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(Research was conducted while Heaslip was an assistant professor of civil and environmental engineering at Utah State University.)

Project Title

Do Changing Prices Portend a Shift in Fuel Consumption, Diminished Greenhouse Gas Emissions, and Lower Fuel Tax Revenue?

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USDOT, Research and Innovative Technology Administration

Washington Department of Transportation

the FINDINGS

The results of the modeling show that the impacts of natural gas vehicles (NGV) have the potential to effect vehicle miles traveled (VMT), emissions, and fuel tax revenue. The effects of NGVs are muted by the limited use of them in the fleet. Challenges with widespread integration include the increased upfront capital costs associated with NGVs, decreased power for heavy vehicles, and range anxiety in locations without developed natural gas fueling infrastructure. The NGV market in the state of Washington is hampered by these factors. The modeling and analysis in this report can be used to analyze changing conditions in the market and the effects on key transportation metrics.

the IMPACT

Although the Washington Department of Transportation (WSDOT) is pursuing alternative fuels and energy sources, this study focuses primarily on natural gas. In particular, this study will help WSDOT assess the likelihood natural gas will substitute for petroleum fuels and estimate the impact changes in fuel prices will have on travel demand, fuel consumption, emissions, and tax revenues.

For more information on this project, download the entire report at <http://www.ugpti.org/resources/reports/details.php?id=786>

For more information or additional copies, visit the Web site at www.mountain-plains.org, call (701) 231-7938 or write to Mountain-Plains Consortium, Upper Great Plains Transportation Institute, North Dakota State University, Dept. 2880, PO Box 6050, Fargo, ND 58108-6050.



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