

Auto Crashes



Noteworthy:

- Expenditures related to auto accidents are significant, and these regrettable expenditures actually contribute to Alberta's GDP and economic growth.
- Albertans have one of the poorest records of seatbelt use in Canada, as well as other poor driving habits.
- Since 1961, there has been a decrease in auto fatalities but an increase in injuries in Alberta.
- Adding up the direct costs of fatalities, injuries and property damage yields a range of costs from a low of \$2,679 million in 1992 to a high of \$7,121 million in 1969, all in 1998 dollars.
- In 1969, the total societal (direct plus indirect) costs associated with auto crashes would have represented 22.6% of Alberta's GDP.
- The total direct costs associated with auto crashes declined significantly to 2.9% of GDP in 2003.

Automobile Crashes in Alberta: How Much?

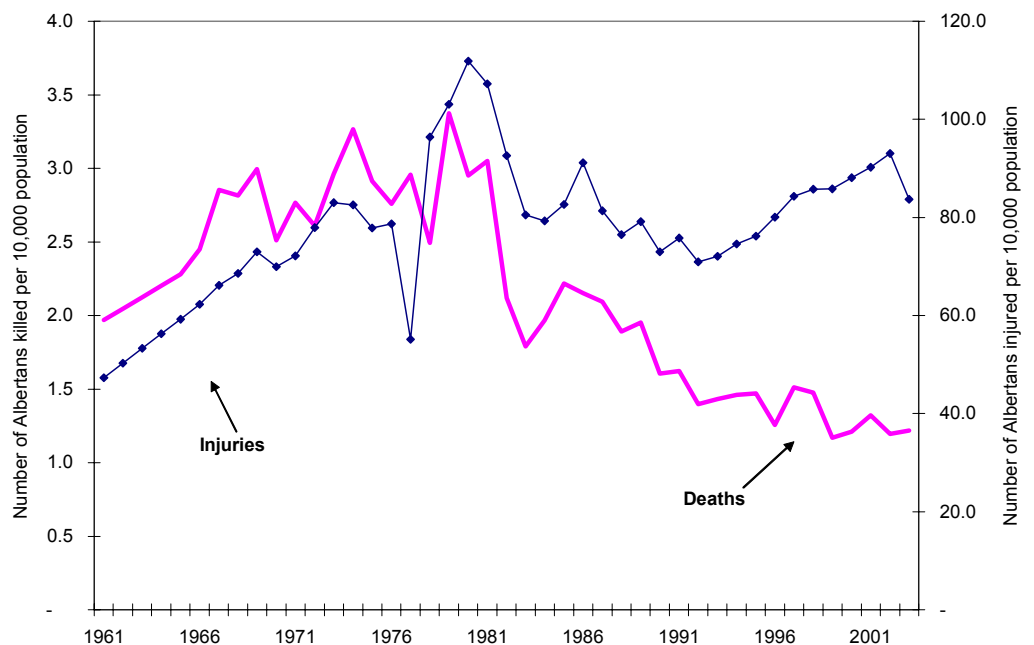
Auto accidents exact a large toll in terms of fatalities, injuries and economic costs. Expenditures related to auto accidents are significant and these regrettable expenditures actually contribute to Alberta's Gross Domestic Product (GDP) and economic growth.

According to the Alberta Motor Association, Alberta

has the highest rate of auto crashes and fatalities (per capita) in the country. Albertans have one of the poorest records of seatbelt use in Canada as well as other poor driving habits. Despite the importance of auto accidents and their significant economic cost, the issue tends to be avoided by political leaders.

The figure below shows the trends in the rate of automobile accidents, mortality and injuries (per 10,000 people) since 1960. The figure shows a decrease in fatalities (deaths) but an increase in injuries. This would indicate that while there are more accidents than before, fewer accidents are resulting in death.

