



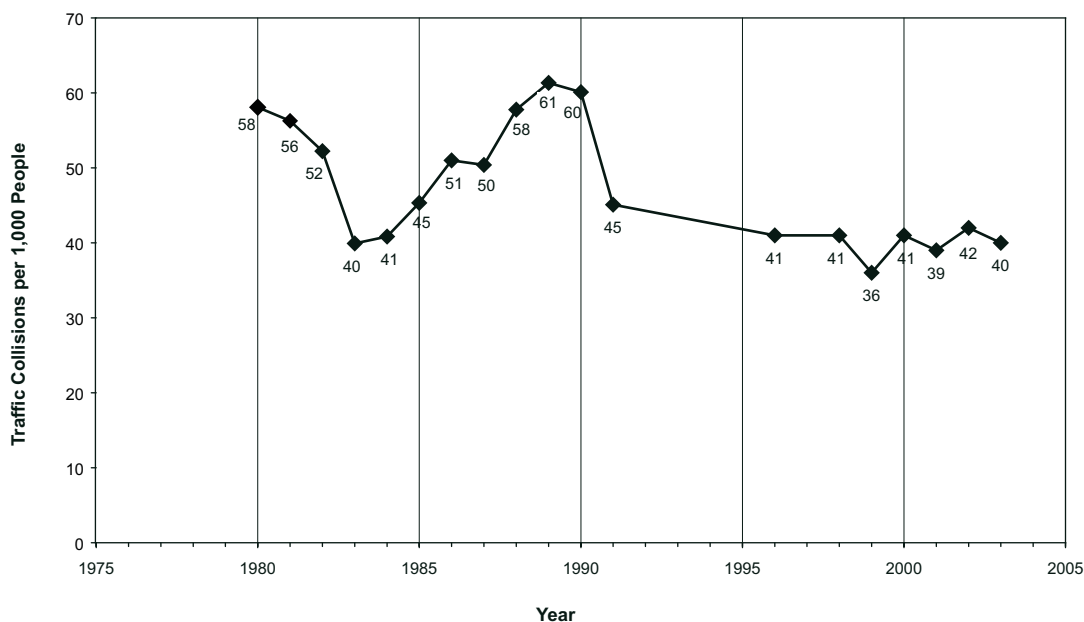
TRENDS IN TRAFFIC COLLISIONS IN CALGARY

Traffic collisions are a reality of large city transportation systems. While many of these collisions are avoidable through better education, speed reduction and driver behaviour, other less predictable factors contribute to collisions, such as weather and road conditions. This *Mobility Monitor* examines traffic collisions and how their frequency has changed over the years.

KEY FINDING

The traffic collision rate in Calgary declined over the last 25 years, but has changed little since 1996.

