

# Washington State Freight Truck Origin and Destination Study: Lincoln County



EWITS Research Report Number 21-Lincoln  
January 1998

by

Kathleen M. Painter

in cooperation with

Kenneth L. Casavant, EWITS Project Director  
Washington State University  
Department of Agricultural Economics  
101 Hulbert Hall  
Pullman, WA 99164-6210

## **EWITS Research Report: Background and Purpose**

This is the twenty-first in a series of Research Reports prepared from the Eastern Washington Intermodal Transportation Study (EWITS). The reports prepared as a part of this study provide information to help shape the multimodal network necessary for the efficient movement of both freight and people into the next century.

EWITS is a six-year study funded jointly by the Federal government and the Washington State Department of Transportation as a part of the Intermodal Surface Transportation Efficiency Act of 1991. Dr. Ken Casavant of Washington State University is Director of the study. A state-level Steering Committee provides overall direction pertaining to the design and implementation of the project. The Steering Committee includes Jerry Lenzi, Chair and Regional Administrator (WSDOT, Eastern Region); Richard Larson, Regional Administrator (WSDOT, South Central Region); Don Senn, Regional Administrator (WSDOT, North Central Region); Charles Howard (WSDOT, Planning Manager), and Eric Berger, Executive Director, County Road Administration Board. Pat Patterson represents the Washington State Transportation Commission on the Steering Committee. An Advisory Committee with representation from a broad range of transportation interest groups also provides guidance to the study. The following are key goals and objectives for the Eastern Washington Intermodal Transportation Study:

- *Facilitate existing regional and state-wide transportation planning efforts.*
- *Forecast future freight and passenger transportation service needs for eastern Washington.*
- *Identify gaps in eastern Washington's current transportation infrastructure.*
- *Pinpoint transportation system improvement options critical to economic competitiveness and mobility within eastern Washington.*

For additional information about the Eastern Washington Intermodal Transportation Study or this report, please contact Ken Casavant at the following address:

Ken Casavant, Project Director  
Department of Agricultural Economics  
Washington State University  
Pullman, WA 99164-6210  
(509) 335-1608

## **DISCLAIMER**

The contents of this report reflect the views of the author, who is responsible for the facts and accuracy the data presented herein. The contents do not necessarily reflect the official views or policies of the Washington State Department of Transportation or the Federal Highway Administration. This report does not constitute a standard, specification or regulation.

## **EWITS PREVIOUS REPORTS NOW AVAILABLE**

1. Gillis, William R. and Kenneth L. Casavant. "Linking Transportation System Improvements to New Business Development in Eastern Washington." EWITS Research Report Number 1. February 1994.
2. Gillis, William R. and Kenneth L. Casavant. "Lessons from Eastern Washington: State Route Mainstreets, Bypass Routes and Economic Development in Small Towns." EWITS Research Report Number 2. February 1994.
3. Gillis, William-R. and Kenneth L. Casavant. "Washington State Freight Truck Origin and Destination Study: Methods, Procedures, and Data Dictionary." EWITS Research Report Number 3. December 1994.
4. Gillis, William R. and Kenneth L. Casavant. "Major Generators of Traffic on U.S. 395 North of Spokane: Including Freight Trucks and Passenger Vehicles Crossing the International Border." EWITS Research Report Number 4. January 1995.
5. Newkirk, Jonathan, Ken Eriksen, and Kenneth L. Casavant. "Transportation Characteristics of Wheat and Barley Shipments on Haul Roads To and From Elevators in Eastern Washington." EWITS Research Report Number 5. March 1995.
6. Jessup, Eric and Kenneth L. Casavant. "A Quantitative Estimate of Eastern Washington Annual Haul Road Needs for Wheat and Barley Movement." EWITS Research Report Number 6. March 1995.
7. Gillis, William R., Emily Gruss Gillis, and Kenneth L. Casavant. "Transportation Needs of Eastern Washington Fruit, Vegetable and Hay Industries." EWITS Research Report Number 7. March 1995.
8. Casavant, Kenneth L. and William R. Gillis. "Importance of U.S. 395 Corridor For Local and Regional Commerce in South Central Washington." EWITS Research Report Number 8. April 1995.
9. Gillis, William R., Eric L. Jessup, and Kenneth L. Casavant. "Movement of Freight on Washington's Highways: A Statewide Origin and Destination Study." EWITS Report Number 9, November 1995.
10. Chase, Robert A. and Kenneth L. Casavant. "Eastern Washington Transport-Oriented Input Output Study: Technical Report." EWITS Research Report Number 10. March 1996.

