

Motor vehicle travel demand continues long-term downward trend in 2011

Despite an improving economy, motor vehicle travel declined markedly in 2011, continuing a downward trend with major implications both for infrastructure revenue and infrastructure needs.



Total VMT fell 1.2 percent from 2010, to its lowest level since 2003.

More striking, accounting for population change, per capita VMT was down for the sixth out of the last seven years, dropping to 1998 levels. VMT per capita dropped 2.1 percent from 2010.



It would be tempting to point to gasoline prices as a key reason for the declines. The inflationcorrected cost of a gallon of regular gas increased from \$2.79 in 2010 to \$3.53 in 2011.

However, comparing inflation corrected gas prices and per capita VMT dating back to 1980 reveals only a weak correlation, r = -.278.



Other factors must be at work.

A prescient U.S. DOT-sponsored 2006 study predicted that "the United States has reached a critical juncture in terms of national mobility trends and underlying socio-demographic conditions and travel behavior that will result in more moderate rates of annual vehicle miles of

travel (VMT).^{"1} Among the drivers of this change, the report said, were saturation of the market for vehicles, aging of the population, and a stabilizing transit mode share.

The report predicted per capita VMT growth from 2001 to 2025 at 51 percent to 60 percent. Those numbers were much lower than those for the preceding 24 years, but now it appears the actual numbers will be far lower still. In the first 10 years of the period, per capita VMT actually declined by nearly 3 percent.

One factor the 2006 report does not address thoroughly is land use changes. A simple analysis by SSTI suggests that these changes may be much more important than gas prices in predicting VMT. Comparing density of U.S. urbanized areas to per capita VMT dating back to 1950 reveals a strong correlation, r = -.861. Density decreased until about 1990, then began to increase again, presaging an inflexion point in VMT about a decade later.



It should be noted that the density connection is controversial and subject to much ongoing research, by SSTI and many others.

¹ Steven E. Polzin, "The Case For Moderate Growth in Vehicle Miles of Travel: A Critical Juncture in U.S. Travel Behavior Trends." Center for Urban Transportation Research, University of South Florida, 2006.