“The Demand For Transportation In The Southeast”

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Everyone wants stuff!!!

To Sustain 1 American...
- 50 tons of stuff
  - (2 Trucks)
- 11,000 ton-miles
  - (driving between LA and Charleston 5 times with 9 friends!)

- What Does It Cost
  - 9% of US GDP spent on logistics
  - 5% of Govt. Spending is Infrastructure
How Does the Southeast Use Transportation?
Joe Hollingsworth, Jr.

1. The South becomes even more competitive in the world economy
2. South shifts from manufacturing to service sector which improves manufacturing
3. Migration continues as the South becomes “land of opportunity”
4. South develops knowledge based economy
5. South leads way in education reform
6. Contiguous counties around major metropolitan areas will be the action in the south
7. South becomes practically the only location for automotive plants
SASHTO States Outperformed US in ... (%Change 2000-2010)

- Manufacturing:
  - United States: 21.3%
  - southeast: 23.5%

- Logistics:
  - United States: 34.9%
  - southeast: 38.3%

- All Industries:
  - United States: 47.2%
  - southeast: 50.8%
Comparison of Freight Dependency between the US, Southeast, 2010

US Average: 17.5% Consuming, 18.3% Producing
Southeast Average: 19.6% Consuming, 18.8% Producing
Note: Highway & Rail is additional highway mileage with daily truck payload equivalents based on annual average daily truck traffic plus average daily intermodal service on parallel railroads. Average daily intermodal service is the annual tonnage moved by container-on-flatcar and trailer-on-flatcar service divided by 365 days per year and 16 tons per average truck payload.

Does Modes/Markets Matter? (Southeastern Average, 2007 tonnage)
Do Ports Matter?
Value of Total Trade As Share of GDP, 2011

- US: 11.55%
- Southeast US: 12.22%
Share of State Exports through a Port, 2011
Share of State GDP Exported through a Port, 2011

[Bar chart showing the share of state GDP exported through a port for various states, with Louisiana having the highest share.]
U.S. Public Port Projected Capital Expenditures by Expenditure Category for 2007-2011

- General Cargo: 14%
- Specialized General Cargo: 30%
- Dry Bulk: 1%
- Liquid Bulk: 3%
- Passenger: 6%
- Other: 23%
- On-Terminal: 7%
- Off-Terminal: 3%
- Dredging: 10%
- Security: 3%
- Specialized General Cargo: 30%
- Dry Bulk: 1%
- Liquid Bulk: 3%
- Passenger: 6%
- Other: 23%
- On-Terminal: 7%
- Off-Terminal: 3%
- Dredging: 10%
- Security: 3%
Does Inland Navigation Matter?
Waterway Usage - Russia, Europe and U.S., 1970-2006

<table>
<thead>
<tr>
<th></th>
<th>Kilometers</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>110,000</td>
<td>18%</td>
</tr>
<tr>
<td>Russia</td>
<td>102,000</td>
<td>16%</td>
</tr>
<tr>
<td>Brazil</td>
<td>50,000</td>
<td>8%</td>
</tr>
<tr>
<td>United States</td>
<td>41,009</td>
<td>7%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>21,579</td>
<td>3%</td>
</tr>
<tr>
<td>Colombia</td>
<td>18,000</td>
<td>3%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>17,702</td>
<td>3%</td>
</tr>
<tr>
<td>European Average</td>
<td>52,332</td>
<td>8%</td>
</tr>
</tbody>
</table>
Tenn-Tom Waterways Economic Benefit

Economic Impact 1996-2008 (in Millions)

<table>
<thead>
<tr>
<th>State</th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>$15,217.1</td>
<td>$550.3</td>
<td>$718.8</td>
<td>$16,486.2</td>
</tr>
<tr>
<td>Kentucky</td>
<td>$867.2</td>
<td>$163.1</td>
<td>$559.1</td>
<td>$1,609.4</td>
</tr>
<tr>
<td>Mississippi</td>
<td>$6,854.7</td>
<td>$1,333.0</td>
<td>$1,276.6</td>
<td>$9,464.3</td>
</tr>
<tr>
<td>Tennessee</td>
<td>$2,361.6</td>
<td>$38.1</td>
<td>$47.1</td>
<td>$2,446.8</td>
</tr>
<tr>
<td>Regional</td>
<td>$25,320.5</td>
<td>$2,093.3</td>
<td>$2,641.1</td>
<td>$30,054.9</td>
</tr>
<tr>
<td>United States</td>
<td>$25,320.5</td>
<td>$5,822.6</td>
<td>$11,380.6</td>
<td>$42,523.7</td>
</tr>
</tbody>
</table>

This table shows the impact from private investment and ports operating in the Tenn-Tom Waterway region.

