

Research Note

Impacts of VMT Reduction Strategies on Selected Areas and Groups

WA-RD 751.1

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December 2010

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Requirement

The State of Washington established benchmarks for reducing vehicle miles travelled (VMT). The ambitious targets call for VMT reductions of 18 percent by the year 2020, 30 percent by the year 2035, and 50 percent by mid century. This report, mandated by state legislation, examined the impacts of VMT reduction strategies on selected groups and geographic areas. The five groups and areas studied were small businesses whose employees cross county lines to get to work, low-income residents, farmworkers—especially migrant workers, distressed counties, and counties with more than half the land in federal or tribal ownership.

The study defined these groups and areas, classified VMT reduction strategies by type, and made assumptions about behavior and trip lengths based on available literature. The study then estimated impacts on the selected groups and areas and suggests several implementation steps and areas for further research.

Researchers Found VMT Reduction Strategies Best Suited in Urban Areas

This study identified and assessed current reports, studies, and academic literature about potential VMT reduction strategies and their economic impacts on five geographic areas, populations, and



business groups. Researchers found the VMT reduction strategies more practical to implement in metropolitan areas, where the largest populations and broadest sets of alternatives to single occupancy vehicle (SOV) dependence exist. The metropolitan/non-metropolitan divide is a distinguishing characteristic in estimating the economic impacts of VMT reduction in most of the five areas and groups examined in this report. Residents in the urban growth portions of metropolitan areas have the potential for more SOV alternatives. Residents in more rural, sparsely populated areas have fewer options for reducing VMT, although trip chaining, telecommuting, working compressed work schedules, and driving less remain viable options in remote areas as well.

No Single Strategy Reduces VMT for Each Area or Group

The researchers found there is no single strategy that will reduce VMT for each area or group. Rather, a variety of strategies available—singly and in combination—are needed at different levels of government and for different groups and individuals to use in reaching the state's VMT reduction benchmarks.

Pricing would likely be effective, but it would disproportionately burden and affect the five groups and areas of interest and is also politically difficult to implement. A per mile VMT charge or toll would adversely affect lower income populations in general, with particularly negative impacts if applied to rural area residents and workers and employees

who must travel long distances to and from work and do not have access to alternative transit or ridesharing programs.

It is possible, however, to implement strategies to serve specific groups such as many farm workers who work in rural areas and are generally low income. The California farm workers' vanpool program offers such a model.

VMT strategies of shifting modes, increasing vehicle occupancy, and driving less are more viable in urban areas because population and employment density enables more SOV alternatives. Most of the state's population resides in just seven of 39 counties. These metropolitan areas are where the infrastructure, population density, and land-use patterns permit the most VMT reduction alternatives and hold the most possibility for land-use changes of compact, transit-oriented development, where walking and transit become increasingly viable alternatives to the SOV.

Findings

The report concludes there is no single strategy that equitably and effectively reduces VMT for all groups, and the

implementation of multiple VMT reduction strategies is the most effective option.

Because the majority of Washington's population lives in metropolitan areas, where infrastructure, population density, and land use patterns are more conducive to VMT reduction, the report recommends near-term strategies focus on increasing ridesharing and transit use in urban areas.

The researchers also suggest policies to increase the amount of affordable housing near employment centers as well as pricing policies for single-occupant vehicle use, with exemptions or subsidies for vulnerable populations. In addition, the authors suggest improving VMT data collection and tracking due to the inaccuracy of current statistics.

Next Steps

The report is part of WSDOT's effort to meet a statutory target of reducing VMT per capita by 18 percent by 2020, 30 percent by 2035, and 50 percent by 2050 (RCW 47.01.440). WSDOT's 2010 Sustainable Transportation Report, which provides an update on all of WSDOT's sustainable transportation efforts to meet state requirements, including next steps in the state's VMT reduction plan and

additional discussion of WSDOT's VMT measurement and forecasting methods, includes information from this report.

WSDOT is currently working with the four major regional transportation planning organizations to cooperatively develop and adopt regional transportation plans that will provide people with additional transportation alternatives and choices to reduce emissions and achieve the statutory requirement to reduce annual per capita vehicle miles traveled as directed in Executive Order 09-05. This collaborative effort will provide a framework to address the potential economic impacts of VMT reduction strategies.



11-08-0874 VMT Impacts_751.1-redo.indd

Contact Information

Report Title and Number

Impacts of VMT Reduction Strategies on Selected Areas and Groups
WA-RD 751.1
<http://www.wsdot.wa.gov/research/reports/fullreports/751.1.pdf>

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Funding

\$48,000	Federal
\$12,000	State

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