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INVESTIGATING THE EFFECT OF ROAD CONDITION ON TRAFFIC SAFETY

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ABSTRACT

The aim of this work is to investigate the effect of pavement condition and other road characteristics on traffic safety. Besides pavement condition, other parameters under investigation include road geometric and traffic characteristics as well as characteristics of the road environment. The methodology focuses on accidents before and after the implementation of maintenance treatments to statistically determine whether there exists substantial reduction in accident rates in section where maintenance has been applied considering also other road characteristics. In addition, conclusions regarding the parameters that create hazardous conditions and the effectiveness of maintenance treatment in reducing accident rates are drawn based on expert opinions. Data collected refer to accidents, characteristics of traffic and the road environment, and of the implemented maintenance treatments. Pavement condition is assessed via field inspection and by the employment of mechanical equipment. Early conclusions indicate that poor pavement condition results in increased accident rates and severity.

KEY WORDS: accidents, safety, road, distresses, maintenance.