11. Chase, Robert A. Kenneth L. Casavant. "The Economic Contribution of Transport Industries to Eastern Washington." EWITS Report Number 11. April 1996.
12. Lee, Nancy S. and Kenneth L. Casavant. "Waterborne Commerce on the Columbia-Snake." EWITS Report Number 12. October 1996.
13. Alderson, Lynn C., Kenneth L. Casavant and Eric Jessup. "Transportation Characteristics and Needs of Forest Products Industries Using Eastern Washington Highways: Part I Economic Structure of the Industry." EWITS Research Report Number 13. January 1997.
14. Eriksen, Ken and Kenneth L. Casavant. "Impact of North American Free Trade Agreement (NAFTA) on Washington Highways - Part 1: Commodity and Corridor Projections." EWITS Research Report Number 14. January 1997.
15. Alderson, Lynn C. and Kenneth L. Casavant. "Transportation Characteristics and Needs of Forest Products Industries Using Eastern Washington Highways: Part 2 Movement of Raw Logs." EWITS Research Report Number 15. May 1997.
16. Alderson, Lynn C. and Kenneth L. Casavant. "Transportation Characteristics and Needs of Forest Products Industries Using Eastern Washington Highways: Part 3 Shipment from Mills." EWITS Research Report Number 16. May 1997.
17. Alderson, Lynn C. and Kenneth L. Casavant. "Transportation Characteristics and Needs of Forest Products Industries Using Eastern Washington Highways: Part 4 Commercial Shipments." EWITS Research Report Number 17. February 1997.
18. Jessup, Eric L., John Ellis, and Kenneth L. Casavant. "A GIS Commodity Flow Model for Transportation Policy Analysis: A Case Study of the Impacts of a Snake River Drawdown." EWITS Research Report Number 18. May 1997.
19. Lee, Nancy S. and Kenneth L. Casavant. "A Commodity and Origin-Destination Analysis of Rail Traffic in Washington--1990-1995. EWITS Research Report Number 19. May 1997.
20. Edwards, Richard, Eric L. Jessup, and Kenneth L. Casavant. "Eastern Washington On-Farm and Commercial Grain Storage." EWITS Research Report Number 20. January 1998.

### **EWITS Previous Working Paper Series Now Available**

1. Lee, Nancy and Ken Casavant. "Grain Receipts at Columbia River Grain Terminals." EWITS Working Paper #1, March 1996.
2. Lenzi, Jerry, Eric Jessup, and Ken Casavant. "Prospective Estimates for Road Impacts in Eastern Washington from a Drawdown of the Lower Snake River." EWITS Working Paper #2, March 1996.
3. Ellis, John, Eric Jessup, and Ken Casavant. "Modeling Changes in Grain Transportation Flows in Response to Proposed Snake River Drawdowns: A Case Study for Eastern Washington." EWITS Working Paper #3, March, 1996.
4. Painter, Kate and Ken Casavant. "A Comparison of Canadian Versus All Truck Movements In Washington State With A Special Emphasis On Grain Truck Movements." EWITS Working Paper #4, March 1996.
5. Jessup, Eric L., John Ellis and Kenneth L. Casavant. "Estimating the Value of Rail Car Accessibility for Grain Shipments: A GIS Approach." EWITS Working Paper #5. April 1996.
6. Painter, Kathleen M. and Kenneth L. Casavant. "Truck Movement Characteristics on Selected Truck Routes in Washington State." EWITS Working Paper #6. August 1996.
7. Lee, Nancy S. and Kenneth L. Casavant. "Grain Receipts at Columbia River Grain Terminals, 1980-81 to 1995-96." EWITS Working Paper #7. January 1997.
8. Jessup, Eric L. and Ken Casavant. "Economic Evaluation of Grain Shipment Alternatives: A Case Study of the Coulee City and Palouse River Railroad." EWITS Working Paper #8, March 1997.