Traffic Collision Rates in Calgary - 1980 to 2003

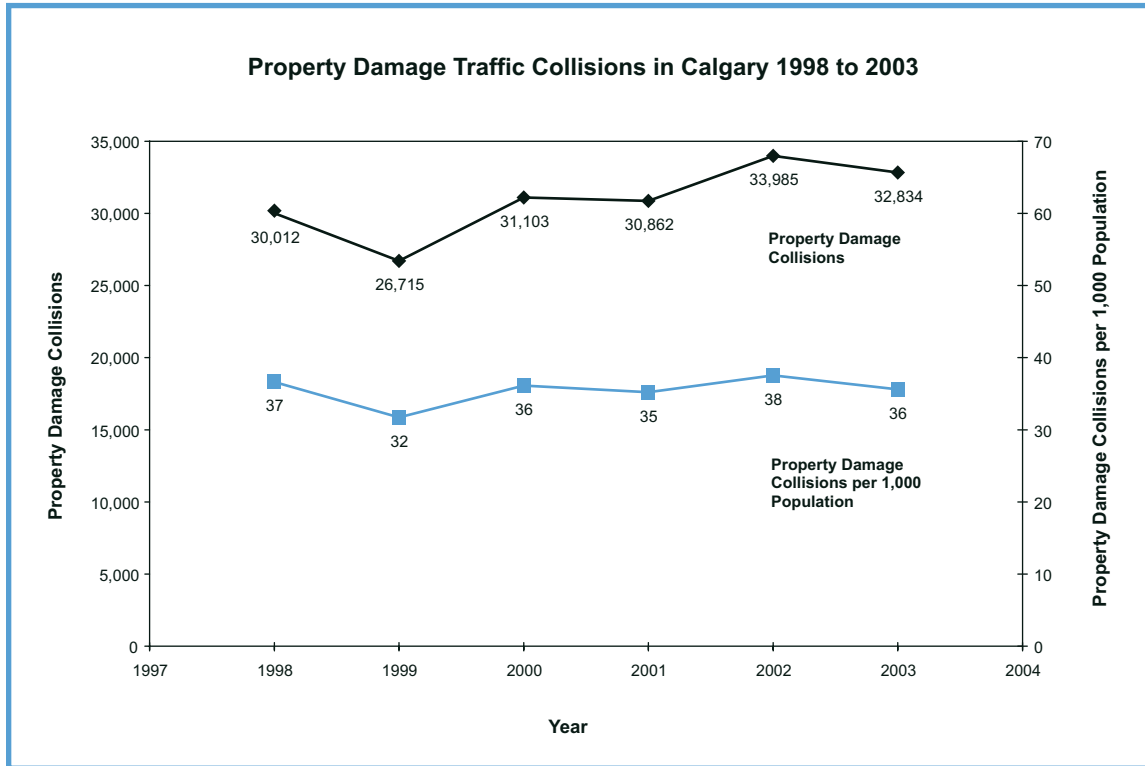


The Transportation Data Section of Transportation Planning produces the *Mobility Monitor* with the goal of making people working in the field of transportation more aware of the information the section can provide. The Transportation Data Section is responsible for collecting information on travel for use in planning and operating the city's roads, transit and pathways.

- On January 1, 1994, the reporting limit for collisions was increased to \$1,000 per collision, so caution should be used when comparing collision rates before this date with collision rates after this date. Changes in the reporting limit were also made in 1983 and 1991.
- There was a noticeable drop in the collision rate in 1999. This appears to be the result of weather conditions during the winter when there was less snow accumulation than normal.

KEY FINDING

For the period 1998 to 2003 there is an increase in the number of traffic collisions with property damage only, but this was linked to population growth.



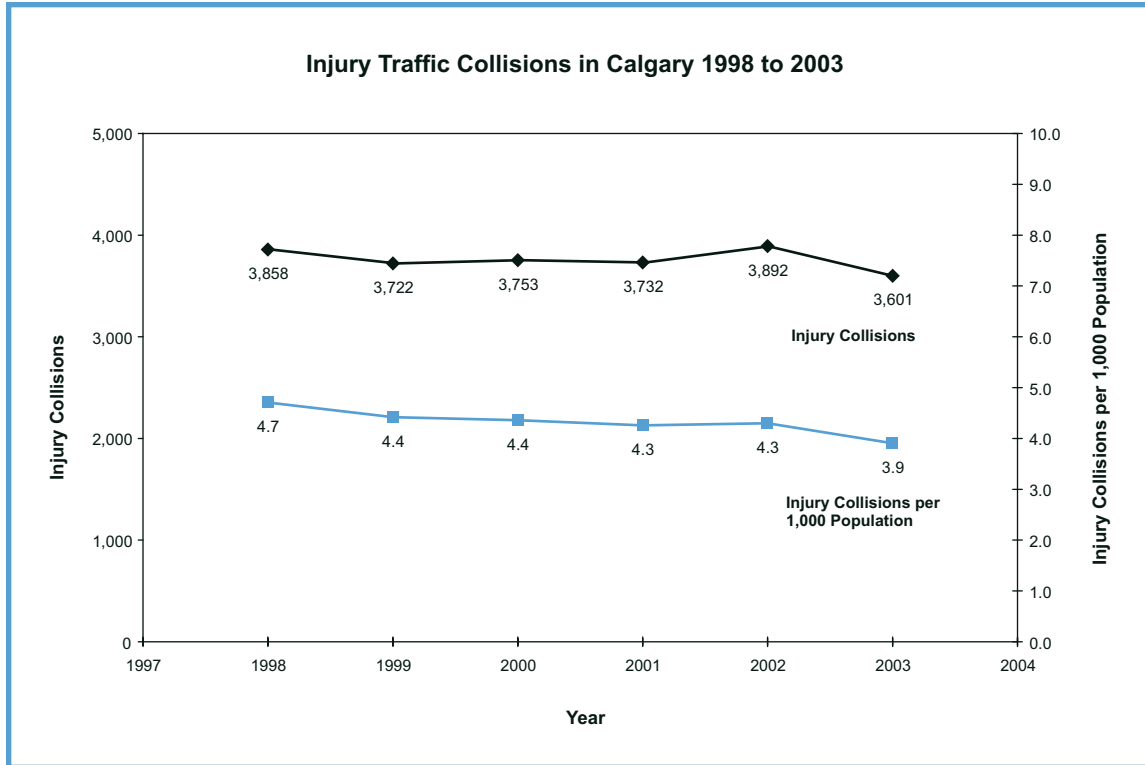
- A collision is classified as a property damage collision if there are no injuries or fatalities and the value of the property damage exceeds a certain value. After January 1, 1994, this value was \$1,000.
- The number of property damage collisions has a pattern similar to total collisions, but has a clear upward trend. The collision rate does not show an upward trend, making it appear that the increase in collisions is tied to other factors. These could include the population in Calgary, changes in dollar reporting levels due to inflation and change in population characteristics.
- As with the total traffic collisions, the lower rate of collisions in 1999 appears to be the result of winter weather conditions.

Sources of Information

The traffic collision information in this *Mobility Monitor* was compiled by the Traffic Safety Section of the Traffic Engineering Division of Calgary Roads using reports from the Calgary Police Service. This information is maintained according to standards required for legal purposes. The City of Calgary's Civic Census provided the population estimates used to calculate the collision rates. The statistics in this *Mobility Monitor* may vary from those in other reports. These variations are the result of differences in statistic definitions, not in what is being reported.

