

# MOUNTAIN-PLAINS CONSORTIUM

PROJECT BRIEF | October 2015

## Impact of Energy Sector Growth on Perceived Transportation Safety in the 17-County Oil Region of Western North Dakota: A Three-Year Case Study



### the **ISSUE**

Traffic safety in western North Dakota's oil-producing counties has changed significantly since the latest oil boom beginning in 2004. A survey measured local residents' perceptions and crash data validated these perceptions of dangerous driving conditions.

### the **RESEARCH**

A survey was sent to local residents living in the oil-producing counties of western North Dakota to measure perceptions of traffic safety. The survey focused on large truck-passenger vehicle interaction. Overall, residents felt driving conditions were dangerous. To investigate if these perceptions are valid, crash data were gathered to see if conditions are actually dangerous. Results showed that injury crashes, fatal crashes, and large truck crashes, were more common in oil-producing counties than elsewhere in the state. This may be linked to economic factors such as the price of a barrel of oil: companies have more trucks and employees on the road when oil prices are high, resulting in more large truck crashes and more danger on the road.



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University of Denver  
University of Utah

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University of Wyoming



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## Project Title

Impact of Energy Sector  
Growth on Perceived  
Transportation Safety in  
the 17-County Oil Region  
of Western North Dakota:  
A Three-Year Case Study

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## Sponsors | Partners

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## the FINDINGS

Traffic conditions are more dangerous in the 17-county oil-producing area of North Dakota. This is true by volume and when normalized by population and vehicle miles traveled. Large truck crashes, injury crashes, and fatal crashes are more common in this area. The results of this work will have implications for public policy and road safety education and enforcement efforts.

## the IMPACT

We demonstrated that there is a relationship between the price of a barrel of oil and crash metrics. Oil prices lead to more extraction activity, which leads to more drilling, which leads to more workers and large trucks on the roadway, which leads to more crashes and more fatal crashes.

For more information on this project, download the entire report at <http://www.ugpti.org/resources/reports/details.php?id=823>

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For more information or additional copies, visit the Web site at [www.mountain-plains.org](http://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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