## Table of Contents

<b>Introduction</b> .....	1
<b>Method of Analysis</b> .....	2
<b>Presentation of Results</b> .....	3
<b>Lincoln County Results</b> .....	4

## List of Figures

Figure 1	Washington State Highways .....	6
----------	---------------------------------	---

## List of Tables

Table 1A	Survey Sites and Traffic Direction.....	1
Table 1	Daily Truck Traffic by Road for Each Season, Lincoln County.....	7
Table 2	Daily Truck Traffic by City of Cargo Origin for Each Season, Lincoln County .....	9
Table 3	Daily Truck Traffic by City of Cargo Destination for Each Season, Lincoln County .....	10
Table 4	Truck Traffic for Trips Originating or Ending in Lincoln County by Season.....	11
Table 5	Truck Trips by Commodity for Truck Traffic Originating or Ending in Lincoln County .....	12
Table 6	Weight Category by Commodity for Truck Loads Originating or Ending in Lincoln County .....	12
Table 7	Weight Category by Road for Truck Loads Originating or Ending in Lincoln County .....	13
Table 8	Truck Configuration by Type of Commodity Hauled, Lincoln County (%)	13
Table 9	Truckers' Home Base for Truck Trips Originating or Ending in Lincoln County .....	13

## Introduction

A large statewide survey of truck traffic origination, destination, and freight characteristics provided the data for in-depth county level reports of freight truck movement in Washington State. Considerable detail on road usage, truck weight, truck configuration, commodity type, and seasonal traffic variation is available in this survey. We were able to examine a rich set of characteristics for trucks whose freight was either destined for or originating from a particular county. It is important to note the survey does not capture truck movement that did not pass through one of 20 survey sites located on major routes throughout the state (see Table 1A for survey sites). For this reason, considerable intra- and intercounty traffic will not be included for some counties depending on their proximity to a survey site. Again, these truck characteristics reflect only the truck movements as reported at the statewide survey locations.

**Table 1A--Survey Sites and Traffic Direction**

Weigh Station	Site Number	Direction of Traffic	Road Designation
Brady West, WA	1	West	SR12
Brady East, WA	2	East	SR12
Cle Elum East, WA	3	East	I90
Cle Elum West, WA	4	West	I90
Deer Park South, WA	6	South	SR395
Douglas POE (BC Border	7	North	I5
Everett North, WA	8	North	I5
Everett South, WA	9	South	I5
Goldendale, WA	10	North/South	SR97
Kelso South, WA	11	South	I5
Othello, WA	12	All Four	SR17
Pasco, WA	13	South	SR395
Peshastin West, WA	15	West	SR2
Plymouth POE, WA	16	North	SR395
East Port Angeles Westbound, WA	17	West	SR101
Sea Tac South, WA	19	South	I5
Sea Tac North, WA	20	North	I5
East Spokane POE, WA	21	West	I90
Tokio East, WA	22	East	I90
Tokio West, WA	23	West	I90
Umatilla POE, WA	24	South	SR395
Vancouver North, WA	25	North	I5
Wallula POE, WA	26	All Four	SR12, SR395, & SR 370
Osoyoos, BC (BC Border	28	North	SR97
Oroville, WA (US Border	29	South	SR97

Information for this report was provided by an extensive study of freight truck movements on major Washington State highways conducted under the Eastern Washington Intermodal Transportation Study (EWITS). This study was the first in the United States to collect statewide freight truck origination and destination data through direct interviews of truck drivers at weigh stations. Over 300 persons conducted these personal interviews of a total of 30,000 truck drivers, providing an extensive database on freight and goods movements in Washington State.

## **Method of Analysis**

Truck traffic characteristics at the county level were analyzed for trucks whose trips either originated or ended in a particular county. Given the survey data, there was no feasible method for analyzing truck traffic that was simply passing through the county. Detailed truck traffic characteristics for each of Washington's 39 counties by season included number of trucks with freight destined for that county per day, their payload weight and commodity type; road usage, including number of trucks per day, freight weight and commodity type; and number of trucks per day, freight weight and commodity type by city of cargo origin and destination. Truck traffic was analyzed on an annual basis for the following characteristics: county road usage, average and total truck tonnage, and number of trucks by commodity; distribution of freight weight by commodity and by road; type of commodity hauled by truck configuration; and truck carriers' home base for truck trips originating or ending in that county. Truck traffic data is likely to be more accurate in terms of relative differences by road, season, etc., than actual magnitude for any one characteristic due to the nature of the survey approach.



