

Centerline Rumble Strips Reduce Crashes

The Franklin County Traffic Safety Board writes a weekly set of "Did You Know" articles on various topics related to highway safety. With their permission, we reprint those articles that would be germane to local highway officials.

Centerline rumble strips, now quite common in our area, have significant safety implications. They were first introduced in Franklin County in the summer of 2013. The first highways to see them in our County were State Route 37 between Ft. Covington and Hogansburg, and State Route 30 between Tupper Lake and the Hamilton County line. Now we find them on many state highways in our county.



Center line rumble strips are placed as a countermeasure for driver error, rather than roadway deficiencies. They are designed primarily to assist distracted, drowsy or otherwise inattentive drivers who unintentionally stray over the center line. For this set of drivers, the

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audible and vibratory warning produced by center line rumble strips greatly improves the chances of a quick and safe return to their lane. Where drivers don't safely recover, the warning created by rumble strips often improves driver reaction, reducing crash severity. Rumble strips also alert drivers to the lane limits when conditions such as rain, fog, snow, or dust reduce driver visibility.

The target crashes for center line rumble strips are head-on and opposite direction sideswipe collisions, along with single vehicle run-off-road crashes to the left. For these crash types, center line rumble strips are among the most cost-effective countermeasures available. For head-on and opposite direction sideswipe collisions, milled center line rumble strips provide statistically significant reductions in injury crashes of 38 to 50 percent on rural two-lane roads and 37 to 91 percent on urban two-lane roads, according to information provided by the Federal Highway Administration (FHWA). Because, according to the FHWA, more than half (57 percent) of U.S. traffic fatalities occur after a driver crosses the edge or center line of a roadway, any safety feature that helps keep drivers where they should be can help reduce crashes, injuries and fatalities.

Eleven states and one national study have analyzed the effectiveness of center line rumble strips in reducing crashes. These studies conclude that crossover crashes were reduced 18 to 64 percent, with most studies showing 40 to 60 percent reductions. On rural freeways, edge line rumble strips studies show that single vehicle run-off-road fatal and injury crashes can be reduced by nearly 29 percent, according to the FHWA.

Shoulder rumble strips were first used on freeways, where their effectiveness has been studied extensively. Fourteen states and two multi-state studies report reductions in single-vehicle run-off-road freeway crashes of 14 to 80 percent, with most reporting reductions in the 30 to 40 percent range. The three states that restricted their crash analysis to crashes caused by distracted or drowsy driving (the true target crashes for rumble strips) report 40 to 80 percent reduction in those crash types.

These are a lot of statistics to comprehend, but the point that we all should take from this is that rumble strips are proving to be an excellent countermeasure for crash prevention. Now don't negate the safety benefit by driving distracted or drowsy.

For more information on traffic law and traffic safety, visit the Traffic Safety Board web site at franklincony.org and go to Traffic Safety Board under "Departments".

This article was prepared from an article written by David Werner, TSB Vice-Chairman, Franklin County Traffic Safety Board as part of the "Did You Know?" series of articles found at http://franklincony.org/content/Departments/View/24#services