

Fighting Oil Addiction

Ranking States' Gasoline Price Vulnerability and Solutions for Change

Report Prepared by

David Gardiner & Associates, LLC

Contributing Author

Deron Lovaas

Natural Resources Defense Council

About the Natural Resources Defense Council

The Natural Resources Defense Council (NRDC) is an international nonprofit environmental organization with more than 1.3 million members and online activists. Since 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment. NRDC has offices in New York City, Washington, D.C., Los Angeles, San Francisco, Chicago, Livingston, Montana, and Beijing. Visit us at www.nrdc.org.

About David Gardiner & Associates, LLC

The mission of David Gardiner & Associates (DGA) is to help organizations and decision makers solve energy and climate challenges. By marshalling technology, policy, and finance, DGA helps its clients build consensus and advance workable solutions. DGA creates strategic advantages for its clients by helping them understand climate and energy issues and by providing advice, analysis, and strategies tailored to their needs. For more information, visit www.dgardiner.com.

Acknowledgments

NRDC would like to thank The Energy Foundation, The William and Flora Hewlett Foundation, The Rockefeller Foundation, and Surdna Foundation for their generous support.

NRDC Director of Communications: Phil Gutis

NRDC Deputy Director of Communications: Lisa Goffredi

NRDC Publications Director: Anthony Clark

NRDC Publications Editor: Carlita Salazar

Production: Jon Prinsky

Copyright 2010 by the Natural Resources Defense Council.

For additional copies of this report, send \$5.00 plus \$3.95 shipping and handling to NRDC Publications Department, 40 West 20th Street, New York, NY 10011. California residents must add 7.5% sales tax. Please make checks payable to NRDC in U.S. dollars. The report is also available online at www.nrdc.org/policy.

This report is printed on paper that is 100 percent post-consumer recycled fiber, processed chlorine free.

Table of Contents

| | |
|--|-----------|
| Executive Summary | 4 |
| CHAPTER 1 Oil Vulnerability Rankings: Who Is Hardest Hit? | 7 |
| CHAPTER 2 Breaking Our Addiction: Solutions to Oil Dependence | 12 |
| State Solutions Rankings: Who's Getting It Right? | |
| Clean Vehicles and Increased Efficiency | |
| Clean Fuels | |
| Smart Growth and Public Transit | |
| CHAPTER 3 Conclusion | 18 |
| APPENDIX 1 Methodology | 20 |
| APPENDIX 2 Policy Trends | 23 |
| Endnotes | 24 |

Executive Summary

The events of the past year have made clear the perils of our dependence on oil. The continued recession has stretched the resources of many Americans and underscored the need for affordable transportation. The massive oil spill in the Gulf of Mexico has poignantly reminded us of both the environmental and economic costs associated with our nation's addiction to oil.

The purpose of this report is to update NRDC's 2007, 2008, and 2009 research identifying the states that are most vulnerable to spikes in gasoline prices—and those states that are doing the most to break their addiction to oil. As with previous editions, this report ranks U.S. states in two critical areas related to our nation's continuing addiction to oil. First, it calculates gasoline price vulnerability—how heavily each state's drivers are affected by increases in gasoline prices. Second, it ranks states on their adoption of solutions to reduce their oil dependence—measures they are taking to lessen their vulnerability and to bolster America's security. Our analysis yields three clear conclusions:

- Oil dependence affects all states, but some states' drivers are hit harder economically than others.
- Drivers in 2009 spent a markedly lower percentage of their income on gasoline than they did in 2008, and drivers in all but five states actually spent a lower percentage than they did in 2006. This is largely due to the fact that gas prices went down, dropping from the record high prices we saw in 2008. This is a notable change in the trend of the past few years, which saw increasing vulnerability. But with gas prices once again beginning to rise, vulnerable states will be even more at risk.
- While some states are pioneering solutions and many are taking some action, a fair number of states are still taking few (if any) of the steps listed in this report to reduce their oil dependence.

Gasoline Price Vulnerability

NRDC's vulnerability ranking is based on the average percentage of income that states' drivers spend on gasoline. The differences are significant. Average drivers in the most vulnerable state—Mississippi, for the fourth year in a row—spend more than 6 percent of their income on gasoline, while drivers in the least vulnerable state—Connecticut, also for the fourth consecutive year—spend about 2.5 percent of their income.

But there was a striking change in gasoline price vulnerability in 2009. NRDC's report last year showed that drivers in most states were more vulnerable in 2008 than they were in 2007 and that drivers in every state spent a higher percentage of their income on gasoline in 2008 than they did in 2006. This troubling trajectory changed in 2009: drivers in every state spent a lower percentage of their income on gasoline in 2009 than they did in 2008, and often markedly so. In fact, in all but five states, drivers were less vulnerable in 2009 than they were in 2006. This change in trajectory seems to flow largely from the significantly lower average gas prices in 2009 compared to prior years, which have some less pleasant underpinnings, such as the weakening economy and increased American joblessness.

Which States' Drivers Were Most at Risk in 2009?

NRDC research shows that the 10 states with the highest degree of gasoline price vulnerability in 2009 were:

- | | |
|---------------------------------------|---------------------------------|
| 1) Mississippi (also #1 in 2008-2006) | 6) Texas (▲ from #7 in 2008) |
| 2) Montana (also #2 in 2008) | 7) Kentucky (▼ from #6 in 2008) |
| 3) Louisiana (▲ from #5 in 2008) | 8) Utah (▲ from #11 in 2008) |
| 4) Oklahoma (also #4 in 2008) | 9) Idaho (▲ from #15 in 2008) |
| 5) South Carolina (▼ from #3 in 2008) | 10) Arkansas (also #10 in 2008) |

State Action on Oil Dependence: The Best and the Worst

The Obama Administration has taken some strong federal actions on energy and climate policy, but states continue to play a key role in creating less oil-intensive transportation options. Although some states are adopting strong measures to reduce their oil dependence, too many others are still taking little or no action.

NRDC research shows that the 10 states doing the most to wean themselves from oil are:

- | | |
|------------------|-----------------|
| 1) California | 6) Washington |
| 2) Oregon | 7) Pennsylvania |
| 3) Massachusetts | 8) Minnesota |
| 4) New York | 9) New Mexico |
| 5) Connecticut | 10) Hawaii |

In contrast, the 10 states doing the least to reduce their oil dependence are:

- | | |
|-------------------|------------------|
| 50) Alaska | 45) Oklahoma |
| 49) Wyoming | 44) Mississippi |
| 48) Nebraska | 43) Kansas |
| 47) Ohio | 42) Alabama |
| 46) West Virginia | 41) North Dakota |

The failure of these 10 states—and many others—to take meaningful action to reduce oil dependence exacerbates the national security, environmental, and economic harms associated with our current transportation habits. These and other states need to be drivers of change.

The Benefits of Reducing Oil Dependence

Especially with the struggling economy, persistently high unemployment, and gasoline and diesel prices starting to rise again, reducing oil dependence can yield significant benefits, including lowering the economic vulnerability that comes with volatile fuel prices. Decreasing oil consumption also enhances America's national security by reducing dependence on sources of oil that are politically unstable or controlled by unfriendly national governments. In addition, reduced oil consumption decreases both air pollution and the greenhouse gas (GHG) emissions that cause global climate change.

