



**WASHINGTON  
CONSERVATION  
V O T E R S**

**What a Load of CO<sub>2</sub>**  
**An Analysis of Dino Rossi's Global Warming Plan**  
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**Contact: Cheryl Murfin**, Communications Director 206.605.4876;  
[cheryl@fusewashington.org](mailto:cheryl@fusewashington.org) or **Aaron Ostrom**, Executive Director,  
206.498.2620; [aaron@fusewashington.org](mailto:aaron@fusewashington.org)

## About the Authors

This report was compiled, authored and produced by Fuse Executive Director Aaron Ostrom and Fuse staff members in partnership with the Sierra Club and Washington Conservation Voters.

**Aaron Ostrom** has been working on transportation and global warming policy for over 17 years. He served as a Transportation Policy Supervisor for the City of Seattle, and co-founded the Transportation Choices Coalition. He also served as the Executive Director of Futurewise. **Nora Johnson** is a graduate of Dartmouth College with an Environmental Studies degree. Her other global warming analyses include a report evaluating the carbon emission impacts of Transfer of Development Rights programs.

**Fuse** is a member-driven progressive advocacy group founded in 2007. With more than 65,000 members in every corner of the state, Fuse is one of Washington's largest grassroots political organizations.

**Washington Conservation Voters (WCV)** is the statewide political voice for the environment. The organization is working to elect environmentally responsible candidates to state and local offices and advocates for strong environmental policies as well as holding elected officials accountable during the legislative session. WCV is dedicated to strengthening laws that safeguard the health of Washington communities, the beauty of Washington State and its economic future.

**The Sierra Club Cascade Chapter** is the nation's oldest, largest, and most influential grassroots environmental organization. The Cascade Chapter is its voice for most of Washington State. The chapter includes 30,000 people working together to protect local communities and the planet.

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## Introduction

*Gubernatorial candidate Dino Rossi claims his global warming plan is “the only serious proposal that would remove carbon from the air.”*

*A serious plan deserves serious review. That’s why Fuse, Washington Conservation Voters and the Sierra Club have conducted an emissions-focused analysis of Rossi’s approach to reduce the size of Washington’s carbon footprint. The analysis included only those components of the plan with substantial impacts on carbon dioxide emissions.*

*Our analysis was alarming. Far from Rossi’s assertion that his plan would remove millions of tons of carbon pollution from the air, the analysis found just the opposite. When you do the math, it shows Rossi’s global warming plan would in fact increase carbon dioxide emissions into the atmosphere in this state by more than 20 million tons.<sup>1</sup>*

*What does 20 million tons look like? Picture 400,000 coal-carrying semi trucks stretched nose to tail across the nation twice – 4,968 miles from Seattle to Boston and back to Seattle again. Fill each truck to the brim with 50 tons of black fuel. Now add 335 miles more. Rossi’s proposed emissions addition looks like 400,000 coal trucks lined up for 5,303 miles.*

*That is the potential outcome of Rossi’s plan to reduce Washington’s global warming pollution. In the pages that follow, we evaluate the carbon emissions impacts of the key components of the Rossi plan, documenting the performance of a plan that would significantly increase our global warming pollution.*

**NOTE:** Washington State law (SB 6001) requires the Governor to develop a plan that achieves the adopted goal of reducing Washington’s carbon dioxide emissions to 50% below 1990 levels by 2050. *Although Governor Chris Gregoire has led the adoption and implementation of aggressive new strategies to reduce Washington’s global warming emissions, analyzing the results of her proposals is beyond the scope of this report.<sup>2</sup>*

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<sup>1</sup> McGann, Chris. “Gregoire, Rossi battle for eco-credentials” *Seattle Post Intelligencer*. 26 May 2008.

