

The year 2002 saw the number of car crash fatalities in Minnesota rise to 657, an increase of more than 15 percent from the previous year, when fatalities totaled 568. Although the year 2001 represented a major positive milestone with the fewest fatalities since 1993, in 2002 we suffered the largest number of fatalities since 1981, the last year that fatalities hovered at numbers greater than 750.

These numbers are much more meaningful when considered in terms of exposure. For example, our fatality rate per 100 million vehicle miles traveled (VMT) rose from 1.07 in 2001 to 1.21 in 2002. Compared with the rest of the country (with a rate of 1.5 fatalities per 100M VMT in 2001), we in Minnesota still seem to be doing better (see fig. 1). And when compared with our fellow states by most any measure of road fatalities, we consistently rate among the lowest ten. This, however, does not give comfort to the families of the 657 who lost their lives. Consider these numbers in the context of other countries. The United States is doing significantly worse than Sweden or the United Kingdom—this despite the fact that the UK has higher speed limits on its motorways (see fig. 2).

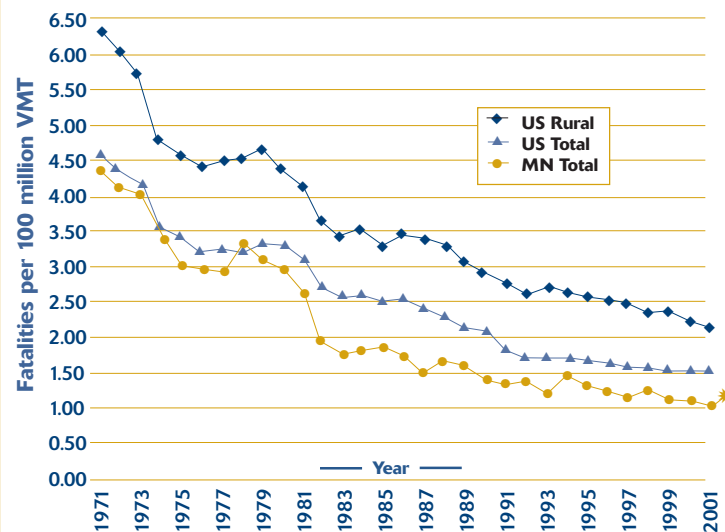


Fig. 1. Fatalities per 100 Million Vehicle Miles Traveled (U.S. Rural, U.S. Total, and MN Rural)

Source: FHWA Highway Statistics 2001 and Minnesota Motor Vehicle Crash Facts

Over the decades prior to the early 1990s, we saw a remarkable drop in fatalities all over the country. This drop was associated with factors such as better car design, the introduction of seat belt laws and air bags, significant changes in DWI laws, improved child restraints, and the steady increase in the use of medians on limited-access highways to separate opposing traffic. What is most bothersome is that we have seen very little change in fatalities per VMT in the U.S. for more than ten years and almost no change in the last three. And for Minnesota, the situation is getting worse rather than better. Is the increase in Minnesota's rate an aberration, or is it a harbinger for what is to come across the country? Will we be seeing increases in the fatality rates in the future? What can we do to effect change? Where do we focus our efforts? One direction that we ought to consider is to direct our attention to rural fatalities, which have consistently and significantly outnumbered urban fatalities.

In order to address these issues, the state of Minnesota has decided to pursue a new tack, with a program called Toward Zero Deaths. This positive development will attempt to focus activities on reducing fatalities and Type A injuries—the most severe form of trauma-type injuries. Striving to achieve a zero-fatality rate is what we should be doing. We are pleased to be a partner in this endeavor. The ITS Institute has focused on research related to reducing fatalities and crashes for many years, and the projects described in this annual report demonstrate that we are committed to thinking “out of the box” so that we can change the trend lines and foster significant reductions in fatalities and crashes.

One example: This year, we received major new funding from the Infrastructure Consortium (a partnership drawing together the FHWA and the three state DOTs of Minnesota, California, and Virginia), to deal with rural intersection crash mitigation. We will be focusing specifically on using new sensing and wireless communication systems and new human interfaces to help drivers correctly gauge the gap size necessary for safely turning into or crossing a traffic lane at rural unsignalized intersections. This has been identified as a key objective necessary to fulfill the AASHTO Strategic Highway Safety Plan. Previous studies have shown that 60 percent of right-angle crashes at rural intersections in Minnesota involve a driver stopping and then proceeding into the intersection, an indicator that the problem indeed is one of poor gap selection.

We have many partners in the operations of the Institute. I would like to thank the people on our board who have given of their valuable time to help the Institute make decisions and fulfill its obligations. This past year, Susan Coughlin, Steve Crouch, Dave Ekern, Asam El

Fakahany, Dick Hansen, Pat Hughes, Adeel Lari, Dick Stehr, and Edward Thomas have all stepped down as their responsibilities took them in different directions. We owe them a great deal of gratitude. We also welcome several new members to the board this year who represent diverse areas of transportation research. We are certain to benefit from the unique knowledge and experience each brings. All of our current board members and their respective affiliations are listed on page five of this report.

As always, we are very appreciative of our local partners, the Minnesota Department of Transportation and the Minnesota Local Road Research Board, for their continued support across the breadth of our activities. We also wish to recognize the USDOT's Research and Special Programs Administration staff for their assistance and encouragement. It is the commitment of all our partners that enables us to advance our mission. We thank you all.



Max Donath  
Director  
Intelligent Transportation Systems Institute

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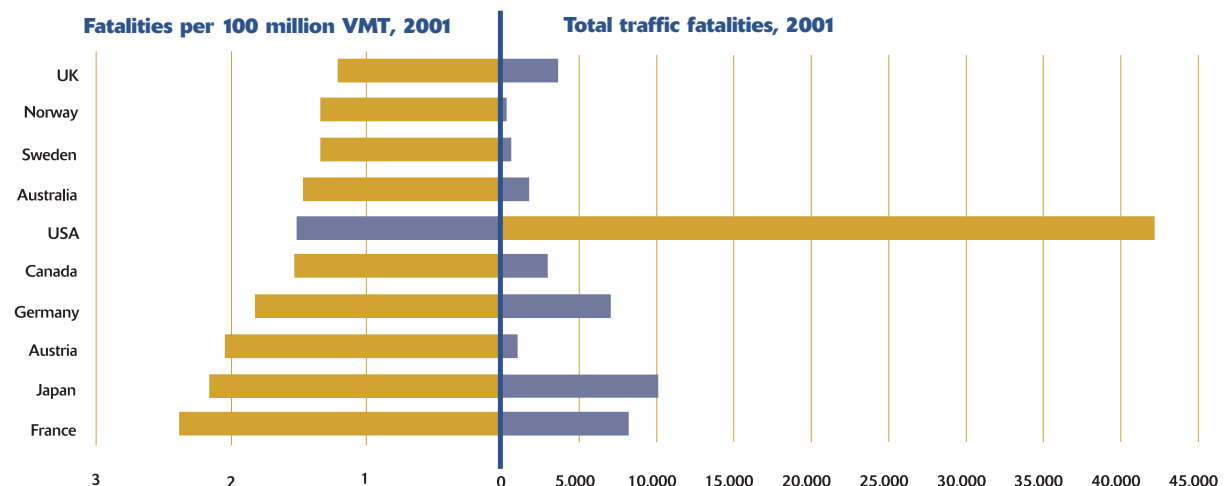


Fig. 2. Fatalities Per 100 Million Vehicle Miles Traveled vs. Total Traffic Fatalities, Selected Countries

Source: International Road Traffic and Accident Database (Organisation for Economic Co-operation and Development)