Moving Containers on the Mississippi River

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MISSISSIPPI - STAIRWAY OF WATER

Source: U.S. Army Corps of Engineers
Gulf Intercoastal Waterway
Advantages of Water Transport

• Safest Mode
• Energy Efficient
• Clean
• Lowest cost if volume is high enough
• More than 90% of world freight traffic moves by water
Why Barges?

• Reduce storage dwell times in Ocean Ports
  improve total *port capacity* without expansion
• Reduce truck moves on roadways,
  make roads *safer, cleaner, more efficient*
• Reduce truck emissions
  improve *quality of life* for neighbors
• Reduce rail traffic in the Port area and long hauls,
  *reduce conflicts* at grade crossings with other users
Why Barges on The Mississippi System?

• Congestion at West Coast Ports
• Shortage of Rail Capacity
• Unused Capacity on Mississippi River
• Coverage from Houston to Pittsburg and Minneapolis to New Orleans
Perceived Disadvantages of Barge Traffic on the Mississippi

• Winter Closure
• Dominant Traffic Flow is East – West
• Travel Time Variance
• Existing Practices ie Very Large Tows and Specialized Terminals
Container Ports

- Houston
- New Orleans
- Gulfport
Osprey Line Started Service in 2003

- Baton Rouge
- Houston
- New Orleans
- Memphis
Baton Rouge’s Custom made Barge Stacker

- Cost $750,000
- 30-ton lift capacity
- Capacity 20-22 containers per hour
- Negative reach 9 foot
- Outward reach 31 foot
- Can stack 3 rows in a barge

Source: Port of Greater Baton Rouge
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## COST COMPARISONS

### Pittsburg to Baton Rouge

<table>
<thead>
<tr>
<th>Number of Containers</th>
<th>Number of LOADS</th>
<th>Days in Transit</th>
<th>Cost</th>
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<tbody>
<tr>
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<td>Truck</td>
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Source: smartbarge.com Web Site
Rhine River

Rhine River, Germany
Types of Container Vessels on the Rhine and European System

- Container Vessel-campine barge class (63m long by 6.6m wide with draft of 2.5m) or 208ft long by 22ft wide with draft of 8.3 ft. Capacity is 24 TEU or 650 tons.
- Container Vessel (110m long by 11.4m wide with draft 3.0m) or 363ft long by 37.6 ft wide with draft of 10ft. Capacity is 200 TEU.
- Container Vessel (135m long by 17m wide with draft 3.0m) or 445ft long by 56ft wide with a 10 ft draft. Capacity 470 TEU or 4600 tons
- Push Train with 4 barges (2x2) (193m long by 22.8m wide with draft 2.5-3.7m) or 637ft long by 75 ft wide with 8 to 12 ft drafts
Commodities in Containers by STCC shipped To MN by Rail (as % of total)

- Misc Mixed Shipments: 67%
- Shipping Containers: 9%
- Freight Forwarder Traffic: 8%
- Lumber Or Wood Products: 6%
- Pulp, Paper Or Allied Products: 5%
- Food Or Kindred Products: 3%
- Other: 2%

Total number of containers: 1,707,660
Commodities in Containers by STCC shipped From MN by Rail (as % of total)

- Misc Mixed Shipments: 9%
- Freight Forwarder Traffic: 3%
- Shipping Containers: 3%
- Food Or Kindred Products: 3%
- Farm Products: 4%
- Pulp, Paper Or Allied Products: 3%
- Mail Or Contract Traffic: 2%
- Other: 7%

Total number of containers: 2,025,964
Container Flow by Rail
From MN to Destinations 2001

From MN TO...

592 330851 661110
Container Flow by Rail
To MN
From Destinations 2001

To MN From...

148 299753 599358
Seasonal variability of Filled containers
-all but STCC 42- To and From MN, 2002

From MN
To MN
Seasonal variability in movement of empty containers
-STCC 42- To and From MN, 2002

- From MN
- To MN
Conclusion

Moving Containers on the Mississippi River System would be cost effective and is overdue
Questions
Thank-you

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