## Agenda TxDOT Greer Building | 125 E 11<sup>th</sup> St. | Austin, TX June 13, 2018

## **Objectives:**

- 1) Identify approaches and programs to support vehicle electrification and charging infrastructure investment
- 2) Develop a framework for coordinated automated vehicle testing in collaboration with other state agencies
- 3) Identify infrastructure investments and programs to enable telecommunications rollout in support of connected transportation

9:00 AM | Welcome & Opening Remarks - Darran Anderson, TxDOT & C. Michael Walton, UT Austin

9:15 AM | Progress Update - Kristie Chin & Andrea Gold, UT Austin

9:30 AM | Panel Presentations: Electrification

**Moderator:** *Michael Webber, Deputy Director of the Energy Institute at The University of Texas at Austin* While electric vehicle sales have been slowly but steadily climbing over the past decade, recent investments decisions from automotive manufacturers indicate a major shift in market share in the next 5 to 10 years. Advances in battery technology, reduced costs, and regulations serve as primary influences of these decisions; however, charging infrastructure could pose a challenge to quicker market adoption. This sessions will explore the future of electric vehicles by examining market projections, performance considerations for heavy duty vehicles, charging infrastructure, alternative energy sources, as well as regulations and policies.

David Raney, GM of Corporate Strategy and Planning, *Toyota Motor North America*Michael E. Legatt, Chief Executive Officer & Founder, *Resilient Grid*Dale Hill, Founder, *Proterra*David Schatz, Director of Public Policy, *ChargePoint*Michael Quinn, VP & CTO for Strategy, *Oncor Electric* 

10:30 AM | Open Discussion: A Path Forward in Electrification

**Moderator:** Michael Webber, Deputy Director of the Energy Institute at The University of Texas at Austin

11:00 AM | Break

11:15 AM | Roundtable: Statewide Connected and Automated Vehicle Framework

Moderator: Michael Morris, Director of Transportation, NCTCOG

Representatives from public agencies and industry join the Task Force and TxDOT in a discussion on a coordinated approach to creating a strong Texas market for the deployment of emerging and advanced technologies. Prospective attendees include representatives from the Governor's office, key legislators, and the business and entrepreneurial community.

**Chris Nordloh,** Major, *Texas Department of Public Safety* 

**Caroline Love**, Government & Strategic Communications Director, *Texas Department of Motor Vehicles* **Brian Moen**, Assistant Director of Transportation, *City of Frisco*, *Texas* 

## 12:30 PM | Lunch

**Presentation: Artificial Intelligence for Smart Transportation** 

TBD, NVIDIA

## 1:30 PM | Panel Presentations: The Path to a V2X Ecosystem

Moderator: Steve Dellenback, Vice President, ITS Division, Southwest Research Institute

V2X, or vehicles-to-everything, is an encompassing term for a vehicle's communication system, where information from sensors and other sources travels via high-bandwidth, low-latency, high-reliability links, paving the way to fully connected transportation ecosystem. There are several components of V2X, including vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I), vehicle-to-pedestrian (V2P), and vehicle-to-network (V2N) communications. In this multifaceted ecosystem, cars will talk to other one another, to infrastructure such as traffic lights or parking spaces, to pedestrians via smartphones, and to data centers. But there is still much uncertainty and debate about which standards and communication technology will underpin all this V2X communication. This session will aim to address a number of these debates and identify strategies for TxDOT to prepare its system while the technology continues to develop in the market. Topics for discussion include comparison of DSRC versus 5G telecommunications; right-of-way and data access; cybersecurity; infrastructure readiness and required supplemental digital infrastructure such as fiber backhaul; applications for safety, mobility, environment; and regulatory considerations.

Salam Akoum, Principal Member of Technical Staff, AT&T

Jim Misener, Senior Director, Technical Standards, Qualcomm

Sue Bai, Principal Engineer, ATR Division, Honda R&D Americas, Inc.

Roger Berg, VP North America Research and Development, DENSO International America, Inc.

Beverly West, Alternative Strategies Manager - Real Estate Management and Development, TxDOT

2:30 PM | Open Discussion: A Path Forward in a V2X Ecosystem

Moderator: Steve Dellenback, Vice President, ITS Division, Southwest Research Institute

3:30 PM | Closing remarks and Next Steps - Darran Anderson, TxDOT & C. Michael Walton, UT Austin

4:00 PM | Adjourn