

Work Zone Safety Interactive Video Trainer/Advisor

*Federal Highway Administration
Virginia Transportation Research Council*

The Federal Highway Administration and Virginia Transportation Research Council implemented a knowledge automation system to assist highway engineers in selecting appropriate traffic control and management strategies for highway construction and maintenance zones. It is used as:

- ◆ An interactive training course for work zone safety procedures
- ◆ A source of information for specific work zone safety issues
- ◆ A work zone planning and design aid

Due to the knowledge automation system's flexibility, it is combined with the presentation capabilities of an interactive video training system. The use of the video technology enhances the knowledge automation system by providing the user with high quality video images. This visual information can aid the user in analyzing and diagnosing problems and in understanding the recommended solution.

The training system presents the traffic control devices available and the basic procedures for selecting and using these devices. It also incorporates established principles to be used in the design, installation and maintenance of traffic control devices and heuristics for applying these principles to a particular situation. The course is divided into a series of knowledge automation system modules and lessons, which allows the training to be tailored to individual needs. Questions spread throughout the course require the user to actively participate in the training and are governed by their responses. A proper response allows the user to continue with the training, while incorrect response results in correction prior to proceeding with new material.

