The Impact of Infrastructure and Mobility Patterns on the Variation of Traffic Fatality Rates in Industrialized Countries

Over the last 40 years, the United States went from being one of the safest counties in the world for traffic safety to one of the least safe among industrialized countries. Even after the notable decrease in fatalities in 2008 and 2009 (partly attributed to a decrease in VMT), the USA still has a per capita fatality rate three times that of the safest countries. The rate of decrease in fatalities in countries like the Netherlands shows no sign of slowing down and continues to outpace that in the USA.

Many observers in the USA, including the FHWA, have noted these results and are seeking to learn how the experiences in these countries can be applied to improving traffic safety in the USA. There is much speculation but no clear sense as to what are the driving factors that contribute to the observed differences. This project is designed to address a part of this issue by focusing on the role that difference in transportation infrastructure and mobility patterns might play in affecting traffic safety. The purpose is to help policy makers understand what strategies might be the most useful for improving traffic safety in the USA. This project will build on the line of inquiry reflected in a recent FHWA white paper, and the study will be modeled to some extent on the highly successful project that the researcher conducted of traffic safety in California cities. The goal of the project will be to assess the extent to which differences in infrastructure, land use and mobility patterns affect the observed differences between the states and between the countries themselves.

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