

Mobility Choices for a Secure America

Oil's Strategic Status Threatens Our Security

In recent years it has become increasingly apparent that America's dependence on oil undermines its national security. It weakens U.S. international leverage, it entangles America with unstable or hostile regimes and it prevents the U.S. from accomplishing its foreign policy objectives. Over-reliance on oil burdens the U.S. military, it undermines combat effectiveness, and it exacts a huge price tag—in dollars and lives. Furthermore, oil dependence undermines economic stability. Every economic recession since World War II was preceded by an oil shock.

The national security and economic vulnerabilities posed by oil dependence stem from oil's status as a strategic commodity second to none. Oil underlies the global economy and, indeed, the American way of life. Transportation is dominated by private vehicle road travel as this is in most cases the only convenient option, and at the same time oil has a virtual monopoly over transportation fuel. In order to strip oil of its strategic status, it is necessary to remove barriers to competition not only amongst transportation fuels but also among transportation modes. In other words, we not only need **fuel choice** through vehicles that support alternatives but we also need **mobility choice**.

The Problem: U.S. Transportation Policies Stifle Competition, Promote Inefficiency

Our transportation system is highly inefficient, both in terms of oil use and in terms of meeting consumer needs. This is in part due to a complex system of resource misallocations and perverse incentives that thwart competition and hide costs. When it comes to transportation options, Americans don't get what they pay for and don't pay for what they get.

Oil-fueled private vehicle travel is subsidized in several ways:

- The real cost of highway trips is not paid per mile at point of use but rather partially at the pump through a federal gas tax and partially through income tax, so people can not make informed travel choices based on full pricing information per trip.
- Uneconomic infrastructure is charged to the taxpayer as a part of political pork:
 Highway Trust Fund moneys are often used wastefully for political favor making,
 subsidizing infrastructure that could never be economically justified.
- The military cost of defending our access to oil is not paid at the pump but indirectly through income tax.
- Auto insurance premiums that are set without regard to the number of miles driven essentially further a system where low mileage drivers cross subsidize high mileage

drivers, further eliminating an option for those who would prefer to save money on insurance by driving less from doing so.

Taxpayers [...] shouldn't have to pick up the tab for other people's preferences for suburban living, yet that has been the effect of the federal interstate highway program since the mid-1950s. The construction of free beltways and expressways has subsidized suburban development. The "correct" or efficient amount of suburban development is the amount that consumers are willing to pay for so long as they bear the incremental costs of land acquisition and expressway construction." **Howard Wood**, CATO, How Government Highway Policy Encourages Sprawl

Public transit is often inefficient, inconvenient, and uneconomic since:

- Low-load routes, which in some cases waste rather than save any oil by carrying very few passengers are propped up by taxpayer dollars at the expense of better service on high-load routes. High-load routes are thus more expensive, less frequent or less convenient than they should be because they carry the burden of low-use routes. And public transportation effectiveness is often difficult to gauge at all since the federal government stopped collecting load-factor data. This puts larger, established transit systems at a disadvantage when it comes to federal transit fund allocations even if they would serve the most people per tax dollar because load factors are ignored.
- Political favor making designed to "bring home the bacon" rather than optimize for oil
 savings results in some transit oriented Highway Trust Fund monies being allocated for
 economically inefficient and thus non-oil saving projects. Historically, this has translated
 into difficulty securing operating funds for transit, because preserving or increasing the
 service along existing lines-often the most economically efficient option is not as
 politically attractive as funding sometimes uneconomic capital expansion projects.

There is a perception that transit is a transportation choice that must be heavily subsidized to exist. As the Chinatown bus lines story demonstrates, however, this need not be the case. Economic, profitable and extremely frequent private bus lines run between major East Coast cities charging a per passenger fee of \$10-\$20. The buses run full so, unlike frequently empty subsidized buses, they save oil as compared to private vehicle travel. Their profitability stems from flat, efficient organizational structure and by their high load factors coupled with frequent, convenient, and quality service passengers find worth paying for.

Other transportation inefficiencies:

- Connections between modes are lacking, for example airports are often not accessible by public transportation and ports could be better connected to surface transportation routes.
- Improvements in operating efficiency for both highways and transit, such as increased use of technology to improve traffic flow which would save Americans time, money, and oil do not benefit from a robust strategic investment plan.

How to Move to a Competitive Market

In order to strip oil of its strategic status by opening the door to more competition in the transportation sector, several policy goals must become top priority in federal transportation legislation. In this blueprint, we focus on the lack of competition amongst transportation modes.

