

Countermeasures for Distracted Driving: An Exploration Beyond the Scientific Literature

INTRODUCTION

Previous systematic reviews on the effectiveness of countermeasures for distracted driving conducted by the AAA Foundation for Traffic Safety found that results of existing evaluations were mixed, there was questionable generalizability to other populations or regions and, in other cases, insufficient evidence to draw firm conclusions. Thus, this study focused on countermeasures implemented by government and private entities, which might not be documented in the peer-reviewed scientific literature or might not have undergone formal evaluation. The objectives were: to identify and document these countermeasures along with related useful outcomes and practical guidance; to identify countermeasures that could benefit from further or future evaluations; and to understand the extent to which there is explicit communication by those involved in distracted driving countermeasures about how the countermeasures align with behavior-change theories and constructs, as well as Safe System principles to address traffic safety.

METHODOLOGY

The research team used a systematic framework for assessing driver distraction countermeasures. The study considered evaluation outcomes available in the non-scientific literature guided by appropriate theory and practice. The data collection tasks included: 1) focused environmental scans directed at current activities from organizations (such as State Highway Safety Offices (SHSOs) and other safety programs), and their incorporation of technology, behavior-change theories, and Safe System approach with implications for driver distraction countermeasures; 2) an initial round of interviews with stakeholders considered to be foundational in nature; 3) a stakeholder survey; and 4) a second round of interviews, considered to be integrative in nature.

KEY FINDINGS

The amount of information contained is vast, especially for the environmental scans of SHSOs and SHSPs. Detailed results from the scans and the other three data collection tasks are available in the full report and incorporated into synthesis tables.

TECHNICAL REPORT:

Molnar, L. J., Zakrajsek, J. S., Zanier, N., St. Louis, R. M., & Eby, D. W. (2024). *Countermeasures for Distracted Driving: An Exploration Beyond the Scientific Literature* (Technical Report). Washington, D.C.: AAA Foundation for Traffic Safety.



ABOUT THE AAA FOUNDATION FOR TRAFFIC SAFETY

Founded in 1947, the AAA Foundation for Traffic Safety in Washington, D.C., is a nonprofit, publicly supported charitable research and educational organization dedicated to saving lives by preventing traffic crashes and reducing injuries when crashes occur. Funding for this research was provided by voluntary contributions from AAA/CAA and their affiliated motor clubs, individual members, AAA-affiliated insurance companies, and other organizations or sources.

607 14TH STREET, NW, STE 701 WASHINGTON, DC 20005 202-638-5944 AAAFOUNDATION.ORG Findings from the foundational interviews revealed that distracted driving is likely to be underestimated, underprioritized, underfunded, and difficult to evaluate. Additional challenges identified by the interviewees include the following:

- Most distracted driving countermeasures (including legislation) focus solely on specific cellphone-use behaviors
- Distracted driving countermeasures, as implemented, most often involve education, though some interviewees noted a lack of effectiveness for education alone
- 3. Enforcement is often perceived as the most effective countermeasure but not feasible for most organizations
- Misunderstanding of the Safe System approach (by both practitioners and the public) may limit the necessary redundancy of implementation efforts.

Based on survey data, half of the respondents confirmed that strategies for addressing distracted driving have been in place in their organization for more than 5 years. Most organizations conduct their own evaluation to determine how effective it is. Suggestions to overcome barriers include increasing funding for implementation and promotion, increasing public awareness, and strengthening policies or laws.

Major recommendations from the integrative interview discussions include: 1) incorporating behavioral science to develop campaigns on content relatable to most drivers rather than just the negative consequences of distracted driving and 2) extending the reach of traditional distracted driving countermeasures by actively involving young drivers, families, and community members. Interviewees mentioned that technologies are currently only useful for specific traffic safety situations and behaviors when drivers engage in risky driving behaviors other than distracted driving. In addition, it was mentioned that legislation must 1) be written as simply as possible with concrete examples of violations; 2) clearly define/describe penalties, as well as any exemptions in the law and consequences for violating the law; and 3) be enforceable by specifying visible behavior that can be detected and proven. Interviewees noted the challenges associated with racial profiling in enforcement, insufficient opportunities

for full legislative review prior to voting, and lawmakers' own use of cell phones and other devices while driving.

The following recommendations are provided, with additional explanation for each in the full report (in the order they are presented in the full report):

- Expand the range of distracted driving behaviors targeted by countermeasures beyond cellphone use.
- Extend the targeting of distracted driving countermeasures beyond young drivers.
- Continue the development of smartphonebased distracted driving countermeasures.
- Strengthen educational/behavioral distracted driving countermeasures by incorporating constructs of behavioral change theory that are known to be effective in changing other risky behaviors.
- Expand the framing of educational/ behavioral countermeasures to include non-risk-related messaging.
- Focus on educating the law enforcement community on the value of enforcing distracted driving laws.
- Promote the use of objective measures of general driving and distracted driving in the development and evaluation of distracted driving countermeasures.
- Clarify among distracted driving stakeholders the importance of outcome evaluations that measure changes in behavior in understanding the effectiveness of distracted driving countermeasures.
- Develop a consistent and coordinated branding of distracted driving prevention efforts across jurisdictions.
- Increase the visibility of the National Distracted Driving Coalition and other existing alliances that address distracted driving.
- Address safety culture and the Safe System approach in efforts to reduce distracted driving.
- Develop a Safe System approach toolkit with easy-to-understand strategies and materials for implementing efforts to address distracted driving.
- Consider the necessary and realistic financial and human resources as a fundamental component in distracted driving efforts.
- Ensure that underserved and low-income communities have the resources to implement and engage in distracted driving countermeasures.