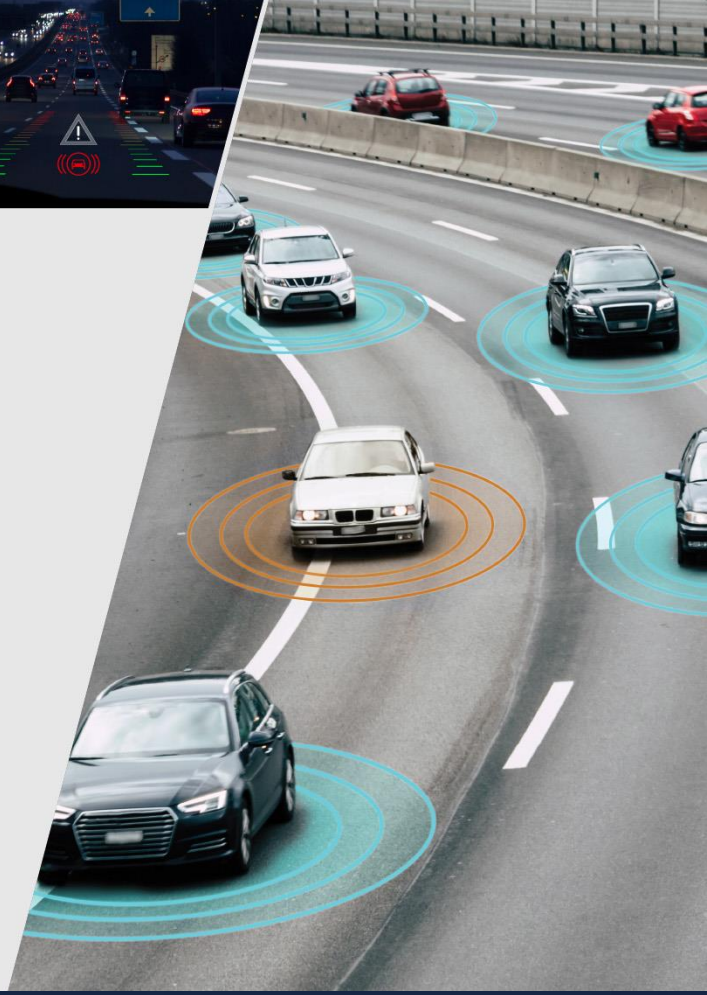
Welcome to Texas!



April, 2021

State of Texas Legislation regarding automation

SB 2205, 85th Legislature (2017)

- SB 2205 creates a legal framework for the operation of automated motor vehicles in Texas and explicitly allows an automated motor vehicle to operate on highways in the state, with or without a human operator, under certain circumstances.

HB 1791, 85th Legislature (2017)

- HB 1791 authorizes an operator of a vehicle equipped with a connected braking system that is following another vehicle equipped with that system to be assisted by the connected braking system to maintain a clear distance or "sufficient space."

SB 969, 86th Legislature (2019)

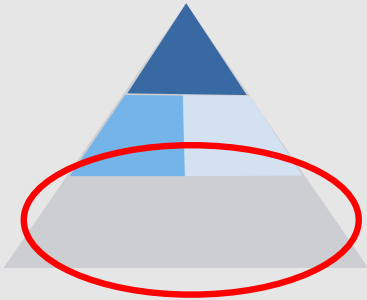
- SB 969 governs the operation of a personal delivery or mobile carrying device in a pedestrian area or on the side or shoulder of a highway.

Takeaway:

