



[Front page Winter 2008-2009](#)

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[Printable PDF of this page](#)

## Traffic Safety Culture Newsletter

### Table of Contents—

[1. Traffic Safety Culture: What is it?](#)

[2. Traffic Safety Culture: What can we do to change it?](#)

[3. Traffic Safety Culture: The role of speed](#)

[4. Traffic Safety Culture: Interviews with two California policymakers](#)

[Chris Murphy, California Office of Traffic Safety](#)

[Jesse Bhullar, Caltrans Safety Engineer](#)

Search ALL Issues of the TSC Newsletter

Go

## 2. Traffic Safety Culture: What can we do to change it?

*(Note: In this and the other articles in this issue of the newsletter, we synthesize some of the key findings in the AAA Foundation's 2007 report, "[Improving Traffic Safety Culture in the United States: The Journey Forward](#)," (2.8 MB, 388 pp.) published in April 2007. We individually reference some of the 22 papers that make up the report. They are indicated by links in parentheses.)*

There are notable successes in effecting cultural change, as Allan F. Williams and Narelle Haworth point out. Cigarette smoking has been marginalized in American culture; people are turning away from consuming fatty foods; recycling is now widely practiced after being limited to the fringe; even the routine acceptance of personal searches and lines at airports in the wake of terrorist attacks is a major cultural shift (Williams and Haworth, "[Overcoming barriers to creating a wellfunctioning safety culture: A comparison of Australia and the United States](#)").

Nevertheless, effecting cultural change is difficult. Culturally-bred behaviors are so extensively interwoven into people's habits that people may not be fully aware of them—or their cultural roots.

In terms of traffic safety culture in the U.S., there have been some piecemeal successes. Seat belt use and child safety seats have become ubiquitous in a matter of decades (though room for improvement remains in terms of compliance and design), and the share of drivers in fatal crashes who were found to be alcohol-impaired dropped from 41 percent to 24 percent from 1982 to 2005. ( In a worrisome development, drivers now use cell phones routinely when, two decades ago, cell phones didn't exist.)

But more fundamental change won't occur until there is broader public awareness of the problem. There is widespread ignorance of the number of traffic deaths and injuries and ignorance about how many types of crashes (some would argue all) are avoidable. Consider the following:

**Driving under the influence(DUI) or driving while impaired (DWI)** is easily eliminated: simply prevent anyone who is impaired from getting behind the wheel.

**Seat belts** are proven to be effective. If every occupant of a vehicle were to wear them, thousands of lives would be saved each year.

**Speeding.** Refraining from driving at excessive speeds would eliminate 30 percent of fatal collisions—at a minimum.

So what are the barriers to people making the connection between these behaviors and traffic safety?

Williams and Haworth point out that the way traffic safety data are presented contributes to public misperception: "The relative stability and predictability of the number of highway deaths gives an aura of being under control, suggesting there is no crisis to which we must respond." Psychological theory holds that there is a resistance to appreciating the data's impact, and, finally, there is a degree of acceptance of a certain amount of death and harm as "inevitable."

Another problem is the attention paid to severe crashes or crashes where someone did an egregious wrong, such as driving while impaired down the wrong side of the freeway, or otherwise operating their vehicle in an exceptionally dangerous manner. Those types of incidents are so rare that they diminish an ordinary road user's sense of exposure to risk, and they obscure the fact that most collisions are due to routine carelessness and inattention. The exaggerated attention given to exceptionally dangerous behavior, allows drivers to exclude themselves from possible blame, and put it off on some "bad actor."

The fact is that ordinary driving, where someone does something wrong for a split-second, without thinking or meaning to, is what causes some crashes—more than most drivers know. In recognition of their avoidability, many traffic safety professionals have ceased using the word "accident;" they refer to "collisions" or "crashes."

The vast majority of people believe they are in control of their own safety and that they possess excellent-to-good driving skills, as borne out in the AAA Foundation surveys. When bad things happen, if they themselves are not to blame, how do typical drivers explain the bad things away? Karen Smith and John W. Martin ("[A barrier to building a traffic safety culture in America: Understanding why drivers feel vulnerable and ambivalent when it comes to traffic safety](#)") suggest that "attribution theory"—the "natural human need to explain events"—comes into play. Under this theory, there is only way they can explain a crash—that it is someone else's fault.

Smith and Martin suggest using marketing and education to harness this compulsion to "attribute" a reason, so that drivers will work to manage their own behavior by driving responsibly—in order to avoid feeling badly about themselves.

Another approach is to show people that most crashes are avoidable. This makes the problem more open to solutions and makes it easier to win support for making investments in safety efforts. (Douglas A. Wiegmann, Terry L. von Thaden, and Alyssa Mitchell Gibbons, "[A review of safety culture theory and its potential application to traffic safety](#)"). This has been used with success in traffic safety campaigns in the Netherlands and Norway.

Regular surveys—with publicized findings—are another proven tool in effecting traffic safety culture change in other countries, but they are underutilized in the U.S., Paul Allen and G. William Mercer note ("[The role of public surveys in measuring program effectiveness and improving road safety](#)"). Public opinion polls are used "in almost every area of public policy development *except* road safety," they write. The public is repeatedly asked to fund the three "Es"—enforcement, engineering, and education, but it has little or no input into how its money is spent, they add.

