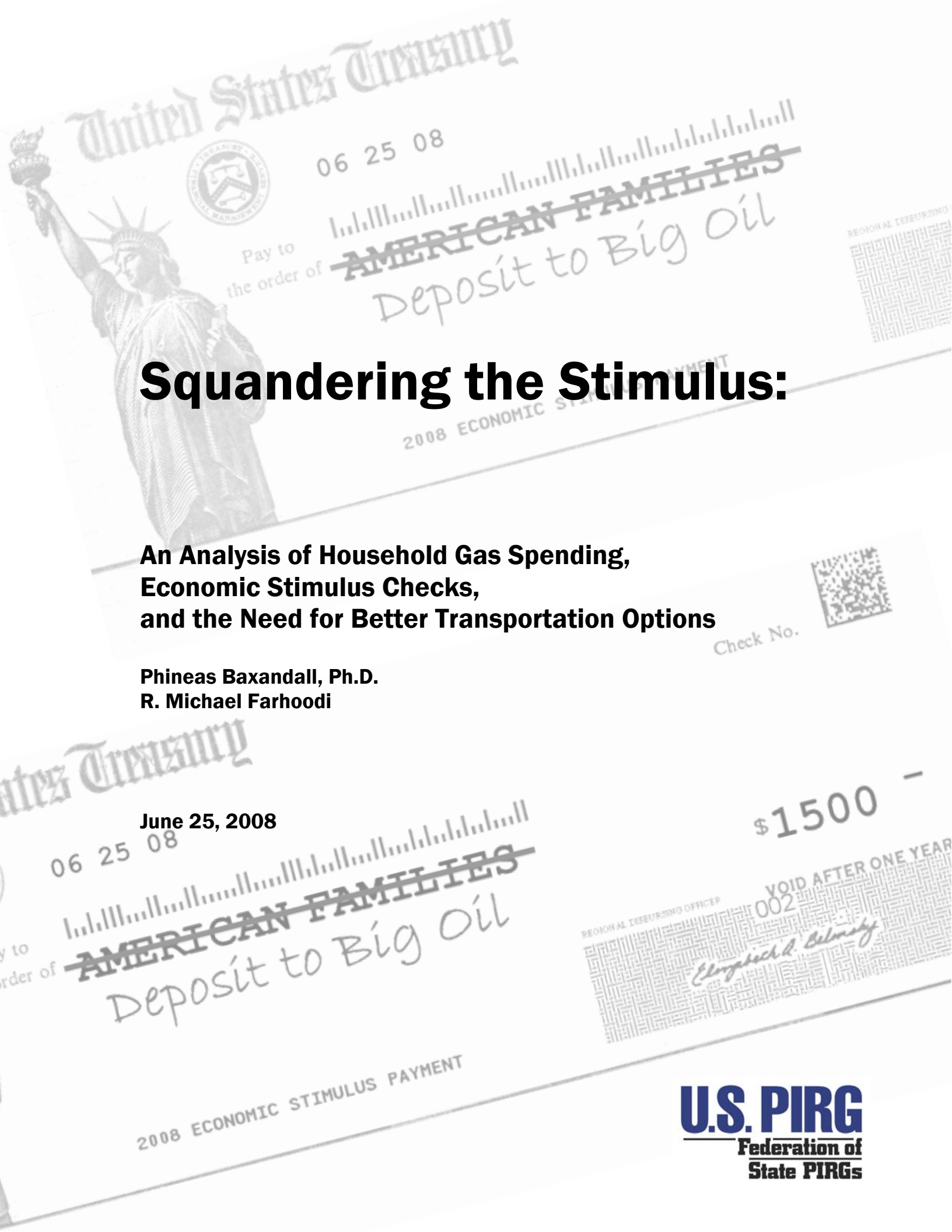

Squandering the Stimulus:

An Analysis of Household Gas Spending, Economic Stimulus Checks, and the Need for Better Transportation Options

Phineas Baxandall, Ph.D.
R. Michael Farhoodi

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U.S. PIRG
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Executive Summary

America's dependence on oil has become increasingly painful. Two thirds of oil in the United States goes to transportation, with the largest share consumed by cars and trucks. As the rising price of gasoline makes driving more expensive, Americans have sought alternatives by driving a little less and riding public transportation more.

