

MISSOURI RIVER SHIPPER NEEDS

September 8, 2004

Rural Freight Transportation
Conference

Transportation 101

- Connects Buyers and Sellers
- Makes a Market
- Adds No Value
- Prices What Market Will Bear
- Selecting Modes
- Competing Intra and Inter Modal

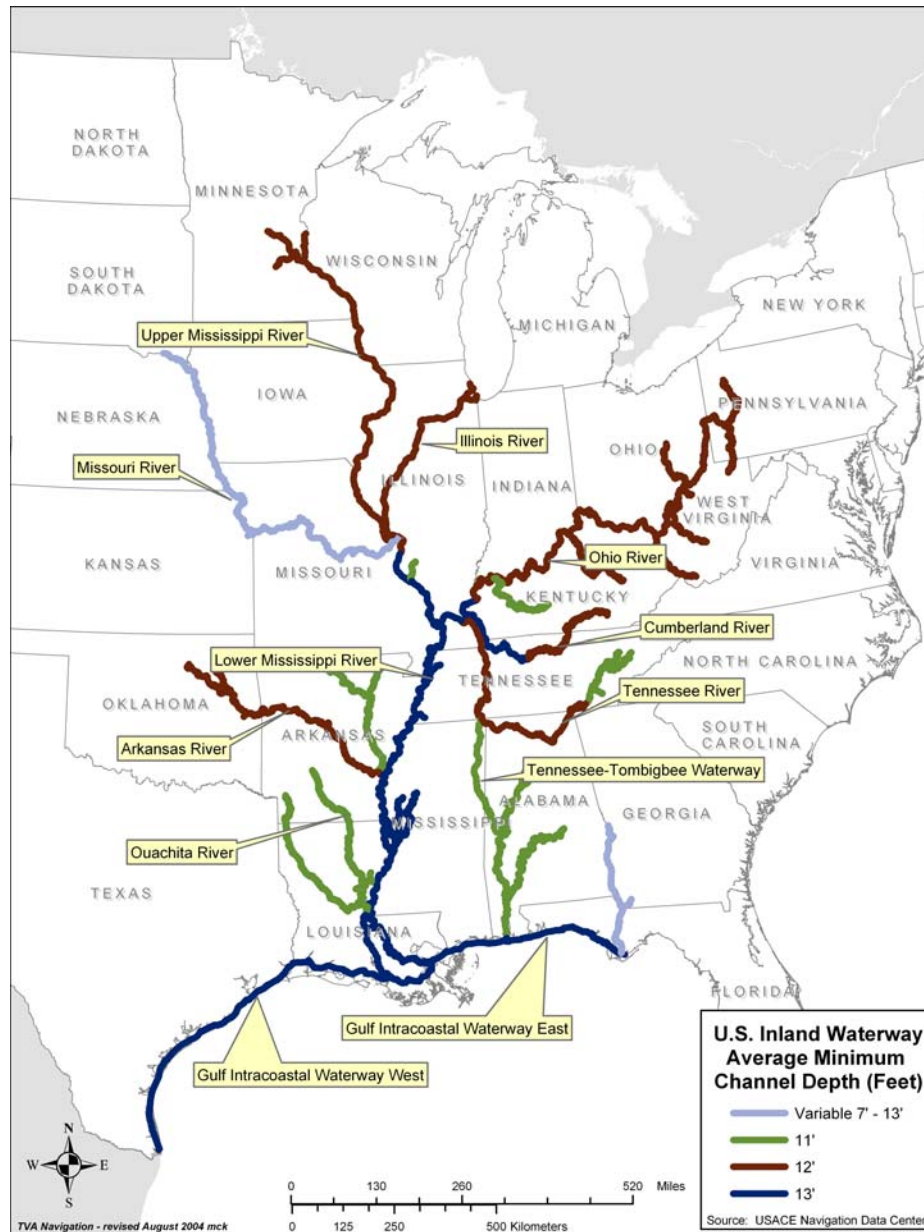
Missouri River Issues

- Competing Water Interests
 - Navigation, Recreation, Hydropower, Water Supply, Irrigation, Ecology
- Reliability of Depth
 - Adequate river flow for navigation-21,000 - 36,000 cfs
- Length of Navigation Season
 - Six month, eight month, or split season
- Market Choices
 - Water compel rates, captive shippers, highway & rail capacity, carrier de-marketing to eliminate service problems (both rail and barge)

Missouri River Carriers

- **General Towing**
 - Tramp
 - Specialty
- **Liquid Barge Lines**
 - Asphalt
 - Fertilizer