Employment Impact 1996-2008

<table>
<thead>
<tr>
<th>State</th>
<th>Direct</th>
<th>Indirect</th>
<th>Induced</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>8,384</td>
<td>3,879</td>
<td>7,567</td>
<td>19,830</td>
</tr>
<tr>
<td>Kentucky</td>
<td>8,046</td>
<td>1,201</td>
<td>5,850</td>
<td>15,097</td>
</tr>
<tr>
<td>Mississippi</td>
<td>12,145</td>
<td>7,858</td>
<td>13,440</td>
<td>33,443</td>
</tr>
<tr>
<td>Tennessee</td>
<td>507</td>
<td>271</td>
<td>493</td>
<td>1,271</td>
</tr>
<tr>
<td>Regional</td>
<td>29,191</td>
<td>13,292</td>
<td>27,806</td>
<td>70,289</td>
</tr>
<tr>
<td>United States</td>
<td>29,191</td>
<td>29,001</td>
<td>79,471</td>
<td>137,663</td>
</tr>
</tbody>
</table>

This table indicates the number of jobs that were directly and indirectly created based on industry-to-industry transactions, as well as the number of jobs that were created based on employee spending in the local economy.
Economics and Port Needs
Maritime Needs

ANCHORING THE U.S. ECONOMY

Our nation's seaports and waterways open markets for international trade that creates ripple effects throughout our economy.

The construction of wider and more efficient locks will provide faster and more reliable service.

These infrastructure needs in both the inland waterway and seaport sectors are significant and current investment trends aren't keeping up:

- $15.8 billion investment gap
- $30.2 billion investment need

Wider and deeper harbors and waterways will allow for larger ships, reducing the cost of freight shipment.

Narrow, shallow channels and outdated facilities cost billions in delays and lost productivity.

By filling this gap, we can reduce costs to businesses and consumers and improve our global competitive position.

Learn more at www.asce.org/failuroact

By 2020, an additional investment of $15.8 billion will protect:
- $270 billion in U.S. exports
- $697 billion in GDP
- 738,000 jobs in 2020
- $770 per year for households

Learn more at www.asce.org/failuroact
Closures Cost Money!

NETS (IWR-USACE)
- Greenup 2003 Closure (52 days)- $42 Million
- Hannibal Locks 2005 Closure (5 days)-$5 Million
- Lock 27 Closures
  - (August 2007)-$3.9 Million
  - (Oct 2005-Feb 2006)- $2.7 Million
- McAlpine (August 2004)-$6.3 million

GLOBAL Insight – Upper Miss 90 Day Closure
- $118.6 million for Waterway freight
- $482.8 million by rail
- $1.50 billion by truck
What may change existing flows or create new markets?
What are Natural Markets?
What may change existing flows or create new markets?

• In 2020?
  • Panama Canal Expansion
  • Nearshoring Trends
  • Exporting Natural Gas
  • European Collapse?
  • Domestic Intermodal Grows
  • Growth in Latin America Economics
  • Dollar Continues to Slide promoting Exports
  • Manufacturing Changes
  • Price of Fuel
  • Distribution Networks

• In 2040?
  • Economic Growth – Regional
  • Consumer Markets
  • Resource Competition
  • Demographic Patterns
  • Energy Needs
  • Housing Stock
  • Distribution Networks
  • Integration
Benefits of discussing the Panama Canal’s Expansion

- Connecting ports and hinterlands
- Connecting exports to trade markets
- Discussion of regional transportation needs
- Finding partners
What is the Potential for Inland Waterways?

• Support future cargo or vessels
• Improve system efficiency
• Encourage freight mobility
• Support economic growth
• Connect to other modes
Needs in Southeast from Latin American Trade (LATTS)

**Total 20-Yr Needs Estimate**: $92 Billion
- Latin America
- Other

**20-Yr Highway Needs Estimate**: $67 Billion
- Latin America
- Other

**20-Yr Port Needs Estimate**: $22 Billion
- Latin America
- Other

**20-Yr Air Cargo Needs Estimate**: $3.3 Billion
- Latin America
- Other
What will you build/operate?

- What is your market? Expand or Cannibalize
- What type of facility/services are needed?
- Develop densities and services
  - Service Requirements (cargo or regulatory)
  - Drayage and equipment issues
  - Domestic and international
  - Shippers bear costs?
  - Vessel and fleet structures
Final Thoughts?

• Southeast benefits
  • From previous investment in public and private freight infrastructure
  • These facilities connect the region with world markets, generating jobs
• Maritime Activities important to the South’s economic growth
  • Ports support growth
  • Inland Navigation provide competitive advantage to the region
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