Trend of decreasing traffic deaths might be coming to an end

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(Phys.org)—Traffic deaths have fallen dramatically since 2005, but estimates for 2012 suggest that the trend may be ending, says a University of Michigan researcher in a new report.

According to Michael Sivak, research professor at the U-M Transportation Research Institute, road fatalities dropped 26 percent from 2005 to 2011, but are up 8 percent over the first seven months of

this year (based on estimates from the National Safety Council).

"After a recent peak of 43,500 fatalities in 2005, fatalities dropped to 32,300 in 2011," Sivak said. "The last time road fatalities were lower was in 1949 when, relative to 2011, we had only about 17 percent of the vehicles on the road and drove only about 14 percent of the miles. That is a remarkable reduction in fatalities."

Sivak said that while vehicle manufacturers, federal regulators, driver-licensing agencies and public-interest groups have taken credit for the drop—and all have certainly contributed—there is another factor: the tepid economy.

"As a consequence of the economic downturn, we have reduced the amount of driving, but not enough to fully account for the magnitude of the fatality drop," he said. "However, we have also changed our patterns of driving.

"For example, we have been driving slower, partly to improve vehicle fuel economy. Further, we have reduced higher-risk exposure, such as leisure driving in rural areas, more so than lower-risk exposure, such as commuter driving in urban areas."

But the important aspect of economic effects is that they are temporary, he said. Once the economy picks up, these effects will disappear or be greatly reduced—in contrast to permanent effects of technological advances in vehicles and of regulatory actions, if enforcement is maintained.

Estimates of road fatalities produced by the National Safety Council, Sivak said, could be viewed as the "canary in the coal mine."

"The economy is beginning to pick up," he said. "So what is the canary's

behavior telling us now?"

NSC data for each of the first seven months show a large rise in road deaths, as compared with the number of fatalities during the same month last year. The increases in the individual months range from 5 percent to 14 percent, which is consistent with an estimated first-quarter increase of 13.5 percent by the National Highway Traffic Safety Administration.

Sivak offers several recommendations to policymakers in addressing the apparent reversal in road fatalities:

- Be cautious in assuming that a sudden, large drop in fatalities is in response to interventions related to vehicle design. It takes about 20 years to turn over the fleet.
- Don't expect most regulatory actions aimed at drivers to produce a sudden, huge drop in fatalities because such actions usually target only a portion of drivers (such as improvements in graduated driver licensing targeting young drivers only).
- Realize that any sudden, large reduction in fatalities is likely only an unintended byproduct of factors that influence the entire transportation system, such as a rapid change in the economy.
- Be aware that most rapid, underlying changes are transient, and therefore, their effects are mostly transient, too.

Provided by University of Michigan