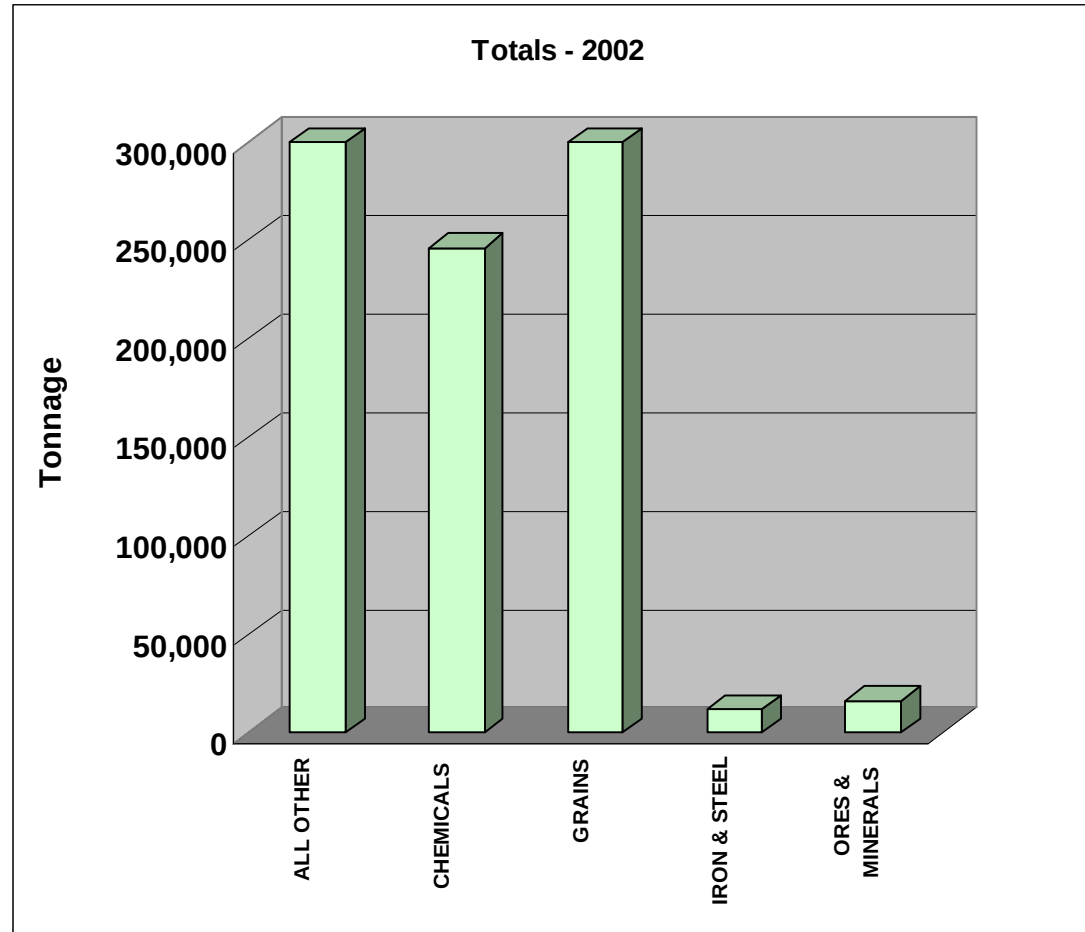
Missouri River Users

- **Geographic Region**
 - Counties adjacent the river
- **Terminals**
 - Grain
 - Fertilizer
 - Asphalt
 - Cement
 - General Commodities
 - Aggregates

