Transportation Research Board
Committee for the Study of Freight Rail Transportation and Regulation

Federal Railroad Administration
May 29, 2014
SAFETEA-LU Section 9007 Study

- Conduct a comprehensive study of the Nation’s railroad transportation system since the enactment of the Staggers Rail Act of 1980. The study shall address and make recommendations on—

  1. the performance of the Nation’s major railroads regarding service levels, service quality, and rates;

  2. the projected demand for freight transportation over the next two decades and the constraints limiting the railroads’ ability to meet that demand;

  3. the effectiveness of public policy in balancing the need for railroads to earn adequate returns with those of shippers for reasonable rates and adequate service; and

  4. the future role of the Surface Transportation Board in regulating railroad rates, service levels, and the railroads’ common carrier obligations, particularly as railroads may become revenue adequate.
Population and Freight Growth

Studies project dramatic growth in population which will drive increased passenger mobility needs.

- **25 years**: 70 million more people
- **40 years**: 100 million more people

The freight transportation system must move **40 tons of freight per person per year** (including bulk commodities such as coal and grains as well as high-value consumer goods).

- **25 years**: 2.8 Billion tons more
- **40 years**: 4 Billion tons more
U.S. Freight Flows

### Rail’s Role in Transportation Network: Freight Potential

The potential advantage of different modes with respect to weight and distance.

<table>
<thead>
<tr>
<th>Weight</th>
<th>Intercity Distance in Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-250</td>
</tr>
<tr>
<td>Retail Goods / Light</td>
<td>Truck</td>
</tr>
<tr>
<td>Consumer Durables-</td>
<td>Truck</td>
</tr>
<tr>
<td>Other Manufactured Goods /</td>
<td>Rail</td>
</tr>
<tr>
<td>Moderate</td>
<td>Rail</td>
</tr>
<tr>
<td>Bulk Goods / Heavy</td>
<td>Truck</td>
</tr>
<tr>
<td></td>
<td>Rail</td>
</tr>
</tbody>
</table>

*The various modes of transport are ranked in each of the cells by the comparative efficiency of each.*
### Truck and Rail Intermodal in Markets 500 Miles and Greater

<table>
<thead>
<tr>
<th>Mileage Blocks</th>
<th>Truck</th>
<th>Rail Intermodal</th>
<th>Total Market</th>
<th>Truck Share</th>
<th>Rail Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 to 749</td>
<td>17.8</td>
<td>1.2</td>
<td>19.0</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>750 to 999</td>
<td>10.1</td>
<td>2.3</td>
<td>12.4</td>
<td>82%</td>
<td>18%</td>
</tr>
<tr>
<td>1000 to 1499</td>
<td>7.7</td>
<td>2.0</td>
<td>9.7</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>1500 to 2000</td>
<td>3.7</td>
<td>2.1</td>
<td>5.8</td>
<td>63%</td>
<td>37%</td>
</tr>
<tr>
<td>&gt;2000</td>
<td>2.8</td>
<td>4.9</td>
<td>7.7</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42.1</strong></td>
<td><strong>12.5</strong></td>
<td><strong>54.6</strong></td>
<td><strong>77%</strong></td>
<td><strong>23%</strong></td>
</tr>
</tbody>
</table>

Millions of units

Source: Assessment of 2007 Commodity Flow Survey and 2007 Rail Carload Waybill Sample
Projected Market-Share by Mileage Block with Rail Intermodal at 50 Percent (Year 2035)

Note: Includes international traffic from ports and NAFTA
Who Will Make Infrastructure Investments for the Future?

Highways

• U.S. has 63,000 bridges that need significant repair; local governments turn to Congress (Washington Post—April 24, 2014)

• Based on current spending and revenue trends, the U.S. Department of Transportation estimates that the Highway Account of the Highway Trust Fund will encounter a shortfall before the end of this fiscal year (FY)
Class I Railroad Capital Expenditures

Source: Association of American Railroads
*2014 Preliminary (Trade Press)
Rail Transportation Benefits

**Safety**
Accidents/Injuries/Fatalities - That Can Be Avoided

**Economic Competitiveness**
Energy, Infrastructure, and Shipper Savings - Passed on to the Public

**Sustainability**
Huge Fuel Savings and CO₂ Emissions Avoided

**Livability**
Reduced Congestion, Reduced Interaction with the Public

**State of Good Repair**
Reduced Wear & Tear and Need for Public Costs to Repair/Replace