## Presentation of Results

Detailed truck traffic characteristics are presented for Washington's 39 counties in a set of nine tables for each county. Table 1 presents information by road for truck traffic either originating or ending in that county for each season. Characteristics include total number of trucks, number of trucks with freight, average payload, and total tonnage. In addition, the percentage of loads by commodity on each road is calculated.

Tables 2 and 3 present seasonal truck traffic characteristics by city of cargo origin and city of cargo destination, respectively. For each city, the daily number of trucks, trucks with freight, their average payload weight, and total truck traffic weight are presented. Again, there is a breakdown by commodity type for each city.

Table 4 summarizes truck traffic characteristics for trucks whose trips end in that county by season. Total daily truck traffic, number of trucks with freight, average payload weight, and the total tonnage per day as well as the percentage of truckloads by commodity are presented.

Table 5 analyzes truck traffic originating or ending in that county by commodity. The number of trucks per day as well as the average and total payload by commodity is presented. In addition, truck traffic usage by road is detailed for each commodity.

Table 6 shows distribution of payload weight by commodity for truck traffic originating or ending in that county. Five weight categories in five-ton increments are used. Table 7 presents distribution of payload weight by road for truck traffic originating or ending in that county. Weight characteristics by commodity and by road are easily identified from these two tables.

Table 8 shows truck configuration by commodity for truck traffic originating or ending in that county. The percentage of trucks with freight by configuration is presented for each commodity. Table 9 presents truckers' home base by city and the number of Washington-based carriers for truck traffic originating or ending in the county.

Overall, this county-by-county disaggregation of truck movements shows the powerful impact of particular commodity movements on certain roads and during certain seasons. Farm commodities are hauled from the field to the processor or market on a seasonal basis. Lumber harvest has considerable seasonal variation as well. Construction or closures on major roads used for these purposes will need to be planned accordingly. As different industries grow or shrink, they create specific demands on the transportation infrastructure that may need to be accommodated in future transportation planning.

These results represent a summary of truck traffic origin and destination information at the county level. This information should be useful for state and county planning with respect to traffic sources, either origin or destination, and the characteristics of this traffic. It should also be valuable for planning road maintenance and construction at the county and regional level.

## Lincoln County Results

The main truck routes in Lincoln County are Interstate 90, and State Routes 395, 2, and 231 (I90, SR395, SR2, and SR231) (Table 1). Truck traffic on I90 ranges from an average of 46 trucks per day in winter to 15 per day in fall. Freight varies seasonally, with agricultural products dominating in fall, general freight in winter, chemicals and agricultural products in spring, and transportation equipment, agricultural products, and petroleum in summer. Truck traffic on SR395 ranges from 28 trucks per day in winter to 9 per day in summer. Freight consists mainly of agricultural products, food, chemicals, metal, and transportation equipment, with considerable seasonal variation. Traffic on State Route 28 (SR28) averages 21 trucks per day in spring and 6 per day in summer. No truck traffic was recorded in the survey for this route in fall and winter. On State Route 23 (SR23), an average of 11 trucks per day were recorded for spring but none were recorded for the other seasons. According to the survey, freight hauled on SR28 and SR23 consists of agricultural products and chemicals. For SR2, truck traffic ranges from an average of 11 trucks per day in spring to 5 trucks per day in fall, with freight consisting mainly of agricultural products and chemicals. SR231 has an average of four and five trucks per day, hauling mainly agricultural products and chemicals. The highest average payload weight of 29 tons is for SR2 in spring when freight consists of chemicals. Due to the small number of trucks in the survey originating from or heading to Lincoln County, some of these data may not offer an accurate representation of actual freight content or truck traffic numbers.

