



Model Rumble Strip Policy

This model rumble strip policy was compiled using bicycle safety best practices from transportation experts, results of conducted studies, and existing state rumble strip policies. We recommend that states reference and use language from this model policy when considering bicycle safety improvements for rumble strips in their roadway design manuals.

I. Purpose

Studies indicate that both crossover and roadway departure crashes may be reduced significantly by the use of rumble strips. However, rumble strips can be dangerous to bicyclists when placed with less than 4 feet of shoulder space, forcing cyclists to take the lane and contend with high-speed vehicle traffic.

II. Design Guidance

A Shoulder Rumble Strips

Design standards: Rumble strips, when considered for installation on new, reconstructed, or resurfaced outside shoulders of all non-access controlled roadways should accommodate bicyclists by incorporating the following design standards (as shown in fig. 2, pg. 5):

- 1 Shoulder width: A minimum effective clear shoulder width of 4 feet or more should be provided from the outside edge of the rumble strip groove to the outside edge of the paved shoulder, or 5 feet from the outside edge of the rumble strip groove to the front face of a curb or guardrail.
- 2 If this clear area cannot be maintained, then a change of configuration and/or deletion of the rumble strip should be considered. Reducing lane widths if the lanes are 12 feet or wider may be considered to increase shoulder width dimensions.
- 3 Offset: Edgeline rumble stripes should be prioritized. If an offset from the lane marker is necessary, then it should not exceed 6 inches and there should be at least 4 feet of shoulder space from the outside edge of the rumble strip to the outside edge of the paved shoulder.
- 4 Traffic speed: Rumble strips should not be considered on roadways with a posted speed limit of 50 mph or less.
- 5 Gaps: Rumble strips should be installed with gap patterns, consisting of 10- to 12-foot gaps for every 40- to 60-foot rumble strip segment.

B Centerline Rumble Strips

Design Standards: When drivers shift their lane position away from centerline to avoid the rumble strips, they are moving closer to pedestrians and bicyclists on the shoulder. Implementation of centerline rumble strips should follow these design standards:

- 1 In locations where the combined lane and shoulder width in either direction is 14 feet or less, consider the level of bicyclist and pedestrian use along the route before installing centerline rumble strips.
- 2 If centerline rumble strips are installed, follow the AASHTO recommendations of a 6-foot minimum shoulder to ensure space for bicyclists and pedestrians.

III. Review and Implementation

- A The regional or state bicycle and pedestrian coordinator should be notified of the proposed rumble strips and consulted throughout the project development process.
- B The regional or state bicycle and pedestrian coordinator should review the road segment under consideration for rumble strip application and identify if it:
 - 1 is used by bicyclists
 - 2 comprises the only practical route between two destinations
 - 3 has been identified as part of a current or prospective bicycle route such as a U.S. Bicycle Route, state or local bike route, or route mapped by a bicycling organization
- C If the road segment under review is identified as having current or future bicycle traffic, then rumble strips should not be applied with less than a minimum clear shoulder width of 4 feet and bicycle safety design standards must be applied as described in Section II.