State Policies for Reducing Oil Dependence

While effective policy at the federal level is critical to reducing energy consumption and climate change, states can also lead by adopting cutting-edge plans to reduce oil dependence, helping to make the nation more secure, protecting drivers' wallets, and enhancing global environmental health. Current state strategies include:

- **Clean cars and increased efficiency.** Reducing emissions from vehicles is often achieved through increased efficiency, thereby also reducing fuel consumption. Fourteen states currently offer incentives for the purchase of new hybrid-electric and plug-in hybrid cars and trucks. Twenty-five states have requirements for state fleet efficiency. And 17 states are taking action to encourage cars already on the road to use less gasoline by placing restrictions on idling.
- **Clean fuels.** Clean energy from sustainably grown sources can make a significant dent in our oil dependence and greenhouse gas emissions. Last year, Oregon joined California and Massachusetts in developing a low-carbon fuel standard, seeking to reduce the greenhouse gas intensity of motor vehicle fuel. And 12 states have a renewable fuel standard or mandate to encourage the blending of renewable fuels like biodiesel into regular fuel. Thirty states are also sponsoring grants to support research and development on clean fuels and vehicles, looking to accelerate development of technologies that will help reduce oil dependence in the future.
- **Smart growth and public transit.** States can reduce oil dependence by integrating land use and transportation policies and designing them to reduce vehicle-miles traveled (VMT) and promote alternatives to driving. Nineteen states have adopted smart-growth management acts intended to curb sprawl and reduce the associated traffic, though Florida unfortunately revoked substantial components of its growth management law. Sixteen states have created an agency or other mechanism to develop and coordinate land use policies. Oregon added a target for reducing VMT, as part of a busy year of progress for the state, bringing the total number of states with VMT targets to seven. And six states have adopted telecommuting policies to encourage companies to enable their employees to opt out of driving. Public investment can also be a critical strategy for states seeking to reduce oil dependence, and in 2009, Connecticut, Minnesota, and Pennsylvania led the way in prioritizing the funding of public transit through the allocation of state funds, while Delaware, Iowa, and Oregon led the way in transferring portions of their federal stimulus dollars towards transit.

These states' policies can serve as examples for the many states that have thus far taken little or no such action—and as Congress debates energy and transportation policies, can lead the way to national policies.

Federal Recommendations for Reducing Gasoline Price Vulnerability

The federal government must enact effective energy and transportation policies that complement the actions by leading states. The Obama Administration has made progress with its vehicle fuel economy and greenhouse gas standards, and there is more to do. Specifically, the Obama Administration and Congress must:

- Set new light-duty vehicle and heavy-duty vehicle standards as high as possible; and
- Fundamentally reform federal transportation investments, enacting a renewed, fuel-saving transportation law without further delay.

CHAPTER 1

Oil Vulnerability Rankings: Who Is Hardest Hit?

With less money in our pockets, a continuing need to put gasoline in our vehicles, gasoline prices once again on the rise, the BP disaster that has left Gulf residents reeling, and a shocking number of extreme weather events around the globe raising concerns about the impacts of climate change, our oil dependence and its consequences are apparent as never before.

In the United States, our dependence on oil is problematic in several key ways:

- The United States has less than 2 percent of the world's oil supplies but is responsible for about a quarter of the world's oil consumption.¹ We currently import almost two-thirds of our crude oil supply from foreign countries,² and more and more of the world's future supply will come from regions that are either politically unstable or unfriendly to U.S. interests.
- Our unstable supply of oil threatens our national economy, particularly since about 96 percent of our transportation system is fueled by oil.³
- Oil consumption is a leading contributor to the greenhouse gas emissions that cause global warming. In the United States, the oil-based transportation system is responsible for roughly one-third of our global warming pollution.⁴

Our national addiction to oil affects every American in every state. However, the rankings in Table 1 (mapped in Figure 1) clearly show that oil dependence hits the drivers of certain states harder than it does others. These rankings reflect the proportion of the average driver's income spent on motor gasoline last year in each state.⁵

THE OIL DISASTER: A NEW MEANING FOR "OIL VULNERABILITY"

On the face of it, what happened is clear: the fourth-largest corporation in the world drilled a well beneath a mile of water in the Gulf of Mexico. Operating at the frontier of knowledge in conditions more challenging than even deep space, this well was inherently dangerous. When the well blew out on the night of April 20, 2010, equipment designed to be the last line of defense against disaster failed to shut down the well.

Eleven men were killed that night and more than 200 million gallons of crude oil gushed into the ocean during the three months it took for the oil company, formerly known as British Petroleum, to cap the well. More than 600 miles of coastline were oiled and a slick the size of South Carolina covered the fertile Gulf. Ocean, coastal and wetlands habitat and birds, fish, marine mammals, sea turtles and other animals and plants were damaged or destroyed. Thirty-seven percent of American waters in the Gulf were closed to fishing; thousands of watermen and others were thrown out of work; and the future of a complex and vital region was cast into uncertainty....

When BP's Macondo well blew out, the company had no idea how to stop the runaway well and no equipment in place to cap it. From the president on down, Americans watched in helpless fury as two million gallons of crude oil a day gushed into some of the most diverse and productive fisheries in the world. The Gulf is home to scores of species of fish ... numerous endangered species ... and birds both migratory and resident. It is the source of 70 percent of the oysters and shrimp produced in this country and hundreds of millions of pounds each year of snapper, grouper, tuna and other seafood. Drilling for oil in the Gulf of Mexico, it turned out, is an activity that puts an irreplaceable resource at risk. There are only two rational responses: reduce the risk and reduce the need....

From NRDC Executive Director Peter Lehner's new book "In Deep Water: The Anatomy of a Disaster, the Fate of the Gulf, and How to End Our Oil Addiction"

As was the case in previous years, the hardest-hit drivers are generally in the South and South Central states, as well as Montana, which maintained its #2 position after shooting up to near the top of the rankings back in 2008. And again, the least vulnerable are generally in the Northeast and Mid-Atlantic. The most vulnerable state—Mississippi—and least vulnerable state—Connecticut—were again unchanged from prior years. Citizens in Mississippi spent 6.35 percent of their income on gasoline versus citizens in Connecticut who spent approximately 2.5 percent of their income on gasoline.

