

UTC Project Information	
Project Title	Safety Data Management and Analysis: Addressing the Continuing Education Needs for the Pacific Northwest
University	University of Idaho
Principal Investigator	Kevin Chang
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Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$165,000 University of Idaho \$45,000 Washington State University \$25,000 Oregon State University \$45,000 University of Washington \$25,000 University of Alaska Fairbanks \$25,000
Total Project Cost	\$330,000
Agency ID or Contract Number	DTRT13-G-UTC40
Start and End Dates	December 16, 2016 – January 31, 2018
Brief Description of Research Project	<p>Advancements in data collection capabilities have allowed transportation-related agencies to collect mountains of safety data. There is an immediate need to find out what types of safety data are being collected, what types of safety analysis can be done with the collected data, and what (other) types of safety data and analysis approaches are required to meet the safety objectives.</p> <p>An initial phase of this study developed a comprehensive understanding of needs and priorities with regard to data management and analysis and compiled a comprehensive set of safety data workforce development resources for use and distribution. This phase will test, refine, modify, and update the training tools by administering user surveys and conducting focus groups with practitioners and academicians alike.</p>

<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p>For this second phase, the set of tools developed for practitioners was pilot tested and reviewed by a focus group and then refined based on the feedback received. A similar set of tools was developed for academicians and reviewed by eighteen faculty members to determine the potential value and effectiveness of these products in the classroom; these faculty members from throughout the country teach transportation or transportation safety-related courses.</p> <p>Several of the faculty members who tested the tools indicated that they would be incorporating the content from these materials in their future classes.</p>
<p>Impacts/Benefits of Implementation (actual, or anticipated)</p>	<p>The field of transportation engineering places significant attention on general themes such as roadway design, traffic operations, and planning. The context and importance of safety as part of this discussion is not always clearly defined or established, so in this study the need to incorporate, emphasize, and highlight the role of this transportation pillar as part of curriculum materials for both students and practitioners was explored. An independent set of modules focused on transportation safety was developed and refined for each target audience.</p> <p>The materials that have been separately developed for academicians and practitioners should be viewed as an important and necessary first step. Although the materials have been reviewed, edited, and updated, the slides and accompanying resources should be refined and adapted for personalized use by future adopters. Based on the initial feedback provided by reviewers, opportunities remain for instructors to tailor the modules to meet individual needs and teaching styles. The focus group suggested that the slide decks could be shortened and active learning activities developed; the research team supports these recommendations and encourages future users to consider such changes to satisfy audience expectations. Furthermore, it is strongly encouraged that instructors incorporate relatable real-world applications and case studies to supplement the materials that have been developed; this type of context will greatly support learning and benefit the students and recipients of this developed material.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<p>Web-based applications were not developed as part of this study.</p>