



[Front page Winter 2008-2009](#)

Vol. 5, No. 1

[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

1. Traffic Safety Culture: What is 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.)

Like all states seeking federal safety funding, California is required to develop a **Strategic Highway Safety Plan (SHSP)** including detailed, data-driven lists of priorities for safety improvements on all the state's roads, plans to implement them, and methods to measure their effectiveness.

The state's 2008 "[Implementation of the SHSP](#)" report contains a description of the process: "The plans must be developed through a collaborative process that involves a wide range of safety stakeholders and must use research and data analysis to identify the most pressing safety problems on all public roads in each state.... More than 190 participants from 80 California public and private stakeholder groups ... identified 16 safety 'challenge areas' where resources and efforts need to be focused."

At least 11 of the 16 challenge areas the state has identified involve changing the way people behave, and thus their attitude toward traffic safety. They are:

- reduce impaired driving related fatalities;
- ensure drivers are licensed and competent;
- increase use of safety belts and child safety seats;
- improve driver decisions about rights of way and turning;
- reduce young driver fatalities;
- make walking and street crossing safer;
- improve safety for older roadway users;
- improve commercial vehicle safety;
- motorcycle safety;
- bicycling safety; and
- work zone safety.

According to the "[California Strategic Highway Safety Plan, Version 2](#)," 57% of all collisions are caused by **human factors** alone, and when combined with other causes, 93% of accidents are caused in all or part by human factors. As the report notes: "California can design the safest vehicles and roadways; however, safer human behavior seems to warrant additional attention for long-term consistent reductions in fatalities on California's roadways."



One approach to achieving this safer human behavior is to look at ways to change the **traffic safety culture** in the state. Part of that involves a better understanding of the perception that road users (in all modes, motorized and non-motorized) have of their traffic safety risk, how and if they truly understand the level of risk they face, and how they could be induced to change their attitudes and hence their practices in order to reduce it.

How to Define It? The concept of a "safety culture," much less one concerning traffic safety, is relatively new. In the field of accident investigation and analysis, the term dates back to the investigation of the 1986 leak and explosion at the Chernobyl nuclear power plant in Russia.

The agencies investigating the event, the International Atomic Energy Agency and the OECD Nuclear Agency, identified, "a 'poor safety culture' ... as a factor contributing to the accident," (Douglas A. Wiegmann, Terry L. von Thaden, and Alyssa Mitchell Gibbons, "[A review of safety culture theory and its potential application to traffic safety](#)").

Wiegmann, von Thaden, and Gibbons offer this definition of safety culture: "Safety culture is the enduring value and priority placed on worker and public safety by everyone in every group at every level of an organization. It refers to the extent to which individuals and groups will commit to personal responsibility for safety, act to preserve, enhance and communicate safety concerns, strive to actively learn, adapt and modify (both individual and organizational) behavior based on lessons learned from mistakes, and be rewarded in a manner consistent with these values."

In defining "traffic safety culture," Allan F. Williams and Narelle Haworth ("[Overcoming barriers to creating a well-functioning safety culture: A comparison of Australia and the United States](#)") say:

"An effective highway safety culture is an environment in which public and political attention is paid to motor vehicle injuries commensurate with the size of the problem."

"Road traffic injuries are the only public health problem for which society and decision-makers still accept death and disability among young people on a large scale. This human sacrifice is seen as a justifiable externality of doing business: the only discussion revolves around the number of deaths and injuries that are acceptable."—Dinesh Mohan

The lack of public attention to deaths and injuries is a recurring barrier, as Williams and Haworth note. "They are part of the fabric, seemingly acceptable collateral damage. Dinesh Mohan (2003) writes: 'Road traffic injuries are the only public health problem for which society and decision-makers still accept death and disability among young people on a large scale. This human sacrifice is seen as a justifiable externality of doing business: the only discussion revolves around the number of deaths and injuries that are acceptable.'"

Jane Moeckli and John D. Lee write (in "[The making of driving cultures](#)") that such attitudes are not inevitable or immutable, but that they have origins in social and political institutions: "What we recognize as a culture of complacency is actually the product of negotiations between different actors with varying interests." How those actors arrive at an agreed-upon set of values (e.g., following the rules of the road, driving under the influence, speed, attitudes toward pedestrians and bicyclists, etc.) will affect the traffic safety culture of everyone.

Values can change, however. Moeckli and Lee cite the achievements in changing cultural attitudes about drunk driving. Hedlund notes that there have been instances where a traffic safety culture has taken root: "Infant and toddler safety seat use is now an integral part of the whole country's safety culture. Hospital policies require newborns to ride home in a child safety seat. NHTSA's 2006 survey reported that 98% of infants under the age of one and 89% of toddlers age one to three were riding in child safety seats. There's no indifference here: parents understand that they must properly secure their infants and toddlers in a scientifically-designed seat on each trip."

But much, clearly, remains to be done.

So what are the next steps?

The Foundation has undertaken many efforts to start discussions about traffic safety culture and raise awareness through public opinion polls, reports, and news stories. It has devised a "[Traffic Safety Culture Index](#)," which is a synthesis of survey results and other research findings.

In his "[Summary and Synthesis](#)" of the main report, James Hedlund explains how to gauge a traffic safety culture. It can be measured "by observing what value and priority the society gives to safety through its policies and actions, by the society's commonly-accepted behavioral norms, and by the society's actions toward individuals who violate these behavioral norms." Currently, he notes, U.S. traffic safety culture is marked by "complacency and indifference," an exaggerated tendency to blame crashes on "the other driver," and the reliance on "wishful thinking instead of science" in choosing actions to take.

The AAA Traffic Safety Foundation has conducted surveys and publicized the results in order to shed light on motorists' attitudes toward safety. The [survey](#) revealed a number of telling gaps between drivers' knowledge and their actions. For example, "Three in four drivers rated speeding as a serious problem," the Foundation reported, "but 40 percent of those same drivers admitted driving at least 15 mph over the speed limit on highways." Further, three in four motorists said of their driving that they were "more careful than others."

This phenomenon of overestimating one's driving skill, while underestimating one's driving risk is

Findings

- **well-documented in risk-perception research. People's natural impulse is to discount the likelihood of drivers.**
- **When asked to rate the seriousness of the problem posed by a number of different traffic behaviors, a large proportion of drivers rate many of the behaviors as serious but admitted engaging in them anyway. For example:**

bad outcomes, and the easiest way to accomplish that is to underestimate the risks they are running and creating "illusory zones of immunity," as noted by Williams and Haworth. This tendency is even stronger when people are undertaking familiar activities—driving, for example.

Hedlund notes that there have been instances where a traffic safety culture has taken root: "Infant and toddler safety seat use is now an integral part of the whole country's safety culture. Hospital policies require newborns to ride home in a child safety seat. NHTSA's 2006 survey reported that 98% of infants under the age of one and 89% of toddlers age one to three were riding in child safety seats. There's no indifference here: parents understand that they must properly secure their infants and toddlers in a scientifically-designed seat on each trip."

Which leads to the next question: [how can we change it?](#)