Beyond work zones:
other new safety products

Tom McDonald, Safety Circuit Rider

Many new products like portable speed humps, recycled rubber matting, and retroreflectometers have recently been introduced to improve safety on the nation’s roadways and provide cost-effective means of meeting newly adopted standards, such as minimum retroreflectivity requirements.

Recycled rubber, formed into mats, could result in safer working conditions for many routine maintenance operations. For example, when installed around guardrails, signs, and other locations in high-traffic areas, the rubber mats can reduce the need for erosion control activities and mowing in those areas, thereby decreasing workers’ exposure to the hazards of working in close proximity to fast-moving vehicles.

Another innovation is temporary speed humps, which may increase safety where excessive speed is a concern. They can be used both temporarily and permanently at speeds up to 40 mph. They can be installed relatively quickly by a crew of three and leave reasonably little damage to the roadway when removed, making them attractive for trial use before installing permanent humps. (See the article below for information on borrowing these devices from the Iowa Department of Transportation.)

The Federal Highway Administration’s impending adoption of minimum retroreflectivity standards for signs and pavement markings on all public roadways has increased local agencies’ interest in cost-efficient and effective devices to monitor and document retroreflectivity performance. Several retroreflectometer models that meet these requirements are now available commercially, ranging from large mobile units to small, hand-held models that can take measurements from relatively remote locations.

For more information about any of these products, contact Safety Circuit Rider Tom McDonald, 515-294-6384, tmcdonal@iastate.edu.

Would you like to try speed humps in your community?

If your community would like to try temporary speed humps before installing permanent ones, you may want to participate in the Iowa Department of Transportation’s (Iowa DOT) pilot program and concurrent research study.

The Iowa DOT plans to purchase several temporary speed humps and loan them—no charge—to interested communities. Various models will be available for collector and local roadways with vehicle speeds between 25 and 40 miles per hour. (The temporary speed humps will not be authorized for installation on state primary highways and are not recommended for major arterial streets.)

Installing temporary speed humps can be accomplished with only minor, repairable damage to the roadway pavement and may aid your community in deciding whether to invest in permanent speed humps.

The Center for Transportation Research and Education (CTRE) at Iowa State University will concurrently study any traffic volume changes, speed reductions, and safety impacts that may be attributable to the installations, as well as reactions of motorists and adjacent property owners.

If you would like to try temporary speed humps, CTRE’s study team will help determine the installation design, assist with the installation, and evaluate the impacts of the speed humps before, during, and after installation. The team may also study the application and investigation of multiple speed humps at different spacings along a roadway or within a specific neighborhood.

The Iowa DOT’s program to loan temporary speed humps to local agencies, which is funded by the Iowa Traffic Safety Improvement Program, will continue after CTRE has completed its study. If successful, the pilot program may lead to the Iowa DOT’s purchase of additional temporary speed humps for use by Iowa communities.

For more information, or to express your interest in participating, please contact Keith Knapp, CTRE, 515-294-7082, kknapp@iastate.edu, or Tom Welch, Iowa DOT, 515-239-1267, twelch@max.state.ia.us.