





# **TECHNICAL MEMORANDUM**

TxDOT IAC - Technical Support to the CAV Task Force

**DATE:** July 14, 2021

**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

July 1, 2021, Meeting Notes

#### **Attendees:**

Attenuces.	
Andrea Gold	University of Texas Center for Transportation Research
Anna McAuley	University of Texas Center for Transportation Research
Bart Teeter	TxDPS
C. Michael Walton – Co-chair	University of Texas Center for Transportation Research
Daniel Goff – Co-chair	Kodiak
Darran Anderson	Texas Department of Transportation
Duane Galligher	Toyota
Ed Seymour	Texas A&M Transportation Institute
George Villarreal	Texas Department of Transportation
Hannah Barron	Austin Transportation Smart Mobility Office
Jason JonMichael	City of Austin
Kristie Chin	University of Texas Center for Transportation Research
Leighton Yates	Alliance for Automotive Innovation
Lori McMahon	Toyota
Mark Worman	Texas Department of Insurance
Monica Darwish	Embark
Robert Brydia	Texas A&M Transportation Institute

Sam Dreiman	ARGO AI
Sam Lott	Automated Mobility Services LLC
Tony Reinhart	Ford
Zeke Reyna	Texas Department of Transportation

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

- Welcome to next round of meetings and looking at topics for this upcoming year and possibility to expand on ideas from last year.
- Roll call of members and attendees
- Introduced meeting facilitators.

### II. Chair Welcoming Statement – Bart Teeter, Texas DPS / Michael Walton, UTCTR

• Delighted that many have made it back for this next round.

# III. Review of Meeting Structure - Robert Brydia

- Review of Mural Board
  - o Basic overview of how meeting structured on Mural and how members of the subcommittee can interact with it.

## IV. 2021 Subcommittee Opening Facilitated Discussion – Robert Brydia

- Opportunities Identified from 2020 Meetings (comments noted)
  - Design an AV public education campaign developed with national partners, with distribution carried out by local officials and first responders, and through other avenues such as the Texas CAV Task Force website and social media campaigns.
    - *May be behind the curve on this at this point in time.*
    - Move from generalities to specifics. What are the success stories?
    - *Who are the target audiences?*
    - Could provide input to PAVE
    - Could work with industry partners at the local level
    - What do cities and counties need to do to be prepared for their communities?
    - *There is a link to the education committee.*
  - Work with AV developers to create a website showing a map of AV testing and deployments within Texas, with highlights of each deployment.
    - *Solicit private sector links that are relevant.*
  - o Promote ongoing and open public-private stakeholder dialogue and collaboration efforts on safety information and transparency.
    - Make sure what we're addressing is well inclusive of the safety concerns
    - What are you doing? What do you encounter elsewhere? What do we need to address?
    - Ex: New NHTSA Order on crash reporting (ADS and ADAS)
      Difference between AV tech causing crash or something else
    - *Should we get a sample of public's thought? Focus groups?*

- Address misconceptions on safety. How to explain to general public? Policy makers might bear more fruit.
- Focus on a few hot topics related to the safety aspect?
  - Ex: What does it mean to be safe related to autonomous vehicle technology
- Starting point might be VSSAs
- o Initiate conversations on data sharing (including security and privacy considerations) with AV companies that focus on which data can be shared, which data cannot be shared, and which data are open for discussion.
  - Room to have this conversation. Must understand that there are items that cannot be shared in public communications.
  - Companies may be able to provide additional data in a privileged manner to help law enforcement and crash investigation.
  - Crash forms may need to be modified in the future.
  - Law enforcement not really looking for proprietary information.
  - What is the intent of the data sharing?
  - Starting point is understanding what the data are to be used for? Then can proceed to more granular discussions on what/when/where/how
  - Companies want to comply and don't want to hinder any crash investigation--just need to know what's needed.
    - what level of autonomy. did it fail? when did it fail?
  - Forms needs to be straight-forward for on-site entry.
  - For traffic safety and DPS: what is Needed vs. Feasible in regard to crash records.
  - What is data subcommittee working on specific to this broad topic?
    - ➤ Which entities are collecting, storing, and using what CV and AV data?
    - What security and privacy protections need to be addressed and incorporated
    - *▶* into *AV* and *CV* data collection and sharing?
    - *how, for what purposes, and with what protections?*
    - integration of AVs and CVs into the transportation ecosystem?
    - What data can be shared or exchanged to facilitate the safe and successful?
    - What data gaps exist that hinder innovation and furthering the public interest?
- Encourage discussion between operators and developers and law enforcement to explore how to incorporate AV and automated driving function crash factors into state crash report forms.
- Potential topics for 2021 (comments noted)
  - Topic 1: Re-examine infrastructure as a topic.
    - Sam will forward copies of papers related to AV operations and infrastructure.
    - First responder interaction process development and training
    - What is the spectrum of infrastructure topics?
    - *Start simple how do we regulate the curb?*

- *Infrastructure may be a key area we haven't touched on.*
- Ex: Standard sheets for striping and updates to 6"
- Automated guideway and roadway junctions
- Topic 2: Response efforts to CAV crashes and impact on first responders (education / training / insurance)
- Topic 3: Response efforts to CAV trails? (Best practices? NHTSA? Trials?)
- o **Topic 4**: HB 3026: Modifying inspections for vehicles that don't have a driver may not need steering wheel, side mirrors, rearview mirrors, etc.
- o **Topic 5**: Liability insurance might be worthy of consideration.
- Are there needs to limit the types of loads that take place in trials (e.g., HazMat)
- Other Topics
  - Work zone data exchange? (Possible joint effort)
  - Industry says we can likely cross off HazMat (many years to go before that)
  - Inspection doesn't apply (at this point) to areas such as long-haul freight.

# V. Voting – Robert Brydia

- Each person gets two votes regarding interest from committee on these topics.
- Voting Outcome:
  - o 11 votes for Topic 1
  - o 8 votes for Topic 2
  - o 6 votes for Opportunity 1

# VI. Next Steps – Zeke Reyna

- We will continue to meet once per month, as in the past.
- Thanks to everyone for participating.

# VII. Closing Remarks – Bart Teeter, Texas DPS / Michael Walton, UTCTR

• Thanks for time, effort and attention.