

Is *Driving* Driving the Economy? Research Shows We Can Thrive More With Less Traffic

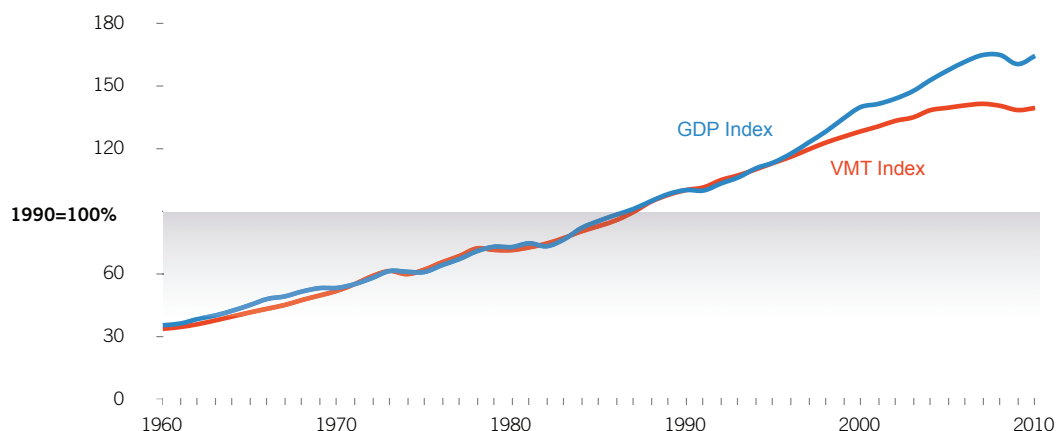
The Natural Resources Defense Council (NRDC) has examined the connection between traffic and economic development. What is the relationship between America's gross domestic product (GDP) and the amount Americans drive, or vehicle miles travelled (VMT)? The answer to this question is vital if we want to both revive a flagging economy and keep our air free of pollution. Fortunately, a look at recent trends and the relationships between VMT, GDP, and household income show that the amount we drive, in fact, does not drive economic growth. Therefore, cutting traffic and the pollution it creates is not a threat to our economic well-being.

In a vibrant economy, trade, manufacturing, and consumption generate demand for transportation. While most studies examine the relationship between energy and economic growth (how one can influence the other), only one study has made the claim that VMT actually causes economic growth.¹ This argument has serious implications—if Americans want less traffic, they must sacrifice economic growth, and if they want economic growth, they must accept more traffic congestion, and pollution.

THE “DECOUPLING” OF VEHICLE MILES TRAVELED AND GROSS DOMESTIC PRODUCT IN THE PAST 10 YEARS

As the figure below shows, the relationship between GDP and VMT has, historically, been quite strong. Rising incomes, cheap gas, and the growth of two-income households are just three broad economic trends that drove both more VMT and higher GDP.

HISTORICAL GROWTH OF TOTAL ON-ROAD VEHICLE MILES TRAVELED AND GROSS DOMESTIC PRODUCT



C. Kooshian and S. Winkelman, "Growing Wealthier: Smart Growth, Climate Change and Prosperity," Center for Clean Air Policy, 2011. <http://www.growingwealthier.info/>


Yet, the trend over the past 10 years has seen VMT and GDP diverge. This trend has continued into the first seven months of 2011, as VMT has been down 1.2 percent year over year (the lowest absolute amount of driving since 2004), while the GDP growth rate for the first half of 2011 was just revised *upward* to 1.7 percent year over year. This “decoupling” of VMT growth from GDP growth, and an overall plateauing of VMT overall, is a trend observed in other developed countries as well.²