The majority of truck traffic originating from Lincoln County leaves from the town of Davenport, with average daily truck traffic ranging from a high of 18 trucks per day in summer to a low of five trucks per day in fall (Table 2). Truck traffic from Almira, Creston, Sprague and Wilbur averages less than ten trucks per day. Agricultural products, chemicals, machinery, livestock, electrical equipment, and transportation equipment make up the majority of freight leaving Lincoln County. Average payloads of over 30 tons occur for agricultural products originating from Davenport in fall, Almira in winter, and Sprague in summer.

Incoming truck traffic for Lincoln County is relatively low according to the data in this survey, ranging from eight to eleven trucks per day across the seasons (Table 3). Towns receiving incoming freight include Edwall in fall and spring; Odessa in fall, spring, and summer; and Davenport in winter, spring and summer. Freight is varied and includes lumber or wood products, agricultural products, general freight, chemicals, food, and petroleum. The highest average payload weight of 35 tons occurs for trucks carrying petroleum to Odessa in summer.

Total truck traffic heading for or leaving from Lincoln County ranges from 42 trucks per day in spring to 19 trucks per day in fall (Table 4). The most common freight is agricultural products. Other types of freight hauled include lumber or wood products in fall, electrical products in winter, food and chemicals in spring, and transportation equipment, petroleum, and metal in summer. Average payload weights are lowest in spring at 20 tons and highest in summer at 24 tons.

Table 5 shows road usage by type of freight for the major commodities hauled into or out of Lincoln County over the entire year. Agricultural products are the predominant commodity hauled into and out of Lincoln County, accounting for 30% of trucks with loads and 55% of total tonnage. SR395 is the most common route for trucks carrying agricultural products, used by 80% of trucks with loads. I90 is used by just 55% of trucks hauling agricultural products, while nearly all of the trucks carrying other types of freight use this route. Other common freight categories for trucks in the survey hauling loads into or out of Lincoln County include food and chemicals, accounting for 6% and 8% of trucks with loads respectively. All of the trucks hauling food used I90 and SR21, and 62% of them also used SR395. Nearly all trucks hauling chemicals used I90, 58% used SR28, and 42% each used SR2 and SR395. The highest average payload weight by commodity for trucks hauling into and out of Lincoln County in the survey was recorded for agricultural products at 27 tons.

Weight category by commodity for trucks hauling freight into or out of Lincoln County is presented in Table 6. For trucks carrying agricultural products, 91% have loads weighing 20 tons or more. Of these, 41% have loads weighing over 30 tons. Just 4% of the trucks carrying other commodities carry freight falling in this category. Trucks carrying chemicals all have payloads weighing between 20 and 30 tons, while trucks carrying food were most likely to have cargo weighing less than 5 tons. However, due to the relatively small numbers of surveyed trucks coming from or headed to Lincoln County, these numbers may not be representative of actual truck traffic characteristics for the smaller categories of freight.

Table 7 shows weight category by roadway for truckloads originating or ending in Lincoln County. Of the 74 surveyed trucks with loads using I90, 19% have payload weights of over 30 tons, and another 50% have payloads weighing between 20 and 30 tons. On SR395, 31% fall into the highest weight class, and 40% have payloads weighing between 20 and 30 tons. Twenty-three percent of loaded trucks using both SR2 and SR28 in the survey have payloads of over 30 tons.

Truck configuration for trucks carrying loads into or out of Lincoln County are most likely to be tractor and trailer configurations, with 37% of trucks with loads falling in this category (Table 8). Another 27% are tractors plus two trailers and 25% are truck and trailer configurations. Just 10% of trucks hauling freight into or out of Lincoln County are straight trucks.

Table 9 presents the distribution of truckers' home base for truck trips originating or ending in this county. The most common base is Othello, with 13% of the truck trips. Another 10% each are based out of Spokane and Sprague. Washington-based carriers represent 72% of all truck trips in the survey for this county.



