

Who attempts to drive less?

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Multiple factors, including structural, social and psychological motivators, contribute to whether a person attempts to drive less, and policy efforts to alter travel choices should address all factors, according to University of Maine researchers.

Caroline Noblet, an assistant professor of economics at UMaine, worked with John Thøgersen, a professor in the Department of Business Administration at Aarhus University in Denmark, and Mario Teisl, director of the UMaine School of Economics and professor of resource economics and policy, to investigate how structural constraints and psychological motivators interact in determining the travel choice of those living in the northeastern United States. The researchers also looked at how the factors can be used to create effective policy interventions that encourage cutting back on personal car use in an attempt to improve environmental, personal and societal conditions.

"Our study indicates that people are moved to different travel behaviors by different factors," Noblet says. "What makes me drive less doesn't necessarily make me want to bike more; a one-size-fits-all policy may not be efficient in changing travel behaviors."

In 2009, the researchers surveyed 1,340 residents from New England states—Maine, New Hampshire, Vermont, Massachusetts, Connecticut and Rhode Island—as well as New York. Residents were asked about their use of alternative travel modes, attempts to drive less and potential psychological and structural aspects.

The researchers found external infrastructure constraints, including price and availability of local options, as well as household and personal characteristics, combine with an individual's problem awareness, attitudes and perceived norms, when it comes to deciding whether one should seek carpooling, walking/bicycling or public transportation over driving a personal vehicle.

"An individual's travel choices have extensive impact on our global environment, personal/societal health, and infrastructure by influencing carbon dioxide emissions and other air pollutants, traffic congestion and the spread of a sedentary lifestyle," the researchers wrote in an article documenting their findings.

The article, titled "Who attempts to drive less in New England?," appeared in the March 2014 journal "Transportation Research Part F: Traffic Psychology and Behaviour," which is supported by the International Association of Applied Psychology and published by *Elsevier*.

The results showed differences across the states, indicating policy interventions should be tailored for each region.

Finding no difference between Maine and New Hampshire drivers, the researchers used results from those states as a base model, comparing drivers from other states to those in Maine and New Hampshire, Noblet says.

Massachusetts residents were found the least likely to attempt to decrease how much they drive, but use public transportation more than residents of other New England states. New York residents were found to use all three alternative modes of transportation (carpooling, biking/walking and public transportation) more than other residents. Vermont residents were found to walk or bike to work the most, while those in Rhode Island and Connecticut walk or bike the least.

The researchers found the attempt of New Englanders to reduce driving time primarily depends on each individual's attitude toward driving less. People who think they have limited control over how much they drive are less likely to cut back, and the more a person drives in an average week, the more likely they are to make an attempt to decrease drive time.

Perceptions regarding the behavior of others also appeared to have a positive, but smaller influence, the researchers say.

The results showed specific psychological factors affect one's decision to use each mode of alternative transportation. Deciding whether to carpool depends on how often someone's acquaintances do; walking or biking depends on the person's perceived ease or difficulty; and the use of public transportation depends on the person's attitude about driving less.

Knowing that the decision to seek out alternative modes of transportation is based on specific contributing components offers additional policy development information.

For example, the researchers say, efforts focused on changing perceived social norms, such as the belief that others drive less, would likely be more effective in decreasing personal car use than campaigns aimed at changing one's environmental concern.

More information: Caroline L. Noblet, John Thøgersen, Mario F. Teisl, "Who attempts to drive less in New England?," *Transportation Research Part F: Traffic Psychology and Behaviour*, Volume 23, March 2014, Pages 69-80, ISSN 1369-8478, [dx.doi.org/10.1016/j.trf.2013.12.016](https://doi.org/10.1016/j.trf.2013.12.016).

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