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## TECHNICAL MEMORANDUM

### TxDOT IAC – Technical Support to the CAV Task Force

**DATE:** July 12, 2020

**TO:** Zeke Reyna, TxDOT  
Strategic Research Analyst, CAV

**COPY TO:** TTI\_Reports@tti.tamu.edu  
Tim Hein, Research Development Office, TTI  
Ed Seymour, Executive Associate Agency Director, TTI  
Robert Brydia, Senior Research Scientist, TTI

**FROM:** Beverly Kuhn Research Supervisor  
Senior Research Engineer Texas A&M Transportation Institute

**RE:** Safety, Liability, and Responsibility Subcommittee  
June 15, 2020 Meeting Notes

#### Attendees:

Name	Organization
Andrea Gold	Texas Innovation Alliance
Anne O’Ryan	AAA Texas
Aidan Ali-Sullivan	Nuro
Brad Schlueter	USAA
Brian Moen	City of Frisco
Steven Rundell	Co-Chair - Texas Department of Public Safety
Daniel Groff	Kodiak
Darran Anderson	TxDOT
Donald Davidson	Volkswagen Group of America
Michael Walton	Co-Chair – University of Texas Center for Transportation Research
George Villarreal	TxDOT
Gerardo Interiano	Aurora
Hannah Barron	Auston Transportation Smart Mobility
Jackie Erickson	Edge Case Research, Inc.
Jason JonMichael	City of Austin
Jeff Peterson	First Transit

Jordan Payson	Austin Transportation Department
Julia Monso	Cintra
Julian Gomez	Julian C. Gomez Law Firm
Kristie Chin	Texas Innovation Alliance
Leighton Yates	Alliance for Automotive Innovation
Libby Elliott	Texas Department of Insurance
Mark Worman	Texas Department of Insurance
Michael Moore	UT CTR
Rachelle Celebrezze	Cruise
Rob Braziel	Texas Automobile Dealers Association
Sam Dreiman	Argo AI
Sam Lott	Automated Mobility Services, LLC
Sue Santo	Ike Robotics
Beverly West	Texas Department of Transportation
Zeke Reyna	Texas Department of Transportation
Beverly Kuhn	TTI
Robert Brydia	TTI
Andrea Chacon	TTI

**Agenda / Discussion:**

**I. Opening Comments/Roll Call – Zeke Reyna, TxDOT**

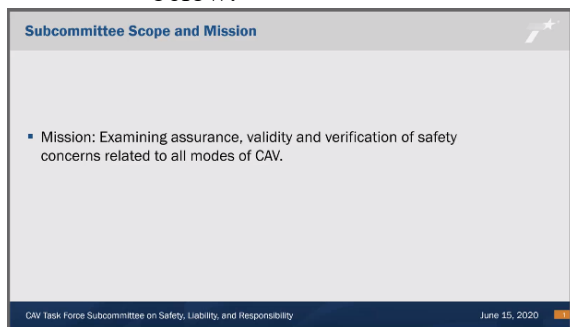
- Zeke welcomed everyone to the first meeting of Texas CAV Task Force Subcommittee on Safety, Liability, and Responsibility.
- Zeke introduced the co-chairs of Captain Steven Rundell from the Texas Dept. of Public Safety and Dr. Michael Walton, Professor of Civil Engineering with the University of Texas at Austin

**II. Co-Chair Welcoming Statements – Steven Rundell, Texas Department of Public Safety / Michael Walton, The University of Texas at Austin**

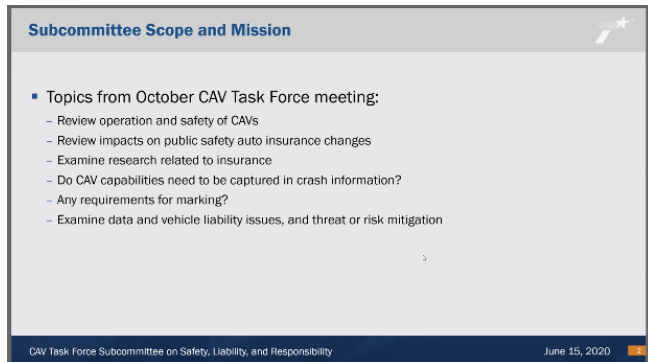
- Covered the agenda for the meeting
- In terms of the white paper, the idea is to work through the development focusing on key elements of the topic, and this is safety, reliability, and responsibility.

**III. Subcommittee Scope and Mission – Zeke Reyna, TxDOT**

- Zeke introduced the mission of the subcommittee, which is captured in the slide below.



- Zeke also shared the previous topics generated by the full task force during the October 2019 meeting. The initial topics are captured in the slide below.