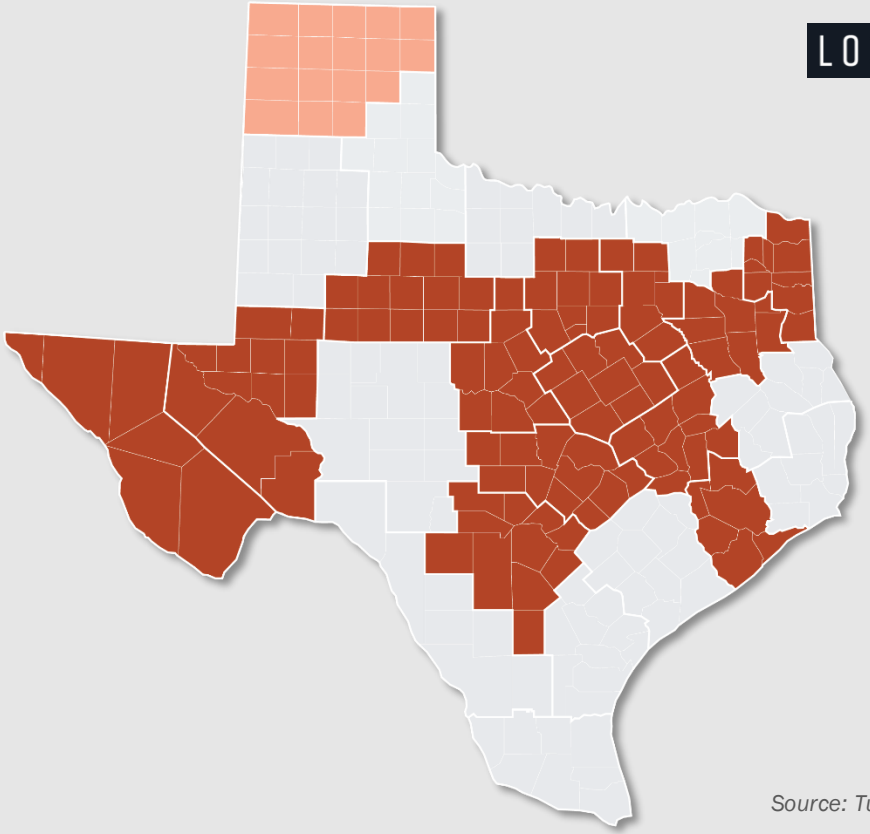
Texas Law is one of the least restrictive in the United States and makes an attractive market for AV testing and deployment.

CAV Task Force mission and functions

- Prepare the state for Connected and Autonomous (CAV) advancements (good with the bad)
- Scope: surface and air transportation connected and autonomous vehicle technology and enablers, such as telecoms, and future infrastructure



