Solving State Oil Addiction

Deron Lovaas
Federal Transportation Policy Director
Natural Resources Defense Council
Figure 1: Map of U.S. Oil Vulnerability, 2010

Percent of Income Spent on Gasoline by the Average Driver, 2010

Source: David Gardiner and Associates.
Gasoline Cost Burdens for Households Can Spike

Figure 1: Map of U.S. Oil Vulnerability

Source: David Gardiner and Associates.
• More production wouldn’t insulate us from global oil price volatility in an 80-mbd market.

• Why? Ken Green, AEI: “The world price is the world price...Even if we were producing 100 percent of our oil...[if prices increase because of a shortage in China or India]...our price would go up to the same thing...We probably couldn't produce enough to affect the world price of oil...People don't understand that.”

• Just look north to Canada and east to England for evidence
Three-Step Program

1. Boost Fuel-Efficiency of Transportation System
2. Deliver Fuel Choice
3. Deliver Mobility Choice
<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>VEHICLES</th>
<th>FUELS</th>
<th>TRANSPORTATION SYSTEM EFFICIENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>California</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>2</td>
<td>Oregon</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>3</td>
<td>Massachusetts</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>4</td>
<td>New York</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>5</td>
<td>New Jersey</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>6</td>
<td>Maryland</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>7</td>
<td>Connecticut</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>8</td>
<td>Rhode Island</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>9</td>
<td>Washington</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>10</td>
<td>Vermont</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>11</td>
<td>Maine</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>12</td>
<td>Florida</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>13</td>
<td>Pennsylvania</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>14</td>
<td>Hawaii</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>15</td>
<td>Delaware</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>16</td>
<td>Virginia</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>17</td>
<td>Illinois</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>18</td>
<td>Arizona</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>19</td>
<td>Minnesota</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>20</td>
<td>New Mexico</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>21</td>
<td>Georgia</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>22</td>
<td>Nevada</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>23</td>
<td>New Hampshire</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>24</td>
<td>Utah</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>25</td>
<td>Wisconsin</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

**Table 4: Solutions Rankings #1 Through #25**

- ● = 2 points
- ○ = 1 point
- ◯ = 1/2 point
- □ = 1/4 point

* Ranking based on the ratio of 3-year average transit spending per metropolitan statistical area (MSA) resident to 3-year average highway spending per MSA resident.
Measuring What We Do (and Plan to Do)

Where States Stand: **Environmental Stewardship**

Environmental stewardship. The effect of the transportation system on energy use and the natural environment.

Potential Oil Savings

Range of Oil Savings by Bundle at Maximum Deployment: 2010 to 2050

Cumulative (2010-2050) percent gallons Saved:
- Near Term/Early Results 13%
- Long Term/Max Results 15%
- Land Use/Transit/Non-Motorized Transportation 9%
- System and Driver Efficiency 8%
- Low Cost 12%
- Facility Pricing 3%
Mobility Choice Members

- Anne Korin, Institute for the Analysis of Global Security (IAGS)
- Cliff May, Foundation for Defense of Democracies
- Robert C. McFarlane, former National Security Advisor
- R. James Woolsey, former director of Central Intelligence Agency
- James Strock, Former California Secretary for Environmental Protection
- John Norquist, Congress for the New Urbanism; former Mayor of Milwaukee
- Kenneth Green, American Enterprise Institute
- Peter J. Pantuso, American Bus Association
- Admiral Dennis McGinn
- Chuck Wilsker, Telework Coalition
- Lisa Margonelli, New America Foundation
- Kenneth Orski, Innovation NewsBriefs
- Gabriel Roth, The Independent Institute
- Paul F. Hanley, The University of Iowa
- Jose Holguin-Veras, Rensselaer Polytechnic Institute
- Paul Feenstra, Intelligent Transportation Society of America
- Dennis Hinebaugh, National Bus Rapid Transit Institute
- Nick Nigro, Pew Center on Global Climate Change
Four Policy Principles