KEY FINDING

The injury collision rate in Calgary decreased by 17% between 1998 and 2002.



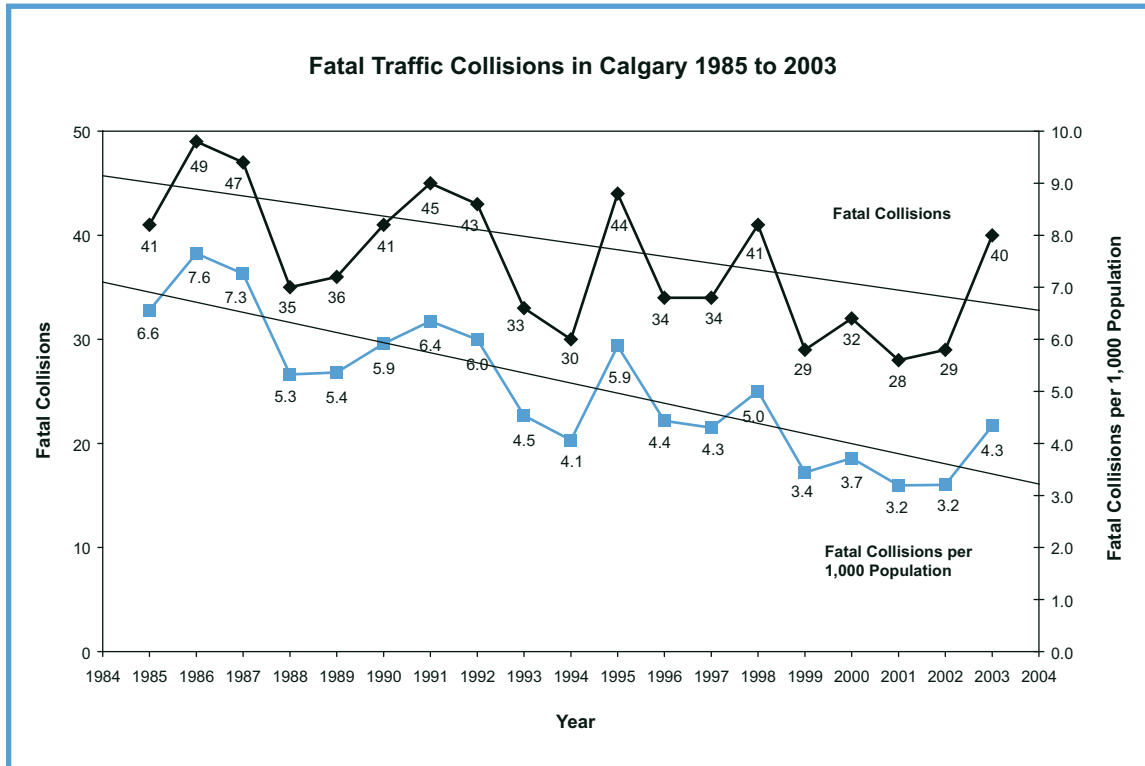
- A collision is classified as an injury collision if there were injuries but no fatalities.
- The total number of injury collisions has not changed greatly between 1998 and 2002 but the number decreased significantly in 2003. The decrease in total collisions in 1999 is not evident with the injury collisions of that same year. This supports the suggestion that the reduction in total collisions was due to mild winter weather. Collisions occurring in winter conditions are generally less severe.
- The rate of injury collisions (injury collisions per 1,000 people) decreased steadily from 1998 to 2003. Since the total collision rate is not changing, this downward trend in the rate of injury collisions suggests that people involved in collisions are less likely to be injured.

Road Safety in Alberta

The Alberta Government is committed to meeting the objectives of the *Road Safety Vision 2010* and *Saving Lives on Alberta's Roads* reports.

KEY FINDING

The fatal traffic collision rate in 2001 was half of what the rate was in 1991, decreasing from 6.4 to 3.2 per 100,000 people.



- A collision is classified as a fatal collision if one or more fatalities resulted from the collision.
- In 2003 the number of fatal accidents increased dramatically to 40, from the 29 reported in 2002. The number of fatal collisions can vary greatly from one year to the next. For example, there were 30 fatal collisions in 1994, while there were 44 in 1995 and then 34 in 1996.
- There is a downward trend in the total number of fatal collisions from 1986 to 2002.
- The rate of fatal collisions (fatal collisions per 100,000 people) has been decreasing over the period 1986 to 2002. Since the total collision rate is not changing, this downward trend in the rate of fatal collisions suggests that fatalities are less likely in collisions than in previous years.

How Accurate and Reliable is This Data?

How concerned should you be by the potential for error in the data presented in *The Mobility Monitor*? Traffic on a road can vary by 10% or more from one day to the next. The traffic collision data used in this *Mobility Monitor* are counts of all traffic collisions, and do not have this accuracy limitation. Even so, a change from one year to the next may be due to some random event, such as the weather. This is why it is wise to look at trends, since changes that are consistent over a long period of time are more likely to be real, and not just the result of random events.