

Strategic Resources Access Road Network: Grain Freight Transportation Study

Wayne Stigge

**Washington State University
Department of Agricultural and Resource Economics
Pullman, Washington 99164-6210**



Objectives of Grain Freight Survey

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

1994 Survey

- **71 Public Grain Warehouse Owners**
 - 64 responses
- **470 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**

- **383 Elevators surveyed**
 - **364 responses**

- **Total Grain Storage Capacity of Public Warehouses is 166,419,700 bushels**
 - **Grain storage Capacity of 364 respondents is 147,826,000 bushels. (accounts for 89% of storage capacity).**

Changes in Survey Population

- **Number of licensed grain warehouses shrank by 21 firms in 2002**
- **Number of elevators decreased by 87 in 2002 survey**
- **Volume of Total Storage Capacity shrank by 19,905,700**

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

Conclusions

- **Elevators**
 - Overall Numbers have decreased
 - Capacities have increased

- **Drawing Capacity**
 - Consolidation has led to greater drawing power, more tran-shipments

- **Receiving and Shipping**
 - Relatively similar seasonal shipping patterns
 - Modal shift from truck-barge to rail-barge