

# U.S. Containerized Grain & Oilseed Exports

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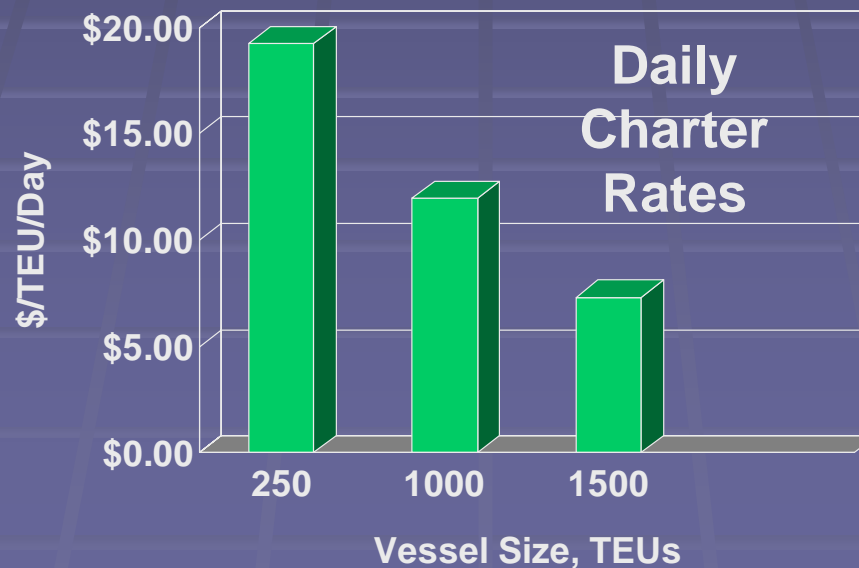
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# OVERVIEW

- Background
- Industry Survey Findings
  - Shipper Characteristics
  - Market Practices
  - Container Export Activity
  - Market Growth

