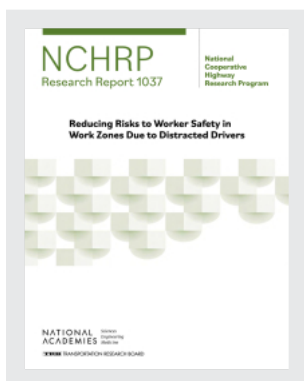


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Reducing Risks to Worker Safety in Work Zones Due to Distracted Drivers (2023)

DETAILS

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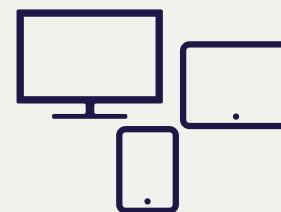
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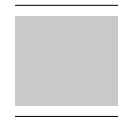
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SUMMARY

Reducing Risks to Worker Safety in Work Zones Due to Distracted Drivers

The purpose of this research was to identify and evaluate temporary traffic control (TTC) strategies aimed at reducing worker safety risks due to distracted driving in work zones. The research team first examined the state of the practice for deterring distracted driving behaviors in work zones. This information is in Chapter 2 and includes a review of available literature related to distracted driving in work zones, as well as a survey of state departments of transportation (DOTs) agency personnel and contractors to identify practices or countermeasures they were using to mitigate distracted driving intrusions into work zones. Countermeasures discussed included:

- Enhanced traffic control devices (primarily, advance warning signs).
- Queue warning systems.
- Speed limit reductions.
- Temporary portable rumble strips (TPRSs).
- Law enforcement.
- Intrusion alarm systems.
- Traveler real-time in-vehicle notifications.

Two countermeasures were selected for evaluation in real work zones, as Chapter 3 details. The research team used direct observations of driver attention to compare work zones with and without the countermeasures deployed.

TPRSs were evaluated at four different flagger stations on a two-lane road in Alabama. TPRSs appeared to have some effect on distraction, and the data indicate that transportation agencies and contractors should consider TPRSs for reducing distracted driving at flagger stations.

A “Watch for Workers When Flashing” warning sign was fabricated and evaluated at lane closures on multilane roads in Texas. Based on the evaluation outcomes, the research team concluded that the “Watch for Workers When Flashing” sign had a limited effect in terms of reducing distracted driving behaviors. This sign may also have other benefits not evaluated in this study, such as increased signing credibility.

The study’s conclusions and proposals are in Chapter 4. For both countermeasures, only a limited number of work-zone conditions could be evaluated within the scope and budget of the research project. Additional research under a wider variety of conditions would be beneficial.