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# TECHNICAL MEMORANDUM

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

**DATE:** August 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:** Licensing and Registration  
 July 17, 2020 Meeting Notes

**Attendees:**

Alex Payson	Austin Transportation
Allison Pascale	Audi of America
Andrea Chacon	TTI
Anne O’Ryan	AAA Texas
Beverly Kuhn	TTI
Bob Brydia	TTI
Brian Moen	City of Frisco
Darran Anderson	TxDOT
Ed Seymour	TTI
Hannah Barron	Austin Transportation
Jason JonMichael	Austin Transportation Smart Mobility
Jeremiah Kuntz	Texas DMV
Maniel Vineberg	CAVWAY

Marcelle Jones	Stantec
Monika Darwish	Embark Trucks
Rachelle Celebrezze	Cruise
Rob Braziel	Texas Automobile Dealers Association
Sam Dreiman	Argo AI
Shelly Mellott	Texas DMV
Stacey	EasyMile
Tammy Meehan	Plum Catalyst

- I. **Opening Comments/Roll Call – Zeke Reyna, TxDOT**
  - Zeke welcomed the group. Narrowing down list for 2020 white papers.
  - Zeke took roll call of all attendees.
  
- II. **Co-Chair Welcoming Statements – Shelly Mellott, Deputy Executive Director Texas Department of Motor Vehicles**
  - Shelly thanked everyone for joining and for the good progress of first meeting. Today’s purpose narrow down to develop white paper. Look forward to active participation.
  
- III. **Candidate Category Topics First White Paper Identified – Zeke Reyna, TxDOT**
  - Three near-term topic categories of topics were identified for the first white paper through voting by the task force
    - Registration / titles
    - Licensing
    - Levels and designation (support the first two categories).
  - Longer-term categories included
    - Safety
    - Redundant systems
  
- IV. **23 issues were discussed.**
  - They represented the pool of topics for the first white paper.
  
- V. **Topics Highlighted as Candidates for First White Paper – Zeke Reyna**
  - Attendees were invited to offer suggestions for content for each of the two highlighted topics by adding sticky notes to each one.
    - **Education/ Awareness/ Levels/ Capabilities**
      - Training needed for law enforcement to understand how these vehicles operate
      - Federal VS State Authority
      - Launch a statewide program. Tie to national efforts as well (PAVE, NHTSA, etc
      - Target audience magazines and online media

- Should include SAE Automation Levels?  
<https://www.sae.org/news/press-room/2018/12/sae-international-releases-updated-visual-chart-for-its-%E2%80%9Clevels-of-driving-automation%E2%80%9D-standard-for-self-driving-vehicles>
- Are there software version requirements (prevent older systems from being on the road)
- Signage to notify other drivers
- Exemptions or revisions to FMVSS
- Current legislative authority
- Obeying police commands
- Common terminology
- Editorial board visits

○ **Registration**

- Sec. 545.454, Transportation Code, prohibits an automated motor vehicle from operating on a highway in this state with the automated driving system engaged unless the
- Vehicle meets certain standards, including being registered and titled in accordance with the laws of this state
- Should PDD operators also be required to register?
- Are marking systems needed to identify vehicles to the public, should these vehicles be required to communicate their intent to other drivers, cyclists and pedestrians
- Understanding what the current laws/regs are for titling and registration for both testing and commercial deployment of AVs -- includes "first sale" requirement
- Commercial vs Passenger vehicle requirements and training
- Marking of Vehicles
- Should PDDs be required to connect to traffic signals to place a pedestrian call? Humans are expected to do so unless signal is timed to allow ped crossing time when it doesn't have buttons.
- When vehicles are registered for testing/operation, should the law enforcement agencies where testing is occurring be notified?
- Review of other states' laws as well as that of other nations
- Operational Design Domain related to registration types
- What is the vehicle capability and behavioral requirements by registration type?
- Identification of vehicles

**V. Next Steps – Zeke Reyna**

- Wait until 3rd week of August. Look at calendars/school starting around then.
- Full Task Force meeting Tuesday.
- July 21st 1:30-4:00pm (virtual meeting).

**VI. Closing Remarks – Shelly Mellott**

- Shelly thanked everyone for their active participation. Came up with lots of questions to be answered. Great team.