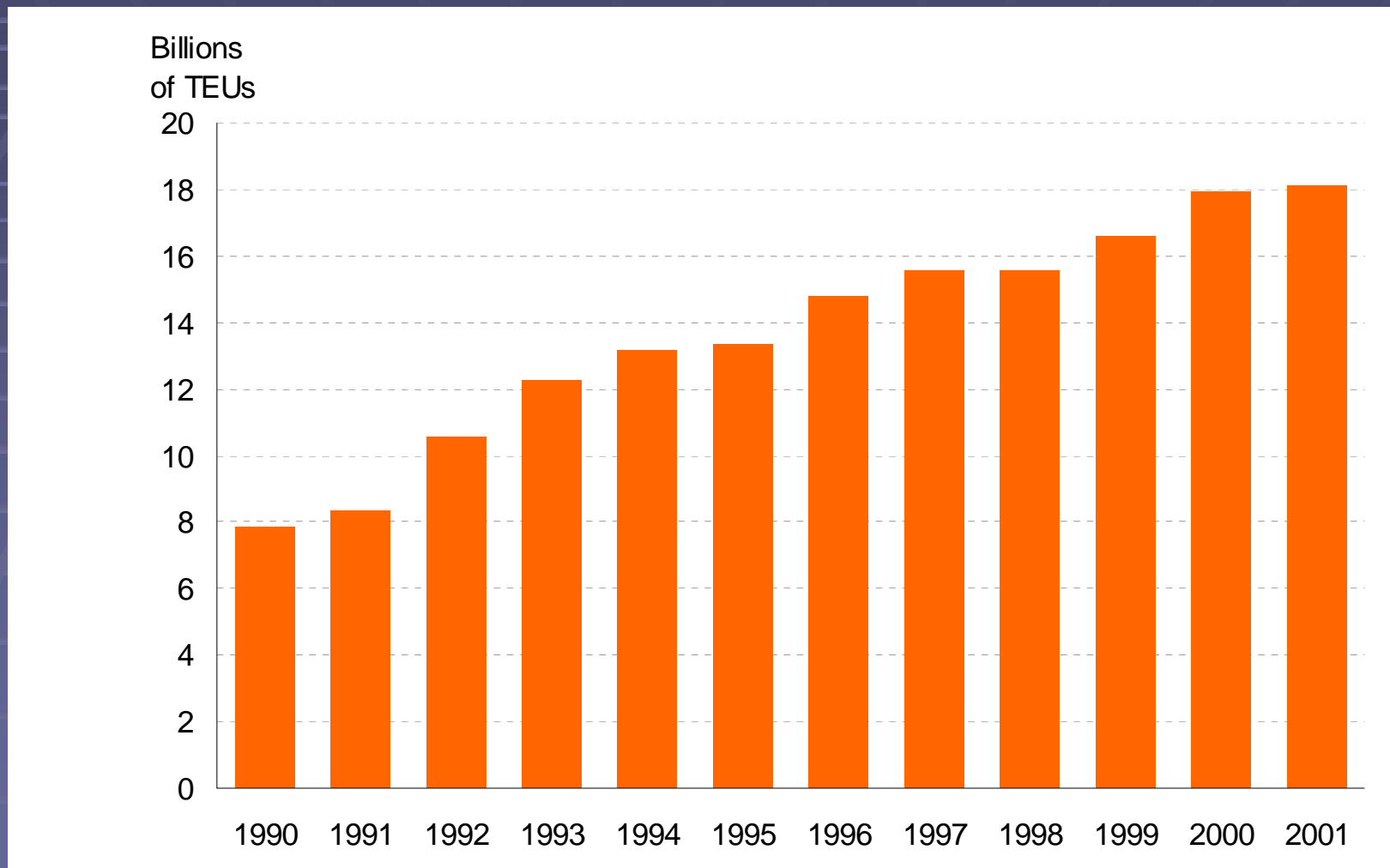
# Container Transport Technology

- McLean initiated container transport in the 1950s with liners capable for 500 TEUs
- Double-stack train technology and vessel capacity of 4,500 TEUs in the 1980s
- Today's post-Panamax vessels carry 6,000 to 8,000 TEUs
- Next generation will carry over 10,000 TEUs



Source: JOC

# U.S. Containerized Waterborne Trade



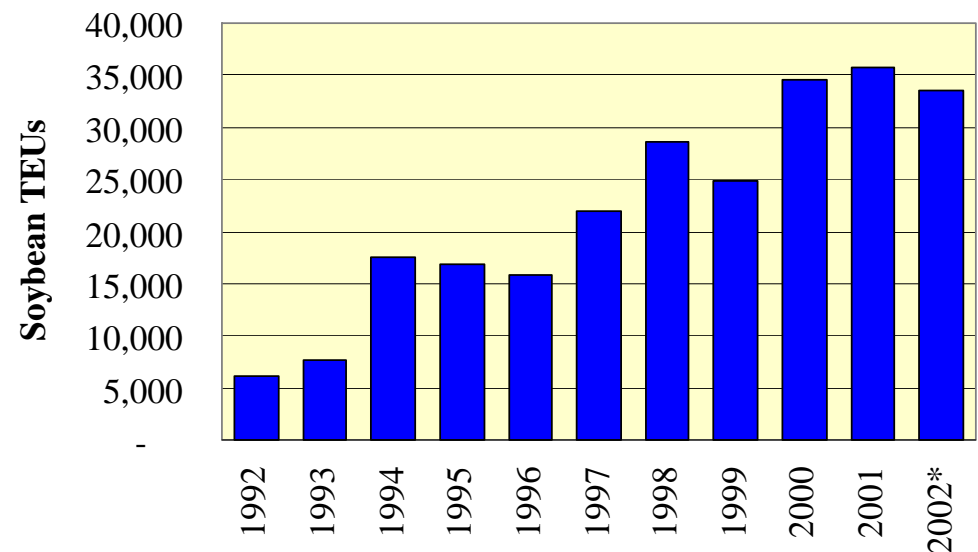
Source: Bureau of Transportation Statistics, US DOT