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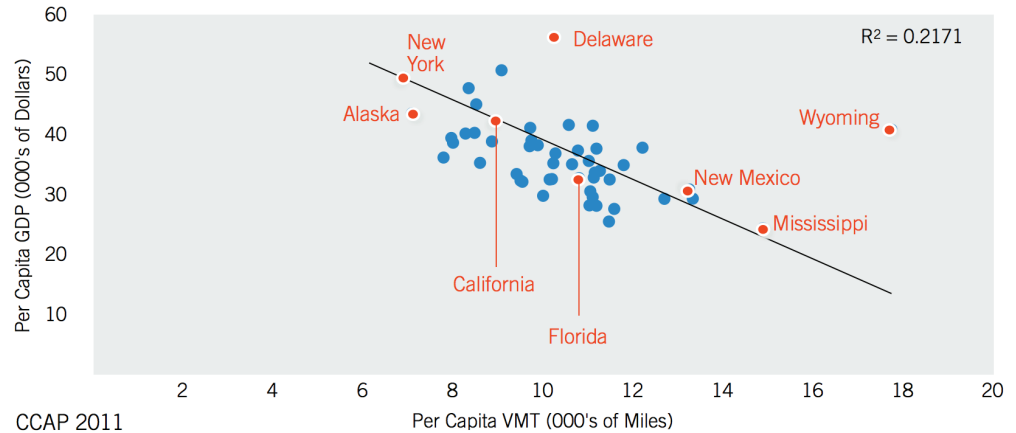


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When individual states are plotted with respect to VMT and GDP, the relationship actually trends away from a “VMT causes growth” conclusion, as states with higher GDPs have lower per capita VMT levels.

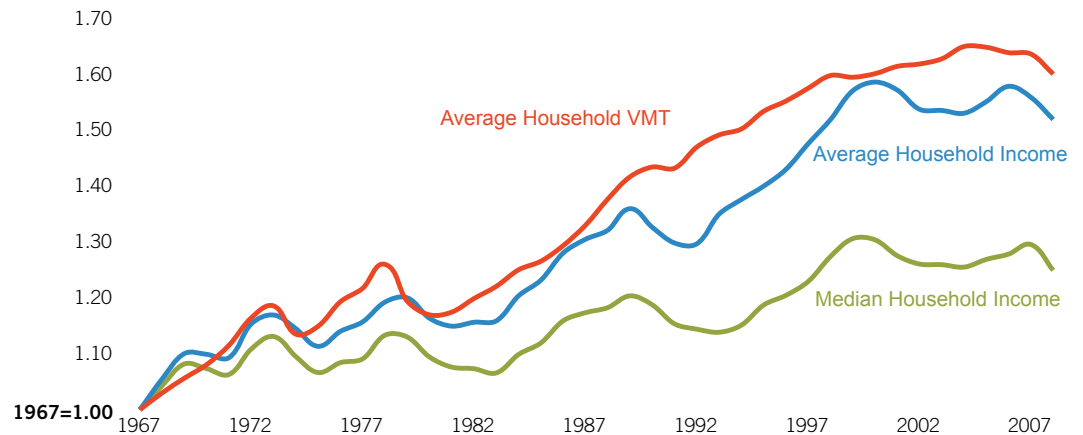
PER CAPITA GROSS DOMESTIC PRODUCT AND VEHICLE MILES TRAVELED FOR U.S. STATES (2008)



C. Kooshian and S. Winkelman, “Growing Wealthier: Smart Growth, Climate Change and Prosperity,” Center for Clean Air Policy, 2011. <http://www.growingwealthier.info/>

It is also fruitful to observe the relationship beyond just comparing VMT trends to GDP trends. GDP, as had been widely argued, is an inelegant measure of economic progress.³ It includes some forms of productive economic activity (auto manufacture, agriculture), while leaving out others (unpaid childcare, charity, and volunteering), and gives economic “credit” to destructive activities (war, cleanup after manmade disasters, pollution). In charting our economic progress, then, it is useful to look at measures other than GDP.

U.S. HOUSEHOLD VEHICLE MILES TRAVELED AND INCOME (1967-2008)



