



Texas A&M Transportation Institute
3135 TAMU
College Station, TX 77843-3135
979-317-2863
<http://tti.tamu.edu>

TECHNICAL MEMORANDUM

TxDOT IAC – Technical Support to the CAV Task Force

DATE: November 19, 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: Licensing and Registration
November 19, 2020 Meeting Notes

Attendees:

Aidan Ali-Sullivan	Nuro
Alison Pascale	Audi of America
Allan Rutter	Texas A&M Transportation Institute
Beverly Kuhn	Texas A&M Transportation Institute
Bob Brydia	Texas A&M Transportation Institute
Brian Moen	City of Frisco
Brittany Gick	Texas A&M Transportation Institute
Darran Anderson	TxDOT
Ed Seymour	Texas A&M Transportation Institute
Hannah Barron	Austin Transportation
Maniel Vineberg	CAVWAY
Marcelle Jones	Stantec
Monika Darwish	Embark

Rachelle Celebrezze	Cruise
Rob Braziel	Texas Automobile Dealers Association
Sam Drieman	Argo AI
Shelly Mellott - CHAIR	Texas Department of Motor Vehicles
Stacey Bennett	EasyMile
Terry Martinez	TxDOT Government Affairs Division
Tim Thompson	Texas Department of Motor Vehicles
Zeke Reyna	TxDOT

I. Opening Comments – Zeke Reyna, TxDOT

- Welcome to the Licensing & Registration 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 – Shelly Mellott, Texas DMV

- Thanks to everyone for joining, we appreciate you taking the time, especially in light of upcoming holidays
- Appreciative to the writers of the current draft.

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.
 - The Executive Summary will be incorporated in the Annual Report for this year
 - 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
 - Global Check: make sure that appropriate reference to CAV (C vs. AV) is noted whether the text is referring to one or the other.

- List of Tables
- Acknowledgements
- Disclaimer
- Texas CAV Task Force Charter
- Terminology Note
- List of Terms and Acronyms
- Executive Summary
- Introduction
 - Helpful in the introduction about how AVs are regulated (the Texas law) and the Texas law related to PDD - needs to be before the section on PDDs;
- Public Agency Roles and Responsibilities
 - NHTSA Section (p. 3) - add statement saying that there was a 2016 enforcement guidance bulletin
- Other Roles and Responsibilities (p6)
- Types of Automated and Connected Vehicles Active in Texas
- Regulation of Drivers and Operators
 - Reference to Arlington: the intent was to have a 1-year deployment with Drive AI; it stopped after the company was acquired by Apple. First deployment to offer rides on roadways to anyone who wanted to utilize it (others limited) - delete the sentence that it was the first of its kind.
 - Arlington had an EasyMile deployment that ran on sidewalks for several months (2017) after the initial legislation was passed.
 - There was an MOU between Frisco and FedEx (is that sponsoring?) No signed agreement between Frisco and Starship; the FedEx deployment started in October 2019 for 2 weeks and Starship started on May of 2020 for 10 weeks - stay "participated" instead of "sponsored"
 - Last sentence (some devices were struck at crosswalks . . .) - needs to be clarified;
- Regulation of Vehicles
 - Gaps: 552A - reference to phone number; the law requires contact information and does not indicate what that should be; strike the part indicating a "phone number is required" for the description of the law
 - before the section that discusses PDD, add reference to law that governs PDDs
- Other Regulations and Issues
 - Paragraph points to 2 sections of the TTC with implications related to the identification of AVs. The first reference is accurate, but the second section doesn't point to anything about identification. Both sentences point towards an inference that Texas should indicate how AVs should identify themselves. Really comes into play for the freight community (every state requiring something); modify this section to add a sentence that includes that it is likely that there will be numerous caveats to how AVs could or should be identified. (likely to be collected in registration and titling and that information would be retained in that database).

- NHTSA FMVSS (top of p. 13) - table highlights federal safety standards (mean AV); more than those that NHTSA is doing; starting to address vehicles that do not have manual controls
- p. 12: need clarification on gaps for vehicle regulation requirements; expand on this section (also on p. 16); clarify this - more still to be resolved; various business models that could emerge
- Current Federal Safety Standards - "other developers choose to ??? novel vehicle designs or modifications that are not currently compliant with FMVSS" - word missing?
- Case Studies Involving Licensing and Registration Requirements
 - Case Studies (CA): lists steps required for the program; they are not the entirety of the steps; need to make the statement that there is a very robust process to secure the permits; need to clarify that these are the highlights of the requirements and not exhaustive; may also apply to the other case studies
- Balancing Regulatory Posture and Economic Development
 - TTC Encouraging Deployment and Innovation - "Texas Public Agencies" - towards the bottom, states regulations would need to be enacted that to not prevent municipalities from testing; any changes would have to be made at the state level so that there is not a patchwork of regulations so that companies would be able to continue to test in municipalities
 - As a muni - they are not required to do agreements with private industry; do not want interpretation that they HAVE to work with the muni;
 - Efforts by NCTCOG to help municipalities prepare for AVs with the assumption that they do have great authority to implement regulations? Is this squarely understood? Are municipalities preempted from regs? What are they able to do? What authority do they have? what does it mean for municipalities to prepare for AVs? many municipalities are trying to evaluate what AVs will mean to their communities and what their role will be?
- Opportunities in Texas
 - Looking ahead to how TxDOT could be proactive in the sense of working with industry to set standards that look at Level 5 AVs and how they might be part of a system.
 - Related to both licensing standards (more related to registration and titling) as well as safety standards
 - This does hinge on what evolves at the Federal level so that there is clarity for the AV community: need to ensure safety at the Federal level before the states address licensing a fully autonomous driving system.
 - The testing that is occurring in Texas is informing future policy and standards that will be developed moving forward
 - Regulatory opportunities (3 bullets); (p16) the tone of these seems to put the onus on the manufacturer or the operator of the CAV; there is an opportunity for the state to step in here; Texas DPS should look at opportunities to advance this issue; how can Texas support the growth of CAV and be proactive in this regard to illustrate the desire for the state to advance this

- If the state is interested in advancing these things (caveat); if they don't want to be proactive, then the onus will be on the developers to make these moves
- References

V. Closing Remarks – Shelly Mellott / Zeke Reyna

- Appreciate everyone's participation and clarifying comments made
- Thank you for time and efforts
- Grateful for Governor's office support in this process
- If anyone has additional comments regarding current content, send via email by Friday 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.