<sup>2</sup> The Washington State Action Plan to Impact Climate Change and related policies developed during Gov. Christine Gregoire’s term can be found at: <http://yosemite.epa.gov/gw/StatePolicyActions.nsf/exhibit?OpenForm&tier=0&state=Washington&type=state>

The current recommendations of the Governor's Climate Advisory Team may be found at: [http://www.ecy.wa.gov/climatechange/CATdocs/020708\\_InterimCATreport\\_final.pdf](http://www.ecy.wa.gov/climatechange/CATdocs/020708_InterimCATreport_final.pdf)

## Rossi Plan Overview

Rossi's plan is comprised of four central elements.<sup>3</sup> The first three components would work together to reduce carbon dioxide emissions in Washington by approximately 24,000 tons. The fourth strategy adds a thousand times that amount back into the atmosphere. The four points of the Rossi plan include:

- Converting state government vehicles to hybrid
- Eliminating the state sales tax for those who purchase green (hybrid or electric) cars
- Researching advancement of plug-in vehicle usage in Washington
- Expanding existing and building new highways

Much of the Rossi global warming plan continues state programs already underway – programs which were advanced by former Governor Gary Locke and incumbent Christine Gregoire.

Rather than offering an aggressive new approach to carbon dioxide reduction, Rossi would simply continue current efforts to green the state's vehicle fleet. Rossi would also follow Gregoire's lead in developing tax breaks for Washingtonians who purchase hybrid and other fuel-efficient cars and extend research into plug-in technologies. While Rossi offers nothing new in these areas, he does plan to continue some programs that clearly move Washington in the right direction.

But the final element of Rossi's four-point approach then takes a major turn in the wrong direction, swamping the modest gains of the first three elements. The *Seattle Post-Intelligencer* has Rossi on record claiming that his proposal to expand Washington highways will actually “eliminate millions of tons of carbon emissions produced by cars stuck in traffic.”<sup>4</sup>

A review of current emissions and emissions levels projected under Rossi's plan tells a dramatically different story. The analysis shows that rather than reducing emissions, Rossi's proposed construction would add tens of millions of tons of carbon dioxide to the atmosphere over the next 50 years.

### **The negative outweighs the positive**

Rossi's global warming proposal is based on his “progressive transportation system for the future.” The carbon impacts of Rossi's global warming plan include both his short-term (within a decade) and long-term (over the next 50 years) strategies. The emissions

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<sup>3</sup> Rossi's global warming plan consists of specific components of his “Solutions to Get Washington Moving” Transportation Plan that he has identified as his “proposal” to reduce global warming pollution.

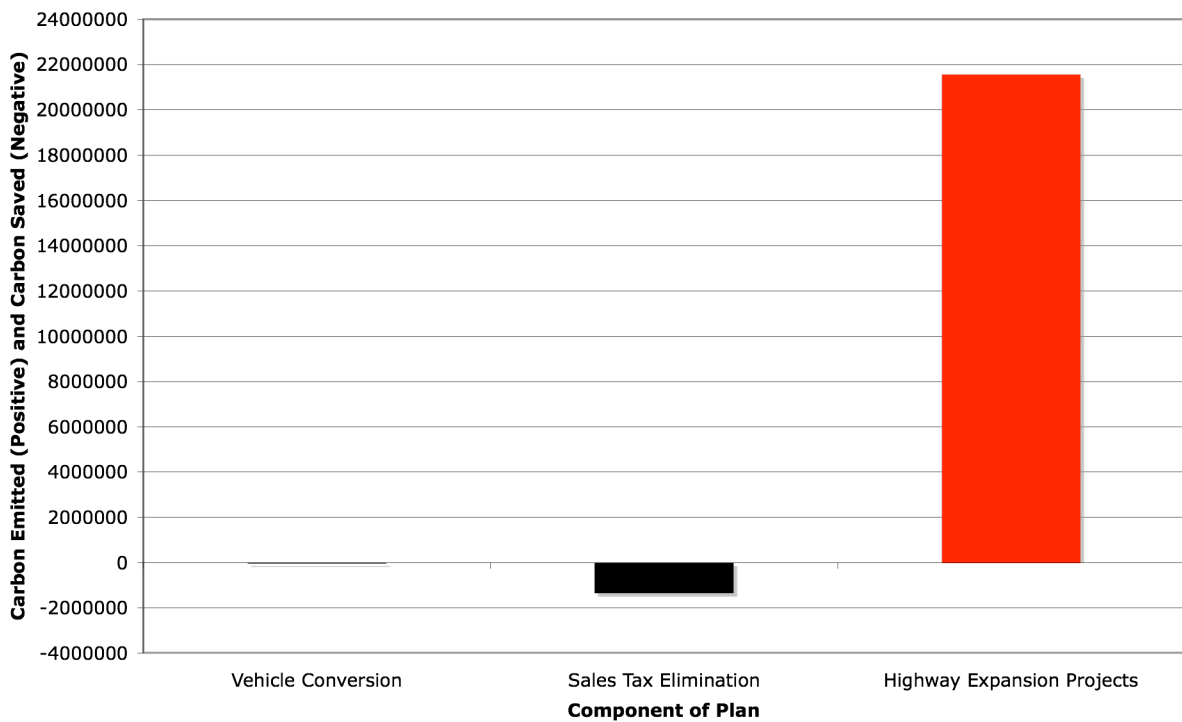
<sup>4</sup> McGann, Chris. “Gregoire, Rossi battle for eco-credentials” *Seattle Post Intelligencer*. 26 May 2008.