Figure 1: Map of U.S. Oil Vulnerability, 2009

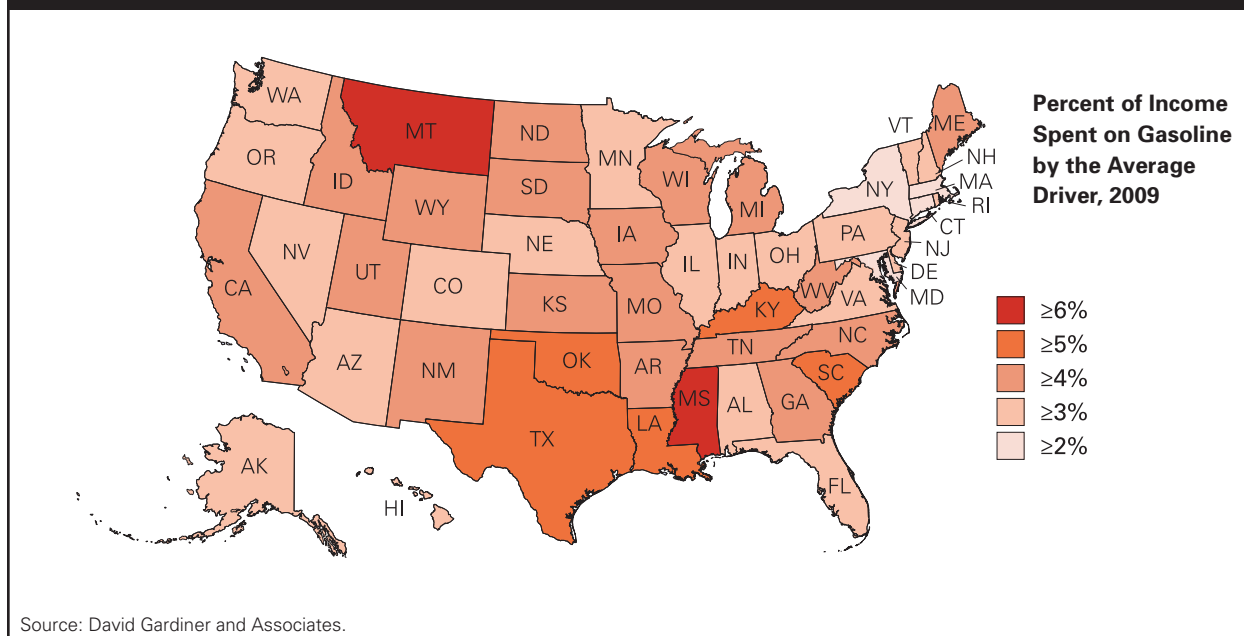


Table 1: Ranking of the Most Vulnerable States, 2009

| Rank | State | Percent of Income (and \$ Amount) Spent on Gasoline by the Average Driver, 2008 |
|------|----------------|---|
| 1 | Mississippi | 6.35% (\$1910.75) |
| 2 | Montana | 6.08% (\$2066.58) |
| 3 | Louisiana | 5.45% (\$1935.45) |
| 4 | Oklahoma | 5.28% (\$1861.26) |
| 5 | South Carolina | 5.27% (\$1675.80) |
| 6 | Texas | 5.09% (\$1857.16) |
| 7 | Kentucky | 5.03% (\$1603.03) |
| 8 | Utah | 4.76% (\$1469.11) |
| 9 | Idaho | 4.74% (\$1499.99) |
| 10 | Arkansas | 4.69% (\$1496.94) |
| 11 | Tennessee | 4.68% (\$1594.42) |
| 12 | Georgia | 4.66% (\$1574.20) |
| 13 | Maine | 4.59% (\$1685.96) |
| 14 | South Dakota | 4.48% (\$1655.12) |
| 15 | North Dakota | 4.42% (\$1745.76) |
| 16 | New Mexico | 4.38% (\$1445.32) |
| 17 | Wyoming | 4.34% (\$1982.32) |
| 18 | North Carolina | 4.24% (\$1461.77) |
| 19 | Michigan | 4.24% (\$1442.35) |
| 20 | Kansas | 4.21% (\$1594.75) |
| 21 | West Virginia | 4.20% (\$1354.49) |
| 22 | Missouri | 4.15% (\$1480.41) |
| 23 | California | 4.06% (\$1720.49) |
| 24 | Iowa | 4.06% (\$1493.61) |
| 25 | Wisconsin | 4.02% (\$1478.67) |
| 26 | Ohio | 3.96% (\$1400.53) |
| 27 | Hawaii | 3.96% (\$1661.66) |
| 28 | Rhode Island | 3.95% (\$1618.57) |
| 29 | Vermont | 3.91% (\$1504.37) |
| 30 | Minnesota | 3.88% (\$1613.53) |
| 31 | Alabama | 3.87% (\$1281.12) |
| 32 | Virginia | 3.78% (\$1657.95) |
| 33 | Indiana | 3.74% (\$1261.56) |
| 34 | Oregon | 3.71% (\$1324.36) |
| 35 | Nevada | 3.69% (\$1425.38) |
| 36 | Arizona | 3.65% (\$1200.89) |
| 37 | Delaware | 3.52% (\$1401.32) |
| 38 | Florida | 3.49% (\$1318.39) |
| 39 | Alaska | 3.45% (\$1469.88) |
| 40 | Nebraska | 3.45% (\$1313.77) |
| 41 | Washington | 3.41% (\$1425.38) |
| 42 | Illinois | 3.40% (\$1407.07) |
| 43 | Pennsylvania | 3.40% (\$1343.97) |
| 44 | New Jersey | 3.28% (\$1651.87) |
| 45 | Colorado | 3.11% (\$1286.81) |
| 46 | New Hampshire | 3.10% (\$1328.21) |
| 47 | Maryland | 2.99% (\$1443.12) |
| 48 | Massachusetts | 2.63% (\$1310.05) |
| 49 | New York | 2.62% (\$1229.16) |
| 50 | Connecticut | 2.56% (\$1391.06) |

Overall, though, there was a striking change in gasoline price vulnerability in 2009. NRDC's report last year showed that drivers in most states were more vulnerable in 2008 than in 2007, and that drivers in every state spent a higher percentage of their income on gasoline in 2008 than in 2006. This troubling trajectory changed in 2009. Drivers in every state spent a lower percentage of their income on gasoline in 2009 than they did in 2008. Take the most and least vulnerable states as shown in Table 2: Mississippi drivers in 2009 spent 6.35 percent of their income on gasoline, compared to 9.14 percent in 2008. Connecticut drivers were at 2.56 percent in 2009 but 3.24 percent in 2008. Furthermore, in *all but 5 states*, drivers were even *less vulnerable* in 2009 than they were in 2006. Only in Montana, Rhode Island, Kansas, Louisiana, and Idaho were drivers spending a greater percentage of their income on gasoline in 2009 than in 2006. (Reasons for these five states being outliers are not clear at this time.)

Drivers in every state spent a lower percentage of their income on gasoline in 2009 than they did in 2008.

Table 2: Percent of Income Spent on Gasoline by the Average Driver (2006–2009)

| State | 2006 % | 2007 % | 2008 % | 2009 % | 2009 vs. 2006 | State | 2006 % | 2007 % | 2008 % | 2009 % | 2009 vs. 2006 |
|-------|--------|--------|--------|--------|---------------|-------|--------|--------|--------|--------|---------------|
| AZ | 5.28% | 6.06% | 5.65% | 3.65% | -1.62% | IL | 3.84% | 4.80% | 4.78% | 3.40% | -0.44% |
| IN | 5.04% | 6.46% | 6.44% | 3.74% | -1.30% | WA | 3.77% | 4.26% | 4.43% | 3.41% | -0.36% |
| NM | 5.66% | 6.55% | 6.79% | 4.38% | -1.29% | OR | 4.06% | 4.83% | 4.91% | 3.71% | -0.35% |
| AL | 5.03% | 6.01% | 5.68% | 3.87% | -1.16% | MI | 4.53% | 5.78% | 5.58% | 4.24% | -0.29% |
| MN | 5.00% | 5.79% | 5.50% | 3.88% | -1.11% | WI | 4.30% | 4.95% | 5.18% | 4.02% | -0.28% |
| GA | 5.67% | 7.08% | 6.71% | 4.66% | -1.00% | UT | 5.04% | 5.81% | 6.61% | 4.76% | -0.28% |
| IA | 5.04% | 6.20% | 5.25% | 4.06% | -0.98% | VT | 4.17% | 5.06% | 4.66% | 3.91% | -0.26% |
| WV | 5.17% | 6.17% | 5.62% | 4.20% | -0.97% | CA | 4.31% | 5.37% | 5.16% | 4.06% | -0.25% |
| NH | 4.04% | 4.65% | 4.21% | 3.10% | -0.94% | FL | 3.74% | 4.63% | 4.65% | 3.49% | -0.25% |
| NV | 4.57% | 5.37% | 4.66% | 3.69% | -0.88% | NJ | 3.53% | 4.10% | 4.49% | 3.28% | -0.25% |
| MO | 5.02% | 6.00% | 5.94% | 4.15% | -0.87% | SD | 4.70% | 5.72% | 5.93% | 4.48% | -0.22% |
| MD | 3.83% | 4.52% | 4.19% | 2.99% | -0.84% | CT | 2.78% | 3.17% | 3.24% | 2.56% | -0.22% |
| SC | 6.03% | 7.21% | 7.59% | 5.27% | -0.76% | OK | 5.47% | 6.28% | 7.50% | 5.28% | -0.19% |
| KY | 5.77% | 6.69% | 6.84% | 5.03% | -0.74% | PA | 3.57% | 4.41% | 4.56% | 3.40% | -0.17% |
| DE | 4.25% | 4.89% | 5.37% | 3.52% | -0.73% | NY | 2.79% | 3.28% | 3.44% | 2.62% | -0.17% |
| AR | 5.38% | 6.28% | 6.68% | 4.69% | -0.69% | TN | 4.85% | 5.82% | 6.25% | 4.68% | -0.17% |
| NC | 4.92% | 5.70% | 5.93% | 4.24% | -0.68% | WY | 4.46% | 5.21% | 5.36% | 4.34% | -0.12% |
| ND | 5.09% | 5.81% | 5.64% | 4.42% | -0.67% | AK | 3.55% | 3.87% | 4.33% | 3.45% | -0.10% |
| CO | 3.77% | 4.47% | 4.29% | 3.11% | -0.66% | TX | 5.16% | 5.85% | 6.80% | 5.09% | -0.07% |
| OH | 4.54% | 5.41% | 5.50% | 3.96% | -0.58% | HI | 3.98% | 4.58% | 5.19% | 3.96% | -0.02% |
| VA | 4.35% | 5.13% | 5.14% | 3.78% | -0.57% | ID | 4.64% | 5.69% | 6.20% | 4.74% | +0.10% |
| ME | 5.15% | 6.09% | 6.36% | 4.59% | -0.56% | LA | 5.34% | 6.83% | 7.00% | 5.45% | +0.11% |
| MS | 6.87% | 7.87% | 9.14% | 6.35% | -0.52% | KS | 3.65% | 4.85% | 5.86% | 4.21% | +0.56% |
| NE | 3.95% | 4.64% | 4.69% | 3.45% | -0.50% | RI | 3.25% | 3.97% | 5.40% | 3.95% | +0.70% |
| MA | 3.11% | 3.50% | 3.66% | 2.63% | -0.48% | MT | 4.84% | 5.80% | 8.07% | 6.08% | +1.24% |

