

Key Findings

- The state estimates that on average each Washington motorist now drives about 31 miles per day. The state's new policy is to reduce how much people drive to 22 miles per day by 2035.
- Missing from the debate on reducing Vehicle Miles Traveled (VMT) is a quantitative analysis of its financial costs.
- If the state is able to achieve the first phase of the VMT reduction targets it will reduce the state's fuel tax revenue stream by about 10.2 percent by 2020.
- Not only does the state's mandate to reduce drivers' VMT cause fuel tax revenues to fall, revenues actually peak in 2014 and based on the state's long term reduction targets, never recover.
- Washington relies heavily on fuel tax revenue to pay for the transportation budget, which means a 10.2 percent reduction in fuel tax revenue could jeopardize funding for the Nickel and Transportation Partnership Account (TPA) projects and the \$2.4 billion in state fuel tax collections set aside for the Seattle Viaduct.
- A policy of reducing VMT for drivers, while simultaneously adopting widespread tolling as a primary revenue stream that *relies* on driving, guarantees the state will fail at one or the other.

State's Mandate to Reduce Driver Mobility Threatens Revenue for Transportation Projects

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Introduction

In February 2007, Governor Chris Gregoire signed an Executive Order mandating the reduction of Green House Gas (GHG) emissions in Washington. Within a month, the state created the Climate Advisory Team (CAT) and by January, 2008, the CAT issued a set of recommendations to accomplish the required reductions.

Among the more controversial recommendations by the CAT is for the state government to reduce how much people drive.

In the transportation sector, a person's driving is measured by calculating the number of Vehicle Miles Traveled (VMT). The Washington State Department of Transportation (WSDOT) estimated that Washington motorists drove about 58.5 billion miles in 2008.¹ By 2020, the WSDOT expects VMT will rise to about 75 billion miles.²

The CAT recommends that the government reduce VMT by 18 percent by 2020, 30 percent by 2035 and 50 percent by 2050, compared to what it would be with no state-imposed restrictions.³ If the state is able to reduce driving by its citizens by 18 percent by 2020, VMT will fall to about 61.5 billion miles per year.

To look at it another way, the CAT's Transportation Implementation Working Group (TIWG) estimates that on average each Washington motorist now drives about 31 miles per day.⁴ The state's policy is to reduce how much people drive to 22 miles per day by 2035.⁵

This recommendation, along with other provisions was ultimately adopted by the state legislature and signed by the governor in 2008. Later that year, the Climate

¹ Forecast of Fuel, Vehicles, and Related Data Through 2025, Washington State Department of Transportation, February, 2008.

² Ibid.

³ As reported in House Bill 2815 (2008). Available online at: <http://apps.leg.wa.gov/documents/bill-docs/2007-08/Pdf/Bills/House%20Passed%20Legislature/2815-S2.PL.pdf>.

⁴ Reducing Greenhouse Gas Emissions and Increasing Transportation Choices for the Future (Page 6), Transportation Implementation Working Group, 2008 Climate Action Team, November 2008.

⁵ Ibid.

Advisory Team changed its name to the Climate Action Team (CAT) and released a new report to the legislature that defined a specific plan to accomplish the VMT reduction targets.⁶

The plan recommends a variety of “strategies” that focus on three broad areas: improving public transit, forcing compact development into specific corridors and creating economic disincentives for drivers through tolling.⁷

These recommendations represent a fundamental shift in transportation policy and a significant expansion of the role of state government. For the first time, the state would pay for public transit (currently a local function) despite rising traffic congestion and the unmet infrastructure needs that currently exist. The state would also expand its land use restrictions to further force people to live and work in areas the government chooses. The state would also change the way it currently uses tolls. Tolls would no longer be reserved to simply pay for new bridges or infrastructure but as a way to create artificial costs for drivers as a punitive effort to force people out of their cars.

These policy changes represent an unprecedented level of government regulation and its restrictions on personal mobility.

Missing from the debate on VMT reductions is a quantitative analysis of its financial costs. Neither the original CAT study nor the more recent TIWG report considered the explicit or implicit fiscal impact of reducing driving.

These policy changes represent an unprecedented level of government regulation and its restrictions on personal mobility.

