

# **GRAIN INDUSTRY CHANGES IN WASHINGTON**

*Presentation to the  
Washington Wheat Commission*

by

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## **Eastern Washington Grain Movement and Road Needs Survey**

- **First conducted in 1994 under the Eastern Washington Intermodal Transportation Study (EWITS) in cooperation with the Washington Wheat Commission and Washington State Department of Transportation (WSDOT).**
- **Study provided valuable information regarding grain shipment characteristics. A follow-up study allows for new information and comparisons in real time.**

## **Strategic Freight Transportation Analysis (SFTA)**

- **Collect information on the changing grain industry, including.**
  - **Shipping Information by Mode & Season**
  - **Storage Information**
  - **Handling Information**
- **Compare Elevator Characteristics over time.**
  - **Number of Licensed Warehouses**
  - **Number of Elevators**
  - **Capacities**
  - **Grain movement Characteristics by Mode & Season**

### **1994 Survey**

- **71 Public Grain Warehouse Owners**
  - **64 responses**
- **468 Surveys Distributed**
  - **410 responses**
- **Total grain storage capacity of public grain warehouses is 186,324,700 bushels**
  - **Grain storage Capacity of 410 respondents is 154,523,000 bushels (accounts for 83% of storage capacity)**

## 2002 Survey

- 50 Public Grain Warehouse Owners
  - 47 Responses
  
- 386 Elevators surveyed
  - 364 responses
  
- Total Grain Storage Capacity of Public Warehouses is 166,419,000 bushels
  - Grain storage Capacity of 364 respondents is 147,826,000 bushels. (accounts for 89% of storage capacity).

## Comparison of 1994 and 2002 Elevator Characteristics

	<u>1994</u>	<u>2002</u>	<u>Percent Change</u>
Number of Firms	71	50	-30%
Number of Elevators Surveyed	468	386	-18%
Overall Storage Capacities (bu)	186,324,700	166,419,000	-11%
Average Volume per Firm (bu)	2,623,024	3,328,380	+27%
Average Volume per Elevator (bu)	397,937	413,137	+4%

**Reported Amount of Wheat and Barley  
Received, by Size of Elevators**

Capacity in Bushels (000)	<u>Bu.</u>	<u>Bu.</u>	<u>Percent</u>
	<u>1994</u>	<u>2002</u>	<u>Change</u>
>1000	31,821,782	43,963,491	+38.16
1000-901	2,837,934	4,650,749	+63.88
900-801	3,422,520	1,953,578	-42.92
800-701	6,097,123	4,750,781	-22.08
700-601	6,442,884	6,995,470	+8.58
600-501	9,751,240	13,646,983	+39.95
500-401	12,415,960	15,253,166	+22.85
400-301	9,703,945	15,172,569	+56.35
300-201	11,905,227	9,198,556	-22.74
200-100	7,758,922	8,233,068	+6.11
<=100	1,377,550	1,672,327	+21.40
<b>TOTAL</b>	<b>103,535,087</b>	<b>125,481,738</b>	<b>+21.20</b>

**Concentration of Firms With Number  
of Elevators and Percent of Industry  
Volume Accounted for**

	1994		2002	
	Number of Elevators	% Volume accounted for in the industry	Number of Elevators	% Volume accounted for in the industry
Top 5 Firms	94	28.91	180	47.27
Top 10 Firms	167	46.44	253	69.89
Top 20 Firms	270	70.96	308	90.78

**Farms Which Ship to an Elevator by Distance**

Distance from Elevator (mi)	Percent of Farms in 1994 Survey	Percent of Farms in 2002 Survey
Less than 5	37.71	49.39
<u>5 to 10</u>	<u>51.03</u>	<u>30.48</u>
10 to 20	8.39	16.80
More than 20	2.79	3.33

**Annual Wheat and Barley Receipts by Time Period**

Time-Periods	Wheat		Barley	
	1994	2002	1994	2002
July-August	72.2	85.4	66.5	81.2
September-October	9.0	11.7	10.5	14.5
November-December	5.8	1.3	7.7	1.0
January-February	4.0	0.7	8.6	0.7
March-April	3.6	0.3	4.1	0.3
May-June	4.7	0.6	2.2	2.2

## Annual Wheat and Barley Shipments by Time Period

Time-Periods	Wheat		Barley	
	1994	2002	1994	2002
July-August	19.1	16.6	11.2	17.4
September-October	19.8	23.5	17.6	20.2
November-December	20.3	20.7	28.8	23.2
January-February	15.3	17.7	24.6	12.9
March-April	14.5	13.7	12.2	14.7
May-June	6.5	8.0	4.9	11.6

## Wheat and Barley Shipments by Destination

Destination	WHEAT		BARLEY	
	1994	2002	1994	2002
Columbia River Ocean Elevators	79.5	85.3	60.9	50.1
Puget Sound Elevator	2.1	0.7	1.9	-
Transshipment to Other Houses	12.3	10.8	4.5	12.0
In-State Flour Mills	0.9	0.3	-	0.3
Out-of-State Flour Mills (ONLY 2002)	-	0.3	-	0.1
Vancouver, WA	0.3	-	10.2	31.9
Feedlots	-	0.1	16.9	3.2
Other	4.8	1.1	4.6	2.5

## Modes Used to Ship Wheat and Barley

Transportation Mode	WHEAT		BARLEY	
	1994	2002	1994	2002
Truck to Other Houses	12.5	14.9	14.5	13.3
Truck to Final Market	2.0	1.3	19.6	26.2
Truck-Barge	61.3	54.4	44.8	33.1
Rail-Barge (Only 2002)	-	5.2	-	5.1
Single-Car Rail	0.9	0.6	1.1	3.5
3-Car Rail	1.7	1.9	9.6	8.7
25/26-Car Rail	21.4	20.0	9.9	6.9
Other	0.1	1.6	0.2	3.3

## Let's Interact

- What was the general mood of the industry?
  - Relatively positive.
- Is consolidation in the industry likely to continue?
  - Probably not in the near-term.
- How does availability of short-line railroad impact consolidation trends?
  - Short-line rail affects consolidation and consolidation affects short-line rail.
- How will these changes likely impact producers?
  - Potentially longer hauls and increased transportation cost.

## Questions ?

