Factors Affecting the State of Our Transportation Infrastructure

2007 James L. Oberstar Forum
Our Nation’s Transportation Infrastructure: Heading Towards a Crisis?

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PB Consult
Road Mileage vs. Vehicle Miles of Travel Trends
Investment per vehicle Mile of travel
Highway Construction Cost Increases

![Graph showing cost increases between 1990 and 2007 for different sources: Other States Combined, FHWA, and WSDOT.](image)
Comparison of Freight Truck Flows 2005-2035
VMT on Roads with “Acceptable” Ride Quality
Bridge Deficiency Percentages—1994–2004

The graph shows the percentage of structurally deficient, functionally obsolete, and total deficiencies in bridges from 1994 to 2004. The percentage of total deficiencies decreases over the years, indicating an improvement in bridge condition.
Trends in Infrastructure Conditions & Performance
Pavement Life Cycle Cost Implications

Diagram:
- Vertical axis: Pavement Condition (Good, Fair, Poor, Very Poor)
- Horizontal axis: Accumulated Axle Loads
- Graph shows the rate of pavement degradation over time:
  - 75% time
  - 40% condition drop
  - 17% time
- Indicates that each $1 of rehabilitation cost at this point will save $4 - $5 if delayed until this point.
“I need to arrange for some bridge financing.”
# Highway Investment Scenarios

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Cost to Maintain Current Conditions into the Future</th>
<th>Economic Investment to Achieve Maximum C/E Conditions and Performance</th>
<th>Current (2004) Investment Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Highways</td>
<td>Bridges</td>
<td>Highways</td>
</tr>
<tr>
<td>System Rehabilitation</td>
<td>32</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>System Expansion and Enhancement</td>
<td>38</td>
<td></td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td></td>
<td>132</td>
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</tbody>
</table>
Major Policy Issues

• Competing Needs for Scarce Resources
  • Flexibility vs. Oversight
  • Quality Assurance
  • Risk Management
  • The Impact of a New Dedicated Bridge Program
  • The National Transportation Policy, Roles and Investments of the Future
  • The National Interest
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