#### IV. Overview of Draft White Paper Outline – Kristie Chin/Andrea Gold, University of Texas Center for Transportation Research

- Presented a list of inputs received from committee members prior to first meeting with subsequent discussion by the group. Discussion points included the following.
  - Cybersecurity and privacy – such as developing key principles and best practices for privacy and cybersecurity with recommendations such as following ISO and/or other standards.
  - Legislation/Regulation – as no federal directive exists for AVs, what requirements are necessary from local/state level?
  - Terminology - Develop and use a consistent vernacular so as to not confuse the general public.
  - Data - Develop a robust and consistent data collection system that accurately obtains, collects, and discloses CAV safety data (including without limitation disengagements, crashes, and injuries) to the general public so that the public can determine for themselves the safety of CAV by reference to data.
  - Data - Data Drives Decisions, Decisions Drive Commerce. Federal regulators need Data, insurance companies need Data, industry needs Data.
- Safety - What features of AV deployment and operation need a minimum level of regulation to guarantee the proper operation and safety of AV in an open environment.
  - Safety Standards - [UL 4600](#) the first standard to address self-driving cars.
  - Transparency & Disclosure - Beneficial to discuss what will be the responsibility of the AV testers when it comes to transparency and disclosure. Will TXDOT consider requiring a formal registration of testers, similar to other states, such as Pennsylvania?
  - Safety - Safety aspects of roadway intersections which require smart Infrastructure and localized fail-safe V2I communications for unmanned AV transit and/or AV ride-hailing fleet operations.
- Infrastructure - Responsibilities of Urban District Management Authorities and associated municipalities for assessment and warranting of infrastructure required for safe operations of AV fleets at roadway intersections.

- Traffic Incident Management (TIM) - How to integrate TIM into the Connected and Automated Transportation (CAT) System. Includes infrastructure owner/operators (IOO), and the first responder community. Includes support means, response needs, data needs, challenges, and opportunities
- Liability and Insurance - White paper should include a focus on liability and insurance issues as they relate to advancing the public interest while balancing the need to encourage AV innovation. All discussions should have a focus on maintaining safety as the highest priority and encouraging the development, testing and deployment of AV technology by companies that are dedicated to operating with transparency.

**V. Important Topics and Feedback on the White Paper Outline (Round Table Discussion) – Kristie Chin/Andrea Gold/Zeke Reyna**

- Group discussion points pertaining to initial white paper outline.
  - Access to the data and the vehicle in general can create problems for OEMs.
  - CAV companies want to see what Texas wants in terms of operations.
  - Challenge for the task force will be to recognize that we're not an advocacy group. Goal is to educate and inform. Be respectful of all different viewpoints.
  - Recognize difference between connected and automated. Other people at larger scales may have reference implementations.
  - Looking forward to hearing goals from the constituency
  - Challenge of gathering data that is useful and no proprietary
  - Industry needs to themselves what their sticking points are.
  - How are we as a subcommittee going to address this "space" - overall, or break it up into parts
  - Certain aspects of our work are going to require inter sub-committee work efforts
  - Currently we test in a bubble, but when we bring everything together, it's a whole new word
  - When we talk about connectivity, are we talking non vehicle, or automated vehicle and/or support mechanism. Implications include standards, privacy, security, amount of data, etc.
  - Important to define the space so that others behind us can continue the work
  - Definitions are important

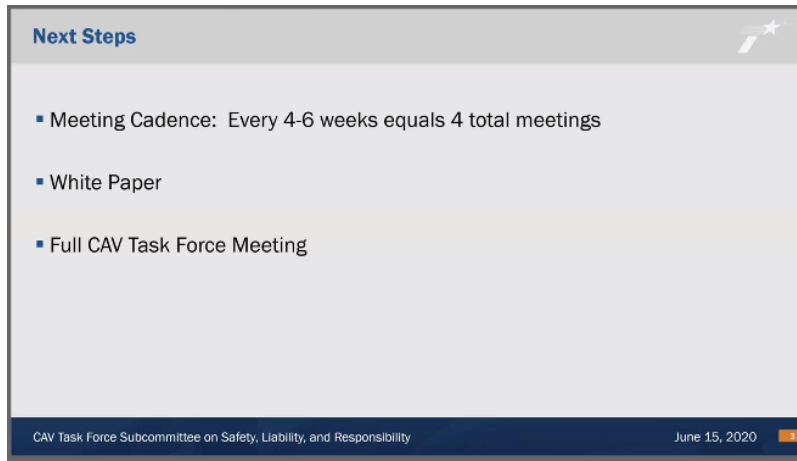
**VI. Selection of Top Priorities – Steven Rundell / Michael Walton / Zeke Reyna**

- Discussion of how to prioritize issues and select top priorities. Comments included:
  - Prioritization could be difficult in this format since we don't have the clarification of the details associated with these issues
  - Since liability is in the title of the SC, is there anybody in insurance
  - Was a game changer to work with an insurance industry.

**VII. Next Steps (Schedule and White Paper) – Steven Rundell/Dr. Michael Walton/Zeke Reyna**

- Discussion of timeframes: Every 4 weeks would mean another 5 meetings
- Group generally agreed.

- Goal dates were provided to have white paper fleshed out late October / Early November. Combine with full project report
- Question was raised about online workspace to share this information. Discussions will be held with TxDOT to determine the best methods for accomplishing this need.



The image shows a presentation slide titled "Next Steps". The slide content includes three bullet points: "Meeting Cadence: Every 4-6 weeks equals 4 total meetings", "White Paper", and "Full CAV Task Force Meeting". The slide footer contains the text "CAV Task Force Subcommittee on Safety, Liability, and Responsibility" on the left, "June 15, 2020" in the center, and a small orange square with the number "3" on the right.

#### **VIII. Closing Remarks – Steven Rundell/Michael Walton/Zeke Reyna**

- Chairs thanked people for participating