UTC Project Information	
Project Title	Data Mining to Improve Planning for Pedestrian and Bicyclist Safety
University	San Diego State University (lead); Texas A&M University/TTI; Virginia Tech/VTTI
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Funding Source(s) and Amounts Provided (by each agency or organization)	Safe-D (Federal): $99,522 SDSU faculty In-Kind (Non-Federal): $90,047 State of Texas (Non-Federal): $100,224
Total Project Cost	$289,793
Agency ID or Contract Number	Grant No: 69A3551747115 Project: 01-003
Start and End Dates	April 2017 - June 2018
Brief Description of Research Project	Technological advancement in transportation has been creating new opportunities to explore and investigate new sources of data for the purpose of improving safety planning. The proposed project will investigate data from multiple sources, including automated pedestrian and bicycle counters, video cameras, crash databases, and GPS/mobile applications (both active and passive monitoring), to inform bicycle and pedestrian safety improvements. The project goal is to combine/integrate and use the strength of these data sources to produce useful insights in transportation safety planning. While it may not be possible to use all these data sources due to data unavailability, data ownership, and other unforeseen issues, the research team will do their best to obtain and use data from as many sources as feasible. To estimate pedestrian and bicyclist counts at intersections, exposure models will be developed incorporating explanatory variables from a broad spectrum of data sources. Intersection related crashes and estimated exposure will then be used to build risk models that identify high risk intersections.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	The final project report will contain the project outcomes, which will be delivered to Safe-D along with any database used in project analyses. In addition, the modelling approach, methods, and results along with the compiled database are expected to be used in undergraduate and graduate level courses at SDSU, Texas A&M, and Virginia Tech. The research team will also reach out to local agencies to form a stakeholder advisory committee in order to share the outcomes and receive feedback on the project and future collaboration possibilities.

Impacts/Benefits of Implementation (actual, not anticipated)	o Pedestrian and bicyclist exposure models are expected to improve by incorporation information from multiple data sources. o High risk intersections for walking and bicycling will be identified. o The modeling framework will be beneficial to conduct future analyses for other facility types such as roadway segments and also at more aggregate levels such as traffic analysis zones.
Web Links • Reports • Project website	http://www.vtti.vt.edu/utc/safe-d/index.php/projects/data-mining-to-improve-planning-for-pedestrian-and-bicyclist-safety/