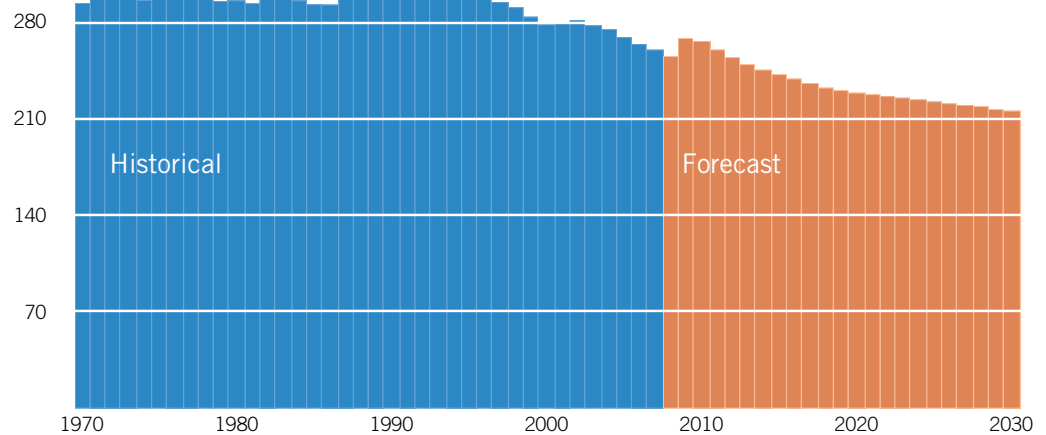
C. Kooshian and S. Winkelman, “Growing Wealthier: Smart Growth, Climate Change and Prosperity,” Center for Clean Air Policy, 2011. <http://www.growingwealthier.info/>

For example, when VMT growth is compared to median household income, we find that the two are not proportionately related: growth in VMT is far outstripping growth in median household income.

Note the number of miles that go into each dollar of GDP. In brief, it takes less driving than it used to to create a thousand dollars of GDP. Even if GDP and VMT were directly related, we could still expect economic growth even if we drove less.

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TRAVEL INTENSITY OF THE U.S. ECONOMY: VEHICLE MILES TRAVELED PER \$1,000 GROSS DOMESTIC PRODUCT (1997 TO 2030)



C. Kooshian and S. Winkelman, *Growing Wealthier: Smart Growth, Climate Change and Prosperity*. Center for Clean Air Policy, 2011. <http://www.growingwealthier.info/>

When we put these observations together, a confusing pattern emerges: 1) Americans have been doing a lot of driving; 2) that driving does not produce a proportional household economic benefit for them; 3) all the while, it appears to take fewer miles to “create” GDP growth in the first place. Confusing? It is, until you realize that driving does not create economic growth.

The relationship between driving, economic growth, and household incomes is far more complex than “VMT = GDP.” Employment opportunities, levels of aggregate demand, technological advances, and productivity increases are just a few of the many factors that likely have a stronger direct effect on the economy than simply driving. Demographic factors also play a part, particularly trends among the two largest American population segments, Baby Boomers and Millennials. Older Americans generally drive less, and Generation Y appears to be showing less enthusiasm for car ownership, as mobile devices and networking technologies replace cars as their main conduit to shopping and socializing.⁴

This is good news. These trends can give us comfort that efforts to reduce traffic will not result in economic decline. NRDC supports investments in public transit and other transportation strategies that give Americans real choices about how and where they want to travel, and encourages smarter land use planning to provide access to more products and services without more driving to get there. More efficient use of land and better transportation investments can save Americans thousands of dollars on transportation expenses each year, and cities millions on infrastructure maintenance and other public services. Projects that reduce the need to drive have also been shown to produce a greater number of jobs more efficiently than does paving roads. Cutting traffic does not hurt the economy; in fact, just the opposite is likely.

Many thanks to Steve Winkelman and the Center for Clean Air Policy. Their report, “Growing Wealthier: Smart Growth, Climate Change and Prosperity,” is the source of this fact sheet’s images. Interested readers should consult “Growing Wealthier” to learn more.

¹ Randall Pozdena, “Driving the Economy: Automotive Travel, Economic Growth and the Risks of Global Warming Regulations,” Cascade Policy Institute, November 2009.

² Adam Millard Ball & Lee Schipper: “Are We Reaching Peak Travel? Trends in Passenger Transport in Eight Industrialized Countries,” *Transport Reviews*, 31:3, 357-378. 2011.

³ Robert Costanza, et al. “Beyond GDP: The Need for New Measures of Progress,” The Pardee Papers No. 4, Boston University; Jon Gertner (2010) “The Rise and Fall of the GDP,” *The New York Times Magazine*, May 13, 2009.

⁴ Zimmerman, Martin, “Rebel Without a Car,” *LA Times*, October 9, 2009; National Household Travel Survey, “Summary of Travel Trends,” 2009. (after age 65, Americans’ miles driven decrease by an average of 45 percent).