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Highlights

Highlights of [GAO-09-56](#), a report to the Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate

Why GAO Did This Study

Fatalities on U.S. roads now total over 40,000 each year. Future reductions may require the Department of Transportation (DOT) to address new trends such as evolving crash-avoidance technologies and rapidly changing electronic devices that may distract drivers who use them on the road. (See figure.) GAO was asked to examine how DOT is addressing fast-moving trends such as these. This report examines how DOT is (1) deciding on responses to the crash avoidance and electronic distractions trends—given available evidence and uncertainties; (2) developing new evidence on these trends' safety impacts; and (3) communicating with the Congress about these and other trends and related issues. To conduct this study, GAO analyzed DOT reports, peer-reviewed literature, and other documents; interviewed DOT officials and staff; and interviewed over 30 experts.

What GAO Recommends

GAO recommends that DOT (1) develop an approach to guide decision-making on new, fast-moving trends that can affect highway safety; (2) evaluate whether new data systems and analytic techniques are needed to provide information on such trends; and (3) employ specific strategies and schedules in communicating with the Congress about these and other trends. DOT disagreed with the first of these and did not comment on the other two. GAO continues to recommend all three.

To view the full product, click on [GAO-09-56](#). For more information, contact Nancy R. Kingsbury at 202-512-2700, kingsburyn@gao.gov, or Katherine A. Siggerud at 202-512-2834, siggerudk@gao.gov.

HIGHWAY SAFETY

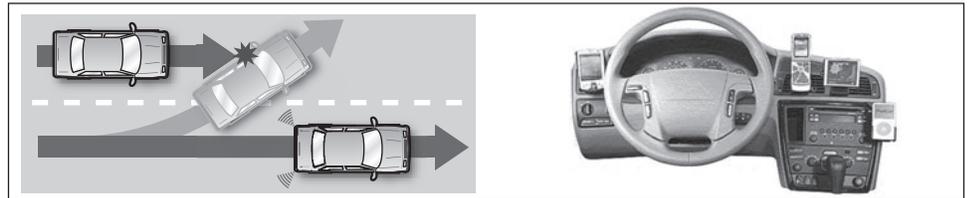
Foresight Issues Challenge DOT's Efforts to Assess and Respond to New Technology-Based Trends

What GAO Found

New fast-moving technology-based trends are characterized by uncertainties, and the main criteria that DOT's National Highway Safety Administration (NHTSA) officials use in deciding how to respond—quantitative evidence that a sizable problem exists and knowledge of a promising countermeasure—do not address uncertainty. One technology-based trend presents potential opportunities to improve future safety: evolving crash avoidance technologies. With somewhat limited data on actual safety benefits, NHTSA is pursuing such opportunities by, for example, providing consumer information about new car technologies designed to help avoid some crashes. A different trend represents a new threat to safety: rapidly changing and proliferating electronic driver distractions. Although NHTSA is conducting studies to understand this trend's nature and scope, it is not self-initiating actions or research designed specifically to counter new distractions, citing a lack of evidence that these are as significant a problem as, for example, failure to use seatbelts. Literature and experts suggest alternative approaches to decision-making, such as anticipatory risk management and expansion of networks, which might help with decisions about investments to shape or counter fast-moving trends.

DOT also faces challenges in developing additional, higher quality or more timely evidence on the changing sizes of the safety impacts of such trends—despite attempting to obtain appropriate data through both long-standing and new methods. For example, analyses of existing crash datasets produce valid comparisons of crashes in cars with and without new technologies, but such analyses require years of accumulated results and thus cannot keep pace with a fast-moving trend. Developing more timely, high-quality evidence would (1) improve evaluations of new safety technologies' benefits and (2) identify the level of threat presented by evolving driver distractions—thus reducing uncertainty and supporting decisions. Innovative approaches, such as data collection that uses emerging technologies for wireless transfer of crash data or new analysis techniques, might help provide more timely, high-quality evidence on the impacts of trends and how these change over time.

Example of Type of Crash That New Safety Technology Is Designed to Help Drivers Avoid and Dashboard with Devices, Such As Cell Phones, That Might Distract Drivers



Sources: GAO and ProClip (portable device holders).

DOT currently communicates some relevant information to the Congress on emerging trends but these communications are not designed to provide a long-term view of highway safety, including trends such as evolving crash avoidance technologies and rapidly changing electronic driver distractions—and their implications for the years ahead—together with timely updates. DOT has not synthesized the results of its work for the Congress to look at how overall trends will impact highway safety in 2020 and beyond. Some of DOT's own practices and other models from the United States and abroad might provide improved strategies for communication.