



979-317-2863 http://tti.tamu.edu

MEETING NOTES

TxDOT IAC - Technical Support to the CAV Task Force

DATE: July 6, 2024

TO: Zeke Reyna, Emerging Technology Team Lead, STR, TxDOT

Lauren Freriks, Strategic Management Analyst, STR, TxDOT

COPY TO: Beverly Storey, Research Scientist, TTI

TTI_Reports@tti.tamu.edu

Tim Hein, Research Development Office, TTI

FROM: Robert Brydia, Research Supervisor

Senior Research Scientist, Texas A&M Transportation Institute

RE: Workforce and Economic Opportunities Subcommittee

June 27, 2024, Meeting Notes

Attendees:

Amit Bhasin	University of Texas Center for Transportation Research
Robert Brydia	Texas A&M Transportation Institute
Kristie Chin	University of Texas
Lauren Freriks	Texas Department of Transportation
Tila Grant	Texas Department of Transportation
Erika Kemp	Texas Department of Transportation
Anita Kim	TORC Robotics, Inc.
Madeleine Pelton	Texas Department of Transportation
Zeke Reyna	Texas Department of Transportation
Beverly Storey	Texas A&M Transportation Institute
Daniel Sullivan	Navistar
Anjaly Roy	Texas Department of Transportation (Intern)
Kris Harbin	Texas A&M Transportation Institute
Ashley Myers	Grace McEwan

Cheng Zhang	Texas A&M Transportation Institute
Jeremiah Kuntz	Aurora

I. Welcome and Introduction – Zeke Reyna, TxDOT

• Thank you for joining us for today's meeting of the Future Workforce and Economic Opportunities subcommittee.

II. Opening Comments – Subcommittee Chair, Amit Bhasin, UT CTR

• We appreciate your time and participation as members and also those who have organized and prepared for presentation today.

III. Priority Topics Updates and Discussion - TTI

- Priority Topics
 - Identify roles and skills needed for the design, maintenance, monitoring, and regulation of AVs
 - LATER DATE: Impacts of establishing timing/zoning restrictions regarding certain local roads (e.g., neighborhoods, schools, etc.)
- Information Gathering
 - o Review of relevant literature
 - Other DOT and related organizations
 - Potential interviews and surveys
 - o Focus is on Level 3 and above
- Development of White Paper
 - o Currently around 100 pages including detailed appendices
 - Focused on how connected and autonomous vehicles are going to change the work requirements and what the public sector workforce is going to need (i.e., knowledge skills and abilities)
 - o Looking at the work requirements and expected activities of how all those in the workforce are going to change and the transitions needed to get there.
 - o Trying to anticipate the types of jobs that will be created due to future need.
- Accomplishments
 - o Draft White Paper on Workforce Opportunities
 - How do CAVs change work requirements and expected activities of the public sector workforce?
 - What knowledge, skills, and abilities are needed?
 - What are potential sources of workforce development and training?
 - How might public sector agencies attract and retain individuals with highly valued skill sets?
- DOT Positions
 - o Computer Engineers/Information Technology (IT) Specialist
 - System Engineer
 - o Telecommunications Engineer/Technology Specialists
 - o Cyber Security Engineer/Specialists
 - Database Management Specialist

- Connected and Automated Vehicle Program Manager
- o Traffic Data Analyst/Data Scientist
- Transportation Data Ethicist
- o Artificial Intelligence (AI) Specialist
- o Applications Developers
- o Electrical and Electronic Engineers/Technicians
- o ITS Specialists/Operators
- o Geographic Information System Specialists

• Enforcement and Regulation Agencies

- o CAV Tesh Engineer/Specialist
- Vehicle Regulator/Compliance Officer
- o CAV Safety Engineer
- o CAV Traffic Enforcement Officer
- CAV Policy Analyst
- o CAV Forensic Specialist

• On the Horizon

- o Continuation of technical level and field roles for the DOT
- o Identification of vocational training programs and community colleges to support the technical workforce.

• Currently Working on

- Technical level and field DOT roles
 - Traffic Signal Technician traffic systems maintenance, including integrated CAV support technology
 - Highway Maintenance Crew Member repair of highway infrastructure components required for CAVs to operate well
 - Automotive Equipment Mechanic repair and maintenance of sensors and communication equipment on DOT-owned CAVs

Takeaways

- Public sector workforce stakeholders
- Workforce needs and requirements
- Development and training activities

IV. Closing Remarks – Zeke Reyna, TxDOT

- Thank you for your time and participation.
- This has been a great discussion and will help us further fleshing out the White Paper

V. Adjourn