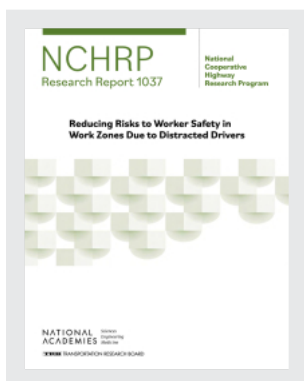


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Reducing Risks to Worker Safety in Work Zones Due to Distracted Drivers (2023)

DETAILS

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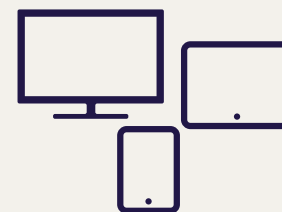
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CHAPTER 1

Background

Work zones are complex and often hazardous places to work. Workers report an increasing concern of distracted drivers resulting in near misses and vehicles hitting pedestrians and/or equipment in work zones. While driver distraction is cited in 8 to 17 percent of fatal work-zone crashes nationally, these figures likely underestimate the role that distraction plays in work-zone crashes. In the past, driver distractions in the vehicle were generally limited to driver actions such as eating, reading a map, talking to passengers, applying makeup, or similar activities while operating the vehicle. The advancement of new cell phone technologies now allows drivers to email, text, and make extended phone calls while driving. An increasing need exists to determine what transportation agencies are doing to minimize or mitigate the intrusion of vehicles by distracted drivers into work zones and areas.

Distracted driving is defined as the “diversion of attention away from activities critical for safe driving toward a competing activity” (Regan et al. 2008). A significant amount of research has investigated how distracted driving can affect an individual’s ability to drive, including the impact of technology use on driver performance. The primary focus, however, has been on enforcement, education, and advocacy to reduce or eliminate the use of technology while driving or operating a vehicle. Little research has been conducted to investigate what states are doing to alert workers or distracted drivers of approaching hazards prior to the distracted driver’s vehicle entering work areas.

For this project, the research team first examined the state of the practice for deterring distracted driving behaviors in work zones. This was accomplished using two techniques to gather information about distracted driving in work zones. First, the research team reviewed the available literature to gather information on mitigating the intrusion of vehicles by distracted drivers into work zones and work areas. Second, the research team contacted the respective state departments of transportation (DOTs) agency personnel and highway construction and maintenance contractors to identify practices or countermeasures they may be using to mitigate distracted driving intrusions into work zones. Chapter 2 presents the state-of-the-practice findings.

Two countermeasures were selected for evaluation: a “Watch for Workers When Flashing” warning sign and temporary portable rumble strips (TPRSs). The research team worked with several transportation agencies and traffic control providers to identify the work zones for evaluating the countermeasures. Chapter 3 presents the details of the evaluation.

Based on the evaluation outcomes, the research team developed conclusions and proposals regarding the implementation of the two countermeasures. Chapter 4 provides this information.