Clearly a large part of the reason for the marked decreases in all states since 2008, and in most states since 2006, is that gas prices spiked in 2008 (U.S. average \$2.77) but were at a level in 2009 below anything seen in the previous few years (U.S. average \$1.89), as shown in Table 3.

There may also be less pleasant factors at play. According to the Energy Information Administration, the 2009 gas price drop was the result of “the weakening economy and the collapse of global petroleum demand.”⁶ Similarly, it is likely that the country’s total VMT dropped in 2008 because of price spikes, and continued to drop in 2009 because of the economic slump, which itself led to increased joblessness and a growing number of people no longer commuting or shopping.

Given these hard realities, it’s important to recognize that since this report calculates vulnerability as the percentage of average income spent on gasoline, many people were not captured in the metrics above in that they no longer have regular incomes, masking the fact that gasoline costs hit this population even harder. Hence, the factors underlying the “good news” on vulnerability are probably merely reflections of oil price volatility and the country’s current economic struggle.

Table 3: Gasoline Prices, Oil Prices, and Total U.S. VMT (2006–2009)

| Year | Avg U.S. Gas Prices (\$/Gal) | Global Crude Prices (\$/Bbl) | Total U.S. VMT (Millions) |
|------|---------------------------------|---------------------------------|------------------------------|
| 2006 | \$2.12 | \$58.30 | 3,033,753 |
| 2007 | \$2.34 | \$64.20 | 3,049,027 |
| 2008 | \$2.77 | \$91.48 | 2,992,705 |
| 2009 | \$1.89 | \$53.48 | 2,979,394 |

CHAPTER 2

Breaking Our Addiction: Solutions to Oil Dependence

Identifying the problem of oil addiction is only the beginning. The next and much bigger step is to adopt workable solutions. Rising gasoline prices in the midst of a fragile economy, coupled with this summer's oil spill in the Gulf of Mexico, provide more evidence that the country urgently needs to reduce its oil dependence. By promoting efficient vehicles, clean fuels, smart growth, and public transit, governments can end the unhealthy addiction threatening our citizens' wallets, coastlines, national security, economy, and environment.

State Solutions Rankings: Who's Getting It Right?

NRDC's rankings of states' solutions are determined by the range of key actions states can take to reduce oil dependence, particularly those that result in a considerable impact on oil dependence and can be replicated by other states. Unlike in previous years, states did not receive credit for having vehicle GHG emission standards, as the federal government has largely taken the lead. The rankings also consider the level of priority being given to public transit, as compared to highways. As Table 4 indicates, some states have already adopted significant measures to promote clean vehicles and fuels, and smart growth. Nonetheless, too many states are failing to act meaningfully.

CLEAN VEHICLES AND INCREASED EFFICIENCY

Several states are enacting policies to promote fuel-efficient vehicles and less driving overall. For example:

- **Fourteen states are promoting cleaner vehicles through incentives for consumers for hybrid and plug-in hybrid electric vehicles.** Hybrids emit less global warming pollution and use less gasoline than conventional vehicles. Plug-in hybrids offer even greater potential for fuel savings. In 2009, states received credit for tax incentives that increase consumer demand—or pull advanced technologies into the market—as well as ones that increase manufacturer supply—or push advanced technologies into the market. Both are logical complements to rising performance standards.

States also received credit for usage-based incentives (i.e., hybrid use of high occupancy vehicle [HOV] lanes), although the *push* and *pull* tax incentives could have greater impact. Colorado and New Jersey offer financial and usage incentives. Compared to previous years, however, hybrid incentives received fewer points in this report's ranking, as market awareness of hybrids has improved, lessening the need to motivate early adopters. In fact, some leading states (e.g., Connecticut) let their incentives lapse last year.

Table 4: Solutions Rankings #1 Through #25

| Rank | State | CLEAN VEHICLES & EFFICIENT USE | | | | R&D | CLEAN FUELS | | SMART GROWTH & TRANSIT | | | | | |
|------|---------------|------------------------------------|------------------------|---------------------|--|-----|--------------------------|-------------------------|---|-----------------------|---|-----------------------|---|--|
| | | Hybrid & Plug-In Hybrid Incentives | State Fleet Efficiency | Idling Restrictions | State-Sponsored Grants for R&D on Cars/Fuels | | Low-Carbon Fuel Standard | Renewable Fuel Standard | Vehicle-Miles Traveled Reduction Target | Tele-commuting Policy | State Agency for Coordinated Smart Growth Development | Growth Management Act | Transit Spending Prioritization (Ranking & Percentage)* | Flexed ARRA Funds to Transit (Ranking & Percentage) Flexed |
| 1 | California | ● | ● | ● | ● | | ●● | | ● | ● | | ● | 8 (21.28%) | 9 (1.24%) |
| 2 | Oregon | ● | | ● | | | ● | ● | ● | | ● | ● | 32 (2.30%) | 1 (16.12%) |
| 3 | Massachusetts | | ● | ● | | | ● | ● | | | ● | ● | 3 (45.12%) | 3 (13.63%) |
| 4 | New York | ● | ● | ● | ● | | | | ● | | ● | | 2 (54.44%) | 2 (15.66%) |
| 5 | Connecticut | | ● | | ● | | | | ● | | ● | ● | 1 (60.58%) | 10 (1.04%) |
| 6 | Washington | ● | | | ● | | | ● | ● | ● | | ● | 41 (1.26%) | 14 (0.35%) |
| 7 | Pennsylvania | ● | | ● | ● | | | ● | | | ● | ● | 7 (30.98%) | 50 (0%) |
| 8 | Minnesota | | ● | | ● | | | ● | | | ● | ● | 5 (38.14%) | 50 (0%) |
| 9 | New Mexico | | ● | | ● | | | ● | ● | | | | 6 (33.94%) | 50 (0%) |
| 10 | Hawaii | | ● | | ● | | | ● | | | ● | ● | 43 (1.08%) | 50 (0%) |
| 11 | Florida | ● | ● | ● | ● | | | ● | | | ● | ● | 18 (8.61%) | 18 (0.17%) |
| 12 | Maryland | | | ● | | | | | | ● | ● | ● | 4 (44.58%) | 5 (3.97%) |
| 13 | New Jersey | ● | ● | ● | ● | | | | | ● | ● | ● | 9 (17.99%) | 50 (0%) |
| 14 | Rhode Island | | ● | ● | ● | | | | ● | | | ● | 11 (17.46%) | 50 (0%) |
| 15 | Virginia | ● | ● | ● | ● | | | | | ● | | | 13 (14.61%) | 7 (2.27%) |
| 16 | Georgia | | ● | | | | | | | ● | ● | ● | 22 (4.90%) | 6 (3.22%) |
| 17 | Wisconsin | ● | ● | ● | ● | | | | | | | ● | 17 (9.07%) | 50 (0%) |
| 18 | Tennessee | ● | ● | ● | ● | | | | | | | ● | 21 (5.05%) | 13 (0.56%) |
| 19 | Colorado | ● | ● | ● | ● | | | | | | ● | | 12 (15.41%) | 4 (4.60%) |
| 20 | New Hampshire | | ● | ● | ● | | | | | | | ● | 35 (1.75%) | 50 (0%) |
| 21 | Maine | | ● | ● | ● | | | | | | ● | ● | 39 (1.31%) | 50 (0%) |
| 22 | Louisiana | | ● | | ● | | | ● | | | | | 47 (0.61%) | 50 (0%) |
| 23 | Delaware | | | ● | ● | | | | | | ● | ● | 10 (17.62%) | 50 (0%) |
| 24 | Vermont | ● | | | | | | | | | ● | ● | 19 (5.74%) | 50 (0%) |
| 25 | Montana | | ● | ● | ● | | | ● | | | | | 27 (3.26%) | 50 (0%) |

