Texas A&M Transportation Institute

TECHNICAL MEMORANDUM

TxDOT IAC – Technical Support to the CAV Task Force

DATE: November 24, 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: Data, Connectivity, Cyber Security, and Privacy Subcommittee
November 18, 2020 Meeting Notes

Attendees:

Andrea Chavez	Grace & McEwan Consulting, LLC
Ashley Myers	Grace & McEwan Consulting, LLC
Beverly West	TxDOT Strategic Planning Division
Bobby Cottam	Burns and McDonnell
Brian Steiner	Cisco
Charlie Leal	Governor's Office
Darren Anderson	TxDOT
Donald Davidson	Volkswagen Group of America
Erik Simpson	SeatsX
Gary Wallace	SiriusXM
Glenn Havinovski	WGI
Hannah Barron	Austin Transportation Smart Mobility Office
Jeff Stewart	AT&T

Julia Monso Bustio	Cintra
Kathleen Baireuther	Ford AV
Kelly Curbow	AT&T
Leighton Yates	Alliance for Automotive Innovation
Monika Darwish	Embark
Rachelle Celebrezze	Cruise
Robert Brydia	Texas A&M Transportation Institute
Sam Dreiman	Argo.AI
Steve Pustelnyk	Central Texas Regional Mobility Authority
Steven Smith	McKinsey & Company
Sumeet Kishnani	Stantec
Tammy Meehan Russell	PLUM Catalyst
Thomas Bamonte	North Central Texas Council of Governments
Tom Black	Gartner
Tony Reinhart	Ford Motor Company
Zeke Reyna	TxDOT

I. Opening Comments– Zeke Reyna, TxDOT
- Welcome to the Data & Communications Subcommittee
- Looking forward to reviewing our very "close to" final draft of the white paper today
- We will proceed with Mural Board discussion as we have in the past

II. Chair Welcoming Statement – Brian Steiner, Cisco
- Thank you to everyone who pours their time and effort into this and collaborates these meetings to drive this forward
- Couldn't be more proud to be a part of this

III. Review of White Paper Progress and Next Steps
- Initial Meeting
- Topic Discussion
- Voted on topics
- Developed an Outline
- Received Feedback on Outline
- White Paper
- Review: we are at this stage in the process
    - We have reviewed the input from last meeting and are eager to finalize the edits.
    - Once the white paper is prepared, it will be presented to the Full Task Force on December 3rd
    - Elements of this are likely to be put on website.

- o The Executive Summary will be incorporated in the Annual Report for this year
- o Grateful for all the comments sent in thus far and we will accept comments/input on this for the next 24 hours
- Opportunities

IV. **Revised White Paper Final Draft – Facilitated Discussion**
- Overall Paper
  - o FCC Notice today on DSRC. May need to redraft sections of the paper based on those actions.
    - Lower 45 MHz of the original 75 MHz allocation
    - Top 30 MHz of the original 75 MHz allocation
    - DSRC ceases operation within 1 year.
- List of Figures
- List of Tables
- Acknowledgements
- Disclaimer
- Texas CAV Task Force Charter
- Terminology Note
  - o We define automated and autonomous vehicles, but not connected on this page.
- List of Terms and Acronyms
- Executive Summary
- Introduction
- Connected Vehicles (CVs)
- Automated Vehicles (AVs)
  - o Potentially lacking a (brief) discussion on AI. Different context of AI may not be understood. AI may need to reference as a tool to fuse and creation of a virtual environment.
  - o Some thought that this was too deep a topic for the current paper.
  - o Rework second paragraph on Page 8 on how data is used and the importance of the on-board computer system. Help it make good decisions on how to react. What is the ownership of the synthesized data?
- Government Regulation of CAVs
- Texas Context
  - o DSRC RIP. How does TX play a role in developing C-V2X and migration to 5G?
- Data Privacy, Data Security, and Cybersecurity
  - o Bottom of page 16. MA has now passed a ballot initiative that advocates say will harm cybersecurity.in this area. Ensure that Texas doesn't follow the same approach. We can state that NHTSA has concerns that this is a conflict of federal requirements.
    - https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/nhtsa_testimony_in_response_to_ma_committee_letter_july_20_2020.pdf
- CV and AV Data Use and Data Generation

- o In this section, (page 19?) big table, might need nuance of ownership integrated into the table.
- o Lead-in statement. Immediate Owners are identified but there may be additional owners and nuances to ownership that can be addressed longer term.
- o Table 3. Would it be possible or helpful to discuss "USES" vs. "USERS"?
  - ▪ NO (agreement of committee to not address this)
- o Both Tables 3 and 4 have a safety area and there are references to "near-miss events". However, there is no objective definition of what this means.
  - ▪ Consider striking "near-miss events"
  - ▪ Concern over "safety-critical" as well.
  - ▪ Safety line item: Consider this as a replacement for the first block. "Environment and vehicle data associated with safety situations."
- • Opportunities and Challenges for Data Sharing and Data Exchange
- • Summary and Conclusions
  - o Data discussion needs to ask the question of ownership. Whose data is it?
  - o Could be a separate bullet speaking to ownership at the end of the document or could be brought into each section.
  - o Should there be a more direct statement of a recommendation for a data exchange?
  - o Have opportunity listed to continue to work with partners (public and private) on data sharing, ownership, exchange, PII, etc. Continue talking and continue talking through this approach.
    - ▪ Data we can share, data we can't share, data we can talk about
- • References

V.   Closing Remarks – **Brian Steiner / Zeke Reyna / Darran Anderson**
- • Thanks to everyone for participation, drive and motivation
- • If anyone has additional comments regarding current content, send via email by Thursday at 5PM (close of business tomorrow)
- • As we look forward to the next revision, will be in touch with committee members via email with a poll to canvas the votes.