



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 12, 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: Freight and Delivery Subcommittee
October 18, 2021, Meeting Notes

Attendees:

Aidan Ali-Sullivan	Waymo
Aisa Showery	Texas Department of Transportation
Andrea Chavez	Grace & McEwan Consulting (Waymo)
Andrea Gold	University of Texas Center for Transportation Research
Andrew Mistrisin	Burns & McDonnell
Bart Teeter	TxDPS
Beverly Kuhn	Texas A&M Transportation Institute
Beverly West	Texas Department of Transportation
Bobby Cottam	Burns McDonnell
Brent Skorup	Mercatus
Brian Moen	City of Frisco
Caroline Mays	Texas Department of Transportation
Daniel Goff, Co-Chair	Kodiak

Darran Anderson	Texas Department of Transportation
David Millikan	WGI
Gerardo Interiano	Aurora
Giacomo Yaquinto	Texas Department of Transportation
Jeff DeCoux	ATRIUS Industries, Inc.
Jimmy Archer	TxDMV
Joe Henry	Lonestar UAS
Kailas Aravind	Volvo
Karan Khosla	HDR, Inc.
Katie Stevens	Nuro
Kristie Chin	University of Texas Center for Transportation Research
Madeline Shepherd	Ford
Monika Darwish	Embark
Nicole Katskides	Texas A&M Transportation Institute
Philipp Kampshoff	McKinsey & Co.
Richard Steiner	Gatik
Robert Brydia	Texas A&M Transportation Institute
Steven Smith	McKinsey & Co
Tom Bamonte	North Central Texas Council of Governments
Zeke Reyna	Texas Department of Transportation

I. Opening Comments/Roll Call – Zeke Reyna

- Welcome to all subcommittee members
- Roll call of members and attendees
- Introductions of meeting facilitators

II. Chair Welcoming Statement - Daniel Goff

- Excited to talk with everyone today.
- Exciting and relevant initiatives to work on together on

III. Preview of Website Changes – TTI Team

- We are working on improving the CAV Task Force website (currently in staging) to be made public within next two weeks.
- We’ve taken some of the products from last year, such as the Glossary from Terminology paper. It is now a completely interactive online tool.
 - TxDOT to do outreach to other states and entities to make sure awareness of this information and come to agreement about best definitions and verbiage.
- Revamped News links to display top ten, most recent. Updated weekly.

- Links to each subcommittee at bottom of webpage. Subcommittee pages have been updated with graphics and complete set of documents (meeting notes and products)
- The Deployment Map has been updated. We have listing that is being validated via websites and press releases.
 - This is a key component of the website, but we depend on your interaction for that.
 - We have chosen to display with pinpoints rather than sections of roadway.
 - Click on a pinpoint and more information will display.
 - If you would like your deployment added, please submit city and brief paragraph description via email to Zeke Reyna and/or Bob Brydia so we can keep the listing as accurate as possible.
- We would love to have your feedback to make sure we are capturing all information available on this website.

IV. **Feedback Exercise on Subcommittee Deliverables – TTI Team**

- Please refer to read ahead material sent via email, accessible on the Mural Board.
- This document was laid out so that all participants could see:
 - What we are going to do
 - How we are going to do it
 - Who we are going to talk to
 - What subjects we want to talk about
- Today’s meeting is important, as it sets the framework for everything we are doing now through the end of the calendar year.
- Process to Product Infographic
FOCUS OF PLAN: What can Texas do to continue to ensure forward thinking operational opportunities for AV freight companies? What are the main issues and how can they be addressed?

BACKGROUND

- Research will build on previous assessment of:
 - Freight ecosystem for operations currently in place
 - Opportunities for Texas freight stakeholders
 - Freight partners and stakeholders
 - Reasonable expectations of TxDOT

RESEARCH AREAS

- Think about how important the bucket of law enforcement it. Need an educational effort with that stakeholder group.
- Lots of opportunity for safety and education pieces; opportunity for in-person interaction with law enforcement and first responders
- Will work across the subcommittees to coordinate cross-collaboration and engagement with stakeholder groups.
 - Lead time is important for engagement with law enforcement stakeholder groups and individuals.
 - Spring timeframe would need identification of potential days fairly soon.
 - PDDs; specific examples for operations

PROCESS

- Literature Review
- Stakeholder Coordination
- Development of Framework

DELIVERABLE PRODUCT

- White paper detailing findings for operations, border, and law enforcement issues and strategies for solutions related to automated trucks.

QUESTIONS TO ASK

- Question related to public communication and public acceptance? How should we communicate with the public about how this is coming?
- To the extent we deal with border operations, focus on things that happen on this side of the border. Make it more focused to be more helpful in the short term; border operations, stops, etc.
 - Data requirements
- What do municipalities or local entities need to know about what will be coming with UAS? PDDs? AVs? All different than what they are used to dealing with currently on the ground.
 - case studies

REVIEW OF PUBLIC INFORMATION

- Texas is probably the leading state and we may be more in a teaching mode than a learning mode.

V. Next Steps – Daniel Goff / Zeke Reyna

- We will take this information, dive in, and start engaging
- We will meet back together in 4-6 weeks to review what we've come up with along the way.
- If you have information you want included on the CAVTF website, please let us know ASAP as it will be going live soon.

VI. Closing Remarks – Daniel Goff

- This was an exciting discussion pointing to a great path forward for the next few months.
- It will be great to begin to talk about this information with our stakeholders beginning with law enforcement.