**Table 1--Daily Truck Traffic by Road for Each Season, Lincoln County**

Season/ Road	Total Trucks Per Day (No.)	Loaded Trucks Per Day (No.)	Average Payload (Tons)	Total Tonnage <sup>1</sup>	Commodity	
					Category	Percent
<b>Fall:</b>						
I90	15	10	21	198	Agriculture	56
					Lumber, wood	44
SR395	15	10	21	198	Agriculture	56
					Lumber, wood	44
SR231	4	4	9	38	Agriculture	100
SR2	5	0	0	0	Empty	100
<b>Winter:</b>						
I90	26	7	15	108	Agriculture	50
					Electrical	50
SR395	28	19	23	444	Agriculture	81
					Electrical	19
SR231	4	4	22	80	Agriculture	100
SR2	8	8	21	168	Agriculture	55
					Electrical	45
<b>Spring:</b>						
I90	37	26	20	523	Agriculture	40
					Food	19
					Chemicals	41
SR28	21	11	25	267	Agriculture	50
					Chemicals	50
SR23	11	11	25	267	Agriculture	50
					Chemicals	50
SR395	21	16	18	277	Agriculture	33
					Food	33
					Chemicals	33
SR231	5	5	20	106	Chemicals	100
SR2	11	5	29	155	Chemicals	100

**Table 1--Daily Truck Traffic by Road for Each Season, Lincoln County (cont.)**

Season/ Road	Total Trucks Per Day (No.)	Loaded Trucks Per Day (No.)	Average Payload (Tons)	Total Tonnage <sup>1</sup>	Commodity	
					Category	Percent
Summer: I90	29	21	24	500	Agriculture	20
					Food	16
					Petroleum	20
					Metal	19
					Trans. equipment	23
SR395	9	9	29	243	Metal	48
SR28	6	6	15	87	Trans. equipment	56
					Chemicals	21
SR231	3	0	0	0	Trans. equipment	79
SR2	9	9	15	133	Empty	100
					Agriculture	100

<sup>1</sup>Total tonnage may differ from the number of trucks per day multiplied by the average payload due to rounding of values for average number of loaded trucks per day and average payload.

**Table 2--Daily Truck Traffic by City of Cargo Origin for Each Season, Lincoln County**

Season/ Town	Total Trucks Per Day (No.)	Loaded Trucks Per Day (No.)	Average Payload (Tons)	Total Tonnage <sup>1</sup>	Commodity	
					Category	Percent
<b>Fall:</b>						
Davenport	5	5	32	173	Agriculture	100
<b>Winter:</b>						
Almira	4	4	34	152	Agriculture	100
Davenport	12	12	14	168	Machinery	44
					Electrical	31
					Trans. equipment	25
Edwall	4	4	22	80	Agriculture	100
Wilbur	7	7	27	194	Agriculture	100
<b>Spring:</b>						
Almira	5	5	29	155	Chemicals	100
Creston	5	5	24	123	Livestock	100
Davenport	17	17	11	184	Agriculture	32
					Furniture	68
Sprague	5	5	28	140	Agriculture	100
<b>Summer:</b>						
Davenport	18	18	17	305	Chemicals	7
					Metal	82
					Machinery	11
Odessa	3	3	24	77	Food	100
Sprague	9	4	32	137	Agriculture	100
Wilbur	4	4	25	107	Agriculture	100

<sup>1</sup>Total tonnage may differ from the number of trucks per day multiplied by the average payload due to rounding of values for average number of loaded trucks per day and average payload.

**Table 3--Daily Truck Traffic by City of Cargo Destination for Each Season, Lincoln County**

Season/ Town	Total Trucks Per Day (No.)	Loaded Trucks Per Day (No.)	Average Payload (Tons)	Total Tonnage <sup>1</sup>	Commodity	
					Category	Percent
<b>Fall:</b>						
Edwall	4	4	9	38	Lumber, wood	100
Odessa	4	4	25	99	Agriculture	100
<b>Winter:</b>						
Davenport	11	11	3	35	General freight	100
<b>Spring:</b>						
Davenport	1	1	22	28	Metal	100
Edwall	5	5	20	106	Chemicals	100
Odessa	5	5	3	13	Food	100
<b>Summer:</b>						
Davenport	5	5	5	24	Trans. equipment	100
Odessa	4	4	35	152	Petroleum	100

<sup>1</sup>Total tonnage may differ from the number of trucks per day multiplied by the average payload due to rounding of values for average number of loaded trucks per day and average payload.