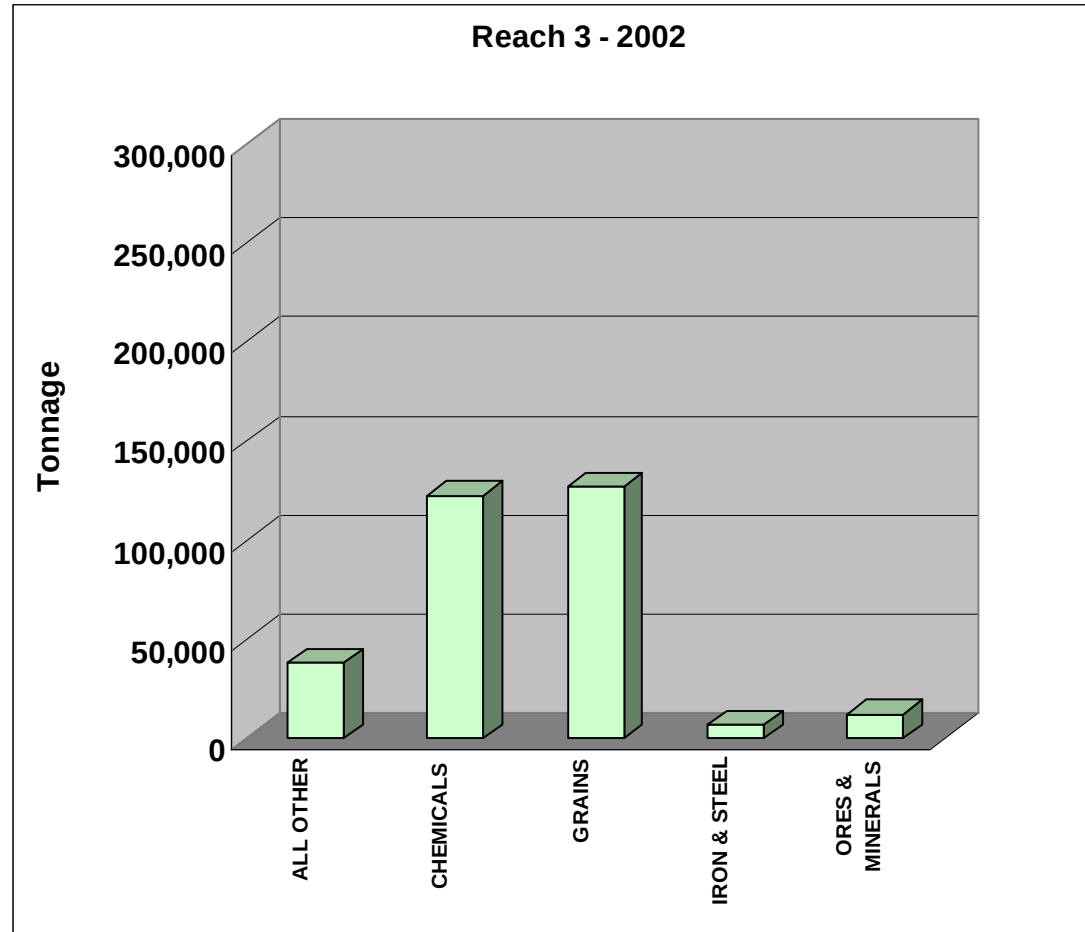
Regional Commerce Modal Split (2002)

- Barge 1.2 Million Tons
 - Dredged 7.8 Million Tons
- Rail 96.3 Million Tons
- Truck 399.6 Million Tons