Unfortunately, government policy does too little to help Americans drive less. Energy experts generally agree that the era of cheap gas is over. Scientists likewise agree that road-based global warming pollution must be reduced. But lawmakers have not taken enough steps to help Americans consume less at the pump. On the contrary, overall government policies continue to encourage more driving at the expense of alternatives, leaving Americans poorer, stuck in worsening traffic, and emitting dangerous levels of global-warming pollution.

Nothing illustrates how the lack of transportation options hurts consumers and our economy more than the fact that, since approval of the tax rebates in February, Americans on average have already spent the amount of their stimulus checks at the pump. The standard stimulus rebate check for American families with a joint filing couple and a child is $1,500. As of this week, the average family household will have already spent over $1,500 at the gas pump since February 13th when President Bush signed the tax rebate checks into law.

The situation is akin to families signing over their rebate checks to big oil companies like Exxon Mobil or sending them to oil-producing countries like Saudi Arabia.

We can reduce our crippling dependence on oil through long-term solutions that will make it easier for Americans to drive less. Modern buses, light rail, commuter rail and other forms of transit more efficiently move passengers with less fuel. Transit also reduces traffic congestion and encourages more compact development patterns which, in turn, further reduce the amount Americans must drive.

Existing public transportation already reduces America's oil dependence. Analysis by U.S. PIRG shows that net oil savings from public transportation totaled 3.4 *billion* gallons in 2006, the last year for which full data on transit agency and ridership is currently available. These oil savings are enough to fuel 5.8 million cars for an entire year and to save about $13.6 billion in gasoline at today's prices.

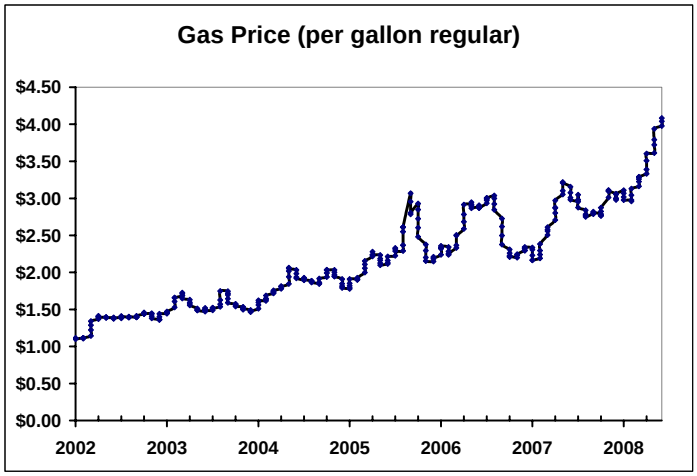
Comparing spending on transportation in neighborhoods with different access to rail and bus routes underscores the gas-saving benefits of public transit, according to newly released analysis by the Center for Neighborhood Technology (CNT) as part of a Brookings Institution project. Based on analysis of 2000 Census data in 52 metro areas, neighborhoods with the best access to transit routes spent an average of $728 monthly on all transportation costs, including gas, insurance, upkeep, and transit fares. Households in communities with the least access to transit, by contrast, spent an average of $925 per month.

Public transit solutions can do far more. At present, underfunded transit agencies are struggling to keep up with the record volume of riders. Despite the success of new rail lines and bus routes around the country, a long line of new transit projects remains stuck on the drawing board due to lack of funding. Federal, state, and local governments must invest in solutions to oil dependence through more and better public transportation.

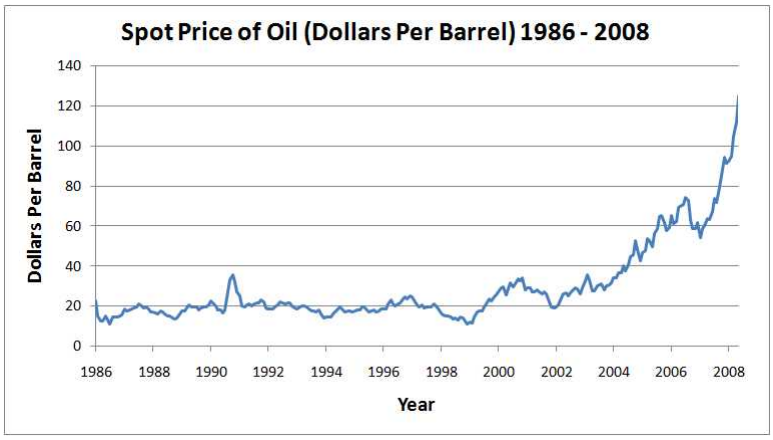
The Rising Costs of Driving

Even before the recent rise in gas prices, driving was becoming increasingly costly for American households. Most directly, Americans pay rising prices at the pump for what President Bush has called our "addiction to oil." Traffic congestion also worsens each year, imposing growing costs in the form of lost time, fuel and productivity. The transportation sector also represents the largest and fastest source of dangerous global-warming pollution.[1]