●● = 2 points ● = 1 point ● = 1/2 point ● = 1/4 point ● = loss of 1/2 point

* Ranking based on the ratio of transit spending to highway spending, from data in the Federal Highway Administration's *Highway Statistics 2008*

Table 4: Solutions Rankings #26 Through #50

| | | CLEAN VEHICLES & EFFICIENT USE | | | | R&D | CLEAN FUELS | | SMART GROWTH & TRANSIT | | | | | |
|------|---------------|------------------------------------|------------------------|---------------------|--|--------------------------|-------------------------|---|------------------------|---|-----------------------|---|---|--|
| Rank | State | Hybrid & Plug-In Hybrid Incentives | State Fleet Efficiency | Idling Restrictions | State-Sponsored Grants for R&D on Cars/Fuels | Low-Carbon Fuel Standard | Renewable Fuel Standard | Vehicle-Miles Traveled Reduction Target | Tele-commuting Policy | State Agency for Coordinated Smart Growth Development | Growth Management Act | Transit Spending Prioritization (Ranking & Percentage)* | Flexed ARRA Funds to Transit (Ranking & Percentage) Flexed) | |
| 26 | Iowa | | | 🟡 | 🟡 | | 🟢 | | | | | 30 (2.44%) | 19 (0.15%) | |
| 27 | S. Carolina | 🟡 | | | 🟡 | | | | | | | 28 (3.01%) | 50 (0%) | |
| 28 | Michigan | | 🟡 | | 🟡 | | | | | | | 15 (11.65%) | 20 (0.07%) | |
| 29 | Illinois | | 🟡 | | 🟡 | | | | | | | 16 (9.37%) | 50 (0%) | |
| 30 | Kentucky | | 🟡 | | 🟡 | | | | | | | 23 (4.57%) | 16 (0.23%) | |
| 31 | Texas | | 🟡 | | 🟡 | | | | | | | 34 (1.96%) | 11 (0.76%) | |
| 32 | Indiana | | 🟡 | | 🟡 | | | | | | | 25 (3.77%) | 21 (0.04%) | |
| 33 | Arizona | | | | 🟡 | | | | | 🟡 | | 31 (2.39%) | 17 (0.21%) | |
| 34 | Missouri | | | | | | 🟢 | | | | | 33 (2.14%) | 50 (0%) | |
| 35 | Nevada | | | 🟡 | | | | | | | 🟡 | 44 (0.94%) | 50 (0%) | |
| 36 | Utah | | | 🟡 | 🟡 | | | | | | | 50 (0.18%) | 50 (0%) | |
| 37 | Idaho | | 🟡 | | | | | | | | | 38 (1.39%) | 8 (1.68%) | |
| 38 | N. Carolina | | | | 🟡 | | | | | | | 24 (4.46%) | 12 (0.70%) | |
| 39 | South Dakota | | | | 🟡 | | | | | | | 20 (5.52%) | 50 (0%) | |
| 40 | Arkansas | | | | 🟡 | | | | | | | 26 (3.70%) | 50 (0%) | |
| 41 | North Dakota | | | | 🟡 | | | | | | | 29 (2.58%) | 50 (0%) | |
| 42 | Alabama | | 🟡 | | | | | | | | | 45 (0.87%) | 15 (0.34%) | |
| 43 | Kansas | | 🟡 | | | | | | | | | 36 (1.64%) | 50 (0%) | |
| 44 | Mississippi | | 🟡 | | | | | | | | | 37 (1.57%) | 50 (0%) | |
| 45 | Oklahoma | 🟡 | | | | | | | | | | 40 (1.26%) | 50 (0%) | |
| 46 | West Virginia | | | 🟡 | | | | | | | | 42 (1.16%) | 50 (0%) | |
| 47 | Ohio | | | | 🟡 | | | | | | | 46 (0.76%) | 50 (0%) | |
| 48 | Nebraska | | | | 🟡 | | | | | | | 49 (0.53%) | 50 (0%) | |
| 49 | Wyoming | | | | | | | | | | | 14 (12.15%) | 50 (0%) | |
| 50 | Alaska | | | | | | | | | | | 48 (0.56%) | 50 (0%) | |

●● = 2 points ● = 1 point ● = 1/2 point ▲ = 1/4 point ● = loss of 1/2 point

* Ranking based on the ratio of transit spending to highway spending, from data in the Federal Highway Administration's *Highway Statistics 2008*

- **Many states are taking action to promote greater efficiency in the use of vehicles.** Twenty-five states have policies mandating stronger fuel efficiency standards for the state fleet. While these fleets are small, relative to the total vehicles in a state, state fleet efficiency standards can provide a good model and represent a positive step forward.

In addition, seventeen states have policies restricting vehicle idling. Oregon passed a law in 2009 authorizing development of idling restrictions for commercial vehicles and ships. There is a great deal of variation among these idling policies, some being stronger than others. Credit in the rankings was awarded liberally, but states are encouraged to make their idling policies as strong possible. While the resulting amount of oil saved is small, such policies promote an important ethic of efficiency.

