

GAO@100 Highlights

Highlights of [GAO-21-405](#), a report to the Ranking Member, Committee on Commerce, Science, and Transportation, U.S. Senate

Why GAO Did This Study

In 2019, over 7,000 pedestrians and cyclists—about 20 per day—died in collisions with motor vehicles in the United States, up from about 4,800 in 2009. Road users' behaviors can affect pedestrian and cyclist safety, along with other factors like vehicle and road design. NHTSA provides states with over \$500 million annually to address the behavioral aspects of safety.

GAO was asked to review pedestrian and cyclist safety and road users' behaviors. This report examines: (1) what is known about how road users' behaviors affect pedestrian and cyclist safety; (2) the extent to which NHTSA's countermeasure guide provides information to help states select effective projects; and (3) the extent to which DOT has used key performance management practices to help ensure activities are improving safety. GAO analyzed pedestrian and cyclist fatality data, state safety plans, and relevant literature; interviewed researchers and officials from states selected based on recent fatality trends; and compared relevant DOT strategic plans and practices to standards for effective performance management.

What GAO Recommends

GAO recommends that (1) NHTSA collect, analyze, and share information on states' pedestrian and cyclist safety behavioral countermeasures; and (2,3) FHWA and NHTSA develop and use performance measures to monitor pedestrian and cyclist safety efforts. DOT concurred with the first recommendation and partially concurred with the others. GAO believes DOT should fully implement all three recommendations.

View [GAO-21-405](#). For more information, contact Elizabeth Repko at (202) 512-2834 or repkoe@gao.gov.

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PEDESTRIANS AND CYCLISTS

Better Information to States and Enhanced Performance Management Could Help DOT Improve Safety

What GAO Found

The behavior of drivers, pedestrians, and cyclists—including driving speed, impairment due to alcohol or drug use, and distracted driving—affect pedestrian and cyclist safety. Some aspects of these road users' behaviors are well understood. For example, higher driving speeds are linked to increased crash risk and severity. In 2019, over 80 percent of pedestrian and cyclist fatalities occurred where speed limits were 35 miles per hour or higher, according to GAO's analysis of Department of Transportation (DOT) data. Other aspects of road users' behaviors are less understood. For example, there is little research on how pedestrian and cyclist impairment affects crash risk, in part because impairment research has focused on drivers. DOT has several efforts under way to improve knowledge of these behavioral aspects of highway safety.

DOT's National Highway Traffic Safety Administration (NHTSA) provides grants and other support to help states implement projects, or countermeasures, to encourage safer behaviors. While NHTSA's *Countermeasures That Work* guide has useful information on a range of pedestrian and cyclist safety countermeasures, only 3 of 26 countermeasures were demonstrated to be effective (see figure). NHTSA has worked to advance research and monitor efforts to improve safety on a state-by-state basis, but has not analyzed information on states' use of countermeasures more broadly, such as by evaluating available information to identify national trends. Taking this step and sharing the results with states could help NHTSA and states identify promising efforts for study and advance knowledge of countermeasures' effectiveness.

Countermeasures Demonstrated to Be Effective in Improving Pedestrian and Cyclist Safety in the National Highway Traffic Safety Administration's Guide

Effectiveness rating	Effectiveness definition	Countermeasure description
★★★★★	Demonstrated to be effective by several high-quality evaluations with consistent results	• Bicycle helmet laws for children
★★★★	Demonstrated to be effective in certain situations	• Bicycle helmet laws for adults • Pedestrian safety zones (targeted measures in geographic areas with high crashes)

Source: NHTSA's *Countermeasures That Work*, 9th edition. | GAO-21-405

DOT has not fully incorporated performance management practices into its pedestrian and cyclist safety efforts. These practices call for agencies to define goals and measure performance. DOT has established an overall departmental goal and an associated performance measure for pedestrian and cyclist safety. However, the Federal Highway Administration (FHWA) within DOT and NHTSA have not established performance measures to monitor their efforts to achieve DOT's pedestrian and cyclist safety goal. For example, DOT released a pedestrian safety plan in 2020 that lists 90 activities of FHWA and NHTSA but no performance measures to assess their progress. Performance measures at the FHWA and NHTSA level could help DOT understand how its different efforts are contributing to safety improvements, identify shortcomings, and make adjustments as warranted.