

Proceedings of the 2nd Annual World Conference
of the Society for Industrial And Systems Engineering
Las Vegas, NV, USA
November 5-7, 2013

Motorcoach Seat Belt Use Rates in the United States

D Cades¹, D Young^{2,3}, K Glazek², G Nauhaus², and S Alper¹

¹Exponent Failure Analysis Associates, Chicago, IL

²Exponent Failure Analysis Associates, Los Angeles, CA

³California State University, Long Beach

Corresponding author's Email: gnauhaus@exponent.com

Abstract: Whereas seat belt use rates in passenger vehicles and trucks have been examined extensively, use rates among passengers of motorcoaches in the United States have been largely unevaluated using scientific methodology. In an initial examination, motorcoach passengers' seat belt use rates were observed unobtrusively on motorcoach bus trips in three different geographical locations of the continental US. Passenger gender and age group (child, adolescent, adult, and senior) were also observed and recorded. On a subset of trips, a portion of the passengers were queried via survey to determine motorcoach travel habits, experience on motorcoaches, traveling companions, etc. Overall, only 2.6% of passengers were observed using the available seat belts. Usage rates did not vary across geographic locations and were statistically similar across all age groups of passengers—although children and adolescents under 21 years of age had the highest observed rates. These data provide a preliminary understanding of the behavioral patterns of motorcoach passengers and their willingness to ride without restraints.

Keywords: Naturalistic decision making, safety, seat belt