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| Project Title | Guidelines for Development of Evidence-Based Countermeasures for Risky Driving | |
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| Industry or Government Principal, organization, and contact information | Toyota | |
| Most relevant CCAT research thrusts (choose all applicable) | ___X___ Enabling Technology<br>_____ Planning and Policy<br>___X___ Human Factors<br>_____ Infrastructure Design and Management<br>_____ Control and Operations<br>_____ Models and Implementation | |
| Funding Request | | |
| Matching Funds and Source (if any) | Toyota $842,501 | |
| Total Project Cost | $842,501 | |
| Contract Number | 69A3551747105 | |
| Project start/end dates | 9/1/2017 – 03/31/2021 | |
| Project Abstract | The overall project objective was to create a set of guidelines that could be used to inform the development of risky driving, particularly distracted driving countermeasures that are evidence-based, guided by theory, and lead to sustained behavioral change. The project had three guiding aims: identify a set of theories and underlying constructs that would be applicable to risky driving behaviors of road-users; identify the characteristics of risky driving behaviors and additional factors that may mediate the effectiveness of a countermeasure (e.g., personality, cognitive ability, socio-demographics, and attitudes); and develop recommendations for evidence-based countermeasures that can be used to examine risky driving behaviors.  To this end, the project had several tasks including: developing an inventory of behavior change theories based on review of the literature; identifying a set of candidate set risky behaviors for the project, comprised of both non-driving secondary tasks (e.g., distraction-related behaviors) and risky driving behavior from existing coded events from two of UMTRI's largest naturalistic driving datasets-- Integrated Vehicle-Based Safety Systems (IVBSS) and Safety Pilot Model Deployment (SPMD); identifying the underlying dimensions of candidate risky behaviors; conducting an online survey of about 445 young, middle age, and older drivers on several topics including engagement in secondary tasks while driving, risky driving, and several psychosocial and personality characteristics; | |

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| | installing a customized DAS in the vehicles of 46 people who completed the survey and collecting driving and secondary task engagement data from them for 3 weeks; and conducting complex data analysis to model engagement in secondary tasks and risky driving based on behavior change theory constructs and other demographic and psychosocial factors.<br><br>The final report for this project will not be publicly available. |
| High-level implementation plan | |
| Project Metrics | |
| Web Links: | ccat.umtri.umich.edu |