon
43	Mail or contract traffic	No data	Use average ratio for Oregon

**Table B.5 Value-Weight Ratios Used to Estimate Value of Commodities
(continued)**

STCC	Commodity Description	CFS - Oregon (\$/Ton)	Study Assumptions
44	Freight forwarder traffic	No data	Use average ratio for Oregon
45	Shipper association traffic	No data	Use average ratio for Oregon
46	Miscellaneous mixed shipments	No data	Use ratio for Pacific District
47	Small packaged freight shipments	No data	Use average ratio for Oregon
48	Waste flammable liquids	No data	Use ratio for STCC 40
49	Toxic waste	No data	Use ratio for STCC 40

For STCC code 36 (Electrical Equipment), we used the West Region value-to-weight ratio for major computer equipment production areas in Oregon, specifically Portland and Corvallis.

The lower panel of Table B.6 shows the remainder of the commodities for which no data were available. Though variations occurred for some of these commodities by region, these variations were considerably smaller than for the commodities in the top panel of the table. The final value-to-weight ratios used to convert the tonnage data to value of commodities shipped are provided by region in Table B.7.

Table B.6 Adjusted Value-to-Weight Ratios

STCC	Commodity Description	Value-to-Weight Ratio (\$/Tons)			
		Oregon	Pacific	West	U.S.
<i>Commodities with Region-Specific Value-to-Weight Ratios</i>					
23	Apparel or related products	30.04	14.33	13.76	8.27
27	Printed matter	4.33	2.38	2.57	3.34
28	Chemicals or allied products	2.98	1.41	1.04	1.08
29	Petroleum or coal products	No data	0.14	0.12	0.16
36	Electrical equipment	26.29	39.22	40.41	21.95
<i>Other Commodities</i>					
1	Farm Products	0.27	0.35	0.34	0.26
9	Fresh Fish	2.61	2.71	2.73	2.31
10	Metallic Ores	No Data	No Data	0.51	0.14
11	Coal	No Data	No Data	0.01	0.02
13	Petroleum, natural gas	0.36	0.27	0.27	0.22
14	Nonmetallic Minerals	0.01	0.01	0.01	0.01
20	Food Or Kindred Products	1.21	1.01	0.95	1.03
24	Lumber Or Wood Products	0.24	0.21	0.23	0.20
25	Furniture Or Fixtures	5.02	5.27	5.54	4.88
26	Pulp, Paper Or Allied Products	0.67	0.81	0.86	0.91
30	Rubber Or Misc. Plastics	2.59	3.30	3.38	2.14
32	Clay, Concrete, Glass Or Stone	0.13	0.13	0.11	0.12
33	Primary Metal Products	0.77	1.27	1.29	0.85
34	Fabricated Metal Products	2.98	2.71	2.59	2.13
35	Machinery	11.27	12.09	11.45	8.36
37	Transportation Equipment	10.51	18.25	16.70	6.76
38	Instruments, Photo Equip	73.30	71.95	72.34	53.74
39	Misc. Manufacturing Products	5.05	6.93	6.76	3.74
46	Miscellaneous mixed shipments	No data	1.99	2.00	2.09

Table B.7 Final Value-to-Weight Conversions Used for the ODOT Commodity Flow Study, by Commodity and Region

STCC2	Description	Oregon	Portland Metro	Corvallis Metro	Washington, Yamhill Counties	Other Regions, Counties
1	Farm Products	0.27	0.27	0.27	0.27	0.27
8	Forest Products	0.27	0.27	0.27	0.27	0.27
9	Fresh Fish Or Marine Products	2.61	2.61	2.61	2.61	2.61
10	Metallic Ores	0.51	0.51	0.51	0.51	0.51
11	Coal	0.01	0.01	0.01	0.01	0.01
13	Petroleum, Natural Gas	0.36	0.36	0.36	0.36	0.36
14	Nonmetallic Minerals	0.01	0.01	0.01	0.01	0.01
19	Ordnance Or Accessories	0.63	0.63	0.00	0.00	0.00
20	Food Or Kindred Products	1.21	1.21	1.21	1.21	1.21
21	Tobacco Products	1.21	1.21	1.21	1.21	1.21
22	Textile Mill Products	0.63	0.63	0.63	0.63	0.63
23	Apparel Or Related Products	30.04	30.04	14.33	14.33	14.33
24	Logs, Lumber, Wood Prod.	0.24	0.24	0.24	0.24	0.24
25	Furniture Or Fixtures	5.02	5.02	5.02	5.02	5.02
26	Pulp, Paper Or Allied Products	0.67	0.67	0.67	0.67	0.67
27	Printed Matter	4.33	4.33	2.38	2.38	2.38
28	Chemicals Or Allied Products	3.40	3.40	1.41	1.41	1.41
29	Petroleum Or Coal Products	0.12	0.12	0.12	0.12	0.12
30	Rubber Or Misc. Plastics	2.59	2.59	2.59	2.59	2.59
31	Leather Or Leather Products	30.04	30.04	30.04	30.04	30.04
32	Clay, Concrete, Glass Or Stone	0.13	0.13	0.13	0.13	0.13
33	Primary Metal Products	0.77	0.77	0.77	0.77	0.77
34	Fabricated Metal Products	2.98	2.98	2.98	2.98	2.98
35	Machinery	11.27	11.27	11.27	11.27	11.27
36	Electrical Equipment	26.29	40.41	40.41	40.41	26.29
37	Transportation Equipment	10.51	10.51	10.51	10.51	10.51
38	Instrum., Photo Equip, Optical Eq.	73.30	73.30	71.95	71.95	71.95
39	Misc. Manufacturing Products	5.05	5.05	5.05	5.05	5.05
40	Waste Or Scrap Materials	0.19	0.19	0.19	0.19	0.19
41	Misc. Freight Shipments	0.63	0.63	0.63	0.63	0.63
42	Shipping Containers	0.63	0.63	0.63	0.63	0.63
43	Mail Or Contract Traffic	0.63	0.63	0.63	0.63	0.63
44	Freight Forwarder Traffic	0.63	0.63	0.63	0.63	0.63
45	Shipper Association Traffic	0.63	0.63	0.63	0.63	0.63
46	Misc. Mixed Shipments	1.99	1.99	1.99	1.99	1.99
47	Small Pkg Freight Shipments	0.63	0.63	0.63	0.63	0.63
48	Waste	0.01	0.01	0.01	0.01	0.01
49	Toxic Waste	0.01	0.01	0.01	0.01	0.01

Note: Cells with values of 0.00 indicate a value below .0055 that is too small to show in this table.

■ B.7 Differences from the Commodity Flow Database for the Portland Metropolitan Area

Though the Oregon Commodity Flow database builds off of the same base data used in the Portland Commodity Flow database, there are some key differences in the means used to estimate commodity movements. One key difference between the two studies is a different geographic aggregation of counties. The Portland study included Clark County, Washington in the commodity flow estimates generated. The statewide study includes only the five Portland metropolitan area counties on the Oregon side of the border. This difference limits the value of a direct numerical comparison of the two databases.

In addition to this geographic difference, the two databases differ in the methodology used to create them. We used additional data resources that were identified after the completion of the Portland metropolitan area study. Overall, we expect the Portland metropolitan area study to have somewhat higher commodity flows across the board than the statewide study due to the inclusion of Clark County, WA in the former study. An overall comparison of the two studies shows that, though this is the case for most commodities, there are others that warrant further consideration (Table B.8).

Table B.8 Comparison of Portland Metropolitan Area and Statewide Commodity Flow Studies by Commodity, 1997

Commodity	Port Study*		ODOT Study*	
	Tons (Millions)	SCTG	Tons (Millions)	STCC
Farm Products	30	1,2,3,4	25	1
Refined petroleum and natural gas	34	17, 18, 19	27	13
Food Products	26	6, 7, 8	29	34
Lumber and wood products	43	25, 26	52	24
Chemicals	17	20, 21, 22, 23	14	28
Non-metallic minerals (aggregate)	25	10, 11, 12, 13, 14	24	14
Non-metallic mineral products	30	31	23	32
Miscellaneous mixed shipments	9	43	11	46
<i>Subtotal</i>	214		205	
<i>Other commodities</i>	47		40	
Total	261		245	

*Does not include through tonnage movements.

SCTG: Standard Classification of Transported Goods.

STCC: Standard Transportation Commodity Classification.

This section provides a description of the methodological differences for several commodities:

- Farm and food products movements;
- Refined petroleum and natural gas movements;
- Lumber and wood products; and
- Miscellaneous mixed products.

Farm and Food Products Movements

For both studies, the Census of Agriculture provided the basis for agricultural production data. The Census of Agriculture provides detailed estimates of production by crop for every county in Oregon. These estimates are provided by volume or weight and by value. The volume/weight estimate varies greatly from crop to crop. For example, wheat is measured in bushels, cattle are measured by head, and hay is measured in tons.

For the Portland metropolitan area study, we used the value data from the Census of Agriculture to derive tonnages using the Commodity Flow Survey's weight and value data (described in Section B.6). For the Oregon study, we used more detailed conversion factors based on specific commodities. These conversions (e.g., from bushels of wheat to tons or head of cattle to tons) are generated by commodity exchanges and used by the U.S. Department of Agriculture (USDA). This allowed us to generate a more accurate picture of the tons of agricultural commodities produced.

In addition, we developed a new methodology to estimate the consumption of farm products. For the Portland metropolitan area study, we used the TRANSEARCH data to estimate the ratio of inbound to outbound and internal agricultural flows, and applied that to the production data estimated from the Census of Agriculture. For the statewide study, we estimated consumption directly using USDA data. This allowed us to create more sophisticated estimates of production and consumption that better capture total agricultural movements in Oregon.

A direct comparison of farm and food products tonnage (as is provided in Table B.8) is difficult because the Standard Transportation Commodity Classification (STCC) codes, as used in the ODOT study, and Standard Classification of Transported Goods (SCTG) codes, as used in the Port study, are heavily intertwined (Table B.9). STCC codes 1 and 20 both are represented by commodities in SCTG categories 3, 4, and 7. For the Port study, however, results were available for both STCC and SCTG codes. As a result, a direct comparison between the results of the two studies for the Portland region in STCC codes is possible. Table B.10 presents the total tons moved of STCC 1 (Farm products) and STCC 20 (Food products) for the Portland metropolitan area study and the statewide study, both for the Portland region. Due to new estimates of food consumption described above, the ODOT study is somewhat higher in farm products than the Port study, despite not including Clark County, WA.

Table B.9 Farm and Food Products Commodity Code Overlaps

STCC	Description	Relevant SCTG Codes
1	Farm Products	1, 2, 3, 4, & 7
8	Forest Products	3
9	Fresh Fish and Marine Products	5
20	Food Products	3, 4, 5, 6, 7, & 8

Table B.10 Farm and Food Products Comparisons (Million Tons)

STCC	Description	Port Study	ODOT Study
1	Farm Products	24.5	25.4
20	Food Products	30.5	29.0

These differences become even larger when examining farm products movements by mode. Roughly 8 million tons of agricultural products were exported overseas from the Port of Portland and 4 million tons from the Port of Vancouver, or 12 million total tons exported by water. This means that there are 4 million fewer tons in the statewide study than in the Portland metropolitan area study. However, the new methodology used for the statewide study results in over 4 million tons additional farm products movements by truck.

Refined Petroleum and Natural Gas (STCC 13)

These movements were changed in a relatively minor way from the Portland metropolitan area study. For gasoline and related refined petroleum products, we improved our estimates of pipeline flows by using more detailed EIA data on movements from Portland Delivery Station to other states, and through discussions with Kinder Morgan Energy Partners on the volume of totals flows to Albany and Eugene. In addition, more accurate conversion factors were used in the statewide study. As with the farm products movements, these were estimated using value-to-weight ratios in the Portland metropolitan area study. For the statewide study, they were estimated using conversion factors for specific fuel types: gasoline and jet fuel.

The Portland metropolitan area study also did not attempt to estimate the total volume of natural gas flowing in the State. For the statewide study, we developed a methodology to

identify natural gas flows to counties by pipeline using population, manufacturing employment, and the megawattage of gas-fired powerplants. Because natural gas is, by its nature, a lightweight commodity, these estimates had little impact on the estimate of STCC 13 products moved.

The Portland metropolitan area study identified roughly 34 million tons of refined petroleum products moving to, from, and within the Portland region. The ODOT study identifies 27 million tons for the Portland region excluding Clark County.

Lumber and Wood Products (STCC 24)

For both studies, the TRANSEARCH estimate of lumber and wood products was substantially higher than from other sources, such as the CFS. For the Portland metropolitan area study, the total inbound lumber and wood products flows were adjusted downward by 16 million tons using local estimates of timber production from the Oregon Department of Forestry.

Upon further analysis of available data, however, we decided not to adjust these flows for the statewide study. There is no straightforward conversion from timber produced (estimated in Million Board Feet) to tons, making it difficult to generate an accurate estimate of the tons of timber and lumber moving throughout the State. Given that a substantial volume of timber of varying qualities enters the State each year to be milled, it is especially difficult to come up with an adjustment factor.

Finally, adjusting this commodity in a single region will have implications for outbound and through movements in other regions. The 16 million tons also show up as outbound flows from other counties and states and many of these movements pass through metropolitan and ACT area regions on their way to the Portland metropolitan area.

Miscellaneous Mixed Products (STCC 46)

Miscellaneous mixed products account for 9 million of the total tons moved in the Portland region in the Port study. In the ODOT study, this total was estimated at nearly 11 million tons, despite covering a smaller geographic area. This increase is a function of total rail intermodal shipments and the method used to estimate the truck portion of these shipments.

Table B.11 shows that the estimate of miscellaneous mixed products shipped by intermodal rail was greater in the ODOT study than in the Port study. The data used to estimate miscellaneous mixed shipments by rail are generated from the Rail Waybill sample (see section B.1). The fact that these shipments are greater in the ODOT study suggests that substantial rail intermodal movements occur between the Portland metro region and Clark County, WA. Because the Waybill data are provided to states, these movements were likely missing from the Port study.

Table B.11 Estimates of Miscellaneous Mixed Products Shipped in Portland, by Study and Mode (1,000 Tons)

Study	Internal	Inbound	Outbound
<i>Rail Intermodal Shipments</i>			
Port (Includes Clark County)	-	724	1,547
ODOT (Excludes Clark County)	-	2,303	1,757
<i>Truck Portion of Rail Intermodal Shipments</i>			
Port (Includes Clark County)	752	2,547	2,847
ODOT (Excludes Clark County)	1,170	3,119	4,541

As described above, TRANSEARCH uses STCC 5020 as a generic identifier for the truck portion of rail shipments. We used the tons, origin, and destination information for the 5020 commodities from TRANSEARCH, but distributed these movements to specific 2-digit STCC commodities using an estimate of the commodities shipped using rail intermodal by the origin and destination listed in TRANSEARCH. As a result, the miscellaneous mixed shipments are a larger piece of a smaller pie for the ODOT study as compared to the Port study.

Appendix C

*4-Digit Standard Transportation Commodity
Classification Codes*

Appendix C. 4-Digit Standard Transportation Commodity Classification Codes

Table C.1 4-Digit STCC Codes

Group	STCC	Description
1	0100	Farm Products
1	0110	Field Crops
1	0112	Cotton, Raw
1	0113	Grain
1	0114	Oil Kernels, Nuts Or Seeds
1	0115	Field Seeds
1	0119	Misc. Field Crops
1	0120	Fresh Fruits Or Tree Nuts
1	0121	Citrus Fruits
1	0122	Deciduous Fruits
1	0123	Tropical Fruits
1	0129	Misc Fresh Fruits Or Tree Nuts
1	0130	Fresh Vegetables
1	0131	Bulbs, Roots Or Tubers
1	0133	Leafy Fresh Vegetables
1	0134	Dry Ripe Vegetable Seeds
1	0139	Misc Fresh Vegetables
1	0140	Livestock Or Livestock Prod
1	0141	Livestock
1	0142	Dairy Farm Products
1	0143	Animal Fibers
1	0150	Poultry Or Poultry Products
1	0151	Live Poultry
1	0152	Poultry Eggs
1	0190	Misc Farm Products
1	0191	Horticultural Specialties
1	0192	Animal Specialties
1	0199	Farm Prod, NEC

Table C.1 4-Digit STCC Codes (continued)

Group	STCC	Description
8	0800	Forest Products
8	0840	Barks Or Gums, Crude
8	0842	Barks Or Gums, Crude
8	0860	Misc Forest Products
8	0861	Misc Forest Products
9	0900	Fresh Fish Or Marine Products
9	0910	Fresh Fish Or Marine Products
9	0912	Fresh Fish Or Whale Products
9	0913	Marine Products
9	0980	Fish Hatcheries
9	0989	Fish Hatcheries
10	1000	Metallic Ores
10	1010	Iron Ores
10	1011	Iron Ores
10	1020	Copper Ores
10	1021	Copper Ores
10	1030	Lead Or Zinc Ores
10	1031	Lead Ores
10	1032	Zinc Ores
10	1033	Lead And Zinc Ores Combined
10	1040	Gold Or Silver Ores
10	1041	Gold Ore
10	1042	Silver Ore
10	1050	Bauxite Or Other Alum Ores
10	1051	Bauxite Or Other Alum Ores
10	1060	Manganese Ores
10	1061	Manganese Ores
10	1070	Tungsten Ores
10	1071	Tungsten Ores
10	1080	Chromium Ores
10	1081	Chromium Ores
10	1090	Misc Metal Ores
10	1092	Misc Metal Ores
11	1100	Coal
11	1110	Anthracite
11	1111	Anthracite
11	1120	Bituminous Coal Or Lignite
11	1121	Bituminous Coal
11	1122	Lignite
13	1300	Crude Petrol. Or Natural Gas
13	1310	Crude Petrol. Or Natural Gas
13	1311	Crude Petroleum
13	1312	Natural Gas
13	1320	Natural Gasoline

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
13	1321	Natural Gasoline
14	1400	Nonmetallic Minerals
14	1410	Dimension Stone, Quarry
14	1411	Dimension Stone, Quarry
14	1420	Broken Stone Or Riprap
14	1421	Broken Stone Or Riprap
14	1440	Gravel Or Sand
14	1441	Gravel Or Sand
14	1450	Clay Ceramic Or Refrac Minerals
14	1451	Clay Ceramic Or Refrac Minerals
14	1470	Chemical Or Fertilizer Minerals
14	1471	Chemical Or Fertilizer Mineral Crude
14	1490	Misc Nonmetallic Minerals
14	1491	Misc Nonmetallic Minerals, NEC
14	1492	Water
19	1900	Ordnance Or Accessories
19	1910	Guns, Howitzers, Mortars, Etc.
19	1911	Guns, Howitzers, Mortars, Etc.
19	1920	Ammo, Over 30mm
19	1925	Guided Missiles Or Space Vehicle
19	1929	Ammo Or Related Parts, NEC
19	1930	Tracked Combat Vehicle Or Parts
19	1931	Tracked Combat Vehicle Or Parts
19	1940	Military Fire Control Equip
19	1941	Military Fire Control Equip
19	1950	Small Arms,30mm Or Less
19	1951	Small Arms,30mm Or Less
19	1960	Small Arms Ammo,30mm Or Less
19	1961	Small Arms Ammo,30mm Or Less
19	1990	Misc Ordnance Or Accessories
19	1991	Misc Ordnance Or Accessories
20	2000	Food Or Kindred Products
20	2010	Meat Or Poultry, Fresh Or Chilled
20	2011	Meat, Fresh Or Chilled
20	2012	Meat, Fresh Frozen
20	2013	Meat Products
20	2014	Animal By-Prod, Inedible
20	2015	Dressed Poultry, Fresh
20	2016	Dressed Poultry, Frozen
20	2017	Processed Poultry Or Eggs
20	2020	Dairy Products
20	2021	Creamery Butter
20	2023	Condensed, Evaporated Or Dry Milk
20	2024	Ice Cream Or Related Frozen Desserts