# GRAIN CONTAINER EXPORTS

## Containerized U.S. Exports Share of Market by Weight

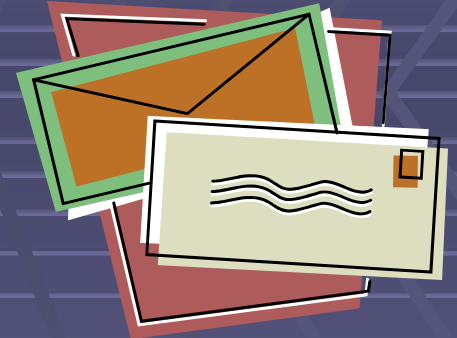
	<u>1992</u>	<u>2002</u>
Soybeans	0.4%	1.8%
Animal Feed	2.6%	6.7%
Pulses	66.0%	70.0%

Source: PIERS



# INDUSTRY SURVEY

- 228 Survey Responses
  - 37% Response rate
  - 47 Active Shipper Survey Responses
- 19 States and 13 Commodities
- Annual Volume averaged 187 TEUs per year between 2000-02
- Average of **366 miles** from business to primary intermodal terminal





# Market Practices

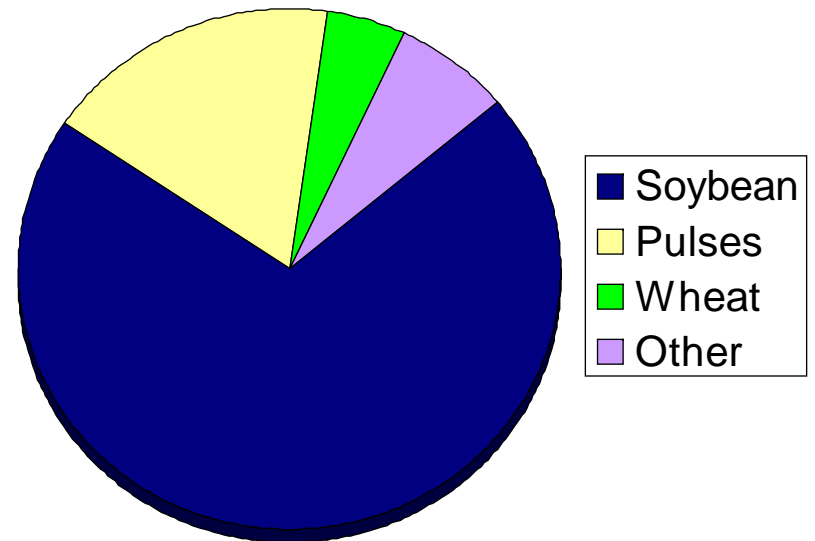
- Contracts
  - 51% handle their own negotiations with Ocean Carrier
  - 12 months is typical contract duration
- Geography
  - 91% of respondents ship to Asia; other popular destinations are Europe, Middle East, North America
- Reasons for using containers
  - Buyer request (54%)
  - Food grade product (30%)
  - Non-genetically modified products (28%)



# Export Activity

- Product Packaging
  - Bags most prevalent across commodities
    - Soybeans-Bag (99%), bulk (90%), tote (60%)
    - Pulse crops-Bag (75%), bulk (50%), tote (12%)
    - Wheat-Bag (100%)
- Premium
  - \$5 per hundredweight

