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7. Author(s) Yan Qi, Ryan N. Fries, Huaguo Zhou, Abdur Rab, and Raghunandan Baireddy		8. Performing Organization Report No. ICT-17-021 UIUL 2017-2021	
9. Performing Organization Name and Address Illinois Center for Transportation Department of Civil and Environmental Engineering University of Illinois at Urbana-Champaign 205 North Mathews Avenue, MC-250 Urbana, IL 61801		10. Work Unit No. N/A	
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16. Abstract Pedestrians are the most vulnerable road users. The risks to pedestrians crossing at uncontrolled locations are much higher than at signalized intersections. There has been an increasing trend in pedestrian deaths during the past decade. Specifically, pedestrian fatality as percent of total fatalities indicates an increasing trend in a ten-year period from 2005 to 2014. Several research projects funded by both federal and state transportation agencies have attempted to identify effective strategies for improving pedestrian safety within their jurisdictions. However, very little research was conducted on pedestrian safety at uncontrolled locations in Illinois. The objectives of the project were to identify the best practices of approving pedestrian crossings and pedestrian-crossing treatments at uncontrolled locations and to develop procedures and guidelines to be used by the Illinois Department of Transportation (IDOT) and local agencies. To achieve the research goal, the team conducted a comprehensive literature review of related studies and existing guidelines, a survey and interview of Illinois transportation engineers, statistical analysis of Illinois pedestrian-crash data from 2010 to 2014, and a field review of selected high-crash corridors (HCC) in Illinois. This study identified several common issues associated with the high-pedestrian-crash-prone roads, e.g., speeding, poor lighting, noncompliance with posted signage, inadequate or missing signage, or lack of conspicuity. Several geometric features were also proven to be related to pedestrian crashes; for instance, long crossing distances, insufficient sight distance, and inappropriate placement of bus stops and parking were proved to affect pedestrian safety. In addition, pedestrian-crossing treatments were classified into five categories in the study, and their effectiveness and suitable conditions were assessed and identified. Based on the research findings, a guidebook was compiled with a comprehensive discussion of strategies and treatments to enhance pedestrian safety at uncontrolled locations. The target audiences for this guidebook are transportation professionals, highway designers, traffic engineers, law enforcement officers, and safety specialists who may be involved in efforts to reduce pedestrian crashes at uncontrolled locations.			
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