CLEAN FUELS

There are many promising oil alternatives that could advance energy security and climate change goals. Not all alternatives, however, are created equal. While debates continue with respect to the climate benefits of some biofuels, some alternatives are unquestionably harmful. For example, West Virginia provides an investment tax credit for coal-based synthetic fuels, which are incredibly GHG-intensive. Accordingly, this report gives credit to states' efforts to create an infrastructure for and drive the development of sustainable alternative fuels. For example:

- **Oregon has joined California and Massachusetts in developing a low-carbon fuel standard.** In 2007, Governor Arnold Schwarzenegger announced an executive order calling for the adoption of a low-carbon fuel standard (LCFS) in California to reduce the global warming pollution "intensity" of motor vehicle fuel by 10 percent by 2020.⁷ Massachusetts Governor Deval Patrick and state congressional leadership followed suit, and in July 2008 announced their support for adopting a similar LCFS. In addition, Massachusetts spearheaded the effort to get the other states in the Regional Greenhouse Gas Initiative (RGGI) to commit to creating a regional LCFS.⁸ In July 2009, Oregon Governor Ted Kulongoski signed a bill into law authorizing the Oregon Environmental Quality Commission to adopt a low-carbon fuel standard with the same targets as California and Massachusetts.⁹

While Massachusetts and Oregon do not yet have their LCFS in effect, they have made important strides towards developing them, and their leadership is credited in the rankings. We hope other states that are considering adopting their own LCFS, such as Washington, will follow suit and move ahead soon. Promoting low-carbon fuels supports oil alternatives, since sustainably produced biofuels (especially those derived from plant cellulose using new techniques), plug-in hybrid-electric vehicles, and the like can yield substantial greenhouse gas emission reductions. California estimates that achieving the 10 percent reduction goal will reduce motor vehicle petroleum consumption by about 20 percent.¹⁰ Such a big effect makes the LCFS one of the most important policies a state can adopt to reduce oil dependence.

- **Twelve states have a renewable fuel standard or mandate.** These policies, in states including Louisiana, Montana, and Minnesota, require the blending of renewable fuels into regular fuel. It is important that states calculate lifecycle greenhouse gas emissions for the biofuels to ensure that they not only save oil but also reduce emissions. Massachusetts law, for instance, requires all diesel motor vehicle fuel to contain 2 percent "eligible diesel substitute fuel" by July 2010, 3 percent by July 2011, 4 percent by July 2012, and 5 percent by July 2013; the law defines "diesel substitute fuel" to mean fuel derived predominantly from renewable biomass, and it requires manufacturers and distributors seeking to have their substitute fuel deemed "eligible" to provide documentation that such fuel yields at least a 50 percent reduction in lifecycle greenhouse gas emissions per unit of delivered energy as compared to the petroleum-based diesel fuel displaced.¹¹
- **Thirty states sponsor grants to support research and development on clean fuels and clean vehicles.** These states are looking to accelerate development of technologies to reduce oil dependence in the near future. For

example, Illinois has a Renewable Fuels Research, Development, and Demonstration Program to promote, expand the use of, and accelerate commercialization of clean, renewable transportation fuels.

SMART GROWTH AND PUBLIC TRANSIT

States can lower oil dependence through smart growth policies that reduce sprawl, the number of miles traveled in vehicles, and promote accessible public transit systems. In order to reduce sprawl, smart growth strategies focus on issues such as transportation, land use, zoning, and building codes. By concentrating growth and development within already existing urban areas and communities, states can reduce the need to develop outside cities and towns, where entirely new infrastructure (roads, buildings, etc.) must be built. New development in suburban and rural areas increases the distance that citizens must travel for work and other activities, increasing inconvenience and pollution (though smart telecommuting policies can ease the strain).

- **Only seven states have set targets for reducing VMT.** Some of these policies are stronger than others. For instance, as part of its Growth Management Act, the state of Washington is adopting statewide VMT reduction goals of 18 percent by 2020, 30 percent by 2025, and 50 percent by 2050.¹² Oregon passed a law last year to calculate VMT reduction targets for each of the state's metropolitan service districts.¹³

In New Mexico, in contrast, the state's goal of reducing VMT from passenger vehicles by 11 percent from 2010 to 2020 can be found only in the appendix of the state Climate Change Advisory Group's final report of recommendations.

- **Only six states have policies to encourage telecommuting.** One way to reduce VMT is to reduce the number of people commuting to work. Telecommuting policies include tax incentives and reimbursements to employers for researching and establishing formal remote work programs. It is important to extend such policies to public and private sector employees; some states, such as Arizona, have excellent telecommuting incentives for state employees, but do not extend them to the private sector. New York has private sector incentives. Sadly, the state also assesses income taxes on non-resident employees, which affects telecommuting employees who live in neighboring states like New Jersey and Connecticut.
- **Sixteen states have an agency or other mechanism to coordinate development.** Recognizing that different state entities influence development, sometimes in potentially contradictory ways, some states have moved toward creating a mechanism to coordinate public investments that support development. Maine has its State Planning Office to coordinate "quality of place" investment strategies across state agencies and regional councils. Such coordination is an important first step toward smart development, enabling a state to take into account a range of relevant influences. We encourage states to use coordinating mechanisms to promote smart growth.
- **Nineteen states have growth management acts.** Legislation is among the most comprehensive ways to promote smart growth. For example, in 2009 Maryland enacted the "Smart, Green, and Growing" legislative package, which included a statewide smart growth goal, requirements for localities to achieve specific smart-growth metrics, and 12 new Planning Visions, which guide local plans.¹⁴

Unfortunately, some states are moving in the wrong direction. Last year, Governor Charlie Crist signed SB 360, which revoked substantial components of the Florida Growth Management law, gutting the smart growth components (e.g., exempting large development projects from review by regional planning boards) and establishing conditions for increased sprawl (e.g., reducing density by defining an urban area as 1,000 people per square mile). This evisceration of smart growth policies earned Florida the only negative points awarded in this report.

- **Some states have prioritized the funding of public transit.** Public transit systems, such as bus, commuter rail, subway, and light rail programs, are important components in state efforts to promote smart growth and reduce oil dependence. By creating or expanding reliable and accessible public transit programs, states can reduce the number of single-passenger cars on the road, consequently lowering average driving per person. And, accessible public transit provides an important transportation alternative as gas prices rise.

States have the ability to “flex” certain federal funds that ordinarily are spent on highway projects and instead use them to pay for public transit programs. States that choose not to transfer federal funds to transit programs are not necessarily neglecting transit funding, however, since they may be spending more state dollars on transit. The best way to understand state transit prioritization is to compare the amount of total state spending (including flexed federal funds) on mass transit with the total spent on highway programs. By this measure, the top five states prioritizing public transit spending are Connecticut, New York, Massachusetts, Maryland, and Minnesota.

Given the influx of stimulus cash in 2009, an additional measure of state transit prioritization is the amount of discretionary transportation funding provided by the American Recovery & Reinvestment Act (the stimulus package) that states flexed from highway accounts to transit programs. Oregon and New York led all other states in this regard. Far too many states—more than half—declined to take advantage of that stimulus opportunity.

CHAPTER 3

Conclusion: States Must Take Action, Feds Must Lead

Drivers in all states are dependent on oil for their transportation needs. However, some states are more vulnerable to oil price increases than others, and some are taking significantly more action to curtail oil dependence.

Responsible states are making efforts to promote clean fuels, efficient vehicles, and smart growth and transit. These states are helping make the nation more secure, protecting their citizens' wallets, and enhancing global environmental health. These states' policies serve as examples for the many states that have thus far taken little or no such action.

At the same time, Congress has failed to move forward on a new multi-year surface transportation authorization bill, posing great challenges for state transportation programs. The federal government has a responsibility to reduce our oil dependence and support states in identifying and replicating the most effective measures.

The Obama Administration is off to a good start, with its unveiling of national standards that will accelerate improvements in vehicle fuel economy, and, for the first time, set a national greenhouse gas emissions standard on cars and trucks.

Still, there is much work to be done, specifically:

- The U.S. Department of Transportation (DOT) and U.S. Environmental Protection Agency (EPA) must set new light- and heavy-duty vehicle standards as high as possible. The technology exists to boost fuel efficiency and cut tailpipe pollution for all types of vehicles. History has shown that without strong pollution and fuel efficiency standards, American automakers lag behind the competition, costing us jobs, increasing oil dependence, creating more pollution, and limiting technology innovation (see box).

