

Research Project Statement 22-224 FY 2022 Annual Program

Title:	Investigate Potential Connected and Automated Vehicle (CAV) Liability Issues Within TxDOT
The Problem:	Connected and automated vehicle (CAV) technologies open new issues of tort liability for TxDOT and other government jurisdictions. As TxDOT begins to explore new data sharing opportunities, such as receiving maintenance reports from autonomous trucks or digital sharing of TxDOT infrastructure data, and autonomous opportunities, such as using an autonomous shuttle for TxDOT employees between campuses, TxDOT and local governments with similar deployments, must ensure that they are aware of any legal liabilities that may arise and must proactively work to address these liability concerns. This research will delve into these issues and provide a legal analysis and primer for TxDOT and local government use.
Technical Objectives:	 This research will identify potential new legal issues that might arise from TxDOT's involvement in CAV technologies. To achieve these objectives, the work to be performed shall include: 1. Conduct a comprehensive national literature review and stakeholder interviews to identify potential liabilities and mitigation techniques. 2. Perform an analysis under Texas and federal laws (case law and statute) and provide issue spotting and mitigation recommendations. 3. Address specific questions to be answered: a. How does Texas tort limitation affect TxDOT's efforts in these areas? b. How do TxDOT and local government entities position themselves to address increased liability concerns? c. What can be learned from existing law (case law and statute) that might indicate what liability TxDOT and local jurisdictions might have? 4. Perform a legal analysis and provide recommendations to address liability concerns for up to seven specific use cases currently being explored by TxDOT, two to be defined by the project team and five to include: a. The operation of a CAV shuttle between two TxDOT campuses by TxDOT. b. A scenario in which CAVs operating on Texas roads cause damage to TxDOT assets and TxDOT seeks to recover damages. c. Digital sharing of TxDOT infrastructure information to CAVs. d. Receiving data of maintenance issues from private entities. e. A public shuttle for general use.
	The expectation of the project end product(s) shall attain a Technology Readiness Level of 4.
Anticipated Deliverables:	 Technical memorandum for each task completed. Monthly progress reports. Value of Research (VoR) that includes both qualitative and economic benefits, to be included in the final research report; <u>not a stand-alone deliverable</u>. Research report documenting the findings of the research, including recommendations to address liability concerns for CAVs within TxDOT. Project Summary Report
Proposal Requirements:	 Utilize the "Proj/Agre" and "PA_Form" templates located at the <u>TxDOT RTI website</u>. Proposals will be considered non-responsive and will not be accepted for technical evaluation if they are not received by the deadline or do not meet the requirements stated in RTI's <u>University Handbook</u>, which is also located at the RTI website. Proposals should be submitted in PDF format, 1 PDF file per proposal. File name should include project name and university abbreviation. This project will be tracked during the life of the project using a Technology Readiness Level (TRL) scale. For more information about the use of a <u>TRL</u>, click.