Auto Crash Fatalities and Injuries, Alberta, 1960 to 2003



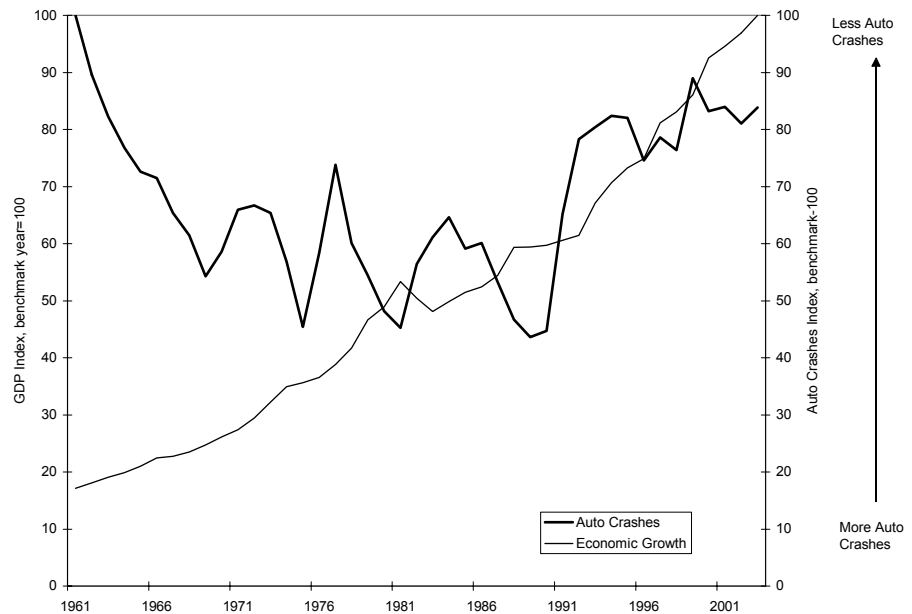
Source: Alberta Infrastructure, Traffic Collision Statistics. Figures for 1960 to 1964 are estimated.

So What?

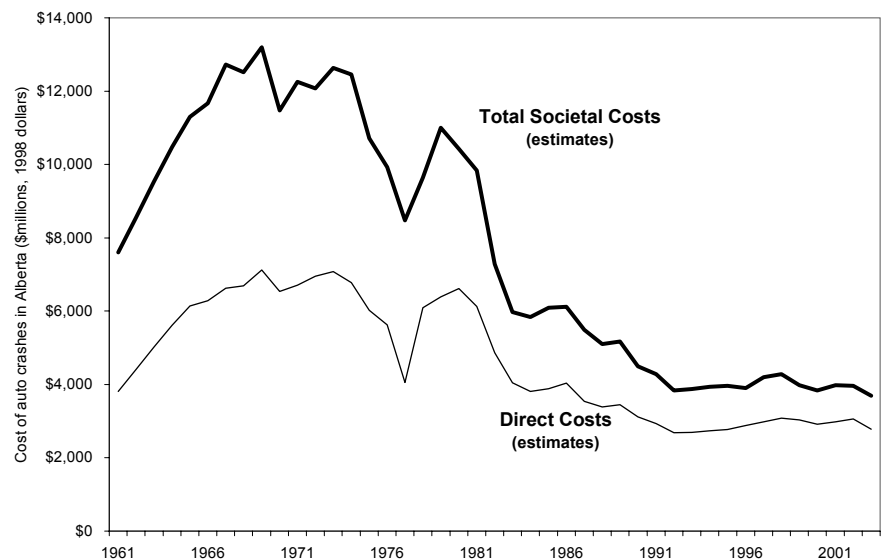
Auto crashes, like other injuries, impose a substantial cost to society; these include loss of life as well as direct and indirect costs of injuries and property damage. Expenditures on cleaning up the damage due to automobile accidents is counted as a positive addition to Alberta's GDP accounts. The GPI identifies such expenditures as "regrettable."

The figure at the bottom right shows the direct and indirect costs of automobile crashes in Alberta from 1961 to 2003. Direct expenditures include the cost of automobile repairs and insurance premiums while indirect costs include lost work and income due to injury or death. We estimate that the total societal costs (direct and indirect) of fatalities from automobile accidents range from \$991 million in 2000 to a high of \$6,600 million in 1967; the direct costs (including hospital costs, property damage and foregone income taxes) of fatalities range from \$51 million in 2003 to \$340 million in 1967. The total societal costs of injuries due to auto crashes range from \$2,096 million in 1992 to \$5,563 million in 1973. The total cost of property damage ranges from \$452 million in 1995 to \$1,333 million in 1969. Adding up the full costs of fatalities, injuries and property damage yields a range of costs from \$3,688 million in 2003 to a high of \$13,201 million in 1969, all in 1998 dollars. These are significant amounts in relation to Alberta's GDP. For example, the estimated direct costs associated with auto crashes were as high as 23.0% of Alberta's GDP in 1965, declining to a low of 2.2% of GDP in 2003. If we were to add the estimated value of the loss of life (productivity losses) the total societal costs of auto crashes would amount to an estimated 2.9% of GDP in 2003.

Automobile Crashes Index: Where are we today?



The Direct and Societal Costs of Auto Crashes in Alberta, 1961 to 2003



Source: Estimated by the authors based on previous cost of auto crash studies by the Urban Institute on behalf of the BC Ministry of Transportation and Highways.



As an index, automobile crashes in Alberta in 2003 ranked 84 on a scale where 100 is set equal to the least number of accidents between 1961 to 2003 (see figure above).

The estimated direct costs of automobile crashes in Alberta in 2003 are estimated at \$2,780 million (1998\$), the equivalent of 2.2% of Alberta's GDP in 2003.