REMARKABLE PROGRESS ON VEHICLE STANDARDS

History has shown that when we set strong standards and tap American ingenuity we can revitalize our economy, protect our environment, save money at the gas pump, and enhance America's security by reducing our need for imported oil and technology. The country's first fuel efficiency standards went into effect in 1978 as a response to the 1973-1974 OPEC oil embargo. These standards roughly doubled the fuel efficiency of new cars in the 10 years following the embargo. Unfortunately, standards largely stagnated over the subsequent two decades, leading to very little improvement in fuel efficiency.

Today, the country is beginning to get back on track by requiring automakers to build vehicles that average approximately 35 miles per gallon by 2016 and emit roughly 30 percent less global warming pollution. When fully implemented, these new standards will save more oil and reduce more tailpipe pollution than any other existing government program. It is now time to build on this success by extending and strengthening fuel efficiency and pollution standards...

Setting strong new fuel efficiency and global warming pollution standards provides a unique opportunity to harness American ingenuity move the country forward. Building and selling clean, fuel-efficient vehicles will encourage greater innovation and put America on the right path to a stronger economy, a safer climate, and less reliance on oil.

From NRDC & partners: <http://www.go60mpg.org>

- Congress must enact a renewed, fuel-saving transportation law without delay, one which fundamentally reforms federal transportation policy so it supports smart, transit-oriented development; assists states and regions in saving oil; and provides ample funding for energy-efficient transportation alternatives including rail and bus lines, bike paths, and sidewalks.

Real solutions exist to ending our oil dependence. Let's get to work.

APPENDIX 1

Methodology

OIL VULNERABILITY RANKING

The oil vulnerability ranking is based on data from the following sources:

Motor Gasoline Consumption (2009):

Energy Information Administration, Prime Supplier Sales Volumes

http://tonto.eia.doe.gov/dnav/pet/pet_cons_prim_a_EPM0_P00_Mgalpd_a.htm

Gasoline Prices by State (2009):

Energy Information Administration

http://tonto.eia.doe.gov/dnav/pet/pet_pri_allmg_a_EPM0_PTC_cpgal_a.htm

Gasoline Taxes by State (2009):

American Petroleum Institute, Gasoline Taxes

http://www.api.org/statistics/fueltaxes/upload/January_2010_gasoline_and_diesel_summary_pages.pdf

Licensed Drivers by State (2008):

Federal Highway Administration's Highway Statistics 2008

<http://www.fhwa.dot.gov/policyinformation/statistics/2008/dl22.cfm>

Per Capita Personal Income by State (2009):

Bureau of Economic Analysis

<http://www.bea.gov/regional/spi/default.cfm?selTable=summary>

The oil vulnerability ranking is based on the percentage of personal income spent on gasoline in each state in 2009. To calculate this percentage, the amount of motor gasoline consumed in each state is multiplied by average price to produce the total amount spent in each state on gasoline. This figure is then divided by the total number of licensed drivers to produce the amount spent on gasoline (including taxes) per driver. Finally, this number is divided by per capita income and multiplied by 100 to produce the average percentage of drivers' income spent on gasoline.

State taxes have again been included in the average cost of fuel per gallon in 2009, as they were in the ranking report released the past two years. In addition, state taxes from 2006 have been added to the data from the original ranking report released in 2007, which had initially excluded state taxes from fuel costs. This addition allows for direct comparisons to be made year over year in the vulnerability of each state to the price of gasoline.

The data in Table 3 came from the following sources:

Average U.S. Gas Prices (2006-2009):

Energy Information Administration, Retail Gasoline Historical Prices

http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_history.html

Global Crude Prices (2006-2009):

Energy Information Administration, World Crude Oil Prices

http://www.eia.gov/dnav/pet/pet_pri_wco_k_w.htm

Total U.S. VMT (2006-2009):

Federal Highway Administration's Highway Statistics 2008

<http://www.fhwa.dot.gov/policyinformation/statistics/2008/vmt422.cfm>

SOLUTIONS RANKING

The solutions ranking was based on data from the following sources:

Clean Vehicles & Efficient Use

Hybrid Incentives, State Fleet Efficiency Requirements, Idling Restrictions, and Research & Development Grants:

Department of Energy, Office of Energy Efficiency and Renewable Energy, Alternative Fuels & Advanced Vehicles Data Center

<http://www.afdc.energy.gov/afdc/laws/search>

Clean Fuels

Low Carbon Fuel Standard:

Pew Center on Global Climate Change, U.S. States & Regions

<http://www.pewclimate.org/states-regions>

Renewable Fuel Standard

Department of Energy, Office of Energy Efficiency and Renewable Energy, Alternative Fuels & Advanced Vehicles Data Center

<http://www.afdc.energy.gov/afdc/laws/search>

National Renewable Energy Laboratory, State Clean Energy Practices: Renewable Fuel Standards, July 2008

<http://www.nrel.gov/docs/fy08osti/43513.pdf>

Smart Growth & Transit

Smart Growth Policies (State Agencies and Growth Management Acts)

Washington University School of Law, Land Use Law, Growing Smart Statutes

http://law.wustl.edu/landuselaw/GrowingSmart_Statutes.html

Smart Growth America, Driving Down VMT

<http://www.smartgrowthamerica.org/documents/smartgrowthclimatepolicies.pdf>

American Council for an Energy Efficient Economy (ACEEE), Transportation System Efficiency Policies

<http://aceee.org/node/3010/all>

VMT Reduction Target

National Cooperative Highway Research Program, Transportation Research Board

<http://www.climatestrategies.us/ewebeditpro/items/O25F22351.pdf>

Telecommuting Policies

Boston College, Sloan Work and Family Research Network, Telework

http://wfnetwork.bc.edu/topic_extended.php?id=4&type=3&area=All

Connecticut Commission on Aging, Workplace Flexibility Initiatives by State
<http://www.cga.ct.gov/coa/PDFs/Reports/workplace%20flexibility%20table%201.15.09.pdf>

SuiteCommute, Telework Tax Incentives and Reimbursements
<http://www.suitecommute.com/about-2/monthly-newsletters/apr-tax-incentives/>

State Transit Prioritization:

Federal Highway Administration, Highway Statistics 2008
<http://www.fhwa.dot.gov/policyinformation/statistics/2008/mt1a.cfm>

<http://www.fhwa.dot.gov/policyinformation/statistics/2008/sf21.cfm>

<http://www.fhwa.dot.gov/policyinformation/statistics/2008/mf3.cfm>

<http://www.fhwa.dot.gov/policyinformation/statistics/2008/mt1b.cfm>

<http://www.fhwa.dot.gov/policyinformation/statistics/2008/index.cfm>

Flexed ARRA Funds for Transit

Smart Growth America, The States and the Stimulus
<http://blog.smartgrowthamerica.org/2009/06/29/120-days-in-sga-reviews-the-stimulus-spending-on-transportation/>

Private communications with Department of Transportation

In order to calculate a solutions ranking of the 50 states, NRDC started by assigning a value of either a half point, one point, or two points to each action in the table that a state currently takes. Actions with a bigger impact on oil dependence received more points:

- **2 points:** Low-Carbon Fuel Standard
- **1 point:** Low-Carbon Fuel Standard under development, vehicle miles traveled (VMT) reduction target, Renewable Fuel Standards
- **0.5 point:** Incentives for hybrids and plug-ins, State fleet efficiency requirements, Idling restrictions, State-sponsored grants for R&D pertaining to clean fuel or clean cars, Telecommuting policies, Coordinating state agencies for development, Growth Management policies
- **0.25 point:** Idling restrictions under development