For consumers, vehicle and other related expenses already accounted for 17 percent of household expenditures in 2005.[2] This is more than was spent on health care, and more than spent on food and clothing combined.[3] Vehicle-related expenses for residents in more automobile-dependent metro areas reached as much as 25 percent of their incomes, although residents in areas with robust transit networks spent approximately 10 percent of their income.[4]



Consumers in the first half of 2008 have seen acceleration in the long-term trend toward higher prices at the pump. Retail prices at the pump now average over $4 per gallon nationally, compared to less than $1.15 per gallon at the end of 2001.[5] An average household spent a little over $60 weekly on gas this February, but currently spends over $90 each week. Households using premium gas or those using mid-grade in the many states where gasoline must be reformulated to meet EPA standards already spend about $100 per week on gas.[6]



These prices are the result of long-term trends in which world demand for oil outstrips limited supply. The price of oil on world markets has increased six-fold over the past six years.[7] Goldman Sachs predicts that by 2011 oil may reach $200 per barrel with prices topping $6 per gallon at the pump.

On top of the direct costs of oil dependence, the traffic congestion generated by driving imposes additional costs, especially during peak commuting hours. These costs have increased steadily, according to the Texas Transportation Institute, which produces the

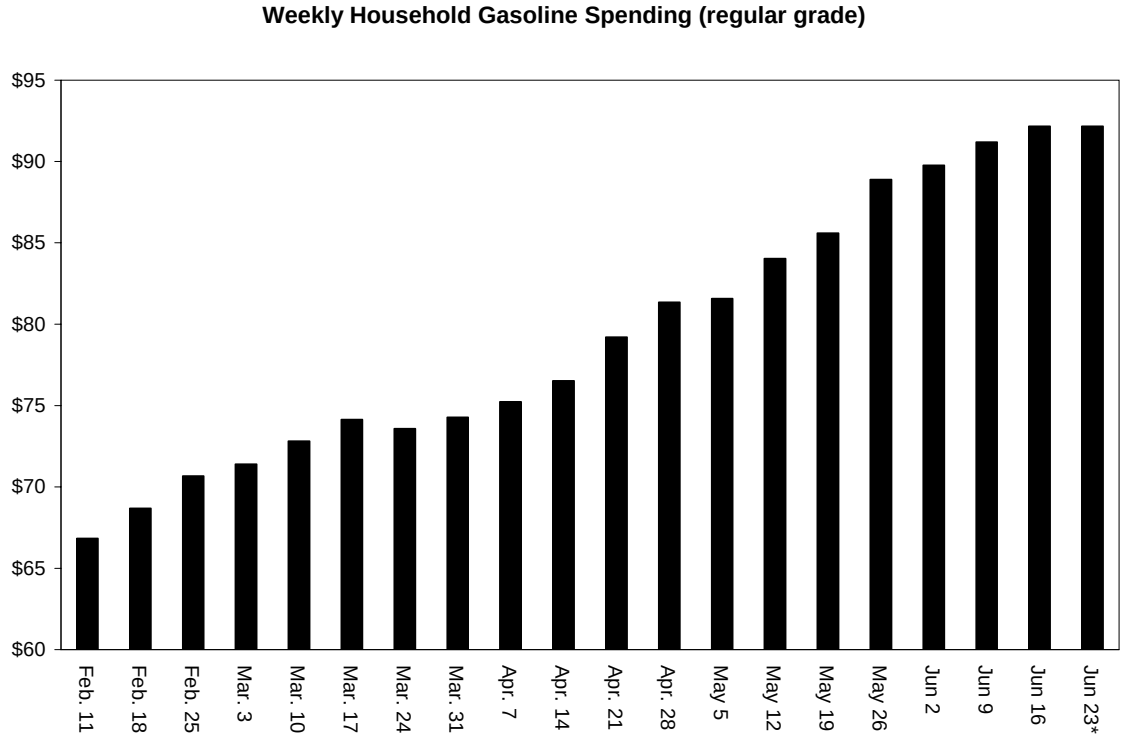
most widely used set of estimates on congestion. Calculating the average value of lost time, fuel, and productivity from traffic delays for a peak-hour traveler, they find that the cost of traffic delays have increased from an average of $129 per peak-hour traveler in 1982 to an average of $707 in 2005, the most recent year for which their data is available.[8] As a variety of studies have shown, constructing new and expanded highways generally provides only temporary congestion relief because more lanes and routes induce greater traffic volume over the longer term.[9]