Australia and New Zealand make extensive use of polls and public information campaigns in their traffic safety programs. Not only do public surveys provide a useful measure of public attitudes but, by the publicity surrounding them, they also promote more critical thinking about road safety. Allen and Mercer note that, in addition, the media "is more engaged, more critical, or, at the very least, more interested in road-safety issues."

In the Australian state of Victoria, key politicians and government staff members receive a daily summary of [road fatalities for the previous 24 hours, also posted on the Web](#). It is broken down by gender, type of road user, location, and age of victim and compared on a year-to-year basis. All the reports are searchable on the Web as well. The daily reports are sent to the press as well. This practice "can raise the priority of road safety issues compared with other government programs in the minds of senior officials and elected members," note Eric Howard and Peter Sweatman ("[Traffic Safety Culture: What is it and how do we improve it?](#)")

### Measuring Safety

Howard and Sweatman also call for a "relentless" pursuit of measurement, including

**data on behavior,**  
**collection of "the 85th percentile free-speed levels,**  
**compliance rates at speed and red-light camera sites,**  
**seat belt wearing and helmet wearing rates,**  
the proportion of the **fleet with key safety features** fitted (such as electronic stability control),  
**alcohol-impaired driving rates, drug-impaired driving rates** and the results of **community attitude surveys** over periods of time on specific issues.

"It is necessary to conduct an analysis of the data and publish it widely within the road safety agencies and Ministries. The purpose is to have the data presented in such a way that it 'speaks for itself' and contributes strongly to driving debate and discussion," they add.

Wiegmann, von Thaden, and Gibbons suggest building on attitudes that are already present and starting with groups that already have an affinity for safety culture.

In the U.S., there already exists a well-articulated culture of safety around vehicle design (and to a lesser degree, road design). Car buyers consult crash ratings, and manufacturers use them in marketing campaigns, for example. Williams and Haworth suggest analyzing the process by which those attitudes were propagated and using the results to "market" traffic safety culture. They also suggest analyzing how aviation and rail were able to develop strong safety cultures, and see how those methods could be

adapted for traffic safety.

Additionally, a successful traffic safety culture campaign tailors itself to different drivers' risk-taking norms and different driving cultures.

Nicholas J. Ward ("[The culture of traffic safety in rural America](#)") points to "the specificity of place" in his analysis of the special challenges posed by rural road safety. Rural roads have a disproportionate share of fatal crashes and, of those, a disproportionate share in which the driver was impaired. Rural areas also have higher than usual DUI arrest rates. He notes, "fatal crashes and traffic fatalities in rural areas are 3.5 times more prevalent than expected on the basis of the percentage of the total population that is classified as rural. This suggests a different attitude that must be taken into account."

Driving at speeds unsafe for conditions is another large contributor to serious crashes. It, too, could benefit from new approaches to research. Barbara Harsha and James Hedlund write ("[Changing America's culture of speed on the roads](#)"). They note several key areas for action:

Develop criteria for setting **appropriate speed limits** that go beyond automatic application of the 85th percentile rule in every situation.

Investigate methods for designing "**self-enforcing roads**" in which the road design itself promotes safe speeds.

Study engineering methods for achieving **appropriate speeds on curves**.

Evaluate the effects of **automated speed enforcement** in different settings.

Study and evaluate how to establish and enforce **variable speed limits** and the effects of variable speed limits on speeds, crashes, and casualties."

[\(Go to sidebar on speed.\)](#)

Williams and Haworth argue that any approach must be "evidence-based." That requires a commitment to measuring conditions, identifying areas in need of attention and prioritizing them, and tracking the effectiveness of interventions.

In 2004, the Federal Highway Administration (FHWA) studied how performance measures were used in traffic safety programs in a selection of Pacific countries, including Australia.

**"Safety was viewed as a strategic use of performance measurement that has resulted in a significant decline in fatalities.** A great deal can be learned from this application of performance measurement, especially as it relates to the identification of strategies and actions that need to be put in place to achieve reductions in road fatalities" (Howard and Sweatman).

Ezra Hauer ("[A case for evidence-based road-safety delivery](#)") argues that there has been too much reliance on "common sense" rather than scientific measures. He argues that there is considerable room for greater use of these in road design alone, and that this should be the first priority.

"Each action, design, and option has crash-frequency and severity consequences. Is it not obvious that these different safety consequences should be examined before the choice is made? Is it not clear that the future safety of a road should be considered before the ribbon is cut and that the future safety of a new subdivision be examined before it is approved? I think that most road users will be very surprised to learn that this is not done. It borders on the unbelievable that the safety consequences of the actions shaping our safety future are not examined and that many cannot be examined because we do not know enough to predict what they are likely to be. Even more perplexing is the claim that a 'cultural change' is needed to convince high-level decision makers of what must be self evident—that we should not stumble into our safety future as blind bats. Just like in the delivery of water, education, or health, road safety too can and should be supplied, delivered, and managed in a rational manner."

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