numbers below support Rossi’s claim that his plan would have substantial impact--unfortunately, the numbers here reveal high impact in the wrong direction.

	Vehicle Conversion	Sales Tax Elimination	Highway Expansion Projects
Carbon Savings (tons)	22,782	1,331,211	0
Carbon Emissions (tons)	0	0	21,565,990 (avg.)
Total (tons)	-22,782	-1,331,211	+21,565,990

These numbers are displayed in chart form below. NOTE: The components of Rossi’s plan play out on drastically different time lines. Greening the fleet and providing a tax break to green drivers would occur over the next decade. The highway expansion project would occur over the next 50 years.

**Carbon Use (Emissions and Savings)**



**The real emissions numbers on Rossi’s highway expansions**

In its report “Increases in Greenhouse-Gas Emissions from Highway-widening Projects” released last fall, the independent Sightline Institute quantified the level of carbon emissions released by construction of one lane-mile over the next 50 years. One lane-mile equals construction of one additional lane for one mile. Clark Williams-Derry, author of the study, developed a range of carbon emissions levels emitted from such projects based

on amounts released or saved during construction, net congestion relief, additional vehicle travel on freeway, and induced travel off the freeway. According to the author 116,500-186,500 tons of carbon dioxide would be released into the atmosphere over 50 years for every one lane-mile built:<sup>5</sup>

Carbon dioxide emissions from building one lane-mile of urban highway, over 50 years	
Construction, building materials, and maintenance	3,500 tons
Net congestion relief	-7,000 tons
Additional vehicle travel on the facility	90,000 tons
Induced vehicle travel off the facility	30,000-100,000 tons
<b>TOTAL</b>	<b>116,500-186,500 tons</b>

Fuse applied the Williams-Derry formula for the emissions cost of lane-mile expansion to highway expansion projects listed in Rossi’s global warming plan, including:

- Expansion of Highway 520/Evergreen Floating Bridge
- Widening of Interstate-405 between Renton and Bellevue
- Improvements to U.S. Route 2
- Improvements to State Route 9
- Extension of Highway 167
- Widening Highway 509 to Interstate-5
- Building the Cross Base Highway in Pierce County
- Replacing and improving the Columbia River Bridge
- Expansion of Highway 395 in the North Spokane Corridor

The math was applied to lane-mile expansion only, and did not include simple expansion projects such as on ramps or off ramps due to the lack of research on emission rates for such construction. Once lane-miles were determined for Rossi’s proposed projects, a low and high emission number was calculated for each project. These costs were added together to provide a final range of emissions reductions/increases. The graphic below includes emissions from construction itself (based on the 3,500 tons calculated by Williams-Derry).

