

Rumble Strips in Work Zones

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Road managers in New Hampshire are using portable rumble strips in work zones in addition to traditional traffic control devices. Rumble strips are often used along highway shoulders to reduce motorist speed. The focus of this article is on use of rumble strips in work zones.

Pros

Rumble strips provide auditory and vibratory stimulus. The sound alerts the road crew and pedestrians that a vehicle is approaching. They are particularly effective when a workzone is around a corner and workers can't see oncoming traffic. They are also effective when visibility is low, such as when trees are leafed out.

Rumble strips have a low effect on the average speed of cars. However, driver awareness is increased.

Cons

A few rumble strips applications can be hazardous as drivers might swerve to avoid the strips placing them into oncoming traffic. Motorcyclists and bikers might lose control of their motorcycle or bicycle.

A pro of strips is also a con, the noise. Workers should avoid using strips in neighborhoods where noise becomes a concern.

Recommendations for Use

There are four recommended uses for rumble strips:

1. Place on the road before the flagger.
2. With shoulder work, use along the shoulders to protect the crew.
3. Place rumble strips well in advance of the workers allowing drivers time to slow down. Use rumble strips in the buffer zones in conjunction with visual stimuli. Greg Hatfield, Public Works Director in Whitefield plans to use the strips he purchased this way.

As with any traffic control device, proper signage should alert drivers to take the desired



Rumble Strip Installation (photo from Texas Transportation Institute)

action. Rumble strips are effective where conventional techniques alone are not.

The NYDOT uses rumble strips in their work zones. They find the strips work well on low-volume streets and in cities. The NYDOT does not use them on high-volume/high-speed roads because of the potential for swerving.

Conclusions

Rumble strips are inexpensive and cost effective. They are most practical when used for long term work zones. Rumble strips should be used in places when other methods alone are unsuccessful. Work zones should be evaluated before using rumble strips. Rumble strips augment the traffic safety devices as outlined in the Manual for Uniform Traffic Control.

Sources:

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