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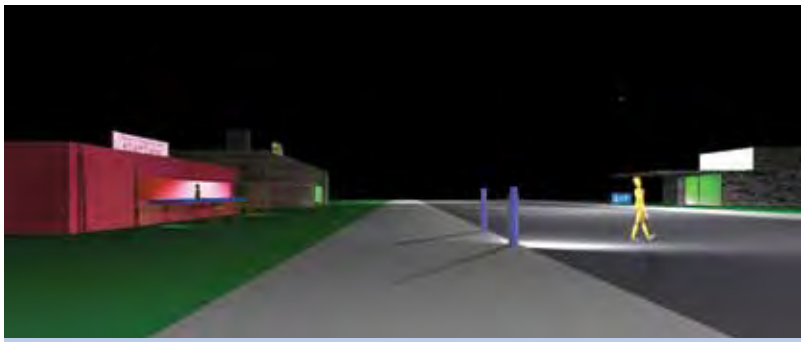

Bollards May Improve Crosswalk Safety

In an effort to reduce traffic accidents involving pedestrians, the Lighting Research Center (LRC) joined with the New Jersey Department of Transportation and the Federal Highway Administration (through the University Transportation Research Center at the City University of New York) to evaluate different crosswalk lighting systems. Traditionally, intersection lighting is provided by pole-mounted luminaires. While the luminaires illuminate the crosswalk and surrounding areas, they don't always provide enough contrast between the pedestrian and his or her background.

The LRC's transportation group conducted a study that looked at lighting solutions that would illuminate the pedestrian but not the background to increase contrast and improve pedestrian visibility and detection. Under the direction of John Bullough, scientists identified and tested a bollard-based approach, which uses short vertical posts containing linear light sources inside. The approach provided the contrast needed to distinguish pedestrians from their surroundings and was less expensive to install, maintain and operate than a typical pole-mounted system.

The study was supported by a full-scale mock-up field demonstration in which a temporary prototype fluorescent bollard system was installed at a crosswalk along U.S. Route 9 in Middlesex County, NJ. "Overall, the bollards were judged as being likely to increase pedestrian safety," says Bullough, principal investigator for the project. "At the end of the study, the group made recommendations for improvements, such as reducing glare by installing louvers and dimming when no pedestrians were present." Complete report details can be found at *www.utrc2.org/research/assets/152/FHWA-NJ-2009-0031.pdf*.