- Align Price Signals
- End Mode Bias
- Subsidiarity – Metros as well as States
- Deploy 21st-Century Technology
Mobility Choice Ten-Point Plan

• Price of Fuel Better Reflects Oil’s Security Impact
• “HOT” Lanes and Congestion Pricing
• Transit Dollars to Optimize Oil Savings
• Insurance Choice
• Transit Vouchers to Low-Income Households
• Telecommuting More Commonplace
• Gas Tax Revenue to Metro Areas
• Easier Local Land-Development Rules
• Smart Traffic Management
• Electric Rail if Justified on Cost and Oil-savings Basis
ROADMAP TO THE FUTURE

BY DANIEL GRUSHKIN ★ ILLUSTRATION BY GARY HOVLUND

More than half a century ago, President Dwight D. Eisenhower inaugurated a program to construct the nation’s interstate highway system. The program changed the way Americans live. Today, facing oil shortages and a climate crisis (tailpipe emissions make up 29 percent of U.S. greenhouse gas emissions), our transportation needs have changed. Here are some ways in which the desperately needed transportation system of the future can be made more efficient, safer, and cleaner.

**BUS RAPID TRANSIT**
The government builds dedicated lanes for buses, on the same principle as this lane, that allow them to avoid traffic. Buses consume less than a quarter of the energy per passenger mile that cars and trucks do (and the more seats are filled, the better they compare).

**OIL SECURITY FEE**
The nation adopts an oil security fee to stop the price of gasoline with the cost of our dependence on foreign oil. If Congress sets the fee at 40 cents per gallon for gasoline and 30 cents per gallon for diesel, this could provide the dedicated Highway Trust Fund with the desperately needed $50 billion a year.

**HIGH EFFICIENCY VEHICLES**
The government institutes a tax such as the one for alcohol or diesel that works for vehicles that produce high efficiency per mile. In 2010, electric cars are high-capacity vehicles. Compared with regular cars, electric vehicles can reduce greenhouse gas emissions by as much as 6 percent.

**HIGH SPEED RAIL**
In 2009 the Obama administration launched a new national high-speed rail program. Producing only 0.9 pounds of CO2 per passenger mile, this could cut greenhouse gas emissions by 5 million tons a year by 2010.

**VEHICLE MILEAGE INCENTIVES**
From 1960 to 2004 the total vehicle miles traveled (VMT) doubled, while total highway lane miles grew by only 5 percent. Traffic costs were $29 billion a year in wasted fuel and lost work time. In addition, city dwellers face more frequent vehicles, the federal government institutes a tax, based on VMT, of about 3 cents per mile.

**CONGESTION PRICING**
To reduce traffic on major thoroughfares and in urban centers, cities charge peak and off-peak prices for driving. This system has already been implemented in several places, including the New York City subway. Meanwhile, Paid-As-You-Drive insurance would reduce distances while the premiums are paid by the drivers.

**TRAFFIC MANAGEMENT SYSTEMS**
A series of small steps to optimize traffic flow collectively save on fuel and emissions. Synchroized traffic lights cut down on stop-and-go driving. Regulated traffic that stop cars briefly or assign permits with lane use. Programmed steps allow traffic managers to estimate traffic patterns and direct vehicles to alternate routes.

**SMART GROWTH**
As an alternative to sprawl, compact urban development would place residential neighborhoods close to shops, schools, and public transportation, and other services. Reduced vehicle use could avoid almost a billion miles of greenhouse gas emissions by 2010.

**ALTERNATIVE TRANSPORTATION**
Cities have made major investments in bike lanes, light rail, and walking routes, reducing emissions by 5 percent.

[Source: NRDC report blog about transportation issues at http://ourbikes.nrdc.org/transportation.php]
Thank You!
For More Information:
Deron Lovaas
dlovaas@nrdc.org
http://switchboard.nrdc.org/blogs/dlovaas/