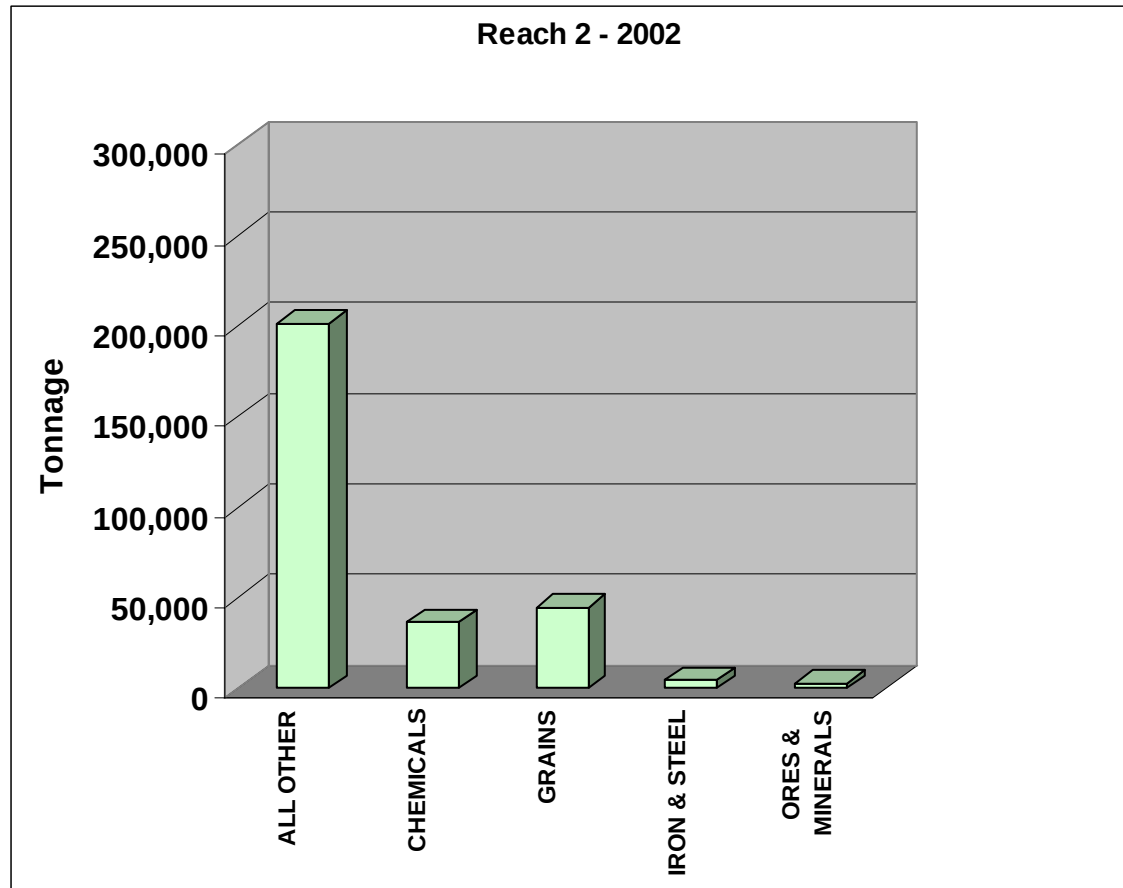
Barge By Commodity



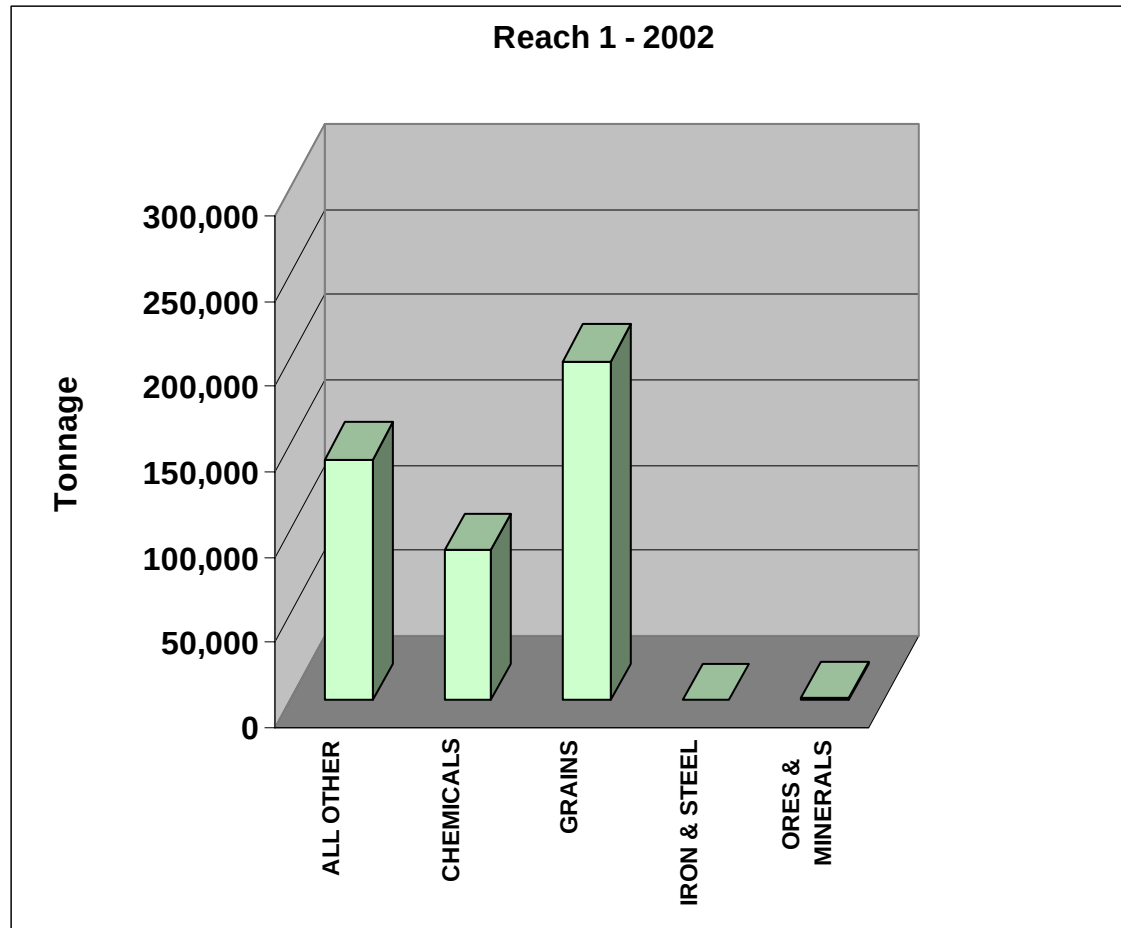
Barge Above Omaha By Commodity



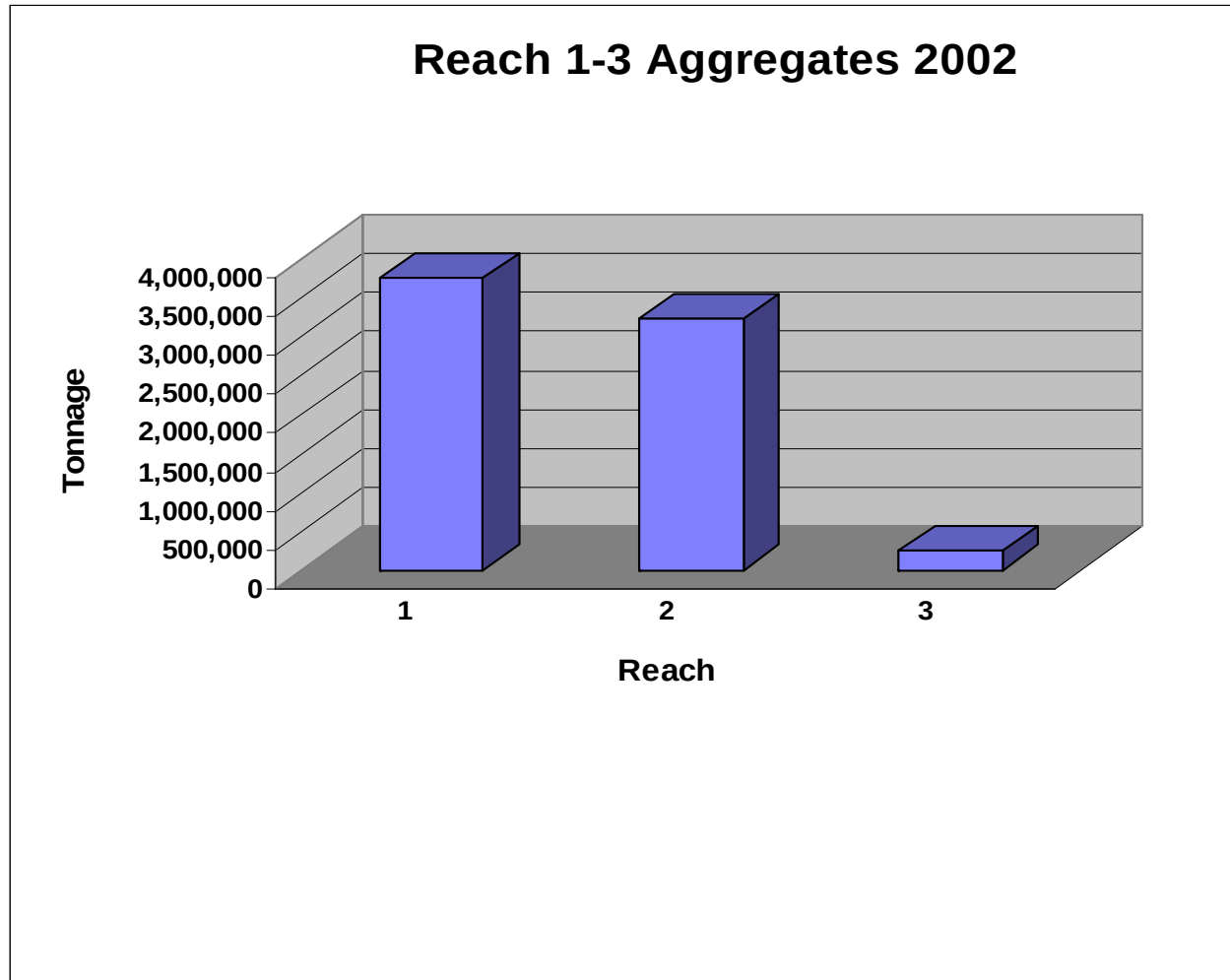
Barge Kansas City-Omaha



Barge Below Kansas City

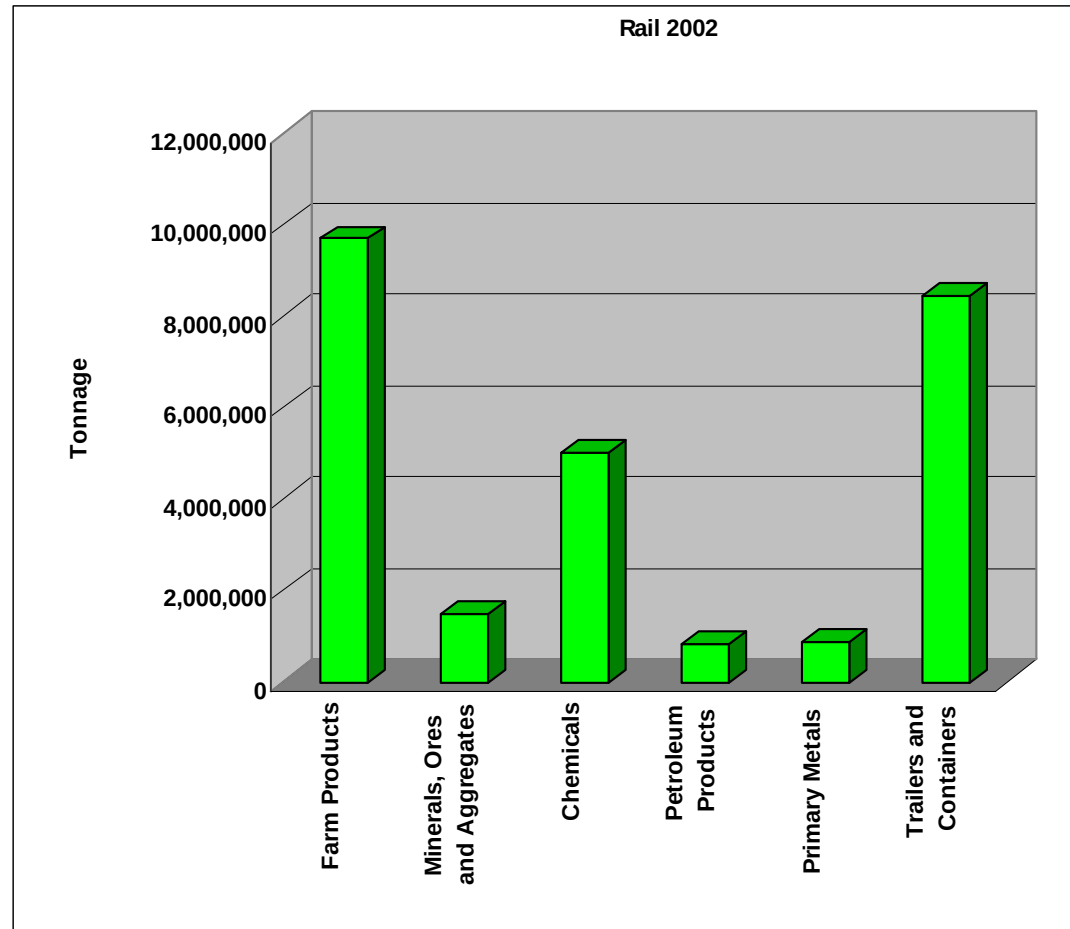


