



Transit



# Bus Safety Study: A Report to Congress

## Background

In the U.S. Department of Transportation's (USDOT) Transportation for a New Generation Strategic Plan Fiscal Years 2012–16, improving transportation safety continues to be the agency's top priority, with a stated goal of focusing on those activities that will reduce transportation-related fatalities and injuries. In the advent of Moving Ahead for Progress for the 21st Century (MAP-21), USDOT's safety mission has been expanded, providing new authority to strengthen public transportation safety—including bus transit system safety. This authority will result in the establishment of safety standards for all transit modes and may lead to improvements in the way in which public transit buses are built, maintained, and operated. Recognizing the similarities that exist between the over-the-road bus (OTRB) and public transit bus industries and advances that continue to be made in commercial vehicle safety, there may be opportunities to improve public transit bus vehicle and operational safety through example.

## Objectives

Section 20021(b) of the Moving Ahead for Progress for the 21st Century (MAP-21) legislation requires the Secretary of Transportation to submit a report of the results of a "Bus Safety Study" to the Committee on Banking, Housing, and Urban Affairs of the U.S. Senate and the Committee on Transportation and Infrastructure of the U.S. House of Representatives. The report's objectives are to 1) examine the safety of public transportation buses that travel on highway routes where 50 percent or more of the route is on roads having a speed limit of more than 45 miles per hour, 2) examine the laws and regulations that apply to commercial OTRBs, and 3) provide recommendations as to whether additional safety measures should be required for public transportation buses that travel on highway routes.

## Findings and Conclusions

*The data compiled for this study present no direct correlation between the operation of public transit bus services on highway routes and an increase in injuries and fatalities of transit passengers.*

There is no evidence to suggest that public transit service operated on highway routes provides a higher level of risk that could lead to severe injuries or fatalities. Therefore, the analysis of information regarding injuries and fatalities of occupants of transit buses did not disclose any basis for requiring additional safety measures to be observed when transit buses are carrying passengers over highway routes.

Other study conclusions include the following:

- *Conclusion 1: Federal Regulations and Standards* –The examination of the existing FMCSR and those FMVSS applicable to public transit buses and the analysis conducted for this study do not provide sufficient evidence to

suggest that the existing regulations and standards be modified to require them for public transit operating on highway routes.

- *Conclusion 2: State Laws and Regulations* – Based on the examination of state laws and regulations, an expanded, comprehensive review of regulations and standards developed by all states is warranted. The findings of this examination should be used in the development of national transit bus safety standards and vehicle safety performance measures.
- *Conclusion 3: Industry Standards and Recommended Practices* – Based on the review of the standards and recommended practices, SDO or industry association-developed standards should be used as resources in the development of national transit bus safety standards and vehicle performance measures.
- *Conclusion 4: Research* – Based on the data analysis and associated research conducted, further study is needed to address those incidents resulting in injuries or fatalities for which human factors are indicated as probable causes or contributing factors.

## Benefits

This study identifies those areas of transit safety improvement that may benefit from experiential knowledge of the over-the-road bus industry and corresponding regulatory framework established under the Federal Motor Carrier Safety Administration and the National Highway Traffic Safety Administration. It provides an understanding of the safety of public transit vehicles traveling on highway routes and promotes further examination of public transit bus incidents occurring in all operating environments and corresponding causal or contributing factors to those events. The findings of this and subsequent research will provide FTA with the knowledge and tools to make informed decisions on national transit safety performance measures and present guidelines for the design and production of transit vehicles, minimum bus operator training curriculum, hours of service standards, and other topics related to bus transit safety.

## Project Information

### FTA Report No. 0051

This research project was conducted by Lisa Staes, Justin Begley, and Victoria Perk of the Center for Urban Transportation Research at the University of South Florida. For more information, contact FTA Project Manager Roy Chen at (202) 366-0462, [royweishun.chen@dot.gov](mailto:royweishun.chen@dot.gov). All FTA research reports can be found at [www.fta.dot.gov/research](http://www.fta.dot.gov/research).