Snapshot: Tax Stimulus Squandered on Rising Cost of Driving Instead of Invested in Long-Term Alternatives

A snapshot of recent consumer spending illustrates the futility of confronting the pain of high gas prices without providing better alternatives to reduce the amount Americans drive. In response to the faltering economy, brought about partly because of higher oil prices, Congress and President Bush agreed on the Economic Stimulus Act of 2008 as a package of policies intended to jumpstart the economy.

Central to this package are tax rebate checks to consumers. This economic stimulus approach was chosen with the hope that consumers anticipating this windfall would increase their spending on new goods and services. The U.S. Treasury began the process of sending out 130 million checks to American households at the beginning of May and expects to send the bulk of them by early July. For qualifying families, the base tax rebate amount is $1,500 for a joint-filing couple with a child or for a single parent with three children.[10]

But instead of new consumer spending all going all to jumpstart growth, much of the stimulus has been deflated by high-priced gas. In fact, this week is an important milestone because it marks the point at which the average household has already spent approximately $1,500 on gas since President Bush signed the Economic Stimulus Act of 2008 on February 13th. This is the base sum that would be received by a joint-filing couple with a child or a single parent with three children. In other words, families across the country have spent more than the amount of their stimulus check on gas since the program became law – long before all of the checks have been put in the mail and only 19 weeks since President Bush signed the stimulus plan into law.



The situation is akin to signing over our rebate checks to oil-producing countries like Saudi Arabia or handing them over to big oil companies like Exxon or Shell which have already seen record profits in recent years. Without longer-term solutions that make it easier for Americans to drive less, any consumer stimulus will largely go to high-priced gas.

Public Transportation Makes it Easier for Americans to Drive Less

Americans are acting exactly how economists predict people do when an activity becomes more expensive: they scale back on the more expensive activity and find alternatives. Americans are clearly trying to drive less and take public transportation more. Last year was the first time since the end of the 1970's that Americans drove fewer miles than the preceding year. The total number of vehicle miles traveled in 2007 was 0.4 percent less than in 2006.[11] Transit ridership is at a fifty-year high and added almost 85 million additional trips over last year's level in the first three months of 2008 alone.[12]

Rising transit ridership already helps reduce America's dependence on oil. U.S. PIRG analysis shows that net oil savings from public transportation totaled 3.4 *billion* gallons nationally in 2006, the last year for which full data on transit agency and ridership is currently available. These oil savings are enough to fuel 5.8 million cars for an entire year and to save about $13.6 billion in gasoline at today's prices.

The savings from rail and bus lines are also evident when comparing household transportation spending in neighborhoods with different levels of access to public transit. Newly released analysis of 2000 Census data by the Center for Neighborhood Technology (CNT) as part of a Brookings Institution project makes these differences clear. According to that data, neighborhoods in 52 metropolitan regions across the country with the best access to transit routes spent an average of $728 monthly on all transportation costs, including gas, insurance, upkeep, and transit fares. Households in neighborhoods with the least access to transit, by contrast, spent an average of $925 per month.

The rapid rise in transit ridership mirrors support for public transportation in public opinion. According to a poll at the end of 2007, 53 percent of respondents—including 47 percent of solo car commuters— said that they would take mass transit if it were easily available where they live and work.[13] Similarly, an October 2007 poll shows 75 percent of Americans surveyed believed that improving public transit and building communities that require less driving are the best solutions for reducing traffic, while only 21 percent—one in five—believed that building new roads was the best solution.[14]

Reducing Oil Dependence Will Require Investment in Public Transportation

America's crippling dependence on oil is a long-term problem that requires long-term solutions. Only a minority of Americans currently have satisfactory access to public transit.[15] The lack of convenient alternatives to driving means that Americans are more vulnerable to high gas prices and that future attempts to jumpstart consumer spending will be diluted.