In response to the TIWG report, AAA Washington and the Washington Trucking Association say, “It is not good public policy to make long-term funding and pricing recommendations to the legislature without first thoroughly assessing their potential costs and impacts.”⁸ They go on to conclude, “While the report is heavily laden with ‘blue sky’ proposals, it is seriously lacking in empirical documentation to support those proposals.”

One of the cost impacts ignored by the CAT and the TIWG is the loss of state fuel tax revenue.

Washington relies heavily on fuel tax revenue to pay for the state transportation budget. Fuel taxes generate about \$2.53 billion in the current 2007-09 biennium, or 61 percent of all revenues in the transportation budget.⁹ This means transportation-related programs and infrastructure projects are extremely sensitive to any disruption in the fuel tax stream. In other words, any reductions in fuel tax revenue could jeopardize funding for the Nickel and Transportation Partnership Account (TPA) projects that were passed in 2003 and 2005 and the \$2.4 billion in state fuel tax collections set aside for the Seattle Viaduct.

⁶ Ibid.

⁷ Ibid.

⁸ Minority Report to the Climate Action Team, AAA Washington & Washington Trucking Association, November, 2008.

⁹ Transportation Revenue Summary for the November 2008 Forecast, Office of Financial Management, November, 2008. Available online at: <http://www.ofm.wa.gov/budget/info/Nov08transpo-summary.pdf>

Less Driving Results in Less Gas Tax Revenue

State fuel tax revenue is generated from fuel consumption, which is directly influenced by two variables: average fuel efficiency and how much motorists drive. For example, the WSDOT estimates that in 2010, Washington motorists will drive about 61 billion miles with an average fuel efficiency of 17.33 miles per gallon and will consume about 3.5 billion gallons of fuel.¹⁰ WSDOT also estimates that level of consumption will generate about \$1.3 billion in gas tax revenue, assuming the current gas tax rate remains constant.¹¹ Obviously, if motorists drive less or if average fuel efficiency rises more than projected, then fuel consumption will fall. This will reduce gas tax collections.

Fortunately, the WSDOT does project average statewide VMT and fuel efficiency rates on an annual basis. Combined with the current fuel tax rate and the CAT's VMT reduction targets, it is possible to show how reducing VMT would impact state fuel tax revenues. To calculate this impact, I used the following equation:

$$\text{VMT(annual reduction target)} / (\text{Annual Average MPG}) * (\text{current gas tax rate of } .375) = \text{missing revenue}$$

To achieve an 18 percent reduction in VMT by 2020, the CAT assumes that the reduction “begins in 2011 at 1.8 percent and increases by 1.8 percent every year to 2020.”¹²

The following data shows how one can calculate the relationship between VMT and state fuel tax revenue:¹³

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Projected VMT (billions)	62.05	63.58	65.19	66.75	68.18	69.54	70.93	72.35	73.69	75.04
VMT Targets	1.8%	3.6%	5.4%	7.2%	9%	10.8%	12.6%	14.4%	16.2%	18%
Projected Avg MPG	17.39	17.44	17.5	17.56	17.61	17.65	17.7	17.76	17.79	17.82
State Gas Tax Rate	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375	0.375

Analysis: Reducing Driver Mobility Will Cost the State \$1.486 Billion in Gas Tax Revenue

The table on the following page illustrates how reducing VMT by 18 percent by 2020 will negatively impact fuel tax revenues.

In the decade between 2011 and 2020, the WSDOT estimates that motorists will drive about 687 billion miles. Translating VMT to gallons consumed and assuming