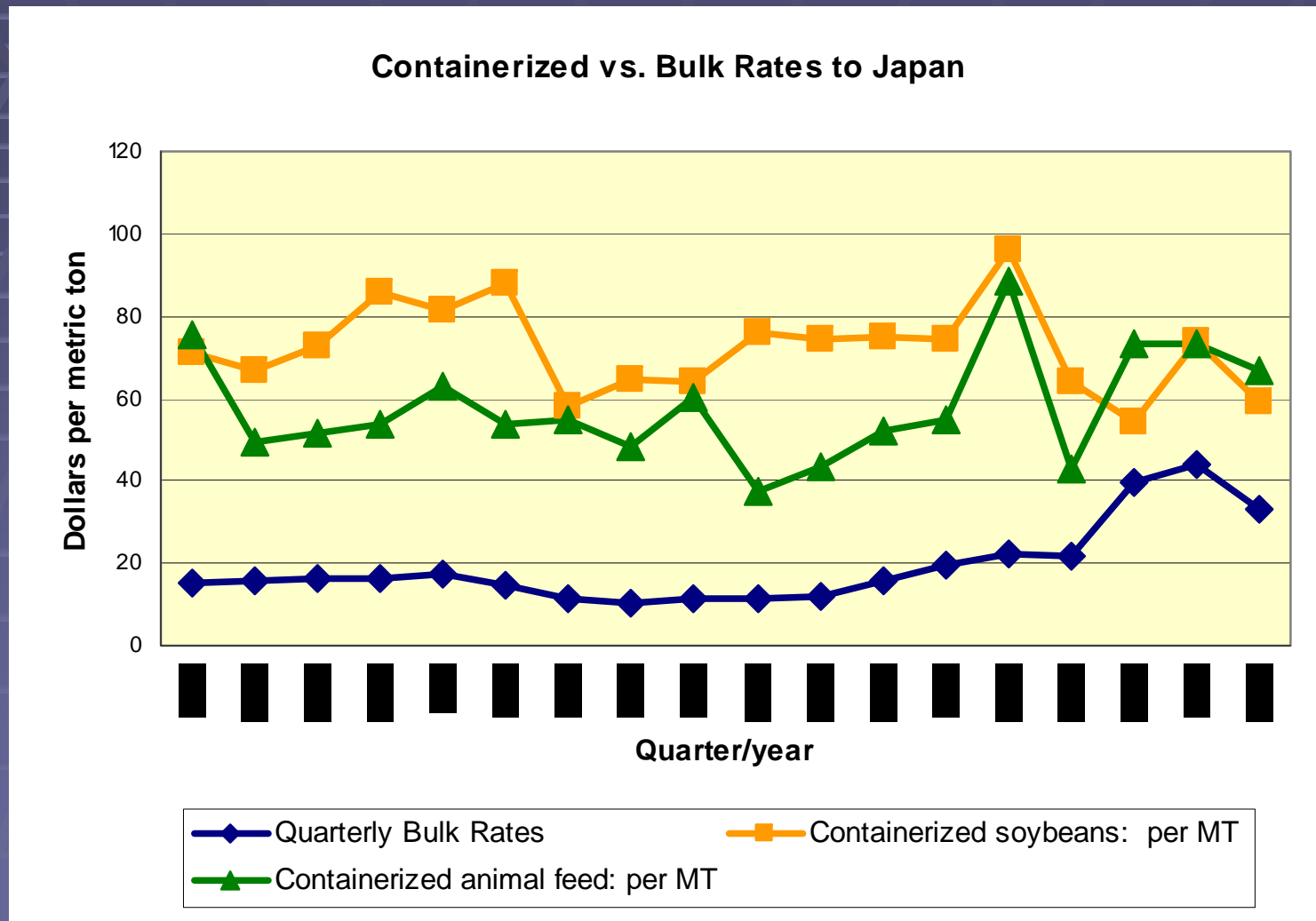
Traffic Composition  
TEUs



# MARKET GROWTH FACTORS

<u>Factor</u>	<u>Shipper Rating</u>
Distance to Container Terminal	3.7
Foreign Buyer Information	3.6
State Truck Weight Limits	3.4
<b>Availability of Containers</b>	<b>4.2</b> ✓
Farm Program <input checked="" type="checkbox"/>	2.3
Inspection/Phytosanitary Requirements	3.4
Access to Market Information	3.4
Ocean Liner Routes and Services	3.9
<b>Ocean Shipping Rates for Containers</b>	<b>4.6</b> ✓
<b>Rail Shipping Rates for Containers</b>	<b>4.1</b> ✓
Barge Container Service Rates	2.7
Container Logistics Information	3.3
Financing	3.2

# Container Export Rates, Soybeans



Source: TMP/USDA, PIERS

# DISCUSSION