Table C.1 4-Digit STCC Codes (continued)

Group	STCC	Description
20	2025	Cheese Or Special Dairy Products
20	2026	Processed Milk
20	2030	Canned Or Preserved Food
20	2031	Canned Or Cured Sea Foods
20	2032	Canned Specialties
20	2033	Canned Fruits, Vegetables, Etc.
20	2034	Dehydrated Or Dried Fruit Or Vegetables
20	2035	Pickled Fruits Or Vegetables
20	2036	Processed Fish Products
20	2037	Frozen Fruit, Vegetables Or Juice
20	2038	Frozen Specialties
20	2039	Canned Or Pres Food, Mixed
20	2040	Grain Mill Products
20	2041	Flour Or Other Grain Mill Products
20	2042	Prepared Or Canned Feed
20	2043	Cereal Preparations
20	2044	Milled Rice, Flour Or Meal
20	2045	Blended Or Prepared Flour
20	2046	Wet Corn Milling Or Milo
20	2047	Dog, Cat Or Other Pet Food, NEC
20	2050	Bakery Products
20	2051	Bread Or Other Bakery Prod
20	2052	Biscuits, Crackers Or Pretzels
20	2060	Sugar, Beet Or Cane
20	2061	Sugar Mill Prod Or By-Prod
20	2062	Sugar, Refined, Cane Or Beet
20	2070	Confectionery Or Related Prod
20	2071	Candy Or Other Confectionery
20	2080	Beverages Or Flavor Extracts
20	2082	Malt Liquors
20	2083	Malt
20	2084	Wine, Brandy Or Brandy Spirit
20	2085	Distilled Or Blended Liquors
20	2086	Soft Drinks Or Mineral Water
20	2087	Misc Flavoring Extracts
20	2090	Misc Food Preparations
20	2091	Cottonseed Oil Or By-Prod
20	2092	Soybean Oil Or By-Products
20	2093	Nut Or Vegetable Oils Or By-Products
20	2094	Marine Fats Or Oils
20	2095	Roasted Or Instant Coffee
20	2096	Margarine, Shortening, Etc.
20	2097	Ice, Natural Or Manufactured
20	2098	Macaroni, Spaghetti, Etc.

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
20	2099	Misc Food Preparations, NEC
21	2100	Tobacco Products
21	2110	Cigarettes
21	2111	Cigarettes
21	2120	Cigars
21	2121	Cigars
21	2130	Chewing Or Smoking Tobacco
21	2131	Chewing Or Smoking Tobacco
21	2140	Stemmed Or Redried Tobacco
21	2141	Stemmed Or Redried Tobacco
22	2200	Textile Mill Products
22	2210	Cotton Broad-Woven Fabrics
22	2211	Cotton Broad-Woven Fabrics
22	2217	Cotton Broad-Woven Fabrics
22	2220	Man-Made Or Silk Woven Fiber
22	2221	Man-Made Or Glass Woven Fiber
22	2222	Silk-Woven Fabrics
22	2230	Wool Broad-Woven Fabrics
22	2231	Wool Broad-Woven Fabrics
22	2240	Narrow Fabrics
22	2241	Narrow Fabrics
22	2250	Knit Fabrics
22	2251	Knit Fabrics
22	2270	Floor Coverings
22	2271	Woven Carpets, Mats Or Rugs
22	2272	Tufted Carpets, Rugs Or Mats
22	2279	Carpets, Mats Or Rugs, NEC
22	2280	Thread Or Yarn
22	2281	Yarn
22	2284	Thread
22	2290	Misc Textile Goods
22	2291	Felt Goods
22	2292	Lace Goods
22	2293	Paddings, Upholstery Fill, Etc
22	2294	Textile Waste, Processed
22	2295	Coated Or Imprinted Fabric
22	2296	Cord Or Fabrics, Industrial
22	2297	Wool Or Mohair
22	2298	Cordage Or Twine
22	2299	Textile Goods, NEC
23	2300	Apparel Or Related Products
23	2310	Mens Or Boys Clothing
23	2311	Mens Or Boys Clothing
23	2330	Womens Or Childrens Clothing

Table C.1 4-Digit STCC Codes (continued)

Group	STCC	Description
23	2331	Womens Or Childrens Clothing
23	2350	Caps, Hats Or Millinery
23	2351	Millinery
23	2352	Caps Or Hats Or Hat Bodies
23	2370	Fur Goods
23	2371	Fur Goods
23	2380	Misc Apparel Or Accessories
23	2381	Gloves, Mittens Or Linings
23	2384	Robes Or Dressing Gowns
23	2385	Raincoats Or Other Rain Wear
23	2386	Leather Clothing
23	2387	Apparel Belts
23	2389	Apparel, NEC
23	2390	Misc Finished Textile Goods
23	2391	Curtains Or Draperies
23	2392	Textile House furnishings
23	2393	Textile Bags
23	2394	Canvas Products
23	2395	Textile Prod, Pleated, Etc.
23	2396	Apparel Findings
23	2399	Misc Fabricated Textile Products
24	2400	Lumber Or Wood Products
24	2410	Primary Forest Materials
24	2411	Primary Forest Materials
24	2420	Sawmill Or Planing Mill Products
24	2421	Lumber Or Dimension Stock
24	2429	Misc Sawmill Or Planing Mill
24	2430	Millwork Or Prefab Wood Products
24	2431	Millwork Or Cabinetwork
24	2432	Plywood Or Veneer
24	2433	Prefab Wood Buildings
24	2434	Kitchen Cabinets, Wood
24	2439	Structural Wood Prod, NEC
24	2440	Wooden Containers
24	2441	Wood Cont. Or Box Shooks
24	2490	Miscellaneous Wood Products
24	2491	Treated Wood Products
24	2492	Rattan Or Bamboo Ware
24	2493	Lasts Or Related Products
24	2494	Cork Products
24	2495	Hand Tool Handles
24	2496	Scaffolding Equip Or Ladders
24	2497	Wooden Ware Or Flatware
24	2498	Wood Prod, NEC

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
24	2499	Misc Wood Products
25	2500	Furniture Or Fixtures
25	2510	Household Or Office Furniture
25	2511	Benches, Chairs, Stools
25	2512	Tables Or Desks
25	2513	Sofas, Couches, Etc.
25	2514	Buffets, China Closets, Etc.
25	2515	Bedsprings Or Mattresses
25	2516	Beds, Dressers, Chests, Etc.
25	2517	Cabinets Or Cases
25	2518	Childrens Furniture
25	2519	Household Or Office Furniture, NEC
25	2530	Public Building Or Related Furniture
25	2531	Public Building Or Related Furniture
25	2540	Lockers, Partitions Or Shelves
25	2541	Wood Lockers, Partitions, Etc.
25	2542	Metal Lockers, Partitions, Etc.
25	2590	Misc Furniture Or Fixtures
25	2591	Venetian Blinds, Shades, Etc.
25	2599	Furniture Or Fixtures, NEC
26	2600	Pulp, Paper Or Allied Products
26	2610	Pulp Or Pulp Mill Products
26	2611	Pulp Or Pulp Mill Products
26	2620	Paper
26	2621	Paper
26	2630	Fiber, Paper Or Pulpboard
26	2631	Fiber, Paper Or Pulpboard
26	2640	Converted Paper Or Paperboard Products
26	2642	Envelopes
26	2643	Paper Bags
26	2644	Wallpaper
26	2645	Die-Cut Paper Or Paperboard Products
26	2646	Pressed Or Molded Pulp Goods
26	2647	Sanitary Paper Products
26	2649	Misc Converted Paper Products
26	2650	Containers Or Boxes, Paper
26	2651	Containers Or Boxes, Paper
26	2654	Sanitary Food Containers
26	2655	Fiber Cans, Drums Or Tubes
26	2660	Paper Or Building Board
26	2661	Paper Or Building Board
27	2700	Printed Matter
27	2710	Newspapers
27	2711	Newspapers

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
27	2720	Periodicals
27	2721	Periodicals
27	2730	Books
27	2731	Books
27	2740	Misc Printed Matter
27	2741	Misc Printed Matter
27	2760	Manifold Business Forms
27	2761	Manifold Business Forms
27	2770	Greeting Cards, Seals, Etc.
27	2771	Greeting Cards, Seals, Etc.
27	2780	Blankbook, Loose Leaf Binder
27	2781	Blankbook, Loose Leaf Binder
27	2790	Svc Indus For Print Trades
27	2791	Svc Indus For Print Trades
28	2800	Chemicals Or Allied Products
28	2810	Industrial Chemicals
28	2811	Industrial, Inorganic, Or Org Chemicals
28	2812	Potassium Or Sodium Compound
28	2813	Industrial Gases
28	2814	Crude Prod Of Coal, Gas, Petroleum
28	2815	Cyclic Intermediates Or Dyes
28	2816	Inorganic Pigments
28	2818	Misc Industrial Organic Chemicals
28	2819	Misc Indus Inorganic Chemicals
28	2820	Plastic Mater Or Synthetic Fibers
28	2821	Plastic Mater Or Synthetic Fibers
28	2830	Drugs
28	2831	Drugs
28	2840	Soap Or Other Detergents
28	2841	Soap Or Other Detergents
28	2842	Specialty Cleaning Preparations
28	2843	Surface Active Agents
28	2844	Cosmetics, Perfumes, Etc.
28	2850	Paints, Lacquers, Etc.
28	2851	Paints, Lacquers, Etc.
28	2860	Gum Or Wood Chemicals
28	2861	Gum Or Wood Chemicals
28	2870	Agricultural Chemicals
28	2871	Fertilizers
28	2879	Misc Agricultural Chemicals
28	2890	Misc Chemical Products
28	2891	Adhesives
28	2892	Explosives
28	2893	Printing Ink

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
28	2899	Chemical Preparations, NEC
29	2900	Petroleum Or Coal Products
29	2910	Prod Of Petroleum Refining
29	2911	Petroleum Refining Products
29	2912	Liquefied Gases, Coal Or Petroleum
29	2950	Paving Or Roofing Materials
29	2951	Asphalt Paving Blocks Or Mix
29	2952	Asphalt Coatings Or Felt
29	2990	Misc Coal Or Petroleum Products
29	2991	Misc Coal Or Petroleum Products
30	3000	Rubber Or Misc Plastics
30	3010	Tires Or Inner Tubes
30	3011	Tires Or Inner Tubes
30	3020	Rubber Or Plastic Footwear
30	3021	Rubber Or Plastic Footwear
30	3030	Reclaimed Rubber
30	3031	Reclaimed Rubber
30	3040	Rubber Or Plastic Hose Or Belting
30	3041	Rubber Or Plastic Hose Or Belting
30	3060	Misc Fabricated Products
30	3061	Misc Fabricated Products
30	3070	Misc Plastic Products
30	3071	Misc Plastic Products
30	3072	Misc Plastic Products
31	3100	Leather Or Leather Products
31	3110	Leather
31	3111	Leather, Finished Or Tanned
31	3120	Industrial Leather Belting
31	3121	Industrial Leather Belting
31	3130	Boot Or Shoe Cut Stock
31	3131	Boot Or Shoe Cut Stock
31	3140	Leather Footwear
31	3141	Leather Footwear
31	3142	Leather House Slippers
31	3150	Leather Gloves Or Mittens
31	3151	Leather Gloves Or Mittens
31	3160	Leather Luggage Or Handbags
31	3161	Leather Luggage Or Handbags
31	3190	Leather Goods, NEC
31	3199	Leather Goods, NEC
32	3200	Clay, Concrete, Glass Or Stone
32	3210	Flat Glass
32	3211	Flat Glass
32	3213	Laminated Safety Glass

Table C.1 4-Digit STCC Codes (continued)

Group	STCC	Description
32	3220	Glassware, Pressed Or Blown
32	3221	Glass Containers
32	3229	Misc Glassware, Blown Or Pressed
32	3240	Portland Cement
32	3241	Portland Cement
32	3250	Structural Clay Products
32	3251	Clay Brick Or Tile
32	3253	Ceramic Floor Or Wall Tile
32	3255	Refractories
32	3259	Misc Structural Clay Products
32	3260	Pottery Or Related Products
32	3261	Vitreous China Plumbing Fixtures
32	3262	Vitreous China Kitchen Articles
32	3264	Porcelain Electric Supplies
32	3269	Misc Pottery Products
32	3270	Concrete, Gypsum, Or Plaster
32	3271	Concrete Products
32	3273	Ready-Mix Concrete, Wet
32	3274	Lime Or Lime Plaster
32	3275	Gypsum Products
32	3280	Cut Stone Or Stone Products
32	3281	Cut Stone Or Stone Products
32	3290	Abrasives, Asbestos Products, Etc.
32	3291	Abrasive Products
32	3292	Asbestos Products
32	3293	Gaskets Or Packing
32	3295	Nonmetal Minerals, Processed
32	3296	Mineral Wool
32	3299	Misc Nonmetallic Minerals
33	3300	Primary Metal Products
33	3310	Steel Mill Products
33	3311	Blast Furnace Or Coke
33	3312	Primary Iron Or Steel Products
33	3313	Electrometallurgical Products
33	3315	Steel Wire, Nails Or Spikes
33	3316	Cold Finishing Of Steel Shapes
33	3320	Iron Or Steel Forgings
33	3321	Iron Or Steel Castings
33	3330	Nonferrous Primary Smelter Products
33	3331	Primary Copper Smelter Products
33	3332	Primary Lead Smelter Products
33	3333	Primary Zinc Smelter Products
33	3334	Primary Aluminum Smelter Products
33	3339	Misc Prim Nonferrous Smelter Products

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
33	3350	Nonferrous Metal Basic Shapes
33	3351	Copper Or Alloy Basic Shapes
33	3352	Aluminum Or Alloy Basic Shapes
33	3356	Misc Nonferrous Basic Shapes
33	3357	Nonferrous Wire
33	3360	Nonferrous Metal Castings
33	3361	Aluminum Or Alloy Castings
33	3362	Copper Or Alloy Castings
33	3369	Misc Nonferrous Castings
33	3390	Misc Primary Metal Products
33	3391	Iron Or Steel Forgings
33	3392	Nonferrous Metal Forgings
33	3399	Primary Metal Products, NEC
34	3400	Fabricated Metal Products
34	3410	Metal Cans
34	3411	Metal Cans
34	3420	Cutlery, Hand Tools Or Hardware
34	3421	Cutlery, Not Electrical
34	3423	Edge Or Hand Tools
34	3425	Hand Saws Or Saw Blades
34	3428	Builders Or Cabinet Hardware
34	3429	Misc Hardware
34	3430	Plumbing Or Heating Fixtures
34	3431	Metal Sanitary Ware
34	3432	Plumbing Fixtures
34	3433	Heating Equip, Not Electrical
34	3440	Fabricated Structural Metal Products
34	3441	Fabricated Structural Metal Products
34	3442	Metal Doors, Sash, Etc.
34	3443	Fabricated Plate Products
34	3444	Sheet Metal Products
34	3446	Architectural Metal Work
34	3449	Misc Metal Work
34	3450	Bolts, Nuts, Screws, Etc.
34	3452	Bolts, Nuts, Screws, Etc.
34	3460	Metal Stampings
34	3461	Metal Stampings
34	3480	Misc Fabricated Wire Prod
34	3481	Misc Fabricated Wire Products
34	3490	Misc Fabricated Metal Products
34	3491	Metal Shipping Containers
34	3492	Metal Safes Or Vaults
34	3493	Steel Springs
34	3494	Valves Or Pipe Fittings

Table C.1 4-Digit STCC Codes (continued)

Group	STCC	Description
34	3499	Fabricated Metal Products, NEC
35	3500	Machinery
35	3510	Engines Or Turbines
35	3511	Steam Engines, Turbines, Etc.
35	3519	Misc Internal Combustion Engines
35	3520	Farm Machinery Or Equipment
35	3522	Farm Machinery Or Equipment
35	3523	Farm Machinery Or Equipment
35	3524	Lawn Or Garden Equipment
35	3530	Construction Machinery Or Equipment
35	3531	Construction Machinery Or Equipment
35	3532	Mining Machinery Or Parts
35	3533	Oil Field Machinery Or Equipment
35	3534	Elevators Or Escalators
35	3535	Conveyors Or Parts
35	3536	Hoists, Industrial Cranes, Etc.
35	3537	Industrial Trucks, Etc.
35	3540	Metalworking Machinery
35	3541	Machine Tools, Metal Cutting
35	3542	Machine Tools, Metal Forming
35	3544	Special Dies, Tools, Jigs, Etc.
35	3545	Machine Tool Accessories
35	3548	Metalworking Machinery
35	3550	Special Industry Machinery
35	3551	Food Prod Machinery
35	3552	Textile Machinery Or Parts
35	3553	Woodworking Machinery
35	3554	Paper Industries Machinery
35	3555	Printing Trades Machinery
35	3559	Misc Special Industry Mach
35	3560	General Industrial Machinery
35	3561	Industrial Pumps
35	3562	Ball Or Roller Bearings
35	3564	Ventilating Equipment
35	3566	Mechanical Power Transmission Equipment
35	3567	Industrial Process Furnaces
35	3569	Misc General Industrial
35	3570	Office Or Computing Machinery
35	3572	Typewriters Or Parts
35	3573	Electronic Data Proc Equipment
35	3574	Accounting Or Calculating Equipment
35	3576	Scales Or Balances
35	3579	Misc Office Machines
35	3580	Service Industry Machines

