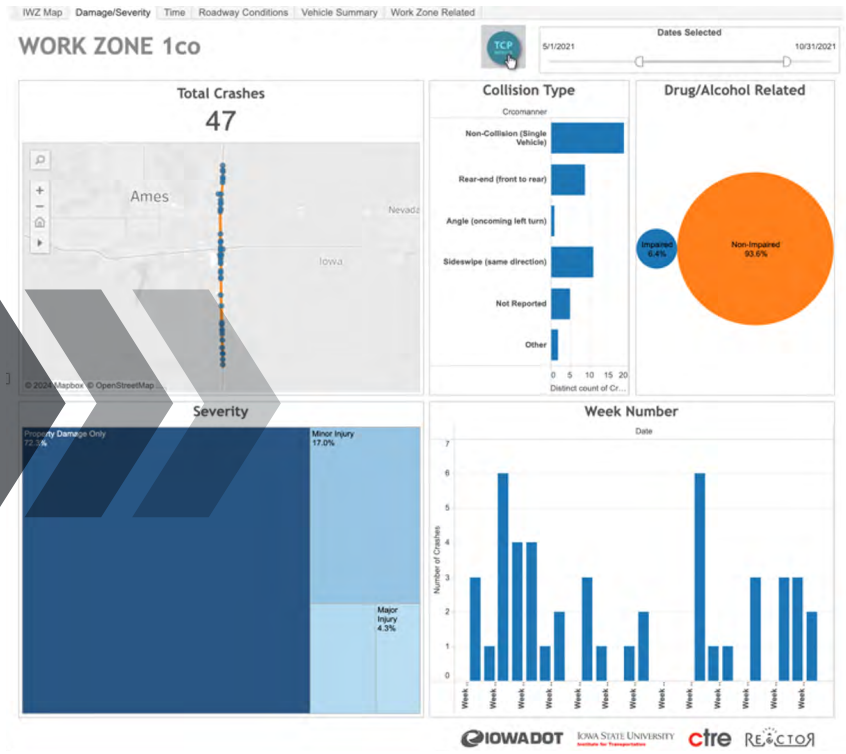
JULY 2024



ABOUT THIS PROJECT

PROJECT NAME: Development of an Analytical Tool for Work Zone Performance

PROJECT NUMBER: TPF-5(438)

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

PROJECTED END DATE: June 2025

PROJECT CHAMPION:
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RESEARCH IN PROGRESS

Developing an analytical tool to measure work zone performance

Work zones present temporary changes in traffic flow that are often the source of crashes and traffic delays. Mitigating the risks is crucial to worker safety and smooth traffic flow. The Midwest States Smart Work Zone Deployment Initiative, a pooled fund study led by Iowa DOT since 2004, evaluates new products and conducts research on the enhancement of safety and mobility in highway work zones. The study includes members from nine state departments of transportation, the Federal Highway Administration, universities, and industry.

In recent years, the availability of data and the size of the data being received have dramatically increased for work zone practitioners. Having access to a large amount of data can be beneficial, but agencies need to translate this raw data into actionable information that can be used to guide decision-making.

The research team will develop an analytical tool for work zones to effectively visualize key performance indicators and measurements. The team will review state-level initiatives relating to work zone performance and compile a comprehensive list of performance metrics.

Based on these findings, the team will create a user-friendly tool for work zones that facilitates easily uploading data in a standard format and generates a summary of the performance measures for the work zone. The tool will allow various stakeholders to report and assess performance measures in work zones without the need for advanced skills in data analytics.

"The tool will be valuable to local agencies in Iowa and other states that are facing similar challenges with data analysis," said Dan Sprengeler, work zone traffic control engineer for Iowa DOT's Traffic and Safety Bureau.

The research is expected to conclude in June 2025.

To learn more about this project and subscribe to updates, visit Idea #3497.

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