

Evaluating the Impact of Median Cable Barriers on Reducing Fatal and Serious Injury Crashes in Tennessee Over a Six-Year Period

This study assessed the effectiveness of median cable barriers in decreasing the number of both Fatal and Suspected Serious crashes over a 6-year period before and after the installation of the cables in Tennessee. It involved analyzing 47 counties with 609 cable segments. The crash data was initially obtained from E-TRIMS for each route, followed by using VBA in Excel to identify crashes occurring within each segment's range. These incidents were further scrutinized through TITAN to confirm their relevance to the median. Among the 554 median-related Fatal crashes, 169 happened in the 6-year span before and after cable installation. Similarly, of the 1758 median-related Serious Injury crashes, 395 occurred in the same timeframe. The study revealed a significant reduction in Fatal crashes, from 135 to 34 (equating to a 75% decrease), and a decrease in Suspected Serious Injury crashes from 255 to 140 (equating to a 45% reduction).