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
35	3581	Automatic Merchandising Machines
35	3582	Commercial Laundry Equipment
35	3585	Refrigeration Machinery
35	3589	Misc Service Industry Machinery
35	3590	Misc Machinery Or Parts
35	3592	Carburetors, Pistons, Etc.
35	3599	Misc Machinery Or Parts
36	3600	Electrical Equipment
36	3610	Electric Trans Or Distributors
36	3611	Electric Measuring Instruments
36	3612	Electrical Transformers
36	3613	Switchgear Or Switchboards
36	3620	Industrial Electrical Equipment
36	3621	Motors Or Generators
36	3622	Industrial Controls Or Parts
36	3623	Welding Apparatus
36	3624	Carbon Prod For Electric Uses
36	3629	Misc Electrical Industrial Equipment
36	3630	Household Appliances
36	3631	Household Cooking Equipment
36	3632	Household Refrigerators
36	3633	Household Laundry Equipment
36	3634	Electric Housewares Or Fans
36	3635	Household Vacuum Cleaners
36	3636	Sewing Machines Or Parts
36	3639	Misc Household Appliances
36	3640	Electric Lighting Or Wire Equipment
36	3641	Electric Lamps
36	3642	Lighting Fixtures
36	3643	Current Carrying Wiring Equipment
36	3644	Noncurrent Wiring Devices
36	3650	Radio Or TV Receiving Sets
36	3651	Radio Or TV Receiving Sets
36	3652	Phonograph Records
36	3660	Communication Equipment
36	3661	Telephone Or Telegraph Equipment
36	3662	Radio Or TV Transmitting Equipment
36	3670	Electronic Components
36	3671	Electronic Tubes
36	3674	Solid State Semiconductors
36	3679	Misc Electronic Components
36	3690	Misc Electrical Machinery
36	3691	Storage Batteries Or Plates
36	3692	Primary Batteries

Table C.1 4-Digit STCC Codes (continued)

Group	STCC	Description
36	3693	X-Ray Equipment
36	3694	Electrical Equip For Internal Combustion Engine
36	3699	Electrical Equipment, NEC
37	3700	Transportation Equipment
37	3710	Motor Vehicle Or Equipment
37	3711	Motor Vehicles
37	3712	Passenger Motor Car Bodies
37	3713	Motor Bus Or Truck Bodies
37	3714	Motor Vehicle Parts Or Accessories
37	3715	Truck Trailers
37	3720	Aircraft Or Parts
37	3721	Aircraft
37	3722	Aircraft Or Missile Engines
37	3723	Aircraft Propellers Or Parts
37	3729	Misc Aircraft Parts
37	3730	Ships Or Boats
37	3732	Ships Or Boats
37	3740	Railroad Equipment
37	3741	Locomotives Or Parts
37	3742	Railroad Cars
37	3750	Motorcycles, Bicycles Or Parts
37	3751	Motorcycles, Bicycles Or Parts
37	3760	Missile Or Space Vehicle Parts
37	3769	Missile Or Space Vehicle Parts
37	3790	Misc Transportation Equipment
37	3791	Trailer Coaches
37	3799	Transportation Equipment, NEC
38	3800	Instruments, Photo Equip, Optical Equip
38	3810	Engineering, Lab Or Scientific Equipment
38	3811	Engineering, Lab Or Scientific Equipment
38	3820	Measuring Or Controlling Equipment
38	3821	Mechanical Measuring Or Control Equipment
38	3822	Automatic Temperature Controls
38	3830	Optical Instruments Or Lenses
38	3831	Optical Instruments Or Lenses
38	3840	Medical Or Dental Instruments
38	3841	Surgical Or Medical Instruments
38	3842	Orthopedic Or Prosthetic Supplies
38	3843	Dental Equipment Or Supplies
38	3850	Ophthalmic Or Opticians Goods
38	3851	Ophthalmic Or Opticians Goods
38	3860	Photographic Equip Or Supplies
38	3861	Photographic Equip Or Supplies
38	3870	Watches, Clocks, Etc.

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
38	3871	Watches, Clocks, Etc.
39	3900	Misc Manufacturing Products
39	3910	Jewelry, Silverware, Etc.
39	3911	Jewelry, Precious Metal, Etc.
39	3914	Silverware Or Plated Ware
39	3930	Musical Instruments Or Parts
39	3931	Musical Instruments Or Parts
39	3940	Toys, Amusement, Athletic Equipment
39	3941	Games Or Toys
39	3942	Dolls Or Stuffed Toys
39	3943	Childrens Vehicle Or Parts, NEC
39	3949	Sporting Or Athletic Goods
39	3950	Office Or Art Materials
39	3951	Pens Or Parts
39	3952	Pencils, Crayons, Or Artists Materials
39	3953	Marking Devices
39	3955	Carbon Paper Or Inked Ribbons
39	3960	Costume Jewelry Or Novelties
39	3961	Costume Jewelry Or Novelties
39	3962	Feathers, Plumes, Etc.
39	3963	Buttons
39	3964	Apparel Fasteners
39	3990	Misc Manufactured Products
39	3991	Brooms, Brushes, Etc.
39	3992	Linoleum Or Other Coverings
39	3993	Signs Or Advertising Displays
39	3994	Morticians Goods
39	3996	Matches
39	3997	Furs, Dressed Or Dyed
39	3999	Manufactured Prod, NEC
40	4000	Waste Or Scrap Materials
40	4010	Ashes
40	4011	Ashes
40	4020	Waste Or Scrap
40	4021	Metal Scrap Or Tailings
40	4022	Textile Scrap Or Sweepings
40	4023	Wood Scrap Or Waste
40	4024	Paper Waste Or Scrap
40	4025	Chemical Or Petroleum Waste
40	4026	Rubber Or Plastic Scrap
40	4027	Stone, Clay Or Glass Scrap
40	4028	Leather Waste Or Scrap
40	4029	Misc Waste Or Scrap
41	4100	Misc Freight Shipments

Table C.1 4-Digit STCC Codes (continued)

Group	STCC	Description
41	4110	Misc Freight Shipments
41	4111	Misc Freight Shipments
41	4120	Special Commodities
41	4121	Special Commodities
42	4200	Shipping Containers
42	4210	Shipping Containers
42	4211	Shipping Containers
42	4220	Semi-Trailers Returned Empty
42	4221	Semi-Trailers Returned Empty
42	4230	Empty Equipment, Reverse Route
42	4231	Empty Equipment, Reverse Route
43	4300	Mail Or Contract Traffic
43	4310	Mail And Express Traffic
43	4311	Mail And Express Traffic
43	4320	Other Contract Traffic
43	4321	Other Contract Traffic
44	4400	Freight Forwarder Traffic
44	4410	Freight Forwarder Traffic
44	4411	Freight Forwarder Traffic
45	4500	Shipper Association Traffic
45	4510	Shipper Association Traffic
45	4511	Shipper Association Traffic
46	4600	Misc Mixed Shipments
46	4610	FAK Shipments
46	4611	FAK Shipments
46	4620	Mixed Shipments, Multi-STCC
46	4621	Mixed Shipments, Multi-STCC
47	4700	Small Packaged Freight Shipments
47	4710	Small Packaged Freight Shipments
47	4711	Small Packaged Freight Shipments
48	4800	Waste Flammable Liquids
48	4809	Waste Flammable Liquids
48	4810	Waste Flammable Liquids, Misc
48	4860	Waste Other Regulated Materials Group E
48	4875	Waste Stream Other Regulated
49	4900	Hazardous Materials
49	4903	Explosives
49	4904	Non Flammable Compressed Gases
49	4905	Flammable Compressed Gases
49	4906	Flammable Liquids
49	4907	Flammable Liquids
49	4908	Flammable Liquids
49	4909	Flammable Liquids
49	4910	Flammable Liquids

Table C.1 4-Digit STCC Codes (*continued*)

Group	STCC	Description
49	4912	Combustible Liquids
49	4913	Combust bale Liquids
49	4915	Combust bale Liquids
49	4916	Combustible Solids
49	4917	Flammable Solids
49	4918	Oxidizing Materials
49	4919	Organic Peroxides
49	4920	Poisons A
49	4921	Poisons B, Organic
49	4923	Poisons B, Inorganic
49	4925	Irritating Materials - Etiologic Agents
49	4926	Radioactive Materials
49	4927	Radioactive Materials, Fissile CI III
49	4928	Radioactive Materials, Fissile CI II
49	4929	Radioactive Materials, Fissile CI I
49	4930	Corrosive Materials
49	4931	Corrosive Materials
49	4932	Corrosive Materials
49	4933	Corrosive Materials
49	4934	Corrosive Materials
49	4935	Corrosive Materials
49	4936	Corrosive Materials
49	4940	Other Regulated Materials Group A
49	4941	Other Regulated Materials Group A
49	4944	Other Regulated Materials Group B
49	4950	Mixed Loads
49	4961	Other Regulated Materials Group E
49	4962	Other Regulated Materials Group E
49	4963	Other Regulated Materials Group E
49	4966	Other Regulated Materials Group E
50	5000	Secondary Traffic
50	5010	Warehouse & Distribution Center
50	5020	Rail Intermodal Drayage
50	5030	Air Freight Drayage
60	6000	Unclassified

Appendix D

Commodity Shipments, 1997

Appendix D. Commodity Shipments, 1997

The following tables list commodity shipments for 1997 by tonnage and value, mode, and direction of movement for Oregon (Table D.1), Metropolitan Areas (Tables D.2 through D.7), Area Commission on Transportation Areas (Tables D.8 through D.17, and Selected Counties (Tables D.18 through D.21).

Table D.1 Commodity Shipments in Oregon, 1997

STCC2 Description		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1	Farm Products	5,177	7,364	9,192	2,292	363	3,730	420	6,503	0	68	72	49	1	3,498	9,517	0	0	4	11	0	0	0	0	48,261
8	Forest Products	10	12	14	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	54
9	Fresh Fish Or Marine Products	9	7	1	0	0	0	3	0	0	0	0	0	128	27	0	0	3	10	0	0	0	0	0	188
10	Metallic Ores	0	0	2	0	216	27	387	115	0	0	0	0	0	511	9	0	0	0	0	0	0	0	0	1,268
11	Coal	0	2	0	7	0	929	0	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,017
13	Petroleum Prod, Natural Gas	7,472	56	1,450	0	0	2	0	0	0	0	0	0	404	3,662	2,667	0	0	0	0	1,682	7,607	0	1,424	26,425
14	Nonmetallic Minerals	49,804	67	33	0	4	187	304	86	0	5	0	2	1,425	2,515	982	0	0	0	0	0	0	0	0	55,414
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	22,604	5,535	4,484	7,140	50	1,430	481	1,546	0	181	162	92	0	41	121	0	0	2	4	0	0	0	0	43,874
21	Tobacco Products	660	23	20	2	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	707
22	Textile Mill Products	4,135	1,547	440	95	0	0	0	0	0	5	1	1	0	8	7	0	0	1	1	0	0	0	0	6,242
23	Apparel Or Related Products	124	89	133	80	0	0	0	0	0	5	7	1	0	0	0	0	0	4	6	0	0	0	0	448
24	Logs, Lumber, Wood Prod.	72,582	12,377	8,644	9,157	285	1,056	5,191	3,030	0	20	343	154	27	596	4,077	0	0	0	2	0	0	0	0	117,540
25	Furniture Or Fixtures	508	187	108	303	0	10	0	3	0	11	0	2	0	2	11	0	0	0	0	0	0	0	0	1,146
26	Pulp, Paper Or Allied Products	2,626	1,327	2,334	2,382	176	573	2,033	1,363	0	81	357	34	4	634	574	0	0	4	3	0	0	0	0	14,506
27	Printed Matter	844	225	408	159	0	0	0	0	0	13	15	10	0	0	0	0	0	7	5	0	0	0	0	1,686
28	Chemicals Or Allied Products	3,196	2,611	1,667	3,248	125	4,270	345	2,476	0	95	22	64	2	331	3,694	0	0	14	0	0	0	0	0	22,162
29	Petroleum Or Coal Products	2,781	2,159	2,170	1,616	3	637	71	378	0	19	9	6	9	279	29	0	0	0	0	0	0	0	0	10,165
30	Rubber Or Misc Plastics	574	758	428	435	0	61	12	17	0	28	4	12	0	15	61	0	0	3	5	0	0	0	0	2,412
31	Leather Or Leather Products	46	11	2	17	0	0	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	82
32	Clay, Concrete,Glass Or Stone	20,344	2,134	1,394	2,381	219	895	165	481	0	66	1	19	0	521	62	0	0	1	1	0	0	0	0	28,686
33	Primary Metal Products	1,140	744	1,466	1,961	0	300	536	570	0	9	26	2	0	235	70	0	0	0	0	0	0	0	0	7,060
34	Fabricated Metal Products	1,436	579	774	1,197	7	4	15	2	0	18	11	4	0	75	29	0	0	3	4	0	0	0	0	4,159
35	Machinery	1,351	602	231	506	0	9	2	10	0	37	18	7	0	15	38	0	1	31	51	0	0	0	0	2,908
36	Electrical Equipment	1,497	517	264	571	0	0	0	19	0	25	3	16	0	19	23	0	0	12	13	0	0	0	0	2,979
37	Transportation Equipment	2,180	1,115	1,240	1,124	6	341	274	350	1	82	58	13	0	367	44	0	0	10	13	0	0	0	0	7,218
38	Instrum, Photo Equip, Optical Eq	292	24	53	71	0	0	0	0	0	0	0	0	0	0	0	0	4	7	0	0	0	0	0	451
39	Misc Manufacturing Products	398	213	188	571	0	4	0	0	0	61	11	18	0	42	31	0	0	2	1	0	0	0	0	1,539
40	Waste Or Scrap Materials	6,251	190	124	0	194	820	43	81	0	406	47	338	0	0	167	0	0	0	0	0	0	0	0	8,661
41	Misc Freight Shipments	7	5	5	0	0	15	6	33	0	4	4	3	0	0	0	0	0	0	0	0	0	0	0	82
42	Shipping Containers	140	169	170	0	0	0	0	1	0	197	66	164	0	305	353	0	0	0	0	0	0	0	0	1,565
43	Mail Or Contract Traffic	15	9	5	0	0	0	0	0	0	3	4	16	0	0	0	0	1	28	23	0	0	0	0	104
44	Freight Forwarder Traffic	152	180	178	0	0	0	0	0	0	229	46	26	0	0	0	0	0	0	0	0	0	0	0	810
45	Shipper Association Traffic	5	6	6	0	0	0	0	0	0	7	2	1	0	0	0	0	0	0	0	0	0	0	0	27
46	Misc Mixed Shipments	2,171	2,653	2,631	0	0	0	0	4	0	2,313	1,758	2,418	0	0	0	0	0	19	0	0	0	0	0	13,967
47	Small Pkg Freight Shipments	123	150	150	0	0	0	0	0	0	153	79	10	0	0	0	0	0	0	0	0	0	0	0	665
48	Waste	3	2	1	0	0	0	24	13	0	20	1	7	0	0	0	0	0	0	0	0	0	0	0	70
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		210,656	43,648	40,408	35,315	1,648	15,302	10,314	17,160	1	4,163	3,145	3,492	1,872	13,800	22,594	0	3	155	160	1,682	7,607	0	1,424	434,549

Table D.1 Commodity Shipments in Oregon, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	1,400	1,992	2,487	620	98	1,009	114	1,759	0	18	19	13	0	946	2,575	0	0	1	3	0	0	0	0	13,056
8 Forest Products	3	3	4	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	15
9 Fresh Fish Or Marine Products	23	19	2	0	0	0	7	0	0	0	0	0	0	334	70	0	1	8	26	0	0	0	0	490
10 Metallic Ores	0	0	1	0	110	14	198	59	0	0	0	0	0	261	5	0	0	0	0	0	0	0	0	647
11 Coal	0	0	0	0	0	12	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
13 Petroleum Prod, Natural Gas	2,662	20	517	0	0	1	0	0	0	0	0	0	144	1,304	950	0	0	0	0	599	2,710	0	507	9,413
14 Nonmetallic Minerals	411	1	0	0	0	2	3	1	0	0	0	0	12	21	8	0	0	0	0	0	0	0	0	457
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	27,334	6,694	5,422	8,633	60	1,729	582	1,870	0	219	195	112	0	50	146	0	0	3	5	0	0	0	0	53,054
21 Tobacco Products	798	27	25	2	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	854
22 Textile Mill Products	2,599	973	277	60	0	0	0	0	0	3	1	1	0	5	4	0	0	1	0	0	0	0	0	3,924
23 Apparel Or Related Products	3,720	2,669	3,995	2,401	0	0	0	0	0	161	197	40	0	0	0	0	4	107	167	0	0	0	0	13,460
24 Logs, Lumber, Wood Prod.	17,477	2,980	2,081	2,205	69	254	1,250	730	0	5	83	37	7	144	982	0	0	0	0	0	0	0	0	28,302
25 Furniture Or Fixtures	2,547	940	544	1,518	0	52	0	13	0	55	2	12	0	10	55	0	0	1	2	0	0	0	0	5,751
26 Pulp, Paper Or Allied Products	1,761	890	1,565	1,597	118	384	1,363	914	0	54	240	23	3	425	385	0	0	2	2	0	0	0	0	9,725
27 Printed Matter	3,653	972	1,766	687	0	0	0	0	0	55	66	43	0	0	0	0	0	32	20	0	0	0	0	7,294
28 Chemicals Or Allied Products	10,870	8,878	5,669	11,047	424	14,521	1,173	8,420	0	324	74	218	7	1,126	12,562	0	0	49	1	0	0	0	0	75,364
29 Petroleum Or Coal Products	336	261	262	195	0	77	9	46	0	2	1	1	1	34	4	0	0	0	0	0	0	0	0	1,228
30 Rubber Or Misc Plastics	1,484	1,959	1,105	1,124	0	158	31	44	0	71	10	31	0	39	158	0	0	7	14	0	0	0	0	6,236
31 Leather Or Leather Products	1,385	321	75	516	0	0	0	0	0	40	24	83	0	0	0	0	0	13	0	0	0	0	0	2,456
32 Clay, Concrete,Glass Or Stone	2,606	273	179	305	28	115	21	62	0	8	0	2	0	67	8	0	0	0	0	0	0	0	0	3,674
33 Primary Metal Products	881	574	1,132	1,514	0	231	414	440	0	7	20	2	0	182	54	0	0	0	0	0	0	0	0	5,451
34 Fabricated Metal Products	4,277	1,723	2,306	3,566	21	11	46	7	0	55	33	11	0	223	86	0	0	9	13	0	0	0	0	12,388
35 Machinery	15,228	6,787	2,600	5,701	0	103	22	109	0	413	202	74	0	169	428	0	12	354	571	0	0	0	0	32,774
36 Electrical Equipment	39,353	13,598	6,928	15,010	0	0	0	494	0	657	89	427	0	500	605	0	7	319	329	0	0	0	0	78,318
37 Transportation Equipment	22,906	11,714	13,029	11,815	65	3,585	2,885	3,676	7	865	608	139	0	3,859	463	0	2	108	133	0	0	0	0	75,857
38 Instrum, Photo Equip, Optical Eq	21,370	1,789	3,851	5,222	0	0	0	0	0	0	0	0	0	0	0	0	11	277	529	0	0	0	0	33,049
39 Misc Manufacturing Products	2,009	1,074	950	2,882	0	19	0	1	0	306	56	90	0	212	157	0	0	12	3	0	0	0	0	7,770
40 Waste Or Scrap Materials	1,161	35	23	0	36	152	8	15	0	75	9	63	0	0	31	0	0	0	0	0	0	0	0	1,609
41 Misc Freight Shipments	4	3	3	0	0	9	4	21	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	52
42 Shipping Containers	88	107	107	0	0	0	0	1	0	124	41	103	0	192	222	0	0	0	0	0	0	0	0	984
43 Mail Or Contract Traffic	10	6	3	0	0	0	0	0	0	2	3	10	0	0	0	0	0	18	15	0	0	0	0	65
44 Freight Forwarder Traffic	95	113	112	0	0	0	0	0	0	144	29	16	0	0	0	0	0	0	0	0	0	0	0	509
45 Shipper Association Traffic	3	4	4	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	17
46 Misc Mixed Shipments	4,317	5,274	5,231	0	0	0	0	7	0	4,599	3,495	4,807	0	0	0	0	0	38	0	0	0	0	0	27,767
47 Small Pkg Freight Shipments	78	94	94	0	0	0	0	0	0	96	49	6	0	0	0	0	0	0	0	0	0	0	0	418
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	192,847	72,765	62,347	76,620	1,030	22,440	8,128	18,689	7	8,367	5,553	6,366	173	10,101	19,959	0	39	1,359	1,834	599	2,710	0	507	512,440