Dredged Material By Origin Reach



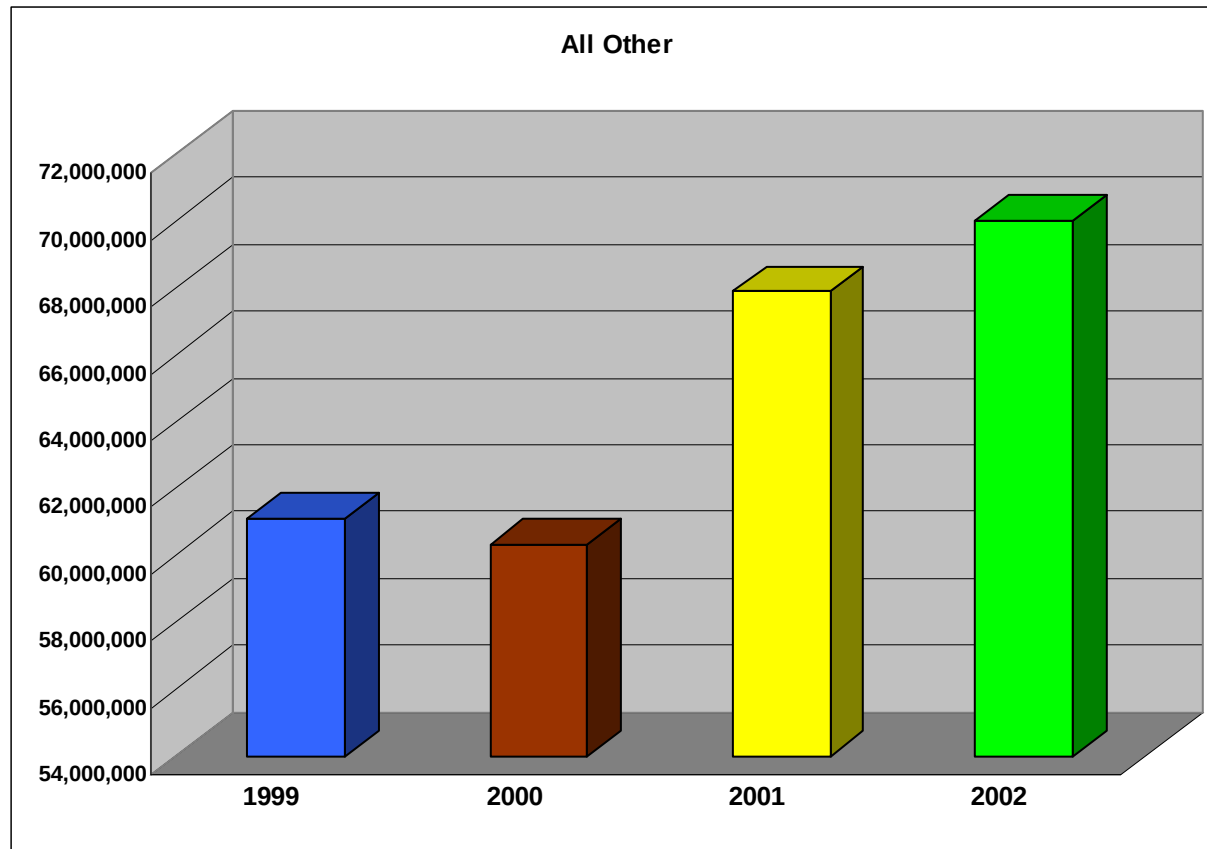
Rail

By Commodity Group



Rail

All Other



Truck

- U.S. Census Bureau 1997 Transportation Commodity Flow Survey
 - Ratio of truck to rail applied to 2002 rail tons

Regional Production