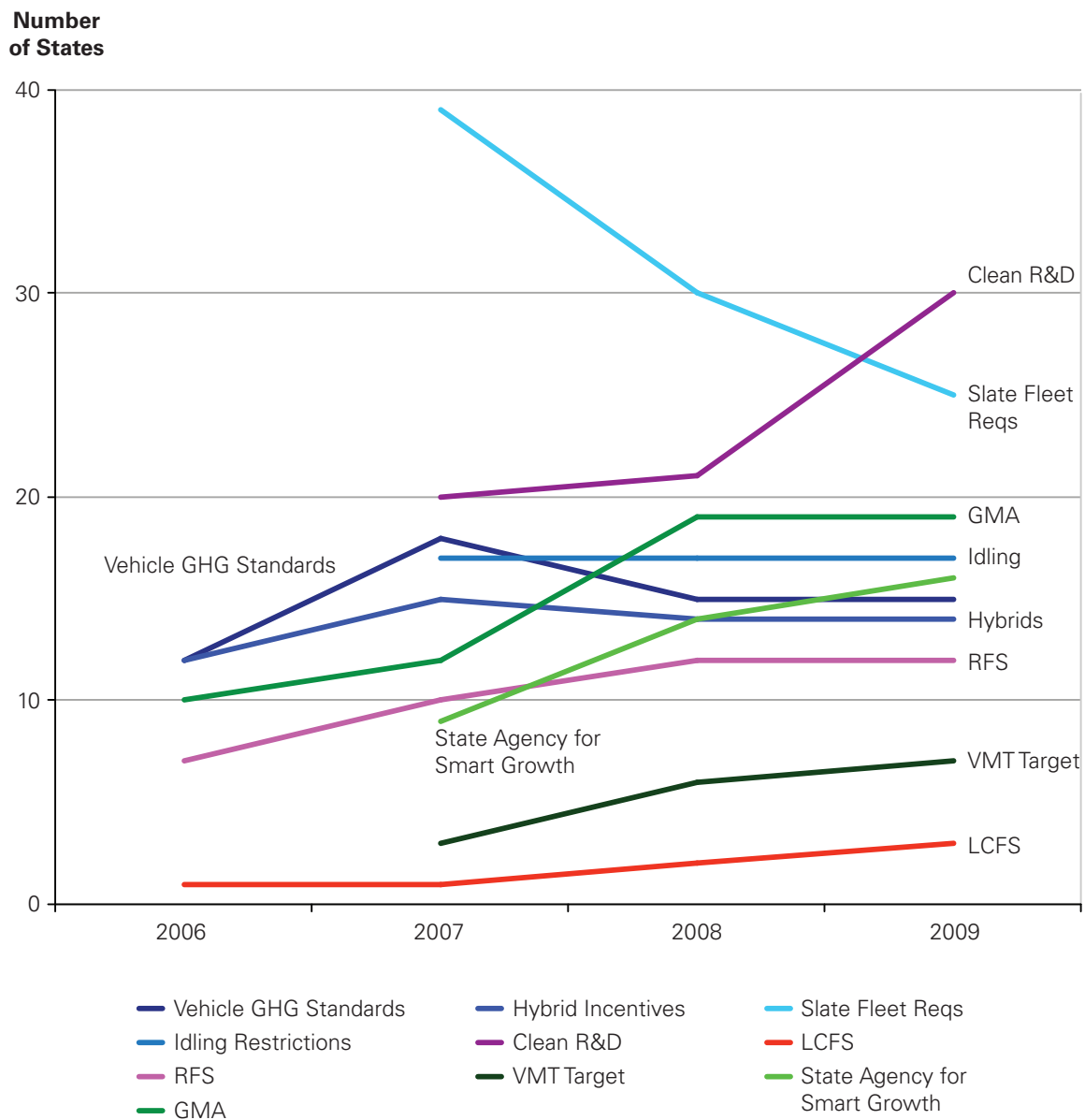
NRDC then added a fraction of a point to states' scores based on how their transit prioritization compared to the highest state's transit percentage (Connecticut: 60.58 percent). In other words, Connecticut's transit prioritization of 60.58 percent was given a value of 1 point, and all other states were given a value proportional to this score. For example, Colorado's transit spending percentage of 15.41 was divided by Connecticut's 60.58; the resulting 0.025437 was added to Colorado's total points.

NRDC added a similar fraction for the actual amount of ARRA funds flexed to transit as compared to the highest state (Oregon: 16.12 percent). So, Oregon's 16.12 percent was given a value of 1 point, and all other states were given a value proportional. For example, North Carolina's flexing of 0.70 was divided by Oregon's 16.12; the resulting 0.043424 was added to North Carolina's total points.

APPENDIX 2

Policy Trends

For informational purposes, the chart below traces the number of states credited with a given policy solution to oil dependence in the NRDC reports over the past few years. Further analysis on the reasons underlying these trends has not yet been done.



Endnotes

- 1 Energy Information Administration, *World Proved Crude Oil Reserves*, February 2009, at <http://www.eia.doe.gov/pub/international/iealf/crudeoilreserves.xls>; Total Consumption of Petroleum Products, 2008, at <http://tonto.eia.doe.gov/cfapps/ipdbproject/IEDIndex3.cfm?tid=5&pid=54&aid=2>
- 2 Energy Information Administration, *U.S. Crude Oil Supply & Disposition*, updated July 29, 2010 http://tonto.eia.doe.gov/dnav/pet/pet_sum_crdsnd_k_a.htm
- 3 Energy Information Administration, *Annual Energy Review 2009*, Transportation Sector Energy Consumption, http://www.eia.doe.gov/aer/pdf/pages/sec2_10.pdf
- 4 Energy Information Administration, *Annual Energy Review 2009*, Transportation Sector Energy Consumption, http://www.eia.doe.gov/aer/pdf/pages/sec2_10.pdf
- 5 For more details, see the Methodology section.
- 6 U.S. Energy Information Administration, *Gasoline Explained: Factors Affecting Gasoline Prices*, http://www.eia.gov/energyexplained/index.cfm?page=gasoline_factors_affecting_prices
- 7 This standard is complementary to the goals set in California's Global Warming Solutions Act of 2006 (Assembly Bill 32). Under this act, California, the world's 12th largest carbon emitter, will cap GHG emissions at 1990 levels by 2020, which is approximately a 25 percent reduction in emissions.
- 8 State of Massachusetts, Executive Office of Energy and Environmental Affairs, "Clean Energy Biofuels Act", http://www.mass.gov/?pageID=eoeecaterminal&L=4&L0=Home&L1=Energy%2c+Utilities+%26+Clean+Technologies&L2=Alternative+Fuels&L3=Clean+Energy+Biofuels+in+Massachusetts&sid=Eoeea&b=terminalcontent&f=eea_biofuels_biofuels_act&csid=Eoeea; "11 Eastern States Commit to Regional Low Carbon Fuel Standard", Environment News Service, Jan. 6, 2009, <http://www.ens-newswire.com/ens/jan2009/2009-01-06-091.asp>
- 9 Oregon House Bill 2186, <http://www.leg.state.or.us/09reg/measpdf/hb2100.dir/hb2186.a.pdf>; State of Oregon, Gov. Ted Kulongoski, "Governor Kulongoski signs climate change legislation into law," Press Release, July 22, 2009, http://www.oregon.gov/Gov/P2009/press_072209.shtml
- 10 David Crane and Brian Prusnek, *The Role of a Low Carbon Fuel Standard in Reducing Greenhouse Gas Emissions and Protecting Our Economy*, California Office of the Governor. 2007.
- 11 Massachusetts, 2008 Session Laws, Chapter 206, Section 3, <http://www.malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter206>
- 12 HB 2815, 2008.
- 13 HB 2001, 2009.
- 14 The 12 new Planning Visions address: quality of life and sustainability, public participation, growth areas, community design, infrastructure, transportation, housing, economic development, environmental protection, resource conservation, stewardship, and implementation approaches.