The tax rebate program will cost the Treasury $168 billion. By contrast, the four-year total of federal spending on new public transportation projects through 2009 is only $6.6 billion. Helping Americans to drive less will require more aggressive investment in public transportation.

States and localities must do their share by fully funding existing transit agencies and investing in new rail lines, rapid bus service, pedestrian walkways, bicycle lanes, and other infrastructure that makes it easier for Americans to drive less. Bonds and other forms of long-term financing and dedicated revenue will be necessary to make possible sizeable investments that will continue to pay off over the long term.

For Congress, the next six-year transportation bill is expected to be signed in 2009 when authorization for the current transportation funding system expires. Lawmakers should take this opportunity to reduce America's oil dependence by accelerating trends toward increased use of public transportation. At a minimum, Congress should:

- Fund the backlog of transit projects that remain stuck on the Federal Transit Administration's New Starts list. States have already committed a majority of the necessary funds and only require federal action to move these projects into action.

- Match federal funding for the construction of transit projects at no less than the share the federal government does for highways – as opposed to the current practice in which highways receive far higher matching amounts.
- Catch up to our economic competitors by building the kind of high-speed bullet trains that already link cities in Europe and Asia, saving oil and relieving strain on our air travel as well as highways.

Additional funding for public transit would also make sense if Congress passes another economic stimulus program. Dozens of projects are already queued up for funds. These projects are ready to go move forward quickly and would leverage additional stimulus through state matching funds. Another effective use of economic stimulus funds would pay for reduced transit fares, thus both encouraging increased transit ridership and simultaneously supporting this alternative to driving.

All of these investments will require far-looking commitments by lawmakers. But we cannot afford to continue to squander spending in ways that do not address the long-term problem.

Methodological Appendix

This report estimates the spending of American households on gasoline derived from official data reports on vehicle miles of non-commercial vehicles and the after fuel efficiency of the passenger vehicle fleet during the period since President Bush signed the Recovery Rebates and Economic Stimulus for the American People Act of 2008 into law on February 13, 2008 until the release of this report on June 25, 2008.

We used an estimate of average weekly vehicle miles traveled (VMT) using a 26-week estimate of VMT based on first quarter 2008 data and an estimate of second quarter 2008 VMT derived from 2007 second quarter VMT reduced by the same 2.3 percent as observed in the first quarter of 2008 compared to first quarter of 2007. Data was provided by the Federal Highway Administration.[16] It was estimated using second quarter 2007, reduced by 2.3 percent, the same quarterly reduction as witnessed in the first quarter rate for 2008. To more accurately estimate *household* VMT, as opposed to including commercial VMT as well, the 2007 VMT data was then adjusted to subtract vehicle miles from trailers and other commercial freight trucks. This estimate was based on FWHA estimates of commercial truck data in 2006 the latest year such detailed statistics are available.[17]

The adjusted VMT estimate was then divided by the number of American households using the most recent Census estimates from 2006.[18] The quotient represents the number of average weekly miles driven per household. This number was divided by the average fuel economy for the fleet of cars, SUVs, vans and pickup trucks, based on the most recent 2006 data, to arrive at the total number of household gallons of fuel consumed per week.[19]

The Department of Energy releases national average gasoline prices every week. They collect these figures by calling gasoline stations at 8:00 in the morning every Monday.[20] We used this price estimate to represent the weekly average. These weekly collected retail gasoline prices collected from February 11-June 9, 2008 were each multiplied by the calculated household gallon/week figure to reach the average amount each household spent on gasoline. The time period includes February 11-12 and June 26-29, which fall outside the report timeframe but within the weekly price estimates. Therefore consumption for these weeks was adjusted proportional to the number of days. At the time of press, gasoline retail prices had not been released for the weeks of June 16 and 23. Therefore we conservatively projected those collections to be identical to the June 9 collection price, which was $4.039, to estimate how much households would have paid for gasoline at the release of the report.

Estimates for the number of net gallons saved by use of public transportation includes consumption by transit agencies as reported in *A Better Way to Go: Meeting America's 21st Century Transportation Challenges with Modern Public Transit*, which includes a full discussion of methodology.[21]

Estimates of household spending according to neighborhood access to public transportation were calculated by the Center for Neighborhood Technology using their Housing and Transportation Affordability Index. Access to transit was derived by measuring a location's distance to transit, and the number of transit lines available in close proximity. The full research is available at http://htaindex.cnt.org. For further information, contact: Nicole Gotthelf, Director of Development and Communications, Center for Neighborhood Technology, (773) 269-4029.