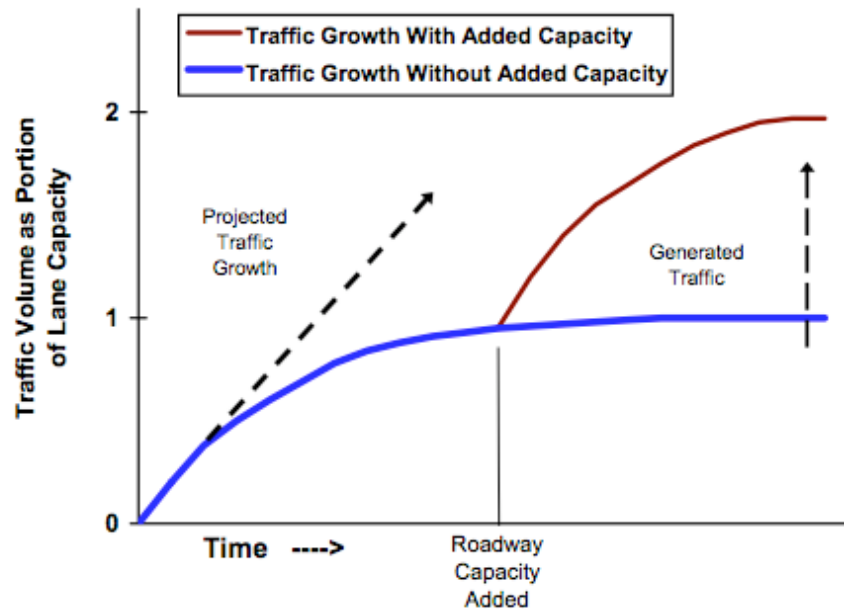
Total Expansion (Mileage)	Total Emissions (Construction)	Total Emissions for 50 years (Low)	Total Emissions for 50 years (High)	Average Emissions for 50 years
48.19	168,665 tons	16,153,890 tons	26,978,090 tons	21,565,990 tons

William-Derry’s report clearly shows that while highway expansion projects will initially reduce emissions once construction is completed, the savings quickly disappear. Upon opening new freeway lanes, drivers historically alternate their routes to take advantage of

<sup>5</sup> Williams-Derry, Clark. 2007. “Increases in Greenhouse-Gas Emissions from Highway-widening Projects.” Sightline Institute. Page 1.

the new freeways, adding more cars to the system. Eventually, this pattern results in renewed congestion and another cycle of road-building and more traffic congestion<sup>6</sup>:

**Figure 1** How Road Capacity Expansion Generates Traffic



The bottom line is clear: Freeway construction projects ultimately increase global warming pollution. Rather than encourage decreased use of fossil fuels, the Rossi plan promotes reliance on cars and leads to increased fossil-fuel consumption by putting more cars on the road.

### Greening the fleet

The first item on Rossi's list of ways to reduce emissions is a program to convert state government vehicles to hybrids. Former Governor Locke signed an executive order in January of 2005 prioritizing the purchase of hybrids for the state fleet. Gregoire also signed an executive order to prioritize the purchase of hybrids for the state motor pool.<sup>7</sup> The state motor pool currently has 1802 vehicles, of which 755 are hybrids, with the number expected to reach over 800 by the end of 2008.

Although Rossi's proposal for greening of the fleet is clearly not a new idea, and despite the fact that this conversion is already occurring, our analysis gave Rossi emission-reduction credit for purchases that would occur should he win the governorship for one term.

<sup>6</sup> Litman, Todd. 2007. "Generated Traffic and Induced Travel: Implications for Transport and Planning." *Victoria Transport Policy Institute*.

<sup>7</sup> McGann, 2008.

	State Motor Pool (Dec. 31, 2008 projected) <sup>8</sup>	Avg. Emissions (lifespan of 75,000 miles) of 1,000 new vehicles	Savings (1,000 hybrids for 7 years)
Hybrids	802	24,742 tons	22,782 tons
Non-hybrid	1000	47,535 tons	

This calculation worked on the assumption that hybrids would remain in the fleet for approximately 7 years. It assumes that with at least 800 vehicles already purchased by the time Rossi would take office, 1,000 hybrids would be purchased over the time he would be in office. Emissions were calculated for 7 years, based on a hybrid vehicle's 75,000 mile lifespan. Miles per gallon are based on Honda Civic, Toyota Prius (for sedans) and the Ford Escape models.

### **Elimination of Sales Tax for Hybrid, Electric and Plug-in Vehicles**

Rossi estimates it will cost the state \$567 million over the next 10 years to encourage consumers to buy green. Like his program to green the state vehicle fleet, a tax break for green car buyers is already in the works. Beginning on January 1, 2009, the state sales tax will be removed from vehicles getting 40 miles per gallon or more for two years (until 2011).<sup>9</sup> The tax break to be launched in 2009 does not apply to plug-in or electric vehicles. Because we could not assess how much of an impact plug-ins and electric vehicles that would be compensated in Rossi's plan will have—even with baseline cost—our calculations were based on hybrid sales only.

