

This topic is “practice ready.” Yes No

Low-Volume Roadway Pavement Marking Use and Effectiveness

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Abstract

Many rural roadways in Iowa have centerline and/or edgeline pavement markings. The current Manual on Uniform Traffic Control Devices (MUTCD), however, requires centerline and/or edgeline pavement markings only along streets and roadways with traffic volumes much greater than 400 vehicles per day. In light of this, work was performed to investigate the state of the practice with respect to the use of pavement markings along low-volume rural roadways. This included a literature review of marking use and impacts, a survey of Iowa county practices, and a basic safety benefit-cost evaluation to identify the point where the potential total crash reduction benefits of pavement-marking use might exceed the cost of pavement-marking installation. This presentation will highlight the major results and conclusions drawn from the research tasks. Among the findings discussed will be the results of past safety and operational evaluations of the effectiveness of pavement markings on low-volume roadways, as well as county practices for pavement marking use. The results of the benefit-cost safety evaluation, which found the total crash reductions needed to make pavement markings beneficial will also be presented.

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