PAIN AT THE PUMP
The relationship between gas prices and transit ridership in urban and rural counties of Vermont

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Background
The Purpose of this study is to determine if there is a difference in the relationship between gas prices and public transit ridership throughout rural and urban counties in Vermont.

The relationship between gas prices and public transit ridership is important because Vermont is a rural state with limited public transit use, a high number of SOV (Single Occupancy Vehicle) commuters, and a high number of VMT (Vehicle Miles Traveled) per capita. If we can determine a way to decrease the amount of VMT or SOV commuters, then we will reduce pollution and greenhouse gas emissions, as well as save energy. The Vermont Comprehensive Energy Plan, released in 2011, stated that the goal of Vermont would be to achieve 90% of its energy from renewable sources by 2050 (Vermont Department of Public Service, 2011). Transportation is an important element in this puzzle, and is necessary to address if Vermont desires to achieve its goal.

Methods
I used a secondary analysis of available data from public transit authorities, census data, and Vermont gas price data from the Vermont Department of Public Service. I collected ridership data from each public transit authority, and gas price data from Michael Kundrich at the Vermont Department of Public Service from January 2004 to December 31, 2013. I contacted people from each of the ten public transit providers, however only five six sets of ridership data are used in the study. Four sets of data are for the full period of time desired- from January 2004 to December 31, 2013, while two sets of data are partial (GMTA and CRTL).

Conclusion
I believe it would be beneficial to increase service around the state, and in order to do this we must decrease the cost of the fare and increase the accessibility of the buses and bus routes. As gas prices rise, demand for buses will rise as well.