Table D.2 Commodity Shipments in the Bend Metropolitan Area, 1997

VALUE (\$1,000,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	0	41	31	807	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	959
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Petroleum Prod, Natural Gas	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	0	295	386
14	Nonmetallic Minerals	15	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	0	342	55	1,883	0	0	0	279	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,559
21	Tobacco Products	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
22	Textile Mill Products	0	35	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
23	Apparel Or Related Products	0	43	58	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112
24	Logs, Lumber, Wood Prod.	18	501	708	1,248	0	9	102	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,681
25	Furniture Or Fixtures	0	43	31	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	249
26	Pulp, Paper Or Allied Products	0	24	2	133	0	0	0	230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	390
27	Printed Matter	0	33	21	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
28	Chemicals Or Allied Products	0	44	45	314	0	6	0	239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	649
29	Petroleum Or Coal Products	0	7	1	12	0	1	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
30	Rubber Or Misc Plastics	0	10	9	114	0	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	279
31	Leather Or Leather Products	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
32	Clay, Concrete,Glass Or Stone	5	39	177	44	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	271
33	Primary Metal Products	0	6	6	273	0	0	0	385	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	670
34	Fabricated Metal Products	0	70	20	93	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	194
35	Machinery	1	688	52	278	0	0	0	0	0	18	0	0	0	0	0	0	2	1	0	0	0	0	0	1,041
36	Electrical Equipment	3	894	94	722	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1,715
37	Transportation Equipment	0	379	95	203	0	0	0	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	823
38	Instrum, Photo Equip, Optical Eq	0	239	96	200	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	538
39	Misc Manufacturing Products	0	45	26	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	382
40	Waste Or Scrap Materials	22	1	12	0	0	0	0	23	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	76
41	Misc Freight Shipments	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
42	Shipping Containers	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Freight Forwarder Traffic	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	32	28	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	61
47	Small Pkg Freight Shipments	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		65	3,591	1,572	6,874	0	167	103	1,519	0	18	0	19	0	0	0	0	0	5	3	0	27	0	295	14,257

Table D.3 Commodity Shipments in the Corvallis Metropolitan Area, 1997

STCC2 Description		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1	Farm Products	0	425	95	135	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	665
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Petroleum Prod, Natural Gas	0	153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	226
14	Nonmetallic Minerals	898	9	993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,900
19	Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	0	319	31	120	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	474
21	Tobacco Products	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
22	Textile Mill Products	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68
23	Apparel Or Related Products	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
24	Logs, Lumber, Wood Prod.	34	1,515	1,941	1,952	0	0	95	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,761
25	Furniture Or Fixtures	0	9	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
26	Pulp, Paper Or Allied Products	0	34	20	65	0	0	0	490	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	610
27	Printed Matter	0	11	10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
28	Chemicals Or Allied Products	0	24	3	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
29	Petroleum Or Coal Products	0	61	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
30	Rubber Or Misc Plastics	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
31	Leather Or Leather Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Clay, Concrete,Glass Or Stone	2	209	157	49	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	419
33	Primary Metal Products	0	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
34	Fabricated Metal Products	0	17	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
35	Machinery	0	31	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
36	Electrical Equipment	0	37	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
37	Transportation Equipment	0	40	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
38	Instrum, Photo Equip, Optical Eq	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
39	Misc Manufacturing Products	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
40	Waste Or Scrap Materials	75	311	67	0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	583
41	Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Shipping Containers	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
43	Mail Or Contract Traffic	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
44	Freight Forwarder Traffic	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	20	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
47	Small Pkg Freight Shipments	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		1,010	3,322	3,351	2,363	0	12	102	843	0	0	0	0	0	0	0	0	0	1	0	0	73	0	0	11,077

Table D.3 Commodity Shipments in the Corvallis Metropolitan Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
	VALUE (\$1,000,000s)																							
1 Farm Products	0	115	26	36	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180	
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13 Petroleum Prod, Natural Gas	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	81	
14 Nonmetallic Minerals	7	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20 Food Or Kindred Products	0	386	38	145	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	574	
21 Tobacco Products	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
22 Textile Mill Products	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	
23 Apparel Or Related Products	0	42	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	
24 Logs, Lumber, Wood Prod.	8	365	467	470	0	0	23	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,387	
25 Furniture Or Fixtures	0	44	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	
26 Pulp, Paper Or Allied Products	0	23	14	43	0	0	0	329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409	
27 Printed Matter	0	26	25	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	
28 Chemicals Or Allied Products	0	34	4	4	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	
29 Petroleum Or Coal Products	0	7	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
30 Rubber Or Misc Plastics	0	3	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
31 Leather Or Leather Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
32 Clay, Concrete,Glass Or Stone	0	27	20	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
33 Primary Metal Products	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
34 Fabricated Metal Products	0	50	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	
35 Machinery	0	345	72	6	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	426	
36 Electrical Equipment	0	1,500	258	116	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1,876	
37 Transportation Equipment	0	416	7	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	430	
38 Instrum, Photo Equip, Optical Eq	0	268	19	15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	303	
39 Misc Manufacturing Products	0	39	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	
40 Waste Or Scrap Materials	14	58	12	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	
41 Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
42 Shipping Containers	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
43 Mail Or Contract Traffic	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
44 Freight Forwarder Traffic	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
46 Misc Mixed Shipments	0	39	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	
47 Small Pkg Freight Shipments	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>	30	3,900	1,013	873	0	9	28	407	0	0	0	0	0	0	0	3	3	0	26	0	0	0	6,292	

Table D.4 Commodity Shipments in the Eugene-Springfield Metropolitan Area, 1997

STCC2 Description		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1	Farm Products	7	536	183	849	0	51	6	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,694	
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	Coal	0	0	0	1	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
13	Petroleum Prod, Natural Gas	454	226	1,207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,998	0	335	4,220	
14	Nonmetallic Minerals	4,232	52	1,860	0	0	27	0	14	0	0	0	3	0	0	0	0	0	0	0	0	0	0	6,189	
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	Food Or Kindred Products	22	1,927	476	4,284	0	11	11	61	0	0	0	29	0	0	0	0	0	0	0	0	0	0	6,821	
21	Tobacco Products	0	49	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	
22	Textile Mill Products	0	382	6	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	438	
23	Apparel Or Related Products	0	31	9	41	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	82	
24	Logs, Lumber, Wood Prod.	1,337	8,873	11,393	32,540	0	241	876	525	0	0	16	10	0	0	0	0	0	0	0	0	0	0	55,811	
25	Furniture Or Fixtures	0	61	22	225	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	311	
26	Pulp, Paper Or Allied Products	1	244	66	2,034	0	76	449	312	0	0	0	10	0	0	0	0	0	0	0	0	0	0	3,191	
27	Printed Matter	2	75	92	280	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	450	
28	Chemicals Or Allied Products	10	337	273	1,217	0	258	0	299	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2,394	
29	Petroleum Or Coal Products	1	267	38	2,400	0	62	2	141	0	0	0	8	0	0	0	0	0	0	0	0	0	0	2,919	
30	Rubber Or Misc Plastics	0	37	26	324	0	0	0	20	0	0	0	5	0	0	0	0	0	0	0	0	0	0	412	
31	Leather Or Leather Products	0	0	0	13	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	20	
32	Clay, Concrete,Glass Or Stone	34	1,027	406	3,045	0	33	0	110	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4,658	
33	Primary Metal Products	0	83	49	1,782	0	22	4	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,006	
34	Fabricated Metal Products	2	136	88	491	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	720	
35	Machinery	2	182	32	267	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	486	
36	Electrical Equipment	3	224	24	421	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	674	
37	Transportation Equipment	3	269	52	648	0	1	4	6	0	1	0	9	0	0	0	0	0	0	0	0	0	0	993	
38	Instrum, Photo Equip, Optical Eq	0	22	5	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	
39	Misc Manufacturing Products	1	54	14	230	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	306	
40	Waste Or Scrap Materials	402	36	177	0	0	14	42	37	0	0	0	10	0	0	0	0	0	0	0	0	0	0	718	
41	Misc Freight Shipments	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
42	Shipping Containers	0	6	4	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	16	
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2	
44	Freight Forwarder Traffic	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
46	Misc Mixed Shipments	0	87	67	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0	0	0	257	
47	Small Pkg Freight Shipments	0	5	4	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	12	
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>		6,514	15,233	16,579	51,195	0	805	1,394	1,663	0	5	16	223	0	0	0	0	0	1	2	0	1,998	0	335	95,961

Table D.4 Commodity Shipments in the Eugene-Springfield Metropolitan Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
	VALUE (\$1,000,000s)																							
1 Farm Products	2	145	49	230	0	14	2	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	458	
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13 Petroleum Prod, Natural Gas	162	81	430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	712	119	1,503	
14 Nonmetallic Minerals	35	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20 Food Or Kindred Products	26	2,330	575	5,180	0	13	13	74	0	0	1	35	0	0	0	0	0	0	0	0	0	0	8,248	
21 Tobacco Products	0	59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	
22 Textile Mill Products	0	240	4	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	276	
23 Apparel Or Related Products	3	438	123	591	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	1	0	1,169	
24 Logs, Lumber, Wood Prod.	322	2,137	2,743	7,835	0	58	211	126	0	0	4	2	0	0	0	0	0	0	0	0	0	0	13,439	
25 Furniture Or Fixtures	2	308	109	1,131	0	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	1,562	
26 Pulp, Paper Or Allied Products	0	163	45	1,363	0	51	301	209	0	0	0	7	0	0	0	0	0	0	0	0	0	0	2,139	
27 Printed Matter	5	179	218	666	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1,073	
28 Chemicals Or Allied Products	14	476	385	1,718	0	364	0	422	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3,382	
29 Petroleum Or Coal Products	0	32	5	290	0	8	0	17	0	0	0	1	0	0	0	0	0	0	0	0	0	0	353	
30 Rubber Or Misc Plastics	1	95	68	838	0	0	0	52	0	0	0	12	0	0	0	0	0	0	0	0	0	0	1,066	
31 Leather Or Leather Products	0	3	2	393	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	587	
32 Clay, Concrete,Glass Or Stone	4	131	52	390	0	4	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	597	
33 Primary Metal Products	0	64	38	1,376	0	17	3	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,549	
34 Fabricated Metal Products	6	404	261	1,463	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	2,146	
35 Machinery	26	2,052	364	3,011	0	0	0	0	0	10	0	8	0	0	0	0	2	5	0	0	0	0	5,479	
36 Electrical Equipment	69	5,898	642	11,074	0	0	0	20	0	0	0	11	0	0	0	0	1	3	0	0	0	0	17,717	
37 Transportation Equipment	34	2,831	541	6,809	0	8	45	66	0	7	0	95	0	0	0	0	0	1	0	0	0	0	10,438	
38 Instrum, Photo Equip, Optical Eq	0	1,555	369	3,742	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	5,672	
39 Misc Manufacturing Products	3	271	71	1,161	0	0	0	1	0	0	7	39	0	0	0	0	0	0	0	0	0	0	1,547	
40 Waste Or Scrap Materials	75	7	33	0	0	3	8	7	0	0	0	2	0	0	0	0	0	0	0	0	0	0	133	
41 Misc Freight Shipments	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
42 Shipping Containers	0	4	3	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	10	
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
44 Freight Forwarder Traffic	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
46 Misc Mixed Shipments	0	173	133	0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	0	0	0	0	511	
47 Small Pkg Freight Shipments	0	3	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7	
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>	791	20,083	7,286	49,295	0	540	583	1,082	0	28	4	642	0	0	0	0	0	5	16	0	712	0	119	81,186

Table D.5 Commodity Shipments in the Medford-Ashland Metropolitan Area, 1997

STCC2 Description		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1	Farm Products	3	202	270	689	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,176
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Petroleum Prod, Natural Gas	0	360	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147	0	0	0	518
14	Nonmetallic Minerals	2,502	24	981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,507
19	Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	10	900	363	3,287	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,560
21	Tobacco Products	0	24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
22	Textile Mill Products	0	187	18	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	247
23	Apparel Or Related Products	0	9	6	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
24	Logs, Lumber, Wood Prod.	320	3,752	6,585	5,861	0	11	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,770
25	Furniture Or Fixtures	0	26	12	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242
26	Pulp, Paper Or Allied Products	1	89	287	1,640	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,021
27	Printed Matter	1	36	33	217	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	287
28	Chemicals Or Allied Products	1	79	50	1,032	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,224
29	Petroleum Or Coal Products	1	88	19	1,798	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,913
30	Rubber Or Misc Plastics	0	12	6	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	269
31	Leather Or Leather Products	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
32	Clay, Concrete,Glass Or Stone	12	512	314	713	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,563
33	Primary Metal Products	0	10	3	1,465	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,478
34	Fabricated Metal Products	1	54	32	402	0	7	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	510
35	Machinery	3	81	52	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	343
36	Electrical Equipment	4	103	75	336	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	519
37	Transportation Equipment	4	107	53	497	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	665
38	Instrum, Photo Equip, Optical Eq	0	10	2	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
39	Misc Manufacturing Products	1	22	18	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	229
40	Waste Or Scrap Materials	169	15	148	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	340
41	Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44	Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		3,035	6,703	9,339	18,927	0	123	261	0	0	0	0	0	0	0	0	0	1	1	0	147	0	0	0	38,535

Table D.5 Commodity Shipments in the Medford-Ashland Metropolitan Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	1	55	73	186	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Petroleum Prod, Natural Gas	0	128	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	0	0	185
14 Nonmetallic Minerals	21	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	12	1,088	439	3,975	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,514
21 Tobacco Products	0	29	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
22 Textile Mill Products	0	118	11	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155
23 Apparel Or Related Products	5	126	80	531	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	743
24 Logs, Lumber, Wood Prod.	77	903	1,586	1,411	0	3	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,038
25 Furniture Or Fixtures	2	130	59	1,023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,215
26 Pulp, Paper Or Allied Products	1	60	192	1,100	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,355
27 Printed Matter	2	86	79	518	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	685
28 Chemicals Or Allied Products	2	112	70	1,457	0	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,729
29 Petroleum Or Coal Products	0	11	2	217	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
30 Rubber Or Misc Plastics	0	31	17	648	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	696
31 Leather Or Leather Products	0	0	0	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312
32 Clay, Concrete,Glass Or Stone	1	66	40	91	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
33 Primary Metal Products	0	8	2	1,131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,141
34 Fabricated Metal Products	3	162	94	1,198	0	21	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,520
35 Machinery	39	909	580	2,333	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	3,867
36 Electrical Equipment	113	2,711	1,967	8,845	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	13,640
37 Transportation Equipment	37	1,123	555	5,225	0	0	53	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6,994
38 Instrum, Photo Equip, Optical Eq	0	750	142	3,613	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	4,510
39 Misc Manufacturing Products	7	110	89	950	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,156
40 Waste Or Scrap Materials	31	3	28	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
41 Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	354	8,719	6,122	34,791	0	121	152	0	0	0	0	0	0	0	0	6	11	0	52	0	0	0	0	50,329

Table D.6 Commodity Shipments in the Portland Metropolitan Area, 1997

STCC2 Description		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1	Farm Products	698	6,133	2,996	2,354	6	3,596	19	62	0	68	72	0	1	3,498	8,349	3,099	0	4	11	0	0	0	0	30,967
8	Forest Products	5	14	14	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	52
9	Fresh Fish Or Marine Products	9	3	1	0	0	0	0	0	0	0	0	0	0	27	0	0	3	10	0	0	0	0	0	53
10	Metallic Ores	0	0	2	0	0	27	604	0	0	0	0	0	418	2	1,149	0	0	0	0	0	0	0	0	2,202
11	Coal	0	1	0	4	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	21
13	Petroleum Prod, Natural Gas	3,181	242	3,896	0	0	0	0	0	0	0	0	373	3,086	2,657	87	0	0	0	558	8,242	1,687	1,514	25,522	
14	Nonmetallic Minerals	13,872	5,101	257	0	0	127	7	14	0	5	0	3	1,223	2,399	981	113	0	0	0	0	0	0	0	24,103
19	Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	9,145	6,536	11,531	4,176	15	1,200	54	61	0	181	160	29	0	41	121	771	0	2	4	0	0	0	0	34,027
21	Tobacco Products	286	63	354	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	705
22	Textile Mill Products	1,231	1,848	3,029	43	0	0	0	0	0	5	1	0	0	8	7	10	0	1	1	0	0	0	0	6,183
23	Apparel Or Related Products	32	48	103	65	0	0	0	0	0	5	7	1	0	0	0	0	0	4	6	0	0	0	0	271
24	Logs, Lumber, Wood Prod.	5,850	34,551	8,093	17,505	36	560	1,443	525	0	20	327	10	0	143	629	730	0	0	2	0	0	0	0	70,424
25	Furniture Or Fixtures	201	141	249	144	0	9	0	0	0	11	0	2	0	2	11	0	0	0	0	0	0	0	0	771
26	Pulp, Paper Or Allied Products	1,174	1,403	2,186	1,925	25	462	701	312	0	81	357	10	4	628	540	52	0	4	3	0	0	0	0	9,867
27	Printed Matter	378	216	531	209	0	0	0	0	0	13	15	2	0	0	0	0	0	7	5	0	0	0	0	1,376
28	Chemicals Or Allied Products	1,993	2,435	1,758	1,978	0	3,460	445	299	0	92	22	2	2	331	3,669	100	0	14	0	0	0	0	0	16,599
29	Petroleum Or Coal Products	1,781	1,567	2,588	1,400	0	382	69	141	0	19	9	8	9	236	29	0	0	0	0	0	0	0	0	8,237
30	Rubber Or Misc Plastics	403	621	330	286	0	4	12	20	0	28	4	5	0	15	61	0	0	3	5	0	0	0	0	1,796
31	Leather Or Leather Products	44	12	3	11	0	0	0	0	0	1	1	6	0	0	0	0	0	0	0	0	0	0	0	78
32	Clay, Concrete,Glass Or Stone	12,688	4,191	4,741	1,504	19	868	23	110	0	66	1	3	0	521	62	5	0	1	1	0	0	0	0	24,803
33	Primary Metal Products	995	687	1,348	1,040	0	263	474	65	0	9	26	0	0	234	40	251	0	0	0	0	0	0	0	5,432
34	Fabricated Metal Products	729	543	915	665	0	4	8	0	0	15	11	0	0	75	29	5	0	3	4	0	0	0	0	3,006
35	Machinery	410	339	200	287	0	9	2	0	0	33	18	1	0	15	35	2	0	32	50	0	0	0	0	1,434
36	Electrical Equipment	310	224	254	328	0	0	0	1	0	25	3	0	0	19	23	0	0	12	12	0	0	0	0	1,213
37	Transportation Equipment	840	870	1,538	611	1	345	264	6	0	82	58	9	0	367	44	71	0	10	13	0	0	0	0	5,130
38	Instrum, Photo Equip, Optical Eq	134	38	176	30	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	0	0	0	0	389
39	Misc Manufacturing Products	147	147	146	271	0	4	0	0	0	61	11	8	0	42	31	0	0	2	1	0	0	0	0	870
40	Waste Or Scrap Materials	1,987	255	926	0	124	607	46	37	0	72	47	10	0	0	167	0	0	0	0	0	0	0	0	4,278
41	Misc Freight Shipments	5	6	6	0	0	15	6	10	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	56
42	Shipping Containers	76	202	184	0	0	0	0	0	0	197	66	7	0	305	348	0	0	0	0	0	0	0	0	1,384
43	Mail Or Contract Traffic	11	13	5	0	0	0	0	0	0	3	4	1	0	0	0	0	0	28	22	0	0	0	0	86
44	Freight Forwarder Traffic	83	215	193	0	0	0	0	0	0	229	46	0	0	0	0	0	0	0	0	0	0	0	0	765
45	Shipper Association Traffic	3	7	7	0	0	0	0	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	26
46	Misc Mixed Shipments	1,170	3,119	2,847	0	0	0	0	0	0	2,303	1,757	103	0	0	0	0	0	19	0	0	0	0	0	11,319
47	Small Pkg Freight Shipments	67	178	163	0	0	0	0	0	0	153	79	3	0	0	0	0	0	0	0	0	0	0	0	643
48	Waste	0	3	1	0	0	0	24	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	29
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		59,939	71,972	51,570	34,836	225	11,942	4,199	1,663	0	3,788	3,128	223	1,612	12,384	17,864	6,461	0	155	158	558	8,242	1,687	1,514	294,120

