“Yes,” say Lister Hill scholar Michael Morrisey and colleague David Grabowski. “The two most effective mechanisms for individuals aged 15–17 are the ones that limit the amount of driving. For this age group, we found that the most restrictive graduated driver’s license (GDL) programs reduced driver fatalities by over 24% while a 10% increase in gasoline prices reduced fatalities by a more than 6%. Beer taxes had no meaningful effect on fatalities for this age group.”

For older teens, those aged 18 to 20, there is a shift in what mechanisms are most successful. Ten percent higher gasoline prices reduced driver fatalities by 3.2%, while restrictive GDL programs cut fatalities by 8.6%. Higher beer taxes reduced fatalities for this group; 10% higher taxes reduced fatalities among drivers by 1.5%.

In contrast, fatalities among young adult drivers, aged 21 to 24 were unaffected by GDL programs. Higher gas prices reduced fatalities by 3.7% and higher beer taxes reduced fatalities by 1.3%.

The authors also found that the state of the economy plays a big role in the number of motor vehicle fatalities among young drivers. Each one percentage point increase in the state-level unemployment rate decreased fatalities by 3 to over 5% depending upon age group.

To investigate the effect of changes in gasoline prices, beer taxes and various traffic policies on young adults aged 15–24, the researchers used 1985-2006 information from the Fatality Analysis Reporting System, a census of all motor vehicle crashes involving a fatality; gasoline prices from the Energy Information Administration; beer tax data from the Brewer’s Almanac; and several sources for traffic laws including the Insurance Institute for Highway Safety.

“The end of the decade has seen a remarkable reduction in motor vehicle fatalities. The reductions have been driven in large part by the recession and higher gasoline prices,” say the authors. “For younger drivers, restrictive graduated driver’s license programs have also been a major factor in the reducing fatalities.”