Identification of Contributory Factors for Cross-Median Crashes

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ABSTRACT

Crossover median crashes are a concern for transportation officials across the country. The nature of a crossover crash—a vehicle that traverses a median and collides with another vehicle either head-on or side-swipe—creates a situation that is high cost, both financially and in terms of human injury. In Wisconsin, median barriers are installed on highways that meet a certain median width and average daily traffic (ADT) requirement. Under these requirements, highway segments with a speed limit greater than 55 mph are not required to install median barriers with a median width greater than 60 ft or under specific ADT conditions for median widths of less than 60 ft. Nevertheless, many crossover crashes are observed on highway segments that do not meet the current warrants for median barrier protection. Therefore, there is a pressing need to develop alternate warrants for median barriers that are not based exclusively on median width and traffic volume. This study identified cross-median crashes that occurred in Wisconsin from 2001 to 2007 and used geospatial techniques to identify factors that contribute to cross-median crashes.

Key words: crossover median crash—median barriers