

# Horizontal Curves

## Safety and Design Technical Services Team

### PRODUCTS & SERVICES

The FHWA Resource Center's Safety & Design Technical Service Team (TST) is available to assist with questions and issues relating to Horizontal Curve design.

The most prevalent types of crashes that occur on horizontal curves are run-off-road (ROR) and head-on crashes; therefore, it is crucial to take steps to reduce the frequency and severity of these types of crashes.

### Workshops, Seminars and Courses:

#### Improving Safety of Horizontal Curves Workshop

This workshop is a 1-day course based primarily on the material in ***NCHRP Report 500 Volume 7: A Guide for Reducing Collisions on Horizontal Curves***. Topics addressed include the 20 strategies outlined in the Guide, as well as additional material provided in other appropriate Report 500 Volumes, by researchers, and by practitioners.



The two main objectives for this course are to introduce ways to improve safety along horizontal curves by:

1. Reducing the likelihood of a vehicle leaving its lane and either crossing the roadway centerline or leaving the roadway, and
2. Minimizing the adverse consequences of leaving the roadway.

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By participating in this training, you will learn multiple strategies for reducing the likelihood of lane departure such as:

- Enhancing delineation along the curve
- Providing adequate sight distance Installing shoulder rumble strips
- Installing centerline rumble strips
- Preventing edge drop-offs
- Providing skid-resistant pavement surfaces
- Providing grooved pavement
- Providing lighting of the curve Providing dynamic curve warning system

The course presents methods for minimizing the adverse consequences of leaving the roadway at a horizontal curve such as:

- Providing advance warning of unexpected changes in horizontal alignment
- Designing safer slopes and ditches to prevent rollovers
- Removing or relocating objects in hazardous locations
- Delineating roadside objects
- Adding or improving roadside hardware
- Improving design and application of barrier and attenuation.

### Who should attend?

The course is designed for State and local engineers and technicians involved in the design, analysis, operation and maintenance of highways.

**For more information about improving the safety of horizontal curves in your area, contact:**

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***Safer by Design***