Notes

[1] The transportation sector produces more carbon dioxide than the commercial, residential, or industrial sectors. See *A Better Way to Go: Meeting America's 21st Century Transportation Challenges with Modern Public Transit* (U.S. PIRG Education Fund, March 2008).
[2] Center for Neighborhood Technology, Surface Transportation Policy Project, *Driven to Spend: Pumping Dollars Out of Our Households and Communities*, June 2005.
[3] U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Expenditures in 2005*, February 2007.
[4] Center for Transit-Oriented Development and Center for Neighborhood Technology, *The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice*, Brookings Institution, 2006.
[5] Latter price is U.S. retail price based on all grades, all formulations, as reported by the U.S. Department of Energy. Price for last three weeks of December 2001 reported as $1.10, $1.11, and $1.14 respectively and rounded to nearest penny. See http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_history.html
[6] For specific grade and formulation prices, see http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/prices_by_region_by_grade_by_formulation.html . For a map of the many metro areas where non-attainment of Environmental Protection Agency standards requires use of reformulated gasoline, see http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/prices_by_region_by_grade_by_formulation.html
[7] See http://tonto.eia.doe.gov/dnav/pet/pet_pri_spt_s1_m.htm
[8] David Schrank and Tim Lomax, Texas Transportation Institute, *The 2007 Urban Mobility Report*, Sept 2007.
[9] For a review of available literature, see Todd Littman, "Generated Traffic and Induced Travel Implications for Transport Planning," *Institute of Transportation Engineers Journal*, Vol. 71, No. 4,, April 2001, pp. 38-47. See also updated version at http://www.vtpi.org/gentraf.pdf .
[10] Base stimulus checks amounts are $600 for single filers and $1,200 for joint-filing couples, plus $300 per minor child. Adults must have valid social security numbers and filed a tax return in 2007, with qualifying income above $3,000. Rebate checks are lower for single filers with wages over $75,000 and joint-filing couples with incomes over $150,000. Average household size was 2.61 members (Census, 2006). Average household spending during time period by our calculations was $1,518.31.
[11] http://www.fhwa.dot.gov/policyinformation/charts/07.cfm
[12] American Public Transportation Association, Ridership Report (June 2, 2008) at http://www.apta.com/media/releases/080602_ridership_report.cfm
[13] Zogby International, *Public Opinion and the Metro Economy: A Survey of American Attitudes on Community Issues, Local Government and a New National Direction*, January 2008, based on questions asked between November and December 2007.
[14] Public Opinion Strategies and National Association of Realtors, *The Key Findings From a National Survey of 1,000 Adults Conducted October 5, 7, 9-10, 2007*, downloaded from www.smartgrowthamerica/narsgareport2007/narslidesgraphics.pdf, 9 January 2008.
[15] *Public Transit in America: Analysis of Access Using the 2001 National Household Travel Survey*, Center for Urban Transportation Research (2007), found that 40 percent of U.S. households were within one-quarter mile of bus service, and only 10 percent of the population lives within one mile of rail transit.
[16] Quarterly Vehicle Miles of Travel (VMT) 1980 – 2008, FHWA, http://www.fhwa.dot.gov/policyinformation/charts/07.cfm Since VMT varies seasonally, it would have been inaccurate to use first quarter 2008 to estimate weekly averages for the whole period. Second quarter 2008 data was not available at the time of publication.
[17] Annual Vehicle Distance Traveled In Miles And Related Data - 2006 By Highway Category And Vehicle Type, FHWA, http://www.fhwa.dot.gov/policy/ohim/hs06/pdf/vm1.pdf
[18] 2006 American Community Survey, United States – Households and Families, US Census, http://factfinder.census.gov/servlet/STTable?_bm=y&-geo_id=01000US&-qr_name=ACS_2006_EST_G00_S1101&-ds_name=ACS_2006_EST_G00_
[19] *Public Transit in America: Analysis of Access Using the 2001 National Household Travel Survey*, Center for Urban Transportation Research, 2007.
[20] Weekly U.S. Retail Gasoline Prices, Regular Grade, DOE, http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_home_page.html
[21] www.uspirg.org/home/reports/report-archives/transportation/transportation2/a-better-way-to-go