Table D.6 Commodity Shipments in the Portland Metropolitan Area, 1997

VALUE (\$1,000,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	189	1,659	811	637	2	973	5	17	0	18	19	0	0	946	2,258	838	0	1	3	0	0	0	0	8,377
8	Forest Products	1	4	4	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	14
9	Fresh Fish Or Marine Products	23	7	2	0	0	0	0	0	0	0	0	0	0	70	0	0	0	8	26	0	0	0	0	137
10	Metallic Ores	0	0	1	0	0	14	308	0	0	0	0	0	0	213	1	586	0	0	0	0	0	0	0	1,123
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Petroleum Prod, Natural Gas	1,133	86	1,388	0	0	0	0	0	0	0	0	0	133	1,099	946	31	0	0	0	199	2,936	601	539	9,092
14	Nonmetallic Minerals	114	42	2	0	0	1	0	0	0	0	0	0	10	20	8	1	0	0	0	0	0	0	0	199
19	Ordance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	11,058	7,903	13,943	5,050	18	1,451	65	74	0	219	194	35	0	50	146	932	0	3	5	0	0	0	0	41,146
21	Tobacco Products	346	76	428	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	852
22	Textile Mill Products	774	1,161	1,904	27	0	0	0	0	0	3	1	0	0	5	4	6	0	1	0	0	0	0	0	3,887
23	Apparel Or Related Products	959	1,454	3,106	1,960	0	0	0	0	0	161	197	27	0	0	0	0	0	109	167	0	0	0	0	8,141
24	Logs, Lumber, Wood Prod.	1,409	8,319	1,949	4,215	9	135	347	126	0	5	79	2	0	34	152	176	0	0	0	0	0	0	0	16,957
25	Furniture Or Fixtures	1,009	707	1,249	725	0	46	0	0	0	55	2	10	0	10	55	0	0	1	2	0	0	0	0	3,871
26	Pulp, Paper Or Allied Products	787	940	1,466	1,291	17	309	470	209	0	54	240	7	3	421	362	35	0	3	2	0	0	0	0	6,615
27	Printed Matter	1,637	934	2,297	905	0	0	0	0	0	55	66	8	0	0	0	0	0	32	20	0	0	0	0	5,953
28	Chemicals Or Allied Products	6,776	8,281	5,980	6,725	0	11,765	1,512	1,015	0	314	74	6	7	1,126	12,477	340	0	49	1	0	0	0	0	56,449
29	Petroleum Or Coal Products	215	189	313	169	0	46	8	17	0	2	1	1	1	29	4	0	0	0	0	0	0	0	0	995
30	Rubber Or Misc Plastics	1,041	1,606	853	741	0	11	31	52	0	71	10	12	0	39	158	0	0	7	14	0	0	0	0	4,645
31	Leather Or Leather Products	1,334	352	78	329	0	0	0	0	0	40	24	189	0	0	0	0	0	13	0	0	0	0	0	2,357
32	Clay, Concrete,Glass Or Stone	1,625	537	607	193	2	111	3	14	0	8	0	0	0	67	8	1	0	0	0	0	0	0	0	3,177
33	Primary Metal Products	768	530	1,041	803	0	203	366	50	0	7	20	0	0	181	31	194	0	0	0	0	0	0	0	4,194
34	Fabricated Metal Products	2,171	1,616	2,725	1,981	0	11	25	0	0	44	33	0	0	223	86	15	0	10	13	0	0	0	0	8,954
35	Machinery	4,619	3,824	2,259	3,237	0	102	22	0	0	374	202	8	0	169	395	22	0	356	569	0	0	0	0	16,157
36	Electrical Equipment	12,525	9,065	10,285	13,263	0	0	0	30	0	1,010	137	16	0	768	930	0	0	497	503	0	0	0	0	49,031
37	Transportation Equipment	8,830	9,147	16,159	6,419	10	3,630	2,776	66	0	865	614	95	0	3,859	463	744	0	109	132	0	0	0	0	53,918
38	Instrum, Photo Equip, Optical Eq	9,814	2,754	12,932	2,207	0	0	0	0	0	0	0	0	0	0	0	0	0	282	527	0	0	0	0	28,516
39	Misc Manufacturing Products	743	741	736	1,366	0	19	0	1	0	306	56	39	0	212	157	0	0	12	3	0	0	0	0	4,390
40	Waste Or Scrap Materials	369	47	172	0	23	113	9	7	0	13	9	2	0	0	31	0	0	0	0	0	0	0	0	795
41	Misc Freight Shipments	3	4	4	0	0	9	4	6	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	35
42	Shipping Containers	48	127	116	0	0	0	0	0	0	124	41	4	0	192	219	0	0	0	0	0	0	0	0	870
43	Mail Or Contract Traffic	7	8	3	0	0	0	0	0	0	2	3	0	0	0	0	0	0	17	14	0	0	0	0	54
44	Freight Forwarder Traffic	52	135	121	0	0	0	0	0	0	144	29	0	0	0	0	0	0	0	0	0	0	0	0	481
45	Shipper Association Traffic	2	5	4	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	16
46	Misc Mixed Shipments	2,327	6,202	5,660	0	0	0	0	0	0	4,578	3,493	205	0	0	0	0	0	37	0	0	0	0	0	22,502
47	Small Pkg Freight Shipments	42	112	102	0	0	0	0	0	0	96	49	2	0	0	0	0	0	0	0	0	0	0	0	404
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		72,752	68,576	88,699	52,242	80	18,949	5,951	1,686	0	8,576	5,601	669	154	9,663	18,963	3,921	0	1,546	2,002	199	2,936	601	539	364,305

Table D.7 Commodity Shipments in the Salem Metropolitan Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	30	699	547	7,181	0	141	2	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,662
8	Forest Products	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	1	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
13	Petroleum Prod, Natural Gas	0	659	33	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	248	0	2,268	3,210
14	Nonmetallic Minerals	4,155	40	2,617	0	0	4	0	14	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6,834
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	71	1,597	1,306	4,719	0	171	69	61	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	8,024
21	Tobacco Products	0	40	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
22	Textile Mill Products	0	315	57	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	422
23	Apparel Or Related Products	2	15	22	67	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	107
24	Logs, Lumber, Wood Prod.	363	6,088	4,685	46,335	0	51	162	525	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	58,219
25	Furniture Or Fixtures	2	46	22	237	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	311
26	Pulp, Paper Or Allied Products	7	187	147	2,101	0	141	16	312	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	2,920
27	Printed Matter	2	59	48	370	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	481
28	Chemicals Or Allied Products	6	151	120	1,837	0	112	0	299	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2,527
29	Petroleum Or Coal Products	10	261	78	2,688	0	13	0	141	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	3,199
30	Rubber Or Misc Plastics	0	26	11	398	0	0	0	20	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	460
31	Leather Or Leather Products	0	0	1	14	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	21
32	Clay, Concrete,Glass Or Stone	40	965	497	5,444	0	2	0	110	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	7,061
33	Primary Metal Products	0	31	30	1,908	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,034
34	Fabricated Metal Products	6	108	130	640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	883
35	Machinery	17	133	153	351	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	655
36	Electrical Equipment	22	164	208	441	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	837
37	Transportation Equipment	18	182	160	788	0	0	0	6	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	1,164
38	Instrum, Photo Equip, Optical Eq	0	18	6	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
39	Misc Manufacturing Products	5	37	46	257	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	354
40	Waste Or Scrap Materials	296	36	312	0	0	0	4	37	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	695
41	Misc Freight Shipments	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
42	Shipping Containers	0	9	5	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	21
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
44	Freight Forwarder Traffic	0	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
46	Misc Mixed Shipments	0	139	81	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	323
47	Small Pkg Freight Shipments	0	8	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	16
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		5,052	12,025	11,341	75,880	0	655	253	1,663	0	0	0	223	0	0	0	0	0	0	0	0	248	0	2,268	109,608

Table D.7 Commodity Shipments in the Salem Metropolitan Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	8	189	148	1,942	0	38	1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,343
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Petroleum Prod, Natural Gas	0	235	12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	0	808	1,144
14 Nonmetallic Minerals	34	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	86	1,931	1,579	5,706	0	207	84	74	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	9,703
21 Tobacco Products	0	48	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
22 Textile Mill Products	0	198	36	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	265
23 Apparel Or Related Products	26	215	322	962	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	1,538
24 Logs, Lumber, Wood Prod.	87	1,466	1,128	11,157	0	12	39	126	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	14,018
25 Furniture Or Fixtures	11	232	111	1,189	0	5	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	1,558
26 Pulp, Paper Or Allied Products	5	125	99	1,408	0	95	11	209	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	1,958
27 Printed Matter	5	142	114	882	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1,147
28 Chemicals Or Allied Products	9	213	169	2,595	0	158	0	422	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3,569
29 Petroleum Or Coal Products	1	32	9	325	0	2	0	17	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	387
30 Rubber Or Misc Plastics	0	68	28	1,029	0	0	0	52	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	1,188
31 Leather Or Leather Products	0	3	28	407	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	0	626
32 Clay, Concrete,Glass Or Stone	5	124	64	697	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	904
33 Primary Metal Products	0	24	23	1,473	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,570
34 Fabricated Metal Products	17	320	387	1,907	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,631
35 Machinery	194	1,499	1,728	3,950	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	7,379
36 Electrical Equipment	576	4,320	5,475	11,606	0	0	0	20	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	22,007
37 Transportation Equipment	187	1,914	1,682	8,285	0	0	0	66	0	0	0	95	0	0	0	0	0	0	0	0	0	0	0	12,230
38 Instrum, Photo Equip, Optical Eq	0	1,278	403	3,727	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,407
39 Misc Manufacturing Products	23	189	234	1,298	0	0	0	1	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	1,785
40 Waste Or Scrap Materials	55	7	58	0	0	0	1	7	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	129
41 Misc Freight Shipments	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
42 Shipping Containers	0	6	3	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	13
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Freight Forwarder Traffic	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Misc Mixed Shipments	0	277	160	0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	0	0	0	0	0	642
47 Small Pkg Freight Shipments	0	5	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	10
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	1,329	15,066	14,038	60,578	0	518	135	1,082	0	0	0	642	0	0	0	0	0	0	0	0	88	0	808	94,284

Table D.8 Commodity Shipments in the Cascades West ACT Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	15	820	701	6,692	0	6	59	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,354
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9	Fresh Fish Or Marine Products	0	3	0	0	0	0	3	0	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	58
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13	Petroleum Prod, Natural Gas	0	526	33	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	256	0	2,256	3,080
14	Nonmetallic Minerals	3,517	47	1,258	0	0	8	0	14	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4,848
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	41	1,639	723	4,715	0	7	9	61	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	7,225
21	Tobacco Products	0	47	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
22	Textile Mill Products	0	369	56	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	475
23	Apparel Or Related Products	2	14	15	64	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	96
24	Logs, Lumber, Wood Prod.	462	5,103	7,601	46,077	0	264	374	525	0	0	0	10	0	0	16	0	0	0	0	0	0	0	0	60,432
25	Furniture Or Fixtures	2	44	23	234	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	305
26	Pulp, Paper Or Allied Products	12	192	338	1,884	0	37	756	312	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	3,542
27	Printed Matter	2	58	39	351	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	452
28	Chemicals Or Allied Products	8	161	185	1,624	0	247	14	299	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2,540
29	Petroleum Or Coal Products	10	230	99	2,485	0	0	0	141	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	2,974
30	Rubber Or Misc Plastics	0	23	10	366	0	0	0	20	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	424
31	Leather Or Leather Products	0	0	0	13	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	19
32	Clay, Concrete,Glass Or Stone	15	687	338	4,949	0	98	0	110	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6,200
33	Primary Metal Products	0	29	47	1,804	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,946
34	Fabricated Metal Products	5	89	52	611	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	757
35	Machinery	20	143	165	298	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	628
36	Electrical Equipment	26	184	182	422	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	815
37	Transportation Equipment	21	197	161	728	0	0	0	6	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	1,122
38	Instrum, Photo Equip, Optical Eq	0	20	3	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
39	Misc Manufacturing Products	5	38	43	242	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	337
40	Waste Or Scrap Materials	316	210	128	0	0	191	8	37	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	901
41	Misc Freight Shipments	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
42	Shipping Containers	0	7	3	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	16
43	Mail Or Contract Traffic	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
44	Freight Forwarder Traffic	0	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	103	43	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	250
47	Small Pkg Freight Shipments	0	6	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	11
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		4,481	10,998	12,264	73,661	0	859	1,223	1,663	0	0	0	223	0	61	16	0	0	1	0	0	256	0	2,256	107,962

Table D.8 Commodity Shipments in the Cascades West ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	4	222	190	1,810	0	2	16	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,260
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	7	0	0	0	0	7	0	0	0	0	0	0	138	0	0	0	0	0	0	0	0	0	152
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Petroleum Prod, Natural Gas	0	187	12	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	91	0	804	1,097
14 Nonmetallic Minerals	29	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	49	1,982	874	5,702	0	8	11	74	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	8,736
21 Tobacco Products	0	57	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
22 Textile Mill Products	0	232	35	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	298
23 Apparel Or Related Products	30	201	218	911	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	1,373
24 Logs, Lumber, Wood Prod.	111	1,229	1,830	11,095	0	64	90	126	0	0	0	2	0	0	4	0	0	0	0	0	0	0	0	14,551
25 Furniture Or Fixtures	12	222	115	1,172	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	1,532
26 Pulp, Paper Or Allied Products	8	129	227	1,263	0	25	507	209	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	2,375
27 Printed Matter	5	139	93	836	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1,077
28 Chemicals Or Allied Products	12	228	261	2,293	0	349	20	422	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3,588
29 Petroleum Or Coal Products	1	28	12	300	0	0	0	17	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	359
30 Rubber Or Misc Plastics	0	59	27	947	0	0	0	52	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	1,097
31 Leather Or Leather Products	0	5	4	383	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	0	581
32 Clay, Concrete,Glass Or Stone	2	88	43	634	0	13	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	794
33 Primary Metal Products	0	22	37	1,393	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,502
34 Fabricated Metal Products	15	265	155	1,819	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,254
35 Machinery	228	1,615	1,864	3,358	0	0	0	0	0	0	0	8	0	0	0	0	2	1	0	0	0	0	0	7,076
36 Electrical Equipment	675	4,838	4,785	11,088	0	0	0	20	0	0	0	11	0	0	0	0	0	0	1	0	0	0	0	21,417
37 Transportation Equipment	221	2,066	1,697	7,647	0	2	0	66	0	0	0	95	0	0	0	0	0	0	0	0	0	0	0	11,795
38 Instrum, Photo Equip, Optical Eq	0	1,458	240	3,697	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5,396
39 Misc Manufacturing Products	27	192	217	1,223	0	0	0	1	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	1,700
40 Waste Or Scrap Materials	59	39	24	0	0	36	2	7	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	167
41 Misc Freight Shipments	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
42 Shipping Containers	0	4	2	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	10
43 Mail Or Contract Traffic	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
44 Freight Forwarder Traffic	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Misc Mixed Shipments	0	205	86	0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	0	0	0	0	0	497
47 Small Pkg Freight Shipments	0	4	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	7
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	1,490	15,728	13,071	57,604	0	498	652	1,082	0	0	0	642	0	141	4	0	0	3	3	0	91	0	804	91,813

Table D.9 Commodity Shipments in the Central Oregon ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	84	149	716	0	0	3	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,032
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Petroleum Prod, Natural Gas	0	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	0	295	420
14 Nonmetallic Minerals	22	1	8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	0	476	79	1,929	0	0	0	279	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,763
21 Tobacco Products	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
22 Textile Mill Products	0	50	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
23 Apparel Or Related Products	0	58	65	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	134
24 Logs, Lumber, Wood Prod.	67	726	1,706	816	0	10	108	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,530
25 Furniture Or Fixtures	0	58	31	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	269
26 Pulp, Paper Or Allied Products	0	34	5	137	0	0	0	230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	406
27 Printed Matter	0	43	23	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113
28 Chemicals Or Allied Products	0	59	61	320	0	28	0	239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	707
29 Petroleum Or Coal Products	0	10	1	12	0	6	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
30 Rubber Or Misc Plastics	2	476	484	111	0	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,218
31 Leather Or Leather Products	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
32 Clay, Concrete,Glass Or Stone	6	48	182	43	0	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	286
33 Primary Metal Products	0	7	6	281	0	3	0	385	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	683
34 Fabricated Metal Products	0	93	21	94	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	220
35 Machinery	4	823	100	283	0	0	0	0	0	18	0	0	0	0	0	0	2	1	0	0	0	0	0	1,231
36 Electrical Equipment	3	1,264	96	737	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2,102
37 Transportation Equipment	1	573	135	203	0	0	0	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,057
38 Instrum, Photo Equip, Optical Eq	0	331	98	206	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	638
39 Misc Manufacturing Products	0	62	27	319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409
40 Waste Or Scrap Materials	31	5	14	0	0	0	0	23	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	91
41 Misc Freight Shipments	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
42 Shipping Containers	0	2	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44 Freight Forwarder Traffic	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Misc Mixed Shipments	0	87	51	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	139
47 Small Pkg Freight Shipments	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	138	5,475	3,346	6,450	0	198	112	1,519	0	18	0	19	0	0	0	0	0	5	3	0	38	0	295	17,615

