

Project #10404 – Scoping Study for Implementation of the Highway Safety Manual in Alabama

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Record Type: UTC

The American Association of State Highway and Transportation Officials (AASHTO) published the first national *Highway Safety Manual* (HSM) in July 2010, but the lack of a systematic, proven plan for implementation of the HSM will delay the use of its new safety procedures. The objective of the project is to develop a plan of action and schedule that includes a scope of work to optimize the implementation of the AASHTO HSM methodologies and the Federal Highway Administration's (FHWA) supporting software Safety Analyst (SA) and the Interactive Highway Safety Design Model (IHSDM). The project will comprise 10 tasks performed in parallel: 1) learn from implementation efforts in other states; 2) identify HSM users and their needs; 3) examine the data and effort needed to deploy AASHTOWare, AASHTO's successful suite of safety-management software, then recommend whether and how it can benefit HSM implementation in Alabama; 4) perform a Strength, Weakness, Opportunity, and Threat analysis of deploying IHSDM in Alabama, including general data availability, training needs and associated costs for incorporating IHSDM into Alabama's traffic-safety analyses, an assessment of the advantages and disadvantages of its use, and an evaluation of how the Center for Advanced Public Safety's Critical Analysis Reporting Environment (CARE) software can work with IHSDM; 5) inventory data needs, compare to the data already collected, and plan to collect data for optimum implementation of the HSM; 6) analyze how the Center for Advanced Public Safety's (CAPS) Critical Analysis Reporting Environment (CARE) and the Alabama Department of Transportation's (ALDOT) Cost/benefit Optimization for the Reduction of Roadway Caused Tragedies (CORRECT) software can support one another; 7) conduct preliminary analysis of HSM's estimates for total number of crashes per year for certain types of facilities using Alabama data, and possibly recommend additional study or modified calibration factors; 8) perform a software-effectiveness study that considers the cost of collecting various types of data and the improvement in estimation those data offer for various software components; 9) prepare a draft implementation plan; and 10) modify or extend the project as UTCA and ALDOT see fit.

Start Date: 2010/10/21

End Date: 2011/10/20

Status: Active

Contract/Grant Number: GR23256

Secondary Number: UTCA Project #10404

Total Dollars: 301279

Source Organization: Alabama Department of Transportation

Sponsor Organization

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Subjects

Highway Safety Manual

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