2013 Agricultural Symposium

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Transportation Issues Facing Agriculture

• Transportation is vital to Agriculture....

• Agriculture is dependent on system wide U.S. transportation improvements.

• U.S. Transportation Challenges:
  – Keeping up with U.S. and world population and economic growth
  – Continuing to strengthen U.S. competitive advantage in transportation infrastructure
  – Funding requires Private and Public funds
  – Working with a fragmented Government Transportation Policy
## U.S. Transportation Capabilities

<table>
<thead>
<tr>
<th>(“other” excluded)</th>
<th>Rail</th>
<th>Water</th>
<th>Truck</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Tons</strong> (2007) (thousands)</td>
<td>2,082,720</td>
<td>781,020</td>
<td>8,721,390</td>
<td>13,017,000</td>
</tr>
<tr>
<td></td>
<td>16%</td>
<td>6%</td>
<td>67%</td>
<td></td>
</tr>
<tr>
<td><strong>Ag Tons</strong> (2007) (thousands)</td>
<td>384,200</td>
<td>228,000</td>
<td>1,379,000</td>
<td>1,991,200</td>
</tr>
<tr>
<td></td>
<td>19%</td>
<td>11%</td>
<td>69%</td>
<td></td>
</tr>
<tr>
<td><strong>Ag Share of Total Tons</strong></td>
<td>18%</td>
<td>29%</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Ton Miles</strong> (2007) (millions)</td>
<td>1,549,557</td>
<td>331,506</td>
<td>1,351,531</td>
<td>3,344,663</td>
</tr>
<tr>
<td></td>
<td>46%</td>
<td>10%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td><strong>Ag Share of Total Ton Miles</strong></td>
<td>22%</td>
<td>44%</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td><strong>2010 System Miles</strong></td>
<td>138,518</td>
<td>12,612</td>
<td>150,309</td>
<td></td>
</tr>
<tr>
<td><strong>1 ton = MPG</strong></td>
<td>413</td>
<td>576</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Bureau of Transportation Statistics
Capacity and Infrastructure

• Capacity
  – Growing U.S. and World populations: 41M and 1B respectively by 2025
  – Incremental gains in Domestic Freight Shipments: 1.6B tons (13%)/(40 tons/person/year)
  – Accelerated growth expected for Imports and Exports

• Infrastructure
  – Infrastructure spending not aligned with projected growth rates
  – Cost of new capacity is in addition to cost of maintenance

UP’s Kate Shelly Bridge at Boone, Iowa
Competitive Advantage

- Infrastructure Rehabilitation is Key to U.S. Competitive Edge in Transportation......
  - Highway: Improving but must increase pace.
  - Water: More than 50% of locks are over 50 years old.
  - Rail: Capital spending of $110B from 2002 through 2012 has improved system reliability and capacity.
  - Brazil and Argentina are still very dependent on higher cost truck transportation, but increasing use of rail and water
Funding

• Highways: $170B combined Federal, State and Local funding in 2012. Approximately 50% from user taxes and 50% from general fund contributions.
  – Total funding split is 25% Federal and 75% State/Local
  – “Maintain” level requires additional $13B/year.

• Water: Funding model of 50% from User Fees and 50% from General Appropriations.
  – Inland Waterway Trust Fund supports a $170M annual expenditure.
  – $380M/yr estimated to maintain reliable system. Scheduled to 2090
  – Large balance of deferred maintenance.

• Rail: Primarily private funding. Demand for capacity driving higher returns and increased capital spending.
Government Transportation Policy and Programs

• Fragmented National Transportation Policy: not fully defined, integrated or supported.

• Regulation burden:
  – Hours of Service (HOS): U.S. DOT
  – Comprehensive Safety Analysis (CSA)
  – Positive Train Control
  – EPA Emission requirements
Key Takeaways

• Growth in U.S. and World GDP and population will place higher demands on U.S. transportation infrastructure.

• U. S. has a well developed and efficient transportation infrastructure that needs repair and expansion to keep U.S. agriculture and the entire economy competitive.

• U.S. transportation strategy does not align the strengths of each mode, funding requirements and regulatory management.