Table D.10 Commodity Shipments in the Lower John Day ACT Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	1	153	599	7,133	0	0	0	4,768	0	0	0	39	0	0	396	5,532	0	0	0	0	0	0	0	18,622
8	Forest Products	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	216	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	227
11	Coal	0	0	0	2	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
13	Petroleum Prod, Natural Gas	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0	2,108	0	0	0	0	16	0	931	3,104
14	Nonmetallic Minerals	519	591	1	0	0	0	0	179	0	0	0	1	0	116	1	2	0	0	0	0	0	0	0	1,409
19	Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	0	64	96	8,835	0	3	0	1,356	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	10,402
21	Tobacco Products	0	2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
22	Textile Mill Products	0	12	1	73	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	87
23	Apparel Or Related Products	0	1	1	178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180
24	Logs, Lumber, Wood Prod.	1	432	230	21,994	0	15	0	2,078	0	0	0	169	0	214	464	293	0	0	0	0	0	0	0	25,890
25	Furniture Or Fixtures	0	2	1	149	0	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	167
26	Pulp, Paper Or Allied Products	0	7	51	2,132	0	0	0	762	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	2,971
27	Printed Matter	0	2	7	305	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	320
28	Chemicals Or Allied Products	0	5	13	3,964	0	13	0	1,209	0	0	0	40	0	0	0	160	0	0	0	0	0	0	0	5,404
29	Petroleum Or Coal Products	0	15	3	2,453	0	16	0	460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,947
30	Rubber Or Misc Plastics	0	0	4	483	0	0	0	4	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	507
31	Leather Or Leather Products	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
32	Clay, Concrete,Glass Or Stone	0	102	22	4,910	0	0	0	275	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	5,324
33	Primary Metal Products	0	1	4	1,907	0	0	36	824	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2,776
34	Fabricated Metal Products	0	3	3	1,235	0	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1,250
35	Machinery	0	6	6	402	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	419
36	Electrical Equipment	0	7	3	280	0	0	0	15	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	319
37	Transportation Equipment	0	8	16	1,736	0	0	0	267	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2,030
38	Instrum, Photo Equip, Optical Eq	0	1	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
39	Misc Manufacturing Products	0	1	9	302	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	324
40	Waste Or Scrap Materials	33	1,623	70	0	0	24	0	329	0	334	0	1,608	0	0	0	0	0	0	0	0	0	0	0	4,021
41	Misc Freight Shipments	0	0	1	0	0	0	0	47	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	54
42	Shipping Containers	0	0	31	0	0	0	0	2	0	0	0	360	0	0	0	0	0	0	0	0	0	0	0	394
43	Mail Or Contract Traffic	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
44	Freight Forwarder Traffic	0	0	32	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	48
45	Shipper Association Traffic	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
46	Misc Mixed Shipments	0	6	474	0	0	0	0	0	0	0	0	2,112	0	0	0	0	0	0	0	0	0	0	0	2,592
47	Small Pkg Freight Shipments	0	0	27	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	28
48	Waste	0	0	2	0	0	0	0	7	0	20	0	19	0	0	0	0	0	0	0	0	0	0	0	49
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		554	3,093	1,714	58,522	0	287	36	12,642	0	354	0	4,522	0	330	861	8,096	0	0	0	0	16	0	931	91,957

Table D.10 Commodity Shipments in the Lower John Day ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	41	162	1,930	0	0	0	1,290	0	0	0	11	0	0	107	1,497	0	0	0	0	0	0	0	5,038
8 Forest Products	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	110	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	116
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Petroleum Prod, Natural Gas	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	751	0	0	0	0	6	0	332	1,106
14 Nonmetallic Minerals	4	5	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	12
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	0	77	116	10,683	0	3	0	1,639	0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	12,579
21 Tobacco Products	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
22 Textile Mill Products	0	8	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
23 Apparel Or Related Products	0	8	20	2,553	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2,586
24 Logs, Lumber, Wood Prod.	0	104	55	5,296	0	4	0	500	0	0	0	41	0	52	112	71	0	0	0	0	0	0	0	6,234
25 Furniture Or Fixtures	0	10	7	749	0	0	0	42	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	836
26 Pulp, Paper Or Allied Products	0	5	34	1,430	0	0	0	511	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	1,992
27 Printed Matter	0	5	18	726	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	762
28 Chemicals Or Allied Products	0	7	19	5,599	0	19	0	1,707	0	0	0	56	0	0	0	226	0	0	0	0	0	0	0	7,633
29 Petroleum Or Coal Products	0	2	0	296	0	2	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	356
30 Rubber Or Misc Plastics	0	0	11	1,250	0	0	0	11	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	1,311
31 Leather Or Leather Products	0	0	7	271	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	287
32 Clay, Concrete,Glass Or Stone	0	13	3	629	0	0	0	35	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	682
33 Primary Metal Products	0	1	3	1,473	0	0	27	636	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2,143
34 Fabricated Metal Products	0	9	9	3,677	0	0	0	11	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	3,722
35 Machinery	0	63	69	4,527	0	0	0	34	0	0	0	15	0	0	0	11	0	0	0	0	0	0	0	4,720
36 Electrical Equipment	0	191	87	7,349	0	0	0	405	0	0	0	346	0	0	0	0	0	0	0	0	0	0	0	8,378
37 Transportation Equipment	0	83	172	18,243	0	0	0	2,802	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	21,339
38 Instrum, Photo Equip, Optical Eq	0	47	0	2,374	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,421
39 Misc Manufacturing Products	0	7	47	1,526	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	1,638
40 Waste Or Scrap Materials	6	302	13	0	0	4	0	61	0	62	0	299	0	0	0	0	0	0	0	0	0	0	0	747
41 Misc Freight Shipments	0	0	1	0	0	0	0	30	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	34
42 Shipping Containers	0	0	19	0	0	0	0	2	0	0	0	226	0	0	0	0	0	0	0	0	0	0	0	247
43 Mail Or Contract Traffic	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Freight Forwarder Traffic	0	0	20	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	30
45 Shipper Association Traffic	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
46 Misc Mixed Shipments	0	12	942	0	0	0	0	0	0	0	0	4,199	0	0	0	0	0	0	0	0	0	0	0	5,153
47 Small Pkg Freight Shipments	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	11	1,018	1,854	70,635	0	142	27	9,779	0	62	0	5,494	0	52	219	2,555	0	0	0	0	6	0	332	92,187

Table D.11 Commodity Shipments in the Mid-Willamette ACT Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	55	802	845	749	0	141	2	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,656
8	Forest Products	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	1	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
13	Petroleum Prod, Natural Gas	10	863	69	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	321	0	2,268	3,533
14	Nonmetallic Minerals	5,339	53	3,042	0	0	4	0	14	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	8,455
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	157	2,319	2,215	4,754	0	194	69	61	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	9,800
21	Tobacco Products	3	70	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
22	Textile Mill Products	17	462	117	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	647
23	Apparel Or Related Products	2	17	25	68	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	112
24	Logs, Lumber, Wood Prod.	627	7,560	6,267	45,238	0	51	424	525	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	60,701
25	Furniture Or Fixtures	3	57	28	243	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	333
26	Pulp, Paper Or Allied Products	16	261	340	2,072	0	141	269	312	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	3,421
27	Printed Matter	4	79	63	378	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	525
28	Chemicals Or Allied Products	9	207	194	1,870	0	124	0	299	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2,704
29	Petroleum Or Coal Products	11	359	81	2,733	0	24	0	141	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	3,357
30	Rubber Or Misc Plastics	0	33	49	404	0	0	12	20	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	523
31	Leather Or Leather Products	0	0	3	14	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	24
32	Clay, Concrete, Glass Or Stone	78	1,525	954	5,424	0	2	0	110	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	8,096
33	Primary Metal Products	3	60	185	1,893	0	0	242	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,447
34	Fabricated Metal Products	9	131	155	655	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	956
35	Machinery	18	138	160	359	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	676
36	Electrical Equipment	23	172	219	451	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	866
37	Transportation Equipment	20	213	177	808	0	0	1	6	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	1,235
38	Instrum, Photo Equip, Optical Eq	1	26	19	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
39	Misc Manufacturing Products	5	39	48	263	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	363
40	Waste Or Scrap Materials	406	628	353	0	0	405	18	37	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	1,856
41	Misc Freight Shipments	0	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
42	Shipping Containers	0	12	7	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	26
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
44	Freight Forwarder Traffic	0	13	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
46	Misc Mixed Shipments	0	186	108	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	397
47	Small Pkg Freight Shipments	0	11	6	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	20
48	Waste	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		6,812	16,297	15,765	68,480	0	1,106	1,050	1,663	0	0	0	223	0	0	0	0	0	0	0	0	321	0	2,268	113,986

Table D.11 Commodity Shipments in the Mid-Willamette ACT Area, 1997

VALUE (\$1,000,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	15	217	229	203	0	38	1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	719
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Fresh Fish Or Marine Products	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Petroleum Prod, Natural Gas	4	307	25	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114	0	808	1,259
14	Nonmetallic Minerals	44	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	189	2,804	2,679	5,749	0	235	84	74	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	11,850
21	Tobacco Products	3	84	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118
22	Textile Mill Products	11	290	73	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	407
23	Apparel Or Related Products	26	239	353	974	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	1,604
24	Logs, Lumber, Wood Prod.	151	1,820	1,509	10,893	0	12	102	126	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	14,616
25	Furniture Or Fixtures	16	284	139	1,217	0	5	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	1,672
26	Pulp, Paper Or Allied Products	10	175	228	1,389	0	95	181	209	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	2,294
27	Printed Matter	9	188	151	900	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1,251
28	Chemicals Or Allied Products	12	292	274	2,641	0	175	0	422	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3,820
29	Petroleum Or Coal Products	1	43	10	330	0	3	0	17	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	406
30	Rubber Or Misc Plastics	0	85	127	1,044	0	0	31	52	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	1,352
31	Leather Or Leather Products	0	4	102	417	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	0	712
32	Clay, Concrete, Glass Or Stone	10	195	122	695	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,037
33	Primary Metal Products	2	46	143	1,461	0	0	187	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,890
34	Fabricated Metal Products	25	391	461	1,950	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,849
35	Machinery	197	1,554	1,804	4,050	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	7,613
36	Electrical Equipment	597	4,518	5,765	11,870	0	0	0	20	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	22,779
37	Transportation Equipment	208	2,243	1,864	8,488	0	0	10	66	0	0	0	95	0	0	0	0	0	0	0	0	0	0	0	12,974
38	Instrum, Photo Equip, Optical Eq	72	1,877	1,386	3,702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,037
39	Misc Manufacturing Products	24	195	242	1,330	0	0	0	1	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	1,831
40	Waste Or Scrap Materials	75	117	66	0	0	75	3	7	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	345
41	Misc Freight Shipments	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
42	Shipping Containers	0	8	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	16
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44	Freight Forwarder Traffic	0	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	370	214	0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	0	0	0	0	0	789
47	Small Pkg Freight Shipments	0	7	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	12
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		1,702	18,364	18,036	59,335	0	640	619	1,082	0	0	0	642	0	0	0	0	0	0	0	0	114	0	808	101,344

Table D.12 Commodity Shipments in the North East Oregon ACT Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	34	802	3,219	1,387	4	64	316	4,916	0	0	0	4	0	0	0	4,881	0	0	0	0	0	0	0	15,628
8	Forest Products	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
11	Coal	0	0	0	7	0	750	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	791
13	Petroleum Prod, Natural Gas	0	268	43	0	0	0	0	0	0	0	0	0	0	0	0	1,671	0	0	0	336	548	0	1,582	4,448
14	Nonmetallic Minerals	2,824	92	485	0	0	20	147	179	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3,749
19	Ordance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	33	807	1,411	9,202	0	57	196	1,577	0	0	1	67	0	0	0	0	0	0	0	0	0	0	0	13,350
21	Tobacco Products	0	19	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
22	Textile Mill Products	0	149	72	124	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	347
23	Apparel Or Related Products	1	6	19	213	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	241
24	Logs, Lumber, Wood Prod.	94	2,769	4,218	12,377	0	3	530	2,894	0	0	0	169	0	0	0	532	0	0	0	0	0	0	0	23,587
25	Furniture Or Fixtures	1	19	28	276	0	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	339
26	Pulp, Paper Or Allied Products	4	88	161	2,542	0	3	0	754	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	3,570
27	Printed Matter	1	26	32	338	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	403
28	Chemicals Or Allied Products	5	199	191	4,917	0	175	4	1,371	0	1	0	41	0	0	0	160	0	0	0	0	0	0	0	7,065
29	Petroleum Or Coal Products	4	77	114	1,840	0	31	0	411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,478
30	Rubber Or Misc Plastics	0	9	4	596	0	1	0	8	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	632
31	Leather Or Leather Products	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
32	Clay, Concrete,Glass Or Stone	10	421	726	3,446	0	37	328	338	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	5,321
33	Primary Metal Products	0	19	91	2,312	0	0	0	405	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2,831
34	Fabricated Metal Products	3	40	110	1,800	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1,958
35	Machinery	12	62	191	605	0	0	0	3	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	876
36	Electrical Equipment	14	69	238	527	0	0	0	15	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	877
37	Transportation Equipment	11	94	210	2,152	0	0	6	331	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2,808
38	Instrum, Photo Equip, Optical Eq	0	8	6	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
39	Misc Manufacturing Products	3	15	50	557	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	636
40	Waste Or Scrap Materials	115	12	139	0	0	0	14	225	0	0	0	102	0	0	0	0	0	0	0	0	0	0	0	608
41	Misc Freight Shipments	0	0	0	0	0	0	0	51	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	57
42	Shipping Containers	0	2	1	0	0	0	0	1	0	0	0	374	0	0	0	0	0	0	0	0	0	0	0	378
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
44	Freight Forwarder Traffic	0	2	1	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	22
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
46	Misc Mixed Shipments	11	63	21	0	0	0	0	4	0	11	1	2,201	0	0	0	0	0	0	0	0	0	0	0	2,311
47	Small Pkg Freight Shipments	0	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
48	Waste	0	0	0	0	0	0	0	34	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	40
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		3,179	6,139	11,793	45,317	4	1,140	1,540	13,574	0	13	2	3,093	0	0	0	7,247	0	0	0	336	548	0	1,582	95,509

Table D.12 Commodity Shipments in the North East Oregon ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	9	217	871	375	1	17	85	1,330	0	0	0	1	0	0	0	1,320	0	0	0	0	0	0	0	4,228
8 Forest Products	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
11 Coal	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
13 Petroleum Prod, Natural Gas	0	95	15	0	0	0	0	0	0	0	0	0	0	0	0	595	0	0	0	120	195	0	564	1,585
14 Nonmetallic Minerals	23	1	4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	40	976	1,707	11,127	0	68	237	1,907	0	0	1	81	0	0	0	0	0	0	0	0	0	0	0	16,144
21 Tobacco Products	0	23	11	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
22 Textile Mill Products	0	94	46	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	218
23 Apparel Or Related Products	16	87	278	3,056	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	3,449
24 Logs, Lumber, Wood Prod.	23	667	1,016	2,980	0	1	128	697	0	0	0	41	0	0	0	128	0	0	0	0	0	0	0	5,679
25 Furniture Or Fixtures	7	97	140	1,385	0	0	0	42	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	1,699
26 Pulp, Paper Or Allied Products	3	59	108	1,704	0	2	0	505	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	2,393
27 Printed Matter	3	61	76	806	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	959
28 Chemicals Or Allied Products	7	281	270	6,945	0	247	5	1,937	0	2	0	58	0	0	0	226	0	0	0	0	0	0	0	9,979
29 Petroleum Or Coal Products	1	9	14	222	0	4	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	299
30 Rubber Or Misc Plastics	0	23	9	1,541	0	2	0	20	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	1,634
31 Leather Or Leather Products	0	0	0	474	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	483
32 Clay, Concrete,Glass Or Stone	1	54	93	441	0	5	42	43	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	681
33 Primary Metal Products	0	15	70	1,785	0	0	0	313	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2,186
34 Fabricated Metal Products	8	119	326	5,361	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	5,831
35 Machinery	130	698	2,156	6,816	0	1	0	34	0	11	0	15	0	0	0	11	0	0	2	0	0	0	0	9,874
36 Electrical Equipment	355	1,820	6,269	13,865	0	0	0	405	0	0	0	346	0	0	0	0	0	0	1	0	0	0	0	23,062
37 Transportation Equipment	115	985	2,205	22,621	0	0	66	3,482	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	29,514
38 Instrum, Photo Equip, Optical Eq	0	580	423	5,366	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6,371
39 Misc Manufacturing Products	14	74	252	2,811	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	3,210
40 Waste Or Scrap Materials	21	2	26	0	0	0	3	42	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	113
41 Misc Freight Shipments	0	0	0	0	0	0	0	32	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	36
42 Shipping Containers	0	1	1	0	0	0	0	0	0	0	0	235	0	0	0	0	0	0	0	0	0	0	0	238
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44 Freight Forwarder Traffic	0	1	1	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	14
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
46 Misc Mixed Shipments	21	125	42	0	0	0	0	7	0	21	2	4,376	0	0	0	0	0	0	0	0	0	0	0	4,594
47 Small Pkg Freight Shipments	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	797	7,166	16,429	89,771	1	357	567	10,855	0	34	3	5,421	0	0	0	2,281	0	1	4	120	195	0	564	134,566

