The Federal Highway Administration is responsible for
administering highway safety programs related to the
roadway and the road user. These safety programs
remove, relocate, or shield roadside obstacles, identify
and correct hazardous sections, alter, or reduce
hazardous areas, add road shoulders, and improve
safety

The FHWA Highway Safety standards and guidelines are
used by highway authorities to improve highway safety on
Federal-Aid highways and other highways. They help in
the identification and analysis of highway accidents;
locations and highway design, construction, and
maintenance. The FHWA also provides highway safety
guidance and funding for traffic engineering services,
traffic analysis, pedestrian and bicycle safety, and
safety management systems.

http://www.ohs.fhwa.dot.gov/
John Watson,
New York State DOT
makes a single statement on
the safety value of rumble strips

The Costs vs the Benefits of Rumble Strips

Run-off-road crashes carry a high price tag. The
estimated annual cost of this type of crash is $80 billion.
In addition to the losses and health care costs of those
injured, there is property damage and the untold cost of
emotional distress and family disruption.

Several State DOTs have analyzed the benefit/cost ratios of shoulder rumble
strips. The analysis involves assumptions based on installation and
maintenance costs and the effect of preventing fatalities versus the savings in
injuries, medical, and property damage crash costs. These values are based on
the FHWA's The Cost of Highway Crashes Publication No. FHWA-RD-91-055:
Available in hardcopy through the FHWA Turner-Fairbank Research Center.

Peter Gustafson,
New York State Thruway
talks about the overall worth of
rumble strips as a run-off-road solution.
How effective are rumble strips as a safety enhancement? Let's do the numbers.

Motor vehicles running off the road (ROR) account for one-third of all traffic fatalities nationwide and about two-thirds of these ROR fatalities occur in rural areas. It has been estimated that 40 to 60 percent of these crashes are due to driver fatigue, drowsiness or inattention.

Many studies of the effectiveness of shoulder rumble strips indicate that they can reduce the overall rate of run-off-road crashes by 15 and 70 percent. And there's more. By reducing the number of crashes, shoulder rumble strips also effectively reduce the number of injuries and fatalities.

See what the following States report on the effectiveness of rumble strips:

- California
- Pennsylvania
- Wyoming

John Watson, New York State DOT, tells about driving in a snowstorm and how rumble strips helped guide him back to the roadway.

Chuck Benson, Professional Truck Driver, tells how rumble strips helped him during a snowstorm on I-78 in Pennsylvania.

The Costs vs the Benefits of Rumble Strips

Run-off-road crashes carry a high price tag. The estimated annual cost of this type of crash is $80 billion in addition to the lost lives and health care costs of those injured. There is property damage and the untold cost of emotional distress and family disruption.

Several State DOTs have analyzed the benefit/cost ratios of shoulder rumble strips. The analysis involves assumptions based on installation and maintenance costs and the effect of reducing incidents versus the savings in fatalities, injuries, and property damage crash costs. These values are based on the FHWA's "The Cost of Highway-Crash Injuries," available in hardcopy through the FHWA Turner Fairbanks Research Center.
Peter Gustafson, New York State Thruway talks about the maintenance concerns of rumble strips on the Thruway.
Safety Evaluation of Continuous Shoulder Rumble Strips Installed on Freeways

Michael S. Griffith

Abstract

Single vehicle run-off-the-road crashes result in approximately one-third of all highway fatalities and one-half million people injured annually, with a societal cost of $80 billion each year. Continuous shoulder rumble strips (CSRS) are one countermeasure used to address this significant safety problem. This study extracted data for two States (California and Illinois) from the Highway Safety Information System (HSIS) to estimate the safety effects of CSRS. Before-after evaluations of CSRS protected with the use of different comparison groups were conducted. The results from these evaluations estimate that CSRS reduce single-vehicle run-off-the-road crashes on average by 18.3 percent on all freeways (no regard to urban/rural classification) and 21.1 percent on rural freeways. Two types of potential adverse effects related to safety with CSRS were analyzed. The first type pertains to the crash risk that CSRS may present due to driver startle/panic responses. The research findings show that these potential adverse effects are insignificant.

Keywords

Continuous shoulder rumble strips, freeways, before-after evaluations, accident analysis, crash migration

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