

Hypothetical Project

The response to this hypothetical project is limited to a brief description of project requirements of no more than **thirty (30) pages** (total, for all three (3) requirements described below). This outline should provide details about each requirement (e.g., justify and describe how it would identify innovative demonstration, countermeasures, or training needs; a proposed project management plan or approach), a list of staff members/labor categories involved, and an estimate of the number of hours required to complete the task. This project is hypothetical, and there are no plans to fund this task under the scope of this effort.

Background

Motor vehicle crashes were the leading cause of unintentional death in 2020 for the 15 to 24-years old age group in the United States (Centers for Disease Control and Prevention [CDC], 2021). In 2020, 1,885 drivers 15- to 20- years old were killed, and an estimated 189,950 were injured in motor vehicle crashes (National Center for Statistics and Analysis [NCSA], 2022). In comparison with adult drivers, young drivers are substantially over-involved in crashes. In 2020, drivers 15 to 20 made up 5.1% of licensed drivers in the United States, yet they made up 8.5% of total drivers in all fatal crashes and 11% of drivers in all crashes. Drivers ages 15 to 20 years have the highest involvement in fatal crashes of any age group.

The dynamic driving task requires an individual's focused attention; however, young drivers have higher crash risks because they are inexperienced (Hedlund et al., 2003) and lack the proper brain development that continues towards full maturation beyond adolescents (Dahl, 2008; Keating, 2007; Somerville, 2016; Steinberg, 2007). Normal adolescent development involves increased risk-taking behaviors (Kelley et al., 2004). In addition, safety considerations are not of primary concern for adolescents and in fact they are more prone to seek rewards and overlook risks, especially in the presence of their peers (Chein et.al. 2011; Spear, 2011).

Additionally, the fatality rate among newly licensed drivers who have had their initial (often restricted) licenses 6 months or less is 5 times larger than the rate for more experienced teens who have held a restricted license for more than 6 months (Mayhew, Simpson & Pak, 2003; Williams, 2003; Williams, Preusser, Ferguson, & Ulmer, 1997). The fatality rate among experienced teen drivers is also unacceptably high, being some 2 to 3 times higher than the fatality rate among the safest of drivers. The same pattern holds true in Europe, both for newly licensed and experienced teen drivers (Vlakveld & Twisk, 2005).

But young drivers are not the only concern, all novice drivers lack appropriate driving experience, and an increasing proportion of young people are delaying licensure (Tefft et al, 2014). Data show that black and Latino youth (Shults and Williams, 2013, Tefft, 2014) as well as those from low-income backgrounds (Curry et al., 2015, Tefft, 2014, Thigpen and Handy, 2018), are more likely to delay licensure. These trends are concerning because most driving programs focus on a graduated licensing process for younger novices under the age of 18 years.

Given these high fatality rates and data trends, it is important to explore what driver education programs are doing to consider appropriate best practices and countermeasures to improve driver education and training efforts across the United States.

The purpose and objective of this Umbrella Cooperative Agreement (CA or Agreement) is to conduct research on, evaluations of, and identification of best practices related to driver education for novice drivers and to train state driver licensing authorities how to adopt such practices.

Drivers ages 15 to 20 years have the highest involvement in fatal crashes of any age group. In addition, there is an increasing proportion of young people over the age of 18 years delaying licensure. Delaying licensure, removes these individuals from the graduated licensing procedures and requires no classroom or behind-the-wheel training/instruction before a license is issued in some states. (Tefft et al, 2014). New traffic safety countermeasures are required to address these trends.

The Applicant will focus on the following:

- Identify and develop innovative driver education, licensing, or training demonstration practices and countermeasures.
- Develop education and training to driver licensing authorities on best practices or countermeasures.
- Conduct research of issues or practices related to driver education, licensing, training, and countermeasures.

NHTSA seeks to issue an award that proactively address equity and barriers to opportunity, including automobile dependence as a form of barrier, or redress prior inequities and barriers to opportunity. Section E describes equity considerations that an applicant can undertake, and the Department will consider during the review of applications. Projects that have not sufficiently considered equity and barriers to opportunity in their planning, as determined by the Department, will be required to do so before receiving funds for construction. All projects must comply with Federal civil rights requirements. See Section F.2 of this NOFO for program requirements.

In addition, NHTSA intends to use the Developing Best Practices and Training for Novice Driver Education project to support the creation of good-paying jobs with the free and fair choice to join a union and the incorporation of strong labor standards and workforce programs.

Consistent with the Department's Rural Opportunities to Use Transportation for Economic Success (ROUTES) initiative, the Department seeks to award funding to rural projects that address deteriorating conditions and disproportionately high fatality rates and transportation costs in rural communities.

The Applicant should discuss how it would conduct a project with the following requirements:

Justify and describe how it would identify innovative demonstration, countermeasures, or training needs; prepare a proposed project management plan or approach to address the identified need, create and justify a strategy for use in the promotion of developed efforts, and conduct research on issues or practices related to driver education, licensing, training, and countermeasures using behavioral research theories and constructs (e.g., Theory of Reasoned Action, Theory of Self-Efficacy, Theory of Planned Behavior, Health Belief Model).

The Applicant shall detail its approach that covers the following requirements:

Requirement 1: Identify and develop innovative driver education, licensing, or training demonstration practices and countermeasures.

The Applicant shall describe their understanding of the Novice Teen Driver Education and Training Administrative Standards (NTDETAS) and the NHTSA State Driver Education Assessment processes. The offeror shall justify and describe how it would use the revised NTDETAS to develop a set of standard questions that could be used in the NHTSA Assessment Process. In addition, based on the revised NTDETAS, the Applicant shall justify and describe how it would develop a tool that would allow States to self-assess their driver education program efforts. And finally, the Applicant shall create and justify a strategy it would use to promote awareness of both tools (e.g., Driver Education Assessments and Driver Education State Self-Assessments) to actively recruit States to participate in the Assessment processes.

Requirement 2: Develop education and training to driver licensing authorities on best practices or countermeasures.

The Applicant shall describe and justify how it would identify education and training needs of driver educators, driver licensing examiners, or other State driver licensing authorities. The Applicant shall describe how it would identify and develop an innovative best practice or countermeasure to address identified training needs. And finally, the Applicant shall create and justify a strategy it would use to promote the developed education, training, or other innovative countermeasure. In developing the promotional strategy, the Applicant shall give consideration to how it would identify those with the greatest need for receiving education and training.

Requirement 3: Conduct research of issues or practices related to driver education, licensing, training practices, and countermeasures.

The Applicant shall provide a plan for how it would study the implementation and impacts of the curriculum developed for Advanced Driver Assistance Systems among the following populations: driver educators, driver licensing examiners, or other State driver licensing authorities. The study is meant to 1) learn more about the intended audience's knowledge of, comfortability with, and readiness to adapt to using ADAS systems or technologies in their teaching or testing methods, 2) determine if the developed curriculum content and delivery

methods are appropriate for the audiences, and 3) identify modifications needed to improve the training curriculum. The plan shall include adequate detail to demonstrate that the Applicant understands how to use behavioral research theories and constructs (e.g., Theory of Reasoned Action, Theory of Self-Efficacy, Theory of Planned Behavior, Health Belief Model) to build an appropriate research study, collect adequate data to support analyses, as well as a description of the data to be collected, independent and dependent variables, and planned analyses. The plan shall also describe plans to acquire necessary approval to collect data, recruit participants, collect and analyze data, and report results.