Table D.13 Commodity Shipments in the Northwest Oregon ACT Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1	Farm Products	2	837	218	0	0	0	0	0	0	0	0	0	0	0	18,588	0	0	0	0	0	0	0	19,645	
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	Fresh Fish Or Marine Products	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5	
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,838	0	0	0	0	0	0	0	1,838	
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	21	
13	Petroleum Prod, Natural Gas	30	887	362	0	0	0	0	0	0	0	0	0	0	0	4,026	0	0	0	0	380	5	0	5,690	
14	Nonmetallic Minerals	1,604	351	7	0	0	35	0	0	0	0	0	0	0	0	843	0	0	0	0	0	0	0	2,839	
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	Food Or Kindred Products	7	812	363	3	0	26	5	0	0	0	0	0	0	0	1,247	0	0	0	0	0	0	0	2,462	
21	Tobacco Products	0	26	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	35	
22	Textile Mill Products	1	175	17	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	217	
23	Apparel Or Related Products	0	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
24	Logs, Lumber, Wood Prod.	54	2,310	2,151	183	0	96	62	0	0	0	0	0	0	0	3,504	0	0	0	0	0	0	0	8,360	
25	Furniture Or Fixtures	0	20	7	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	40	
26	Pulp, Paper Or Allied Products	5	101	769	1	0	3	6	0	0	0	0	0	0	0	1,061	0	0	0	0	0	0	0	1,947	
27	Printed Matter	0	29	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	
28	Chemicals Or Allied Products	1	66	62	0	0	0	66	0	0	0	0	0	0	0	4,641	0	0	0	0	0	0	0	4,837	
29	Petroleum Or Coal Products	4	140	128	40	0	0	0	0	0	0	0	0	0	0	269	0	0	0	0	0	0	0	581	
30	Rubber Or Misc Plastics	0	7	14	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	36	
31	Leather Or Leather Products	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
32	Clay, Concrete,Glass Or Stone	24	477	1,143	13	0	37	0	0	0	0	0	0	0	0	596	0	0	0	0	0	0	0	2,289	
33	Primary Metal Products	0	4	4	0	0	0	0	0	0	0	0	0	0	0	588	0	0	0	0	0	0	0	597	
34	Fabricated Metal Products	1	37	14	0	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	0	0	117	
35	Machinery	2	61	50	0	0	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	165	
36	Electrical Equipment	3	73	55	0	0	0	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	173	
37	Transportation Equipment	2	90	49	0	0	0	0	0	0	0	0	0	0	0	482	0	0	0	0	0	0	0	624	
38	Instrum, Photo Equip, Optical Eq	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
39	Misc Manufacturing Products	1	15	13	0	0	0	0	0	0	0	0	0	0	0	129	0	0	0	0	0	0	0	159	
40	Waste Or Scrap Materials	87	170	131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	388	
41	Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
42	Shipping Containers	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
43	Mail Or Contract Traffic	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
44	Freight Forwarder Traffic	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
46	Misc Mixed Shipments	0	59	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	
47	Small Pkg Freight Shipments	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>		1,829	6,774	5,641	240	0	197	139	0	0	0	0	0	0	0	38,050	0	0	0	0	380	5	0	53,253	

Table D.13 Commodity Shipments in the Northwest Oregon ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	1	226	59	0	0	0	0	0	0	0	0	0	0	0	0	5,028	0	0	0	0	0	0	0	5,314
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	13
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	938	0	0	0	0	0	0	0	938
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Petroleum Prod, Natural Gas	11	316	129	0	0	0	0	0	0	0	0	0	0	0	0	1,434	0	0	0	0	135	2	0	2,027
14 Nonmetallic Minerals	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	23
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	8	981	439	3	0	31	6	0	0	0	0	0	0	0	0	1,508	0	0	0	0	0	0	0	2,977
21 Tobacco Products	0	31	9	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	42
22 Textile Mill Products	0	110	11	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	136
23 Apparel Or Related Products	4	80	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
24 Logs, Lumber, Wood Prod.	13	556	518	44	0	23	15	0	0	0	0	0	0	0	0	844	0	0	0	0	0	0	0	2,013
25 Furniture Or Fixtures	2	98	33	0	0	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	203
26 Pulp, Paper Or Allied Products	4	68	515	0	0	2	4	0	0	0	0	0	0	0	0	711	0	0	0	0	0	0	0	1,305
27 Printed Matter	1	69	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
28 Chemicals Or Allied Products	1	94	88	0	0	0	93	0	0	0	0	0	0	0	0	6,556	0	0	0	0	0	0	0	6,832
29 Petroleum Or Coal Products	0	17	16	5	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	70
30 Rubber Or Misc Plastics	0	18	35	0	0	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	92
31 Leather Or Leather Products	0	1	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
32 Clay, Concrete,Glass Or Stone	3	61	146	2	0	5	0	0	0	0	0	0	0	0	0	76	0	0	0	0	0	0	0	293
33 Primary Metal Products	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	454	0	0	0	0	0	0	0	461
34 Fabricated Metal Products	2	109	42	0	0	0	0	0	0	0	0	0	0	0	0	194	0	0	0	0	0	0	0	347
35 Machinery	27	688	559	0	0	0	0	0	0	0	0	0	0	0	0	586	0	0	0	0	0	0	0	1,859
36 Electrical Equipment	79	1,920	1,457	0	0	0	0	0	0	0	0	0	0	0	0	1,104	0	0	0	0	0	0	0	4,561
37 Transportation Equipment	26	944	517	0	0	0	0	0	0	0	0	0	0	0	0	5,066	0	0	0	0	0	0	0	6,554
38 Instrum, Photo Equip, Optical Eq	2	705	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	780
39 Misc Manufacturing Products	3	78	68	0	0	0	0	0	0	0	0	0	0	0	0	651	0	0	0	0	0	0	0	800
40 Waste Or Scrap Materials	16	32	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
41 Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42 Shipping Containers	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
43 Mail Or Contract Traffic	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Freight Forwarder Traffic	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Misc Mixed Shipments	0	117	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	202
47 Small Pkg Freight Shipments	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	216	7,338	5,034	55	0	62	118	0	0	0	0	0	0	0	0	25,323	0	0	0	0	135	2	0	38,283

Table D.14 Commodity Shipments in the Rogue Valley ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	3	80	105	186	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	377	
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13 Petroleum Prod, Natural Gas	0	181	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	0	0	268	
14 Nonmetallic Minerals	28	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20 Food Or Kindred Products	33	1,443	773	3,953	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,202	
21 Tobacco Products	0	39	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	
22 Textile Mill Products	0	160	32	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	219	
23 Apparel Or Related Products	19	156	210	519	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	905	
24 Logs, Lumber, Wood Prod.	139	1,193	2,062	1,333	0	4	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,806	
25 Furniture Or Fixtures	8	166	127	1,009	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,310	
26 Pulp, Paper Or Allied Products	3	77	217	1,100	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,399	
27 Printed Matter	4	114	120	508	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	746	
28 Chemicals Or Allied Products	6	140	132	1,433	0	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,799	
29 Petroleum Or Coal Products	1	14	6	218	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240	
30 Rubber Or Misc Plastics	0	33	29	641	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	703	
31 Leather Or Leather Products	0	0	0	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	310	
32 Clay, Concrete,Glass Or Stone	2	89	42	108	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242	
33 Primary Metal Products	0	10	3	1,124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,137	
34 Fabricated Metal Products	11	207	197	1,174	0	21	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,652	
35 Machinery	144	1,119	1,525	2,315	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	5,109	
36 Electrical Equipment	426	3,366	4,885	8,756	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	17,436	
37 Transportation Equipment	139	1,432	1,483	5,201	0	0	53	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	8,308	
38 Instrum, Photo Equip, Optical Eq	0	1,024	467	3,394	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	4,890	
39 Misc Manufacturing Products	20	134	202	944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,300	
40 Waste Or Scrap Materials	41	4	45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91	
41 Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
46 Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>	1,026	11,182	12,688	34,250	0	123	169	0	0	0	0	0	0	0	0	6	11	0	76	0	0	0	59,532	

Table D.15 Commodity Shipments in the South Central Oregon ACT Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL				
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through					
STCC2	Description																												
1	Farm Products	0	154	1,244	1,056	6	10	328	513	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,312
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Petroleum Prod, Natural Gas	0	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	0	773	990
14	Nonmetallic Minerals	1,192	613	1	0	0	2	0	51	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,861
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	0	435	57	1,622	0	10	0	309	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,462
21	Tobacco Products	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
22	Textile Mill Products	0	96	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
23	Apparel Or Related Products	0	4	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
24	Logs, Lumber, Wood Prod.	88	1,826	4,254	3,137	0	84	237	949	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,585
25	Furniture Or Fixtures	0	12	1	44	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
26	Pulp, Paper Or Allied Products	0	41	26	206	0	1	4	655	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	943
27	Printed Matter	0	16	6	27	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
28	Chemicals Or Allied Products	0	41	49	240	0	7	7	465	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	811
29	Petroleum Or Coal Products	0	204	1	102	0	46	3	372	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	736
30	Rubber Or Misc Plastics	0	2	0	47	0	0	0	20	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
31	Leather Or Leather Products	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
32	Clay, Concrete,Glass Or Stone	0	263	45	546	0	0	0	124	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	981
33	Primary Metal Products	0	3	3	369	0	0	0	563	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	938
34	Fabricated Metal Products	0	26	12	39	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
35	Machinery	0	41	1	26	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
36	Electrical Equipment	0	53	2	31	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
37	Transportation Equipment	0	58	1	22	0	0	0	20	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
38	Instrum, Photo Equip, Optical Eq	0	5	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
39	Misc Manufacturing Products	0	11	0	68	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
40	Waste Or Scrap Materials	76	26	53	0	0	0	0	162	0	0	0	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	420
41	Misc Freight Shipments	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
42	Shipping Containers	0	0	0	0	0	0	0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44	Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104
47	Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		1,356	4,102	5,757	7,594	6	161	580	4,219	0	0	0	317	0	0	0	0	0	0	0	0	57	0	773					24,922

Table D.15 Commodity Shipments in the South Central Oregon ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	42	337	286	2	3	89	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	896
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Petroleum Prod, Natural Gas	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	275	353
14 Nonmetallic Minerals	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
19 Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20 Food Or Kindred Products	0	526	69	1,962	0	12	0	373	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	2,977
21 Tobacco Products	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
22 Textile Mill Products	0	60	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
23 Apparel Or Related Products	0	62	6	66	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	146
24 Logs, Lumber, Wood Prod.	21	440	1,024	755	0	20	57	228	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2,549
25 Furniture Or Fixtures	0	60	3	219	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	293
26 Pulp, Paper Or Allied Products	0	27	17	138	0	1	3	439	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	632
27 Printed Matter	0	37	14	64	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	119
28 Chemicals Or Allied Products	0	58	69	339	0	10	10	656	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1,145
29 Petroleum Or Coal Products	0	25	0	12	0	6	0	45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	89
30 Rubber Or Misc Plastics	0	4	0	122	0	0	0	52	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	190
31 Leather Or Leather Products	0	0	3	3	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0	0	0	0	195
32 Clay, Concrete,Glass Or Stone	0	34	6	70	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126
33 Primary Metal Products	0	2	2	285	0	0	0	435	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	724
34 Fabricated Metal Products	0	76	37	117	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240
35 Machinery	0	465	17	296	0	0	0	0	0	0	0	8	0	0	0	0	1	1	0	0	0	0	0	787
36 Electrical Equipment	0	1,390	43	815	0	0	0	20	0	0	0	11	0	0	0	0	0	1	0	0	0	0	0	2,278
37 Transportation Equipment	0	613	7	228	0	0	0	212	0	0	0	95	0	0	0	0	0	0	0	0	0	0	0	1,154
38 Instrum, Photo Equip, Optical Eq	0	381	107	330	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	819
39 Misc Manufacturing Products	0	56	0	341	0	0	0	1	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	437
40 Waste Or Scrap Materials	14	5	10	0	0	0	0	30	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	78
41 Misc Freight Shipments	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
42 Shipping Containers	0	0	0	0	0	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	6
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	206	0	0	0	0	0	0	0	0	0	0	0	206
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	45	4,439	1,771	6,448	2	52	159	2,665	0	0	0	661	0	0	0	0	0	2	3	0	20	0	275	16,542

Table D.16 Commodity Shipments in the South East Oregon ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
10 Metallic Ores	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11 Coal	0	51	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	232	290
13 Petroleum Prod, Natural Gas	10	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
14 Nonmetallic Minerals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 Ordnance Or Accessories	8	832	768	8,784	0	9	215	1,407	0	0	0	81	0	0	0	0	0	0	0	0	0	0	0	12,102
20 Food Or Kindred Products	0	21	3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
21 Tobacco Products	0	85	11	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174
22 Textile Mill Products	4	76	75	2,822	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	2,988
23 Apparel Or Related Products	4	268	384	2,410	0	0	0	392	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	3,498
24 Logs, Lumber, Wood Prod.	1	79	38	1,301	0	0	0	42	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	1,489
25 Furniture Or Fixtures	1	38	28	1,352	0	0	0	239	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	1,667
26 Pulp, Paper Or Allied Products	1	46	25	713	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	798
27 Printed Matter	1	90	47	6,260	0	22	0	1,363	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	7,843
28 Chemicals Or Allied Products	0	6	2	132	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161
29 Petroleum Or Coal Products	0	2	0	1,451	0	0	0	20	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	1,512
30 Rubber Or Misc Plastics	0	0	0	452	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	460
31 Leather Or Leather Products	0	18	25	285	0	0	0	36	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	366
32 Clay, Concrete,Glass Or Stone	0	1	11	1,631	0	0	0	98	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1,743
33 Primary Metal Products	2	101	57	5,189	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	5,367
34 Fabricated Metal Products	27	605	637	6,516	0	0	0	34	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	7,834
35 Machinery	80	1,853	1,793	12,490	0	0	0	405	0	0	0	346	0	0	0	0	0	0	0	0	0	0	0	16,968
36 Electrical Equipment	26	737	587	21,566	0	0	0	3,337	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	26,294
37 Transportation Equipment	0	529	71	5,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,750
38 Instrum, Photo Equip, Optical Eq	3	70	73	2,466	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	2,671
39 Misc Manufacturing Products	4	5	12	0	0	0	0	32	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	54
40 Waste Or Scrap Materials	0	0	0	0	0	0	0	32	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	35
41 Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	233	0	0	0	0	0	0	0	0	0	0	0	234
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43 Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	12
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
45 Shipper Association Traffic	0	1	3	0	0	0	0	7	0	0	0	4,373	0	0	0	0	0	0	0	0	0	0	0	4,384
46 Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	172	5,518	4,656	81,057	0	34	215	7,472	0	0	0	5,393	0	0	0	0	0	0	0	0	3	0	232	104,752

Table D.17 Commodity Shipments in the South West Oregon ACT Area, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	17	981	335	763	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,107
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
13	Petroleum Prod, Natural Gas	0	663	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	168	0	0	852
14	Nonmetallic Minerals	2,716	812	11	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,543
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	43	2,796	383	3,850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,073
21	Tobacco Products	0	85	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
22	Textile Mill Products	0	659	37	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	741
23	Apparel Or Related Products	2	26	14	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78
24	Logs, Lumber, Wood Prod.	689	4,466	11,262	17,374	0	25	1,039	153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35,008
25	Furniture Or Fixtures	3	77	12	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312
26	Pulp, Paper Or Allied Products	8	276	233	1,762	0	0	252	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,535
27	Printed Matter	3	118	25	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	397
28	Chemicals Or Allied Products	8	186	38	1,151	0	26	0	62	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1,472
29	Petroleum Or Coal Products	10	169	32	2,069	0	33	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,322
30	Rubber Or Misc Plastics	0	11	14	277	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	303
31	Leather Or Leather Products	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
32	Clay, Concrete,Glass Or Stone	4	527	135	2,028	0	0	15	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,721
33	Primary Metal Products	0	7	7	1,604	0	11	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,652
34	Fabricated Metal Products	6	147	38	445	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	658
35	Machinery	24	258	82	232	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	596
36	Electrical Equipment	30	336	99	377	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	843
37	Transportation Equipment	25	339	88	558	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,009
38	Instrum, Photo Equip, Optical Eq	0	36	2	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
39	Misc Manufacturing Products	6	66	31	203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	307
40	Waste Or Scrap Materials	233	80	142	0	0	47	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	510
41	Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Shipping Containers	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Freight Forwarder Traffic	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	24	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
47	Small Pkg Freight Shipments	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		3,828	13,151	13,074	33,310	0	150	1,329	282	0	2	0	0	0	0	0	0	0	0	0	168	0	0	0	65,293

Table D.17 Commodity Shipments in the South West Oregon ACT Area, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Forest Products	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	236	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	304
13 Petroleum Prod, Natural Gas	22	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
14 Nonmetallic Minerals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 Ordnance Or Accessories	52	3,381	463	4,656	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,553
20 Food Or Kindred Products	0	102	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108
21 Tobacco Products	0	414	23	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	466
22 Textile Mill Products	36	369	203	515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,123
23 Apparel Or Related Products	166	1,075	2,712	4,183	0	6	250	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,430
24 Logs, Lumber, Wood Prod.	15	384	60	1,109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,568
25 Furniture Or Fixtures	6	185	156	1,181	0	0	169	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,699
26 Pulp, Paper Or Allied Products	6	281	59	599	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	946
27 Printed Matter	11	262	54	1,626	0	36	0	88	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2,080
28 Chemicals Or Allied Products	1	20	4	250	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	281
29 Petroleum Or Coal Products	0	29	37	717	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	783
30 Rubber Or Misc Plastics	0	7	1	339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	346
31 Leather Or Leather Products	0	68	17	260	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	348
32 Clay, Concrete,Glass Or Stone	0	5	5	1,238	0	9	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,275
33 Primary Metal Products	18	439	114	1,324	0	0	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,958
34 Fabricated Metal Products	269	2,908	925	2,617	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	6,722
35 Machinery	799	8,834	2,612	9,912	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	22,159
36 Electrical Equipment	259	3,558	920	5,868	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,606
37 Transportation Equipment	0	2,620	173	3,671	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	6,466
38 Instrum, Photo Equip, Optical Eq	32	333	156	1,027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,548
39 Misc Manufacturing Products	43	15	26	0	0	9	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
40 Waste Or Scrap Materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Misc Freight Shipments	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43 Mail Or Contract Traffic	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Shipper Association Traffic	0	48	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
46 Misc Mixed Shipments	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	1,737	25,586	8,784	41,121	0	64	439	194	0	2	0	0	0	0	0	0	2	4	0	60	0	0	0	77,993