- Total Employment (2002)
 - Sioux City MSA 93,206
 - Kansas City MSA 1,225,451
 - Omaha MSA 538,121
 - Columbia MSA 349,783
 - Jefferson City MSA 97,253
 - Atchison Micro SA 10,332
 - St. Joseph MSA 68,849

Regional Production

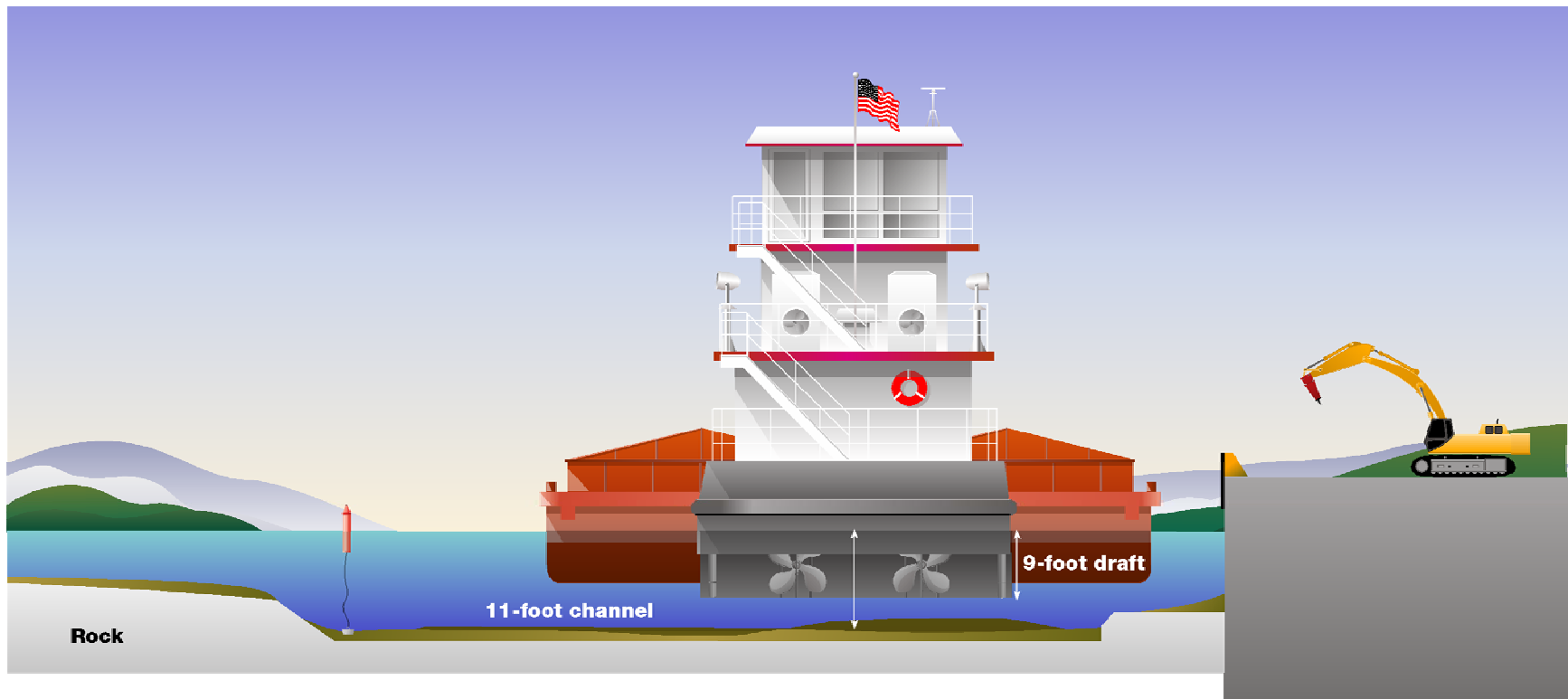
- Total Earnings (2002)
 - Sioux City MSA \$3,073,345,000
 - Kansas City MSA 50,141,130,000
 - Omaha MSA 20,866,953,000
 - Columbia MSA 13,333,070,000
 - Jefferson City MSA 3,002,081,000
 - Atchison Micro SA 241,491,000
 - St. Joseph MSA 2,059,633,000

