PORTABLE TEMPORARY RUMBLE STRIPS -
Reducing Distracted Driving Crashes in Work Zones

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2017 Work Zone Crashes – Driver Actions

- 635 crashes were speeding driver related
- 596 crashes were distracted driver related *
- 107 crashes were alcohol related

* Distracted driving crashes are believed to be the most under reported crashes occurring on our roadways today.
National Distracted Driving Facts

➢ 85% of drivers – are distracted by their cell phones while driving.
➢ 1 out of 6 minutes – drivers are on their phones one out of every six minutes while driving.
➢ 71% are texting – 71% of drivers are texting while driving.
➢ Talking on a phone – you’re 2.2 times more likely to crash while talking on the phone.
➢ Texting while driving – you’re 6.1 times more likely to crash from texting.
➢ Dialing a phone – you are 12.2 times more likely to crash from dialing a phone.
Distracted Drivers – Our #1 Challenge
Distracted Driving Crash Locations in 2017

It’s an epidemic!
Portable Temporary Rumble Strips (PTRS)

In Nov. ’17 issued IIM-TE-386 on the use of PTRS and revised it on 10/15/18.
PTRS Benefits

- It creates an audible noise and vibration to approaching motorists;
- Raises motorists attentiveness to flagging operations;
- Provides an audible warning to flaggers, increasing their awareness of approaching vehicles and;
- Helps reduce rear end collisions and roadway departures.
Conditions for the Use of PTRS

**Shall** be used when the following conditions are met concurrently:

- Work operation involving flaggers occurs on a two-lane roadway during daylight hours;
- Work duration is > three hours but < 72 hours;
- Existing posted speed limit is 35 mph or >; and,
- Roadway has a marked centerline (500 vpd)

PTRS shall be used in both stationary and non-stationary flagging operations.
Conditions for the Use of PTRS

PTRS shall not be used on loose gravel, bleeding asphalt, heavily rutted pavements or unpaved surfaces, in pedestrian crossings or marked bicycle lanes.
Conditions for the Use of PTRS

PTRS *should* be:
- Considered for use on unmarked roadways at least 18 feet wide or wider;
- Located in advanced of horizontal curves when possible so they are visible to traffic;
- Installed according to Section 6G.25 of the VWAPM (installed/removed as a mobile operation or as a slow roll operation)
Conditions for the Use of PTRS

PTRS may be:
- Used at posted speeds < 35 mph;
- Used on one-lane, two-lane application which utilizes AFADs or portable traffic signals;
- Used on a divided four-lane (non-limited access) roadway at the discretion of VDOT management;
- Used during nighttime operations.
PTRS Specifications

- PTRS shall be hinged segments of equal length.
- Length 10'-9" to 11' long, max. 1" in height, 12" to 13" in width.
- Weigh between 100 to 120 lbs. max. per strip.
- Rubber or recycle rubber black or orange in color.
- PTRS shall be able to withstand being run over by an 80,000 lb. vehicle and not move more than 6 inches in an eight hour period.
- PTRS shall be used in arrays of three rumble strips.
- Payment shall be per day for each array.
PTRS Spacing Requirements

Spacing of the PTRS is related to the posted or statutory speed limit of the roadway during work operations. Each strip should be spaced center to center at the following distances:

<table>
<thead>
<tr>
<th>Posted/Statutory Speed Limit</th>
<th>Spacing in Feet (center to center)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 40 MPH</td>
<td>10 Feet</td>
</tr>
<tr>
<td>41-55 MPH</td>
<td>15 Feet</td>
</tr>
<tr>
<td>&gt; 55 MPH</td>
<td>20 Feet</td>
</tr>
</tbody>
</table>
PTRS Installation Video

The following video has been made showing the basics on the use of PTRS and will be available soon.
Implementing PTRS

Questions?

Thanks!

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