Table D.18 Commodity Shipments in Columbia County, 1997

STCC2 Description		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1	Farm Products	0	329	54	0	0	0	0	0	0	0	0	0	0	0	18,588	0	0	0	0	0	0	0	18,971	
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,838	0	0	0	0	0	0	0	1,838	
11	Coal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	21	
13	Petroleum Prod, Natural Gas	0	86	0	0	0	0	0	0	0	0	0	0	0	0	4,026	0	0	0	0	51	5	0	4,168	
14	Nonmetallic Minerals	549	155	0	0	35	0	0	0	0	0	0	0	317	4	904	541	0	0	0	0	0	0	2,505	
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	Food Or Kindred Products	0	209	37	162	0	26	5	0	0	0	0	0	0	0	1,247	0	0	0	0	0	0	0	1,687	
21	Tobacco Products	0	8	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	15	
22	Textile Mill Products	0	37	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	63	
23	Apparel Or Related Products	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
24	Logs, Lumber, Wood Prod.	4	768	497	3,137	0	96	62	0	0	0	0	0	0	0	128	3,376	0	0	0	0	0	0	8,068	
25	Furniture Or Fixtures	0	3	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	17	
26	Pulp, Paper Or Allied Products	2	29	607	244	0	3	0	0	0	0	0	0	0	0	1,061	0	0	0	0	0	0	0	1,946	
27	Printed Matter	0	8	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
28	Chemicals Or Allied Products	0	19	34	33	0	0	66	0	0	0	0	0	0	0	4,641	0	0	0	0	0	0	0	4,793	
29	Petroleum Or Coal Products	2	69	32	235	0	0	0	0	0	0	0	0	0	0	269	0	0	0	0	0	0	0	607	
30	Rubber Or Misc Plastics	0	6	13	1	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	35	
31	Leather Or Leather Products	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
32	Clay, Concrete,Glass Or Stone	17	316	1,127	207	0	37	0	0	0	0	0	0	0	0	596	0	0	0	0	0	0	0	2,301	
33	Primary Metal Products	0	2	0	8	0	0	0	0	0	0	0	0	0	0	588	0	0	0	0	0	0	0	598	
34	Fabricated Metal Products	0	6	1	1	0	0	0	0	0	0	0	0	0	0	65	0	0	0	0	0	0	0	73	
35	Machinery	0	7	5	2	0	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	65	
36	Electrical Equipment	0	2	0	0	0	0	0	0	0	0	0	0	0	0	42	0	0	0	0	0	0	0	45	
37	Transportation Equipment	0	18	1	3	0	0	0	0	0	0	0	0	0	0	482	0	0	0	0	0	0	0	505	
38	Instrum, Photo Equip, Optical Eq	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
39	Misc Manufacturing Products	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
40	Waste Or Scrap Materials	30	25	52	0	0	0	0	0	0	0	0	0	0	0	129	0	0	0	0	0	0	0	236	
41	Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
42	Shipping Containers	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	7	
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
44	Freight Forwarder Traffic	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
46	Misc Mixed Shipments	0	14	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
47	Small Pkg Freight Shipments	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
48	Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>		604	2,125	2,488	4,038	0	197	133	0	0	0	0	0	317	4	1,032	37,625	0	0	0	0	51	5	0	48,619

Table D.18 Commodity Shipments in Columbia County, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Forest Products	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	9
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	938	0	0	0	0	0	0	0	0	938
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	30	0	0	0	0	0	0	0	0	0	0	0	0	1,434	0	0	0	0	18	2	0	1,485	
13 Petroleum Prod, Natural Gas	5	1	0	0	0	0	0	0	0	0	0	0	3	0	7	4	0	0	0	0	0	0	0	21
14 Nonmetallic Minerals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 Ordnance Or Accessories	0	253	45	196	0	31	6	0	0	0	0	0	0	0	0	1,508	0	0	0	0	0	0	0	2,039
20 Food Or Kindred Products	0	10	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	18
21 Tobacco Products	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	39
22 Textile Mill Products	0	1	25	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
23 Apparel Or Related Products	1	185	120	755	0	23	15	0	0	0	0	0	0	0	31	813	0	0	0	0	0	0	0	1,943
24 Logs, Lumber, Wood Prod.	0	16	0	1	0	0	0	0	0	0	0	0	0	0	0	70	0	0	0	0	0	0	0	88
25 Furniture Or Fixtures	2	19	407	164	0	2	0	0	0	0	0	0	0	0	0	711	0	0	0	0	0	0	0	1,305
26 Pulp, Paper Or Allied Products	0	20	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
27 Printed Matter	0	27	47	47	0	0	93	0	0	0	0	0	0	0	0	6,556	0	0	0	0	0	0	0	6,770
28 Chemicals Or Allied Products	0	8	4	28	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	73
29 Petroleum Or Coal Products	0	15	34	3	0	0	0	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	0	91
30 Rubber Or Misc Plastics	0	1	79	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
31 Leather Or Leather Products	2	40	144	27	0	5	0	0	0	0	0	0	0	0	0	76	0	0	0	0	0	0	0	295
32 Clay, Concrete,Glass Or Stone	0	1	0	6	0	0	0	0	0	0	0	0	0	0	0	454	0	0	0	0	0	0	0	461
33 Primary Metal Products	0	19	2	2	0	0	0	0	0	0	0	0	0	0	0	194	0	0	0	0	0	0	0	216
34 Fabricated Metal Products	0	79	51	19	0	0	0	0	0	0	0	0	0	0	0	586	0	0	0	0	0	0	0	735
35 Machinery	0	55	8	12	0	0	0	0	0	0	0	0	0	0	0	1,104	0	0	0	0	0	0	0	1,180
36 Electrical Equipment	0	191	16	33	0	0	0	0	0	0	0	0	0	0	0	5,066	0	0	0	0	0	0	0	5,305
37 Transportation Equipment	0	168	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172
38 Instrum, Photo Equip, Optical Eq	0	4	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
39 Misc Manufacturing Products	6	5	10	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	44
40 Waste Or Scrap Materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Misc Freight Shipments	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	4
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43 Mail Or Contract Traffic	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Shipper Association Traffic	0	28	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
46 Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	15	1,205	1,036	1,309	0	62	114	0	0	0	0	0	3	0	38	19,637	0	0	0	0	18	2	0	23,439

Table D.19 Commodity Shipments in Hood River County, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	2	62	326	4,447	0	0	0	4,439	0	0	0	39	0	0	0	5,532	0	0	0	0	0	0	0	14,847
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	Metallic Ores	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
11	Coal	0	0	0	2	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	
13	Petroleum Prod, Natural Gas	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	2,108	0	0	0	0	21	0	2,165	
14	Nonmetallic Minerals	312	7	0	0	0	0	0	175	0	0	0	1	0	0	0	2	0	0	0	0	0	0	497	
19	Ordnance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	Food Or Kindred Products	0	66	45	7,475	0	0	0	1,096	0	0	0	50	0	0	0	0	0	0	0	0	0	0	8,732	
21	Tobacco Products	0	2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
22	Textile Mill Products	0	14	0	73	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	87	
23	Apparel Or Related Products	0	1	1	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183	
24	Logs, Lumber, Wood Prod.	3	417	786	15,561	0	3	19	1,554	0	0	0	168	0	0	0	293	0	0	0	0	0	0	18,803	
25	Furniture Or Fixtures	0	3	0	116	0	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	0	0	133	
26	Pulp, Paper Or Allied Products	0	8	1	1,981	0	0	0	473	0	0	0	18	0	0	0	0	0	0	0	0	0	0	2,481	
27	Printed Matter	0	2	2	291	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	301	
28	Chemicals Or Allied Products	0	4	0	3,823	0	0	0	969	0	0	0	40	0	0	0	160	0	0	0	0	0	0	4,996	
29	Petroleum Or Coal Products	0	10	0	2,390	0	0	0	227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,628	
30	Rubber Or Misc Plastics	0	0	0	438	0	0	0	4	0	0	0	15	0	0	0	0	0	0	0	0	0	0	458	
31	Leather Or Leather Products	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
32	Clay, Concrete,Glass Or Stone	0	59	0	3,771	0	0	0	268	0	0	0	15	0	0	0	0	0	0	0	0	0	0	4,113	
33	Primary Metal Products	0	1	0	1,569	0	0	0	668	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2,242	
34	Fabricated Metal Products	0	3	0	1,237	0	0	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1,250	
35	Machinery	0	6	1	380	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	391	
36	Electrical Equipment	0	8	9	256	0	0	0	15	0	0	0	13	0	0	0	0	0	0	0	0	0	0	301	
37	Transportation Equipment	0	9	1	1,765	0	0	0	253	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2,031	
38	Instrum, Photo Equip, Optical Eq	0	1	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	
39	Misc Manufacturing Products	0	2	2	240	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	256	
40	Waste Or Scrap Materials	14	2	22	0	0	0	0	236	0	0	0	1,417	0	0	0	0	0	0	0	0	0	0	1,692	
41	Misc Freight Shipments	0	0	0	0	0	0	0	47	0	0	0	6	0	0	0	0	0	0	0	0	0	0	53	
42	Shipping Containers	0	1	0	0	0	0	0	2	0	0	0	360	0	0	0	0	0	0	0	0	0	0	364	
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
44	Freight Forwarder Traffic	0	1	1	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	17	
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
46	Misc Mixed Shipments	0	12	7	0	0	0	0	0	0	0	0	2,112	0	0	0	0	0	0	0	0	0	0	2,130	
47	Small Pkg Freight Shipments	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
48	Waste	0	0	0	0	0	0	0	7	0	0	0	19	0	0	0	0	0	0	0	0	0	0	26	
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>		331	738	1,207	46,040	0	3	19	10,493	0	0	0	4,328	0	0	0	8,096	0	0	0	0	21	0	0	71,276

Table D.19 Commodity Shipments in Hood River County, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	751	0	0	0	0	7	0	0	771
13 Petroleum Prod, Natural Gas	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
14 Nonmetallic Minerals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 Ordnance Or Accessories	0	80	55	9,038	0	0	0	1,325	0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	10,558
20 Food Or Kindred Products	0	2	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
21 Tobacco Products	0	9	0	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
22 Textile Mill Products	0	11	20	2,591	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2,628
23 Apparel Or Related Products	1	100	189	3,747	0	1	5	374	0	0	0	40	0	0	0	71	0	0	0	0	0	0	0	4,528
24 Logs, Lumber, Wood Prod.	0	15	0	580	0	0	0	42	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	666
25 Furniture Or Fixtures	0	5	0	1,328	0	0	0	317	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	1,663
26 Pulp, Paper Or Allied Products	0	6	5	693	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	717
27 Printed Matter	0	6	1	5,400	0	0	0	1,369	0	0	0	56	0	0	0	226	0	0	0	0	0	0	0	7,057
28 Chemicals Or Allied Products	0	1	0	289	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	317
29 Petroleum Or Coal Products	0	1	1	1,133	0	0	0	11	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	1,184
30 Rubber Or Misc Plastics	0	0	0	278	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	286
31 Leather Or Leather Products	0	8	0	483	0	0	0	34	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	527
32 Clay, Concrete,Glass Or Stone	0	1	0	1,212	0	0	0	516	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1,731
33 Primary Metal Products	0	10	1	3,683	0	0	0	11	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	3,722
34 Fabricated Metal Products	0	66	6	4,279	0	0	0	34	0	0	0	15	0	0	0	11	0	0	0	0	0	0	0	4,412
35 Machinery	0	204	242	6,718	0	0	0	405	0	0	0	346	0	0	0	0	0	0	0	0	0	0	0	7,915
36 Electrical Equipment	0	90	8	18,549	0	0	0	2,657	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	21,343
37 Transportation Equipment	0	55	4	2,234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,292
38 Instrum, Photo Equip, Optical Eq	0	10	10	1,212	0	0	0	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	1,290
39 Misc Manufacturing Products	3	0	4	0	0	0	0	44	0	0	0	263	0	0	0	0	0	0	0	0	0	0	0	314
40 Waste Or Scrap Materials	0	0	0	0	0	0	0	29	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	33
41 Misc Freight Shipments	0	0	0	0	0	0	0	2	0	0	0	226	0	0	0	0	0	0	0	0	0	0	0	229
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
43 Mail Or Contract Traffic	0	1	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
45 Shipper Association Traffic	0	24	13	0	0	0	0	0	0	0	0	4,198	0	0	0	0	0	0	0	0	0	0	0	4,235
46 Misc Mixed Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	6	718	561	63,501	0	1	5	7,204	0	0	0	5,446	0	0	0	1,059	0	0	0	0	7	0	0	78,506

Table D.20 Commodity Shipments in Washington County, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	14	144	703	8,083	0	11	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Fresh Fish Or Marine Products	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	2	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Petroleum Prod, Natural Gas	11	652	371	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 257 0 1,682
14	Nonmetallic Minerals	5,981	12	1,322	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	271	1,501	3,527	5,660	0	46	2	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Tobacco Products	7	42	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	Textile Mill Products	18	494	883	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	Apparel Or Related Products	0	5	5	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	Logs, Lumber, Wood Prod.	239	8,027	2,400	45,889	0	43	221	286	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	Furniture Or Fixtures	3	27	97	227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Pulp, Paper Or Allied Products	9	159	287	2,457	0	20	0	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	Printed Matter	4	66	123	410	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	Chemicals Or Allied Products	4	165	170	2,071	0	65	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	Petroleum Or Coal Products	3	396	26	3,010	0	12	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	Rubber Or Misc Plastics	10	62	115	451	0	4	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	Leather Or Leather Products	2	4	12	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	Clay, Concrete,Glass Or Stone	327	2,585	1,965	6,833	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Primary Metal Products	4	135	98	1,970	0	4	0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	Fabricated Metal Products	12	85	286	789	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	Machinery	5	47	103	393	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Electrical Equipment	9	31	151	460	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Transportation Equipment	3	99	103	848	0	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Instrum, Photo Equip, Optical Eq	2	12	62	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	Misc Manufacturing Products	1	9	36	269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	Waste Or Scrap Materials	245	6	465	0	0	0	6	423	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Shipping Containers	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Freight Forwarder Traffic	0	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	69	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	Small Pkg Freight Shipments	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	Waste	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		7,185	14,849	13,487	80,026	0	275	230	1,317	0	0	0	0	0	0	0	0	0	0	0	0	257	0	1,682	119,308

Table D.20 Commodity Shipments in Washington County, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Forest Products	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	4	232	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	0	599	1,059	
13 Petroleum Prod, Natural Gas	49	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	
14 Nonmetallic Minerals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19 Ordnance Or Accessories	328	1,815	4,265	6,845	0	56	2	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,344	
20 Food Or Kindred Products	8	51	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	184	
21 Tobacco Products	12	311	555	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	910	
22 Textile Mill Products	0	73	68	1,205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,346	
23 Apparel Or Related Products	58	1,933	578	11,050	0	10	53	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,750	
24 Logs, Lumber, Wood Prod.	17	137	486	1,137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,777	
25 Furniture Or Fixtures	6	107	193	1,647	0	13	0	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,136	
26 Pulp, Paper Or Allied Products	10	158	293	976	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,436	
27 Printed Matter	6	233	240	2,926	0	92	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,510	
28 Chemicals Or Allied Products	0	48	3	364	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	418	
29 Petroleum Or Coal Products	25	159	298	1,166	0	11	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,691	
30 Rubber Or Misc Plastics	56	130	371	512	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,069	
31 Leather Or Leather Products	42	331	252	875	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,508	
32 Clay, Concrete,Glass Or Stone	3	104	76	1,521	0	3	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,894	
33 Primary Metal Products	37	254	853	2,350	0	0	4	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,518	
34 Fabricated Metal Products	52	525	1,158	4,435	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,169	
35 Machinery	344	1,234	6,100	18,577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26,255	
36 Electrical Equipment	33	1,041	1,086	8,912	0	62	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,145	
37 Transportation Equipment	168	834	4,481	3,503	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,986	
38 Instrum, Photo Equip, Optical Eq	3	43	181	1,360	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,588	
39 Misc Manufacturing Products	45	1	86	0	0	0	1	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213	
40 Waste Or Scrap Materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
41 Misc Freight Shipments	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
43 Mail Or Contract Traffic	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
45 Shipper Association Traffic	0	138	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	258	
46 Misc Mixed Shipments	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Total</i>	1,308	9,903	22,021	69,394	0	256	60	614	0	0	0	0	0	0	0	0	0	0	0	92	0	599	104,247	

Table D.21 Commodity Shipments in Yamhill County, 1997

TONS (1,000s)		Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
		Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
STCC2	Description																								
1	Farm Products	2	126	321	1	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	473
8	Forest Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10	Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	Coal	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
13	Petroleum Prod, Natural Gas	1	212	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	331
14	Nonmetallic Minerals	1,182	15	426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,623
19	Ordinance Or Accessories	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	Food Or Kindred Products	22	785	973	96	0	24	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,903
21	Tobacco Products	1	32	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
22	Textile Mill Products	2	162	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	239
23	Apparel Or Related Products	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
24	Logs, Lumber, Wood Prod.	36	1,699	1,809	884	0	0	262	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,711
25	Furniture Or Fixtures	0	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
26	Pulp, Paper Or Allied Products	3	80	199	64	0	0	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	599
27	Printed Matter	0	21	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
28	Chemicals Or Allied Products	0	58	76	5	0	12	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155
29	Petroleum Or Coal Products	0	99	4	57	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172
30	Rubber Or Misc Plastics	0	7	38	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
31	Leather Or Leather Products	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
32	Clay, Concrete,Glass Or Stone	12	586	484	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,259
33	Primary Metal Products	2	29	157	1	0	0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	430
34	Fabricated Metal Products	0	26	27	2	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
35	Machinery	0	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
36	Electrical Equipment	0	8	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
37	Transportation Equipment	0	33	19	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
38	Instrum, Photo Equip, Optical Eq	0	9	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
39	Misc Manufacturing Products	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
40	Waste Or Scrap Materials	109	592	41	0	0	405	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,165
41	Misc Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	Shipping Containers	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
43	Mail Or Contract Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Freight Forwarder Traffic	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
45	Shipper Association Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	Misc Mixed Shipments	0	47	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
47	Small Pkg Freight Shipments	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
48	Waste	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
49	Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>		1,374	4,658	4,810	1,294	0	451	798	72	0	0	0	0	0	0	0	0	0	0	0	0	73	0	0	13,530

Table D.21 Commodity Shipments in Yamhill County, 1997

STCC2 Description	Truck				Rail - Carload				Rail - Intermodal				Water				Air			Pipeline				TOTAL
	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Through	Internal	Inbound	Outbound	Internal	Inbound	Outbound	Through	
1 Farm Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Forest Products	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9 Fresh Fish Or Marine Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Metallic Ores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11 Coal	1	76	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	118
13 Petroleum Prod, Natural Gas	10	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
14 Nonmetallic Minerals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19 Ordnance Or Accessories	26	950	1,176	116	0	28	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,302
20 Food Or Kindred Products	1	38	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
21 Tobacco Products	1	102	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
22 Textile Mill Products	0	23	31	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
23 Apparel Or Related Products	9	409	436	213	0	0	63	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,134
24 Logs, Lumber, Wood Prod.	1	57	33	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91
25 Furniture Or Fixtures	2	54	133	43	0	0	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	402
26 Pulp, Paper Or Allied Products	1	49	40	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
27 Printed Matter	1	82	108	7	0	17	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	219
28 Chemicals Or Allied Products	0	12	1	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
29 Petroleum Or Coal Products	0	18	99	1	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149
30 Rubber Or Misc Plastics	0	1	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
31 Leather Or Leather Products	2	75	62	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161
32 Clay, Concrete,Glass Or Stone	1	23	121	0	0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	332
33 Primary Metal Products	1	77	81	6	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187
34 Fabricated Metal Products	1	58	79	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142
35 Machinery	5	331	472	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	828
36 Electrical Equipment	3	347	200	33	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	592
37 Transportation Equipment	15	656	1,040	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,714
38 Instrum, Photo Equip, Optical Eq	0	6	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
39 Misc Manufacturing Products	20	110	8	0	0	75	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216
40 Waste Or Scrap Materials	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41 Misc Freight Shipments	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
42 Shipping Containers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43 Mail Or Contract Traffic	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
44 Freight Forwarder Traffic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Shipper Association Traffic	0	93	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
46 Misc Mixed Shipments	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
47 Small Pkg Freight Shipments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48 Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Toxic Waste	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Total</i>	99	3,655	4,352	501	0	122	485	15	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	9,254