**Signing for curves and hills**

Tom McDonald, Safety Circuit Rider

Although Iowa is often considered flat, drivers regularly encounter uneven, rolling terrain on Iowa’s roadways. To ensure safe travel for Iowa’s drivers, be sure to provide proper advance warning of variations in roadway alignment.

Iowa’s manual for traffic control devices (Section C5) and the millennium MUTCD (Chapter 2C) present detailed suggestions and recommendations for signing hills and curves on local roads.

The Iowa manual explains proper use of specific warning signs, from the common curve and turn signs to signing for more complex alignment conditions.

**Using supplemental plaques and combination signs**

The Iowa manual discusses the use of supplemental plaques, along with several new combination signs and plaques featured in the MUTCD.

These include the combination Horizontal Alignment/Advisory Speed sign, W1-9, and Curve Speed sign, W13-5. Determining advisory speeds for curves is addressed in Section H1.1, “Advisory Speed Determination,” in the Iowa manual.

**Using arrow and chevron signs**

For higher-volume roads or in other locations of special concern, agencies may wish to install large arrow signs, W1-6, or chevrons, W1-8. These devices can provide additional warning for drivers in locations with potential problems.

Drawing on information in handbooks from South Dakota and Kansas, Iowa’s manual presents recommendations for locating and installing arrows and chevron alignment signs for maximum effectiveness along curves.

**Using warning signs for hills**

In addition to horizontal alignment situations, Iowa’s manual presents information about selecting warning signs for hills, primarily using guidance from the MUTCD.

When referring to the suggestions on advance warnings for roadway alignment changes in Iowa’s guide manual, refer to the tables in Chapter 2C of the new MUTCD to determine proper application, size, and location for these important traffic control devices.

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**Bicycle friendly rumble strips**

As you plan road maintenance and rehabilitation projects for the next construction season, remember the bicyclists in your jurisdiction.

Two new “bicycle friendly” rumble strip patterns have been recommended to AASHTO’s Steering Group for Technology Deployment. The patterns are recommended specifically for implementation along nonfreeway facilities.

Developed by Pennsylvania State University, the new configurations provide enough vibration to alert inattentive or drowsy motorists but can be safely traversed by bicyclists.

For more information see AASHTO’s High Value Research website, www4.nationalacademies.org/trb/scot/states.nsf. Or contact Michael Bonini, Research Division, Pennsylvania DOT, 717-772-4664, mbonini@dot.state.pa.us.