Improving truck productivity is critical to sustaining the U.S. economy and will help keep it from eroding in the future. It is not, in itself a sufficient condition, but it is absolutely a necessary condition.

Countries are working hard to emulate the efficiency of the U.S. logistical system.
Four Topics

- Changing domestic economy
- Globalization is spreading faster
- Congestion is getting worse
- Fossil fuel consumption is increasing
Changing Economy

- Natural resources/agriculture – 1800’s
- Durable goods – early 1900’s
- Consumer goods – 40’s, 50’s, & 60’s
- Service economy – 70’s, 80’s, & 90’s
- Knowledge based – 21st Century
Intercity Tonnage by Mode

Source: Transportation in America, ENO Transportation Foundation
U.S. Ton-Miles of Freight

Source: Transportation in America, ENO Transportation Foundation
2000 Freight Revenue by Mode

Source: Transportation in America, ENO Transportation Foundation
Conclusion 1

- Trucks have become the most critical element in providing freight mobility in the U.S. economy.
- The economy as we know it would not have evolved without truck transportation and cannot be sustained without improved truck freight mobility.
Globalization

- How many in this room would have thought in 1995 that they would be economically secure if they had a degree in computer science?
- How many feel that way today?
- Bangalore, India
Globalization

- What % of the world GDP was accounted for by China and India prior to 1415?
  - 75%

- In 1947 Asia accounted for 8% of the world GDP and a majority of the world population!!!
The World is Flat – 10 Flatteners

- Fall of the Berlin Wall
- Netscape IPO
- Work flow software
- Open-sourcing
- Out-sourcing
- Off-shoring
- Supply-chaining
- In-sourcing
- In-forming; Google
- Steroids
  - Digital
  - Mobile
  - Personal
  - Virtual

Source: Thomas Friedman, The world is Flat; A brief History of the 21st Century, 2005
The World is Flat – 10 Flatteners

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Source: Thomas Friedman, The world is Flat; A brief History of the 21st Century, 2005
Trade as a % of U.S. GDP

≈25%
Overcoming Trade Deficit

- Currently over $600 billion, 6% of GDP
- Does manufacturing matter?
  - 23% of GDP in 80’s to 12.7% today
- Export of services unlikely to fill gap
- Technology development moving off-shore
Conclusion 2

- Globalization will increase at an even faster pace than before.
- Trade will continue to grow.
- Trade deficit is unsustainable.
- U.S. must improve productivity, particularly in manufacturing, if it hopes to maintain its position in world economy.
## Congestion by Urban Area

<table>
<thead>
<tr>
<th>Urban Area</th>
<th>Hours of Delay per Traveler</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1982</td>
</tr>
<tr>
<td>Atlanta</td>
<td>14</td>
</tr>
<tr>
<td>Washington, DC</td>
<td>21</td>
</tr>
<tr>
<td>Dallas-Fort Worth</td>
<td>13</td>
</tr>
<tr>
<td>Los Angeles-Long Beach</td>
<td>47</td>
</tr>
<tr>
<td>Chicago</td>
<td>16</td>
</tr>
<tr>
<td>San Francisco-Oakland</td>
<td>30</td>
</tr>
<tr>
<td>Detroit</td>
<td>17</td>
</tr>
<tr>
<td>Miami</td>
<td>11</td>
</tr>
<tr>
<td>Boston</td>
<td>14</td>
</tr>
<tr>
<td>New York-Newark</td>
<td>18</td>
</tr>
<tr>
<td>Phoenix</td>
<td>18</td>
</tr>
<tr>
<td>Houston</td>
<td>39</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>14</td>
</tr>
</tbody>
</table>
# U.S. Freight Growth

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercity Truck</td>
<td>1,130.1</td>
<td>2,121.8</td>
<td>87.7%</td>
<td>2.55%</td>
</tr>
<tr>
<td>Rail</td>
<td>1,416.4</td>
<td>1,484.8</td>
<td>4.8%</td>
<td>0.18%</td>
</tr>
<tr>
<td>Air</td>
<td>15.9</td>
<td>33.9</td>
<td>113.2%</td>
<td>3.08%</td>
</tr>
</tbody>
</table>

Source: Unpublished NCHRP Report
Conclusion 3

- Congestion is getting worse
- It will become much more costly and get much worse if projections of freight growth are realized
## Fuel Consumption

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway Total</td>
<td>114,960</td>
<td>130,755</td>
<td>162,555</td>
<td>167,730</td>
</tr>
<tr>
<td>Truck, total</td>
<td>19,960</td>
<td>24,490</td>
<td>35,229</td>
<td>36,756</td>
</tr>
<tr>
<td>Single-unit 2-axle 6-tire or more</td>
<td>6,923</td>
<td>8,357</td>
<td>9,563</td>
<td>10,305</td>
</tr>
<tr>
<td>Combination truck</td>
<td>13,037</td>
<td>16,133</td>
<td>25,666</td>
<td>26,451</td>
</tr>
<tr>
<td>Truck (percent of total)</td>
<td>17.4</td>
<td>18.7</td>
<td>21.7</td>
<td>21.9</td>
</tr>
</tbody>
</table>
Reason to Improve Productivity

- Improve global competitiveness
- Increase domestic competition
- Decrease congestion
- Decrease fuel consumption
- This will result in improved economic growth and deficit reduction
What Do We Need to Do???

- That’s your challenge
- However, the body politic must be convinced, because whatever it is, it most likely will not effect all people evenly
Final Question

- How many of you believe that your children and grandchildren will have the same or better quality of life than you had???

- Increased productivity in trucking is a necessary but not sufficient condition
Final Thought

“The reasonable man adapts himself to the world, the unreasonable one persists in trying to adapt the world to himself. Therefore, all progress depends on the unreasonable man.”