However, it is important to note that electric cars are not readily available to consumers in Washington State and would add minimal overall emissions savings during a 4-year Rossi administration.

We first calculated the projected hybrid sales (i.e. business as usual) for the next 10 years, until 2018. These are the sales (and revenue) the state would receive without the tax incentive. Tax revenue was calculated based on projected hybrid sales and adjusted for inflation (at 3%), and then subtracted from Rossi's estimated cost in order to determine how many new buyers would purchase hybrids due to this incentive.

To figure out the latter figure, the "gap" in estimated revenue loss was spread out over 10 years, accounting for the projected hybrid sales once again. From that, the implied additional hybrids were calculated, and from there miles per gallon consumed. With that, a projected average fleet mpg for the next 10 years was compared, thus giving the mpg savings of the additional hybrid drivers. From all of these calculations, here are the resulting numbers:

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<sup>8</sup> Ibid.

<sup>9</sup> RCW 82.08.813

Max. Gallons Saved through Tax Relief	104,000,824 gallons
Max lbs CO2 Saved/Avoided	2,662,421,087 lbs
Tons Saved/Avoided	1,331,221 tons
Cost per Ton	\$426

### **Short term gains, long term loss**

Essentially, Rossi has two time frames for his global warming plan: short term (7 to 10 years) and long term (50 or so years). There are potential emissions reductions in the short term. The long term, however, overwhelmingly negates the savings of the first 10 years. The highway expansion would generate about 21.5 million tons of additional carbon dioxide pollution over 50 years, suggesting that Rossi’s global warming program is a huge step in the wrong direction for Washington.

### **Conclusion**

Global warming is a major threat to the health and wellbeing of Washington’s residents and their environment. It is described as the greatest moral challenge of our generation, and is undoubtedly one of the greatest policy challenges of our lifetimes. Washington State law (SB 6001) requires the Governor to develop a plan that achieves the adopted goal of reducing Washington’s carbon dioxide emissions to 50% below 1990 levels by 2050.

The people of Washington State expect and deserve real leadership on this critically important issue. Responding to this expectation, gubernatorial candidate Dino Rossi has offered his plan for reducing global warming pollution in Washington. Unfortunately, the Rossi plan leads Washington in the wrong direction – a direction that not only fails to reduce global warming pollution and achieve goals established by State law, but that actually increases Washington’s global warming pollution by over 21 million tons.

In our experience, Rossi’s global warming plan is a unique proposal in its field. Although there are quite a few plans that fail to achieve goals for reducing pollution, we have not yet encountered another one that actually increases emissions. Our analysis of Dino Rossi’s plan leaves us with no choice but to conclude that he does not offer credible or responsible leadership to the critically important challenge of global warming.

## **Sources**

Litman, Todd. 2007. "Generated Traffic and Induced Travel: Implications for Transport and Planning." *Victoria Transport Policy Institute*.

McGann, Chris. 2008. "Gregoire, Rossi battle for eco-credentials" *Seattle Post-Intelligencer*. 26 May 2008.

Ostrom, Aaron. Fuse. Personal Communications. June 2008.

Point Carbon.com. Available from: <http://www.pointcarbon.com/>, as of 26 June 2008.

Regional Transport Investment District. 2007. "Blueprint for Progress."  
<http://www.rtid.org/blueprint.html>

Valandra, Steve. Washington Department of General Administration. Personal Communication. 20 June 2008.

Vlasic, Bill and Nick Bunkley. 2008. "The Smaller the Better, Automakers are Finding." *The New York Times*. 20 June 2008.

Washington State. 2007. "Greenhouse Gas Inventory and Reference Case Projections, 1990-2020." (Department of Community, Trade and Economic Development). Page 7.

Washington State. RCW 82.08.813. "Exemptions – High gas mileage vehicles, (Effective January 1, 2009, until January 1, 2011.)." Available from:  
<http://apps.leg.wa.gov/rcw/default.aspx?cite=82.08.813>

Washington State. 2007. SB 6001.

Williams-Derry, Clark. 2007. "Increases in Greenhouse-Gas Emissions from Highway-widening projects." Sightline Institute.

Williams-Derry, Clark. Sightline Institute. Personal Communications. June 2008.