**Table 4--Truck Traffic for Trips Originating or Ending in Lincoln County by Season**

Season	Total Trucks Per Day (No.)	Loaded Trucks Per Day (No.)	Average Payload (Tons)	Total Tonnage <sup>1</sup>	Commodity	
					Category	Percent
Fall:	19	14	22	299	Agriculture	69
					Lumber, wood	31
Winter:	38	19	23	444	Agriculture	81
					Electrical	19
Spring:	42	26	20	524	Agriculture	38
					Food	19
Summer:	34	26	24	631	Chemicals	53
					Agriculture	33
					Food	12
					Petroleum	16
					Metal	15
					Trans. equipment	18

<sup>1</sup>Total tonnage may differ from the number of trucks per day multiplied by the average payload due to rounding of values for average number of loaded trucks per day and average payload.

**Table 5--Truck Trips by Commodity for Truck Traffic Originating or Ending in Lincoln County**

Commodity	Truck Trips Per Year (%)	Total Weight		Avg. Payload (Tons)	County Roads Used	
		Tons	% of Total		Road	% of Trips
Agriculture	30	1188	55	27	SR395	80
					I90	55
					SR21	35
					SR28	25
Food	6	109	5	13	I90	100
					SR395	62
					SR21	100
Chemicals	8	102	5	25	I90	92
					SR28	58
					SR2	42
					SR395	42
Other	69	739	35	19	I90	97
					SR395	46
					SR2	36

**Table 6--Weight Category by Commodity for Truck Loads Originating or Ending in Lincoln County**

Weight Category (tons)	Commodity							
	Agriculture		Chemicals		Food		Other	
	No.	%	No.	%	No.	%	No.	%
<5	0	0	0	0	5	61	5	5
5 - <10	0	0	0	0	0	0	8	8
10 - <15	0	0	0	0	0	0	0	0
15 - <20	4	9	0	0	0	0	5	5
20 - <25	9	20	7	56	3	39	5	5
25 - <30	13	30	5	44	0	0	4	4
>30	18	41	0	0	0	0	4	4
<b>Total</b>	<b>44</b>	<b>100</b>	<b>12</b>	<b>100</b>	<b>8</b>	<b>100</b>	<b>31</b>	<b>100</b>

**Table 7--Weight Category by Road for Truck Loads Originating or Ending in Lincoln County**

Weight Category (tons)	Commodity							
	I90		SR395		SR2		SR28	
	No.	%	No.	%	No.	%	No.	%
<5	5	7	5	9	0	0	0	0
5 - <10	13	17	8	14	8	36	5	23
10 - <15	0	0	0	0	0	0	0	0
15 - <20	5	7	4	6	0	0	0	0
20 - <25	23	31	14	24	0	0	7	32
25 - <30	14	19	10	16	9	41	5	23
>30	14	19	18	31	5	23	5	23
<b>Total</b>	<b>74</b>	<b>100</b>	<b>58</b>	<b>100</b>	<b>22</b>	<b>100</b>	<b>22</b>	<b>100</b>

**Table 8--Truck Configuration by Type of Commodity Hauled, Lincoln County (%)**

Commodity	Truck Configuration				No. of Loads
	1	2	4	5	
Agricultural products	0	12	39	49	44
Livestock	0	0	100	0	5
Food	61	39	0	0	8
Lumber & wood products	0	0	100	0	4
Chemicals	0	89	11	0	11
Petroleum products	0	0	0	100	4
Metal	0	0	100	0	4
Machinery	0	100	0	0	5
Electrical equipment	0	0	100	0	4
Transportation equipment	100	0	0	0	5
<b>Total</b>	<b>10%</b>	<b>25%</b>	<b>37%</b>	<b>27%</b>	<b>95</b>

Legend: 1 = straight truck, 2 = truck and trailer,  
4 = tractor and trailer, 5 = tractor and two trailers

**Table 9--Truckers' Home Base for Truck Trips Originating or Ending in Lincoln County**

Location	Number	Percent
<b>By Town:</b>		
Pasco	25	17
Othello	13	9
Spokane	10	7
Sprague	10	7
Seattle	9	6
Other	97	67
Total	144	100
<b>Wash. State carriers:</b>	<b>103</b>	<b>72</b>