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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: Safety, Liability, and Responsibility Subcommittee
July 14, 2020 Meeting Notes

Attendees:

Alex Payson	Austin Transportation Smart Mobility
Andrea Chacon	TTI
Andrea Gold	UT CTR
Anne O’Ryan	AAA Texas
Beverly Kuhn	TTI
Beverly West	TxDOT Strategic Planning Division
Bob Brydia	TTI
Brad Schlueter	US
Chase Williams	Stantec
Daniel Goff	Kodiak
Darran Anderson	TxDOT Director Strategy and Innovation
Ed Seymour	TTI

George Villareal	TxDOT Traffic Safety Division
Gerardo Interiano	Aurora
Hanna Barron	Austin Transportation Smart Mobility
Jackie Erickson	Edgecase
Jason JonMichael	Austin Transportation Smart Mobility
Jeff DeCoux	Autonomy Institute
Jeff Peterson	First Transit
Julia Monso Bustio	Cintra
Julian Gomez	Julian C. Gomez Law Firm
Kristie Chin	UT CTR
Leighton Yates	Alliance for Automotive Innovation
Libby Elliot	TDI
Mark Worman	TDI
Michael Walton	UT CTR
Rachelle Celebrezze	Cruise
Sam Dreiman	Argo
Sam Lott	Automated Mobility Services
Steven Rundell	Texas DPS
Tony Reinhart	Ford

Agenda / Discussion:

- I. Opening Comments/Roll Call – Zeke Reyna, TxDOT**
 - Zeke welcomed everyone to the meeting. TTI leading discussion using Mural tool. Wants everyone to bring input this time. Chat function not working.

- II. Co-Chair Welcoming Statements – Steven Rundell, Texas Department of Public Safety / Michael Walton, The University of Texas at Austin**
 - Steven noted that topics go beyond agenda. Lots of people and sources for information (good ideas). Challenge is to narrow focus of what to discuss. Most important things of deliberation. Come up with white paper for legislature. Raise your hand. Thanked everyone in advance.
 - Michael emphasized narrow list down and develop priorities

- III. Audiences for White Papers Identified – Zeke Reyna, TxDOT**
 - Two customer groups were highlighted as near-term audiences for the first white paper: freight and operating agencies
 - Two customer groups were highlighted as the second level of priority: passenger vehicles and transit

- Three customer groups were assigned as a third level of priority: ports (both water and inland), rail, and air

IV. 36 Issues Were Discussed

- These 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 5 highlighted topics by adding sticky notes to each one.
 - **Collection of safety data**
 - Data sharing / transparency to proactively drive lower insurance rates
 - Define a common set of safety performance metrics
 - Numerous organizations currently working on this topic (companies, non-profits (SAE, AVSC, UL, NHTSA) -- need to ensure not picking winners and losers at early stages
 - Mission Specialist (AV Test) Driver Training
 - All companies/agencies collecting their own data in their own way
 - US DOT AV Test Initiative
 - Ensure that any recommendations keep with spirit of keeping TX open for business / not overly burdensome to prevent innovation
 - Specify particular types of data needed
 - Need to ensure that company proprietary info protected, and that data requested minimized to address specific goals
 - Determine data elements
 - Determine safest conditions for operations.
 - Need to protect company proprietary information
 - Need to specify reasons/justification for collecting data, not collecting simply for the sake of collecting
 - The public needs the information to make choice based on facts
 - Basic information that includes who is testing what and where
 - ODD Metrics
 - The what and how approach should be unpacked in the data sub
 - **Safety cases**
 - IF we focus on safety cases, for Freight and IOO, then we end up providing content to the other 4...
 - Numerous groups working on developing this (companies, SAE, AVSC, etc.) --need to avoid picking winners and losers at early stage of testing/deployment (i.e. Let's not be BetaMax)
 - General form
 - Should be combined w/ 'collection of safety data'?
 - US DOT Test Initiative
 - Can states really assess very complex technical concepts like safety cases?
 - The collection of safety data feeds into the safety case
 - NHTSA/US DOT purview

- **Infrastructure**
 - Spectrum allocation issues
 - Huge need = innovative finance/delivery
 - Funding sources - dedicated
 - Foundational to the entire project
 - Unified Infrastructure for 5G, ITS, Edge, APNT
 - Roles of Public vs. Private Sector
 - Ensure V2X enhances deployment, but is not required

- **Terminology**
 - Standards Development Organization and Project review identifying TF/Committee engagement to determine most useful/accepted taxonomy
 - Without a consistent vernacular we cannot ensure all parties are discussing the same issue
 - Refer to SAE - Taxonomy and Definitions for Terms Related to Cooperative Driving Automation for On-Road Motor Vehicles
 - Try to resist the urge to create new. Work w national bodies of knowledge and SDOs

- **Liability**
 - Who is liable in the event of a crash?
 - Safety performance indicators
 - Backdrop of State law -- already addressed. Is the question really about education?
 - What are the pros and cons of NHTSA's VSSAs
 - Immediate near-term needs?

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

- Michael noted next step to take today's discussion with Ed, and structure papers. Begin that effort. Thanked everyone for their participation and involvement.
- Steven echoed the same and thanked TTI for bringing into focus what needs to be talked about. Emphasized communication between industry, enforcement and stakeholders; everyone offer their ideas.

VII. Closing Remarks – Steven Rundell / Michael Walton/Zeke Reyna

- Next Tuesday, July 21st, full meeting.
- Next SC meeting 2nd/3rd week of August.