Freight



LOCOMATION

Kodiak

Ike

isee

WAYMO

Aurora

EMBARK

Uber

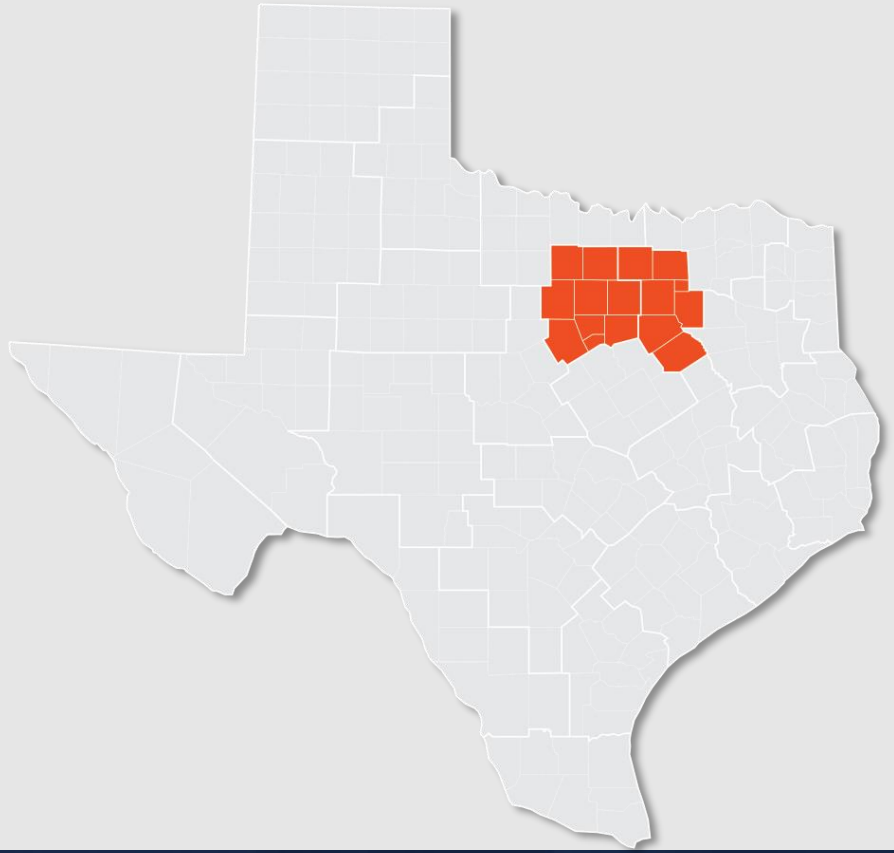
tusimple

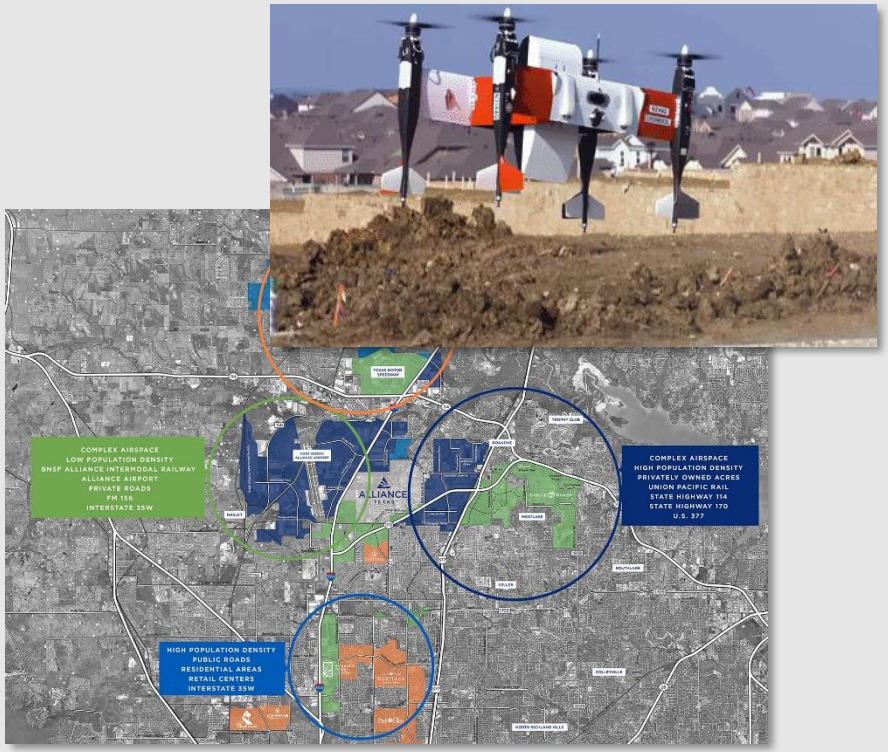
DAIMLER

PELOTON

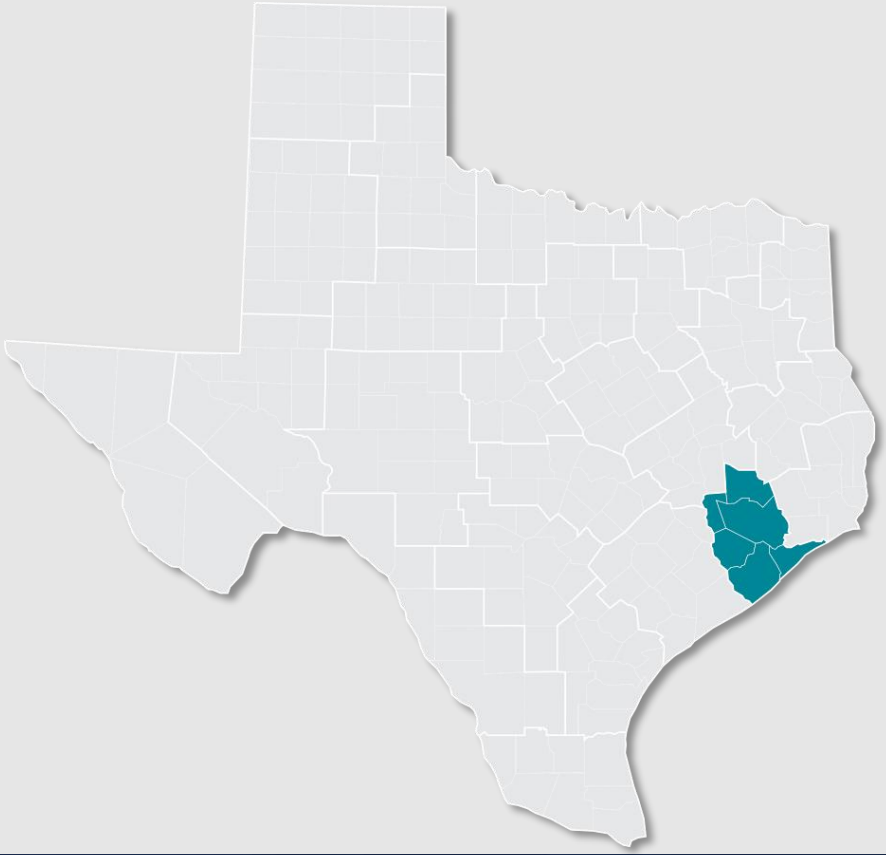
Source: TuSimple

Alliance Texas - Dallas & Fort Worth

