



ABOUT THIS PROJECT

PROJECT NAME: [Accommodation of Vulnerable Road Users](#)

PROJECT NUMBER: TPF-5(438)

PROJECT FUNDING PROGRAM: Smart Work Zone Deployment Initiative, a nine-state collaborative research effort

PROJECTED END DATE: June 2025

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RESEARCH IN PROGRESS

Accommodating vulnerable road users in work zones

With more telecommuters in the workforce since the COVID-19 pandemic, travel areas that were traditionally considered low-volume environments for cyclists and pedestrians are experiencing increasing activity. At the same time, there has been a rise in multiyear, large-scale infrastructure projects. Combined, these factors have increased the dangers to vulnerable road users such as bicyclists and pedestrians in work zones.

This project will provide a comprehensive overview of best practices and innovative solutions for accommodating vulnerable road users in work zones to address the current lack of data on this topic. The aim is to create a user-friendly resource that can be readily implemented by those responsible for

work zone safety, ultimately leading to safer conditions for bicyclists and pedestrians. “The results will provide ready-to-use guidance on how to improve safety for vulnerable road users in many environments,” said Dan Sprengeler, work zone traffic control engineer, Iowa DOT Traffic and Safety Bureau.

Research will include a review of the literature, a survey of state and local transportation agency practices in work zone safety, and case studies based on survey findings and peer exchanges. The results of these efforts will then be synthesized to develop a gap analysis that will guide the development of practical solutions for real-world scenarios where mitigating the hazards that face vulnerable road users are most urgent.

The guidance would support practical solutions and strategies, such as setting up temporary pedestrian walkways with clear signage and proper lighting. The research may also guide the use of intelligent transportation systems, which could gather data through sensors and camera systems to improve pedestrian wayfinding and visibility to drivers.

The research is expected to conclude in June 2025.

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