

UTC Project Information – Project 1.14

Project Title	Exploring the Safety Impact of Rumble Strips on Prevention of Lane Departure Crashes in Maine
University	University of Maine
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Funding Source(s) and Amounts Provided (by each agency or organization)	Federal: \$60,000 MaineDOT: \$40,000
Total Project Cost	\$100,000
Agency ID or Contract Number	69A3551847101
Start and End Dates	Start: 10/01/2021; End: 03/31/2023
Brief Description of Research Project	Enhancing safety of roadway segments is a critical step towards maintaining durable transportation infrastructures. Due to significant costs associated with construction of roadway segments, redesigning or rebuilding a roadway segment is not always a viable solution for safety improvement. Low-cost safety countermeasures are effective tools to enhance safety while diminishing reconstruction costs. Among all traffic collisions, the lane departure crashes continue to be the leading type of serious traffic accidents in Maine, comprising 70% of state-wide traffic fatalities. Installations of shoulder and centerline rumble strips have been a primary countermeasure to prevent lane departure crashes in Maine. With an increase in installations of rumble strips, there is a clear DOT need to understand the impact of rumble strips in reducing lane departure crashes in Maine in different conditions. This project will employ Empirical Bayes (EB) observational before-after study (and/or other statistical tools when appropriate) to explore the effectiveness of rumble strips in Maine. The evaluation will investigate the impact of both centerline and shoulder rumble strips on reducing the frequency and severity (Fatal, Injury and PDO) of lane departure crashes (e.g.: run-off the road and head-on collisions) for select roadways (e.g.: rural two lane roads) under different conditions. This analysis will also use benefit-cost analysis to explore the economic benefits of using rumble strips.
Describe Implementation of Research Outcomes (or why not implemented)	This project is in its initial research phase. Implementation of Research outcomes will be reported upon completion of initial research.
Place Any Photos Here	

<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	<p>This project is in its initial research phase. Implementation of Research outcomes will be reported upon completion of initial research.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project website 	