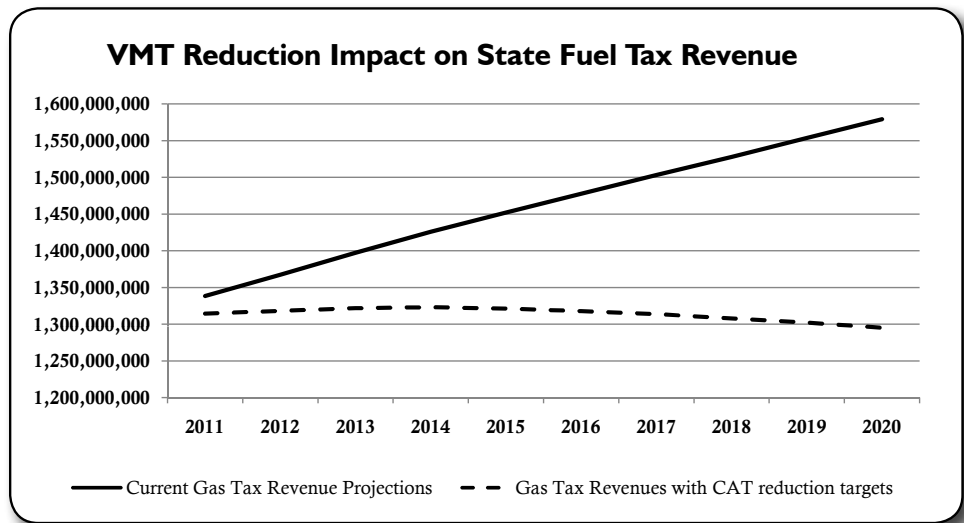
¹⁰ Forecast of Fuel, Vehicles, and Related Data Through 2025, Washington State Department of Transportation, February 2008.

¹¹ The current fuel tax rate is 37.5 cents per gallon.

¹² Transportation Sector Technical Work Group Policy Option Recommendations, Climate Advisory Team, Pg. 18, December 2007. Available online at: http://www.ecy.wa.gov/climatechange/interim-report/122107_TWG_trans.pdf

¹³ Forecast of Fuel, Vehicles, and Related Data Through 2025, Washington State Department of Transportation, February 2008.

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the gas tax rate remains constant over the same time period, total fuel tax revenues will equal about \$14.6 billion.

Incorporating the CAT's first reduction target of 18 percent, VMT would fall by 70 billion miles over ten years and the state would receive only about \$13.1 billion in total gas tax revenue, or \$1.486 billion fewer dollars than what would be collected otherwise. This means if the state is able to achieve the first phase of the VMT reduction targets it will reduce the state's fuel tax revenue stream by about 10.2 percent by 2020.

Conclusion

Not only does the state's mandate to reduce drivers' VMT cause fuel tax revenues to fall, revenues actually peak in 2014 and based on the state's long term reduction targets, never recover.

Policymakers are already painfully aware of the long-term uncertainty of fuel tax revenues. As fuel efficiency, gas prices and inflation increase, fuel consumption, tax revenue, and revenue purchasing power decrease. The state's requirement to reduce drivers' VMT by 50 percent by 2050, on top of an already diminishing revenue stream, quickly and significantly compounds the problem. This raises serious questions about whether the state could finish the Nickel and TPA projects, pay the debt on completed projects, or pay its share of the Alaskan Way Viaduct.

While the latest TIWG report ignores the effect of reducing drivers' VMT on fuel tax revenue, it does recognize the long-term limitations of fuel taxes in a broad sense and proposes other revenue sources; the bulk of which come from widespread tolling. Yet the CAT overestimates the value of tolls because, like gas tax revenues, they rely on road demand. While toll revenue is immune to increases in fuel efficiency rates, it cannot escape the negative impact of reduced driving.

A policy of reducing VMT for drivers, while simultaneously adopting a revenue stream that relies on driving, guarantees the state will fail at one or the other. Similar to "sin" taxes on cigarettes, gambling and alcohol, the state is trying to reduce a particular activity while making money off the same activity but state policymakers quickly become addicted to the revenue stream.

This would be the most likely result of the state's attempt to reduce driving through tolling. As fuel tax collections continued to fall, the state would become more reliant on the toll revenue and its intended goal of reducing VMT will no longer be possible.

For most people, the added cost of the toll will simply be absorbed as the cost of living in modern society, similar to an increase in gas prices. And like an increase in gas prices, tolls will place a drag on all social activity. Businesses will pass the cost of the toll on to their customers.

While individual drivers will just pay, the overall effect of extensive tolling will be to depress total economic growth - it would be like handing everyone in the economy a ten-pound weight to carry around; it is not enough to stop anyone in their tracks, but it makes it slightly more difficult to get anything done.

Implementing a policy that reduces Vehicle Miles Traveled without a full quantitative analysis of these financial impacts will undoubtedly lead to more problems, more unintended consequences and more government intervention into the lives of citizens.

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