Future Modal Trends

- Barge
 - Deep draft barges-12' (27% cover hopper fleet and 25% open hopper fleet)
 - Horsepower (towboat fleet configuration)
 - Labor
 - Container on barge (COB)
 - Empty return ratio

11-Foot Channel

9-Foot Draft



Future Modal Trends

- Rail
 - Car weight (264-286-292-315)
 - Train size (72-95-102-120-150-180)
 - Service type (farm products 2.5% of tons single car)
 - Labor
 - Containerization - double stack
 - Single line hauling

Trinity Industries

6300 Cu Ft



Modal Trends

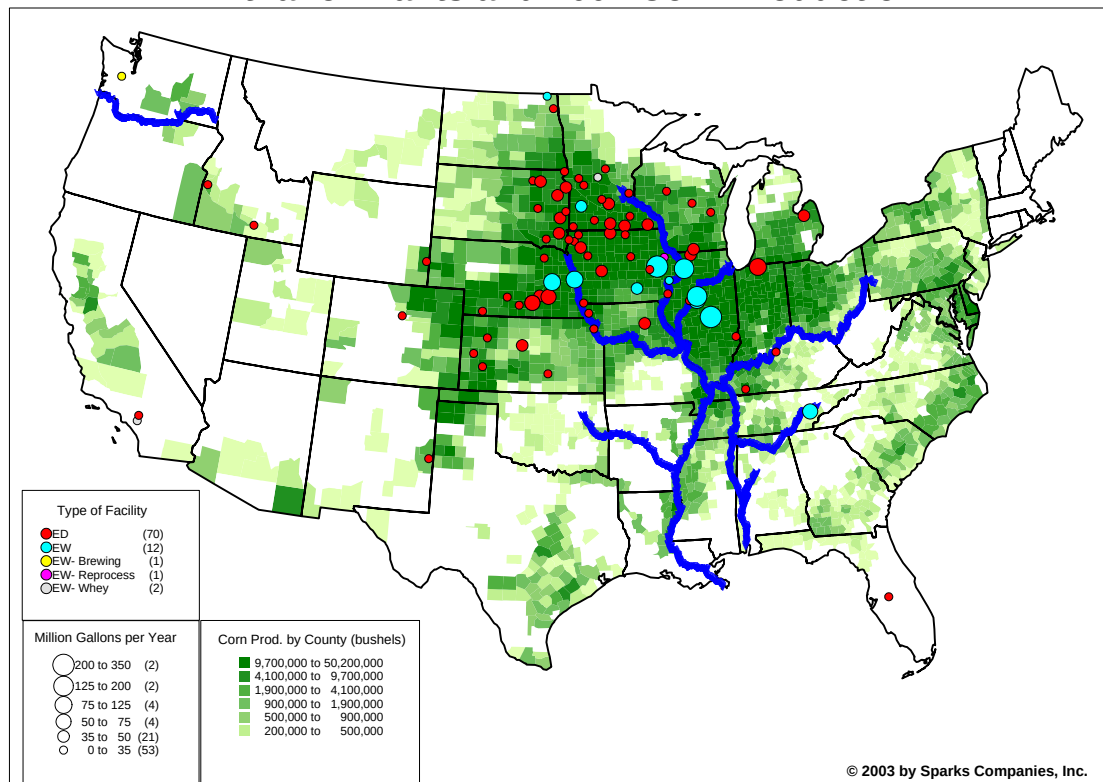
- Truck
 - Hours of service
 - Fuel and emissions
 - Labor
 - Weight & length

Commodity Trends

- Grain Production
 - Western corn belt ethanol
- Grain By-Products
 - Corn gluten

Missouri River Corn

Ethanol Plants and 2001 Corn Production



Incremental Analysis

- Modal Capacity
- Just in Time (JIT)
- Investment

Missouri River Navigation

What's Next

- Bigger-Deeper-Longer-Wider (Efficiency)
- O/M Expense (performance based budget)
- Capacity Investment
 - Highways
 - Rail
 - Waterways
- Incremental Markets