The following principles would move us toward a more modally competitive transportation market:

- 1. Align price signals to consumers closer to a full and transparent reflection of costs: This means, as much as possible, pricing goods so users pay true costs and are not subsidized by or subsidizing others. This is not an inflexible principle given the dramatic underinvestment in mobility options. However, to the extent there are cross-subsidies, they should be transparent and regularly evaluated for effectiveness.
- 2. End federal bias for any particular transportation mode by basing investments on performance criteria and allocating costs based on use (for example, heavy trucks should be charged based on the disproportionate amount of damage inflicted on roads and bridges, and transit investments should be viewed more favorably should they provide modal choice to a very large number of people).
- 3. **Push responsibility down to the metropolitan level** where most traffic and oil-savings potential is located with expanded accountability for performance.
- 4. Aggressively deploy technology to improve operations in each transportation modes, as well as in their intermodal connections, enhancing efficient use of taxpayer money.

These principles translate into the following policies:

1. Ensure the Price of Fuel Better Reflects Oil's Security Impact

To better reflect the hidden costs of oil, primarily those associated with its national security impact, an oil security fee should be levied either per barrel or at the pump. This fee would send a more accurate signal to consumers about the real cost of their gallon of gasoline or diesel. Reflecting the hidden costs of oil at the pump will enable consumers (assuming modal choices exist and vehicles are platforms on which fuels can compete) to make more economically informed transportation choices.

2. Deploy "HOT" lanes and Congestion Pricing

Highway Trust Fund financing for new highway, bridge and tunnel infrastructure should be to the extent possible shifted to user fees comprised of tolls, incorporating congestion pricing where appropriate. A "Bridge to Nowhere" would be more difficult to build if it had to be paid for by tolls and justify itself economically. Research shows a host of other benefits of road pricing, from depoliticization of investments by tying them to demand to more effective project financing.

The National Highway System could be opened up to pricing as an option when congestion reaches a certain threshold, and grants or other assistance can be provided as an incentive for localities to exercise this option. Additionally, federal-aid roads in urban areas should be tolled to the extent possible with the objective of becoming self sustaining.

3. Allocate Transit Dollars to Optimize Oil Savings

The transit routes that have the highest load factors save the most oil. Thus taxpayer moneys allocated to transit should go to capital improvements that would:

- Improve service on, and recapitalize to maintain a state of good repair, existing high-load routes meaning more frequent service during peak usage hours and reduced travel times with an eye toward maintaining a consistently high-load factor.
- Add new routes that are expected to be consistently high-load.

In terms of cost-effectiveness, bus rapid transit (BRT) — as demonstrated masterfully in cities such as Bogota (Colombia) and Curitiba (Brazil) — is a winner. Travel demand patterns have changed, and will continue to change, so building static or inflexible systems could simply result in lower utilization and therefore investment returns. And compared to heavy or even light rail projects, BRT costs less and takes less time per mile to build, and operations costs are also lower. It can also offer flexibility in the service it provides, fitting into a variety of urban and suburban environments since it can run on highways, streets or even highway medians. To attract riders, systems can be designed with clean, comfortable, fuel-efficient, buses that travel at high speeds down a dedicated right-of-way, with at-grade boardings at sleek shelters along the route. There are almost 20 cities in the U.S. with bus rapid transit (www.nbrti.org); every large and even medium metro area should deploy this cutting-edge transit infrastructure option.

Specific policy recommendations for boosting BRT infrastructure investments include:

- Direct the Federal Transit Administration to create a new national BRT Strategic Plan.
- Provide free BRT access to roadways in private concession contracts.
- Expand eligibility of Surface Transportation Program (STP) funds for BRT support activities such as land assembly, utility relocation and other incentives for private development near stations.
- Require priority BRT access to HOT lanes.

4. Increase Insurance Choice

Today, low-mileage drivers are forced to subsidize risk for high-mileage drivers, again distorting price signals for driving. Legislation should lift state regulations that prevent insurance companies from offering consumers the option of pay-as-you-drive insurance. Federal discretionary dollars should be used aggressively to finance research by the Transportation Research Board as well as major experiments with this concept.

5. Transit Vouchers: Mobility Choice for Low-Income Households

To encourage competition and to allow transit agencies to become more self-sustaining, subsidies should be laser focused on helping the people that actually need help. To this end, transit vouchers could be provided for low-income households. This policy would help transit agencies recover more revenue from the farebox by giving them the chance to charge higher fares for consumers who can afford it. And similar to school vouchers, they could be redeemed with either existing transit agencies or entrepreneurs running private sector buses, shuttles, vanpools and jitney buses, facilitating choice for low-income consumers and a more competitive market. This would also spur public transit agencies to focus resources as effectively as possible (for example, by increasing support for high-load routes). New federal legislation could provide incentives for states and communities to enable more competition by changing regulations that thwart private sector entrants and establishing transit voucher programs.

6. Unburden the Trip Not Taken

Beyond competition among transportation modes, telecommuting is becoming increasingly pervasive. The choice to take the broadband highway to work, shop or to run errands saves more oil than any mode of transport. While telecommuting is on the rise, there are ways that policy can accelerate the trend. First, government should set a good example by encouraging, as appropriate depending on job description and citizen needs, telecommuting and a compressed workweek of its workforce. Next, policymakers should ensure that most interactions with the local, state, and federal government can be handled online rather than requiring an in person trip. Tax incentives should be provided for telecommuting setup and maintenance costs, similar to the tax free benefits currently provided for other workplace transportation costs (parking and transit use).

Other policies may be in order to increase the use of telecommuting — and of videoconferencing in lieu of business air travel — by addressing barriers or disincentives. Given the oil-savings potential, Congress should direct the Transportation Research Board or the General Accounting Office to perform a study of the issue. States should maintain the current no internet sales tax policy as this facilitates online shopping, and the Congress should ensure individuals are not penalized by state taxes for telecommuting across state lines.

7. Return Gas Tax Revenue to Areas with the Most Traffic and Oil Savings Potential

Our nation's metropolitan areas are hosts to most of the nation's population, employers, GDP and traffic. They are therefore logical recipients of a large proportion of federal gas tax receipts, as recognized by both the Bush Administration and Democratic Transportation Committee Chairman Rep. James Oberstar, who both included substantial metropolitan mobility programs in their proposals for a new transportation program. Any new program should send a much larger proportion of gas tax receipts — either through a brand-new program or through the existing Surface Transportation Program — directly to metropolitan regions in a process referred to as "suballocation," with appropriate conditions to maximize efficient and transparent use of the funds. One condition could be to focus support for transit operations on high-load routes.

8. Liberalize Local Land-Development Rules

Currently, regulatory barriers often stand in the way of neighborhood designs that allow minimal driving, i.e., by mixing land uses (commercial, residential) and offering a variety of housing types. Demographic research suggests that aging Baby Boomers and rising Millenials are driving demand for alternative neighborhood structures, and recent gasoline price spikes and the housing market collapse appear to have given that demand an added boost. Regardless of the cause, what often bars consumers from products they prefer is government regulation, with 78.2 percent of developers in a 2001 survey identifying that as a "significant barrier" to expanding mixed use development, and 60 percent naming it the "most significant" obstacle. Government needs to get out of the way, and eligibility of municipalities for certain federal transportation funds should be conditioned on liberalization of rules to meet market demand. Specifically, the wildly oversubscribed Transportation Investment Generating Economic Recovery (TIGER) program could be authorized in a new program, with a focus on grants for infrastructure projects that municipalities can opt to participate in by liberalizing zoning regulations.

9. Deploy Smart Traffic Management

Roads and transit lines across the country should be retrofitted with the latest technology available to improve flow, and new systems should be required to include such technology, including:

- Ramp metering
- Variable message signs
- Latest incident management techniques
- Latest road weather management techniques
- Smart signal control, including priority access through intersections for transit
- Enhanced traveler information systems
- Vehicle Infrastructure Integration programs

The new program should include a Strategic Technology Plan for rapid deployment of these commonsense components. And making them eligible for more funding under new programs and/or the existing STP program would help accelerate deployment. Moreover technology investments would benefit from analysis of their cost-effectiveness by the Department of Transportation — they tend to score very well, but have little political support.

10. Deploy Electric Rail if Justified by Cost Efficiency and Oil Displacement Potential

While we generally favor greater use of BRT lines and technology, in some regions it may also be cost-effective to construct rail lines. Under the right circumstances, and developed and implemented well, such lines can save oil too. Transit agencies should be required to assess cost efficiency and oil savings as part of the justification for receipt of federal funding for such projects. New programs which provide funding for rail, and existing ones such as the High Speed Rail initiative, the TIGER program and the Transit New Starts and Small Starts programs should include criteria that rank projects highly if they are energy-efficient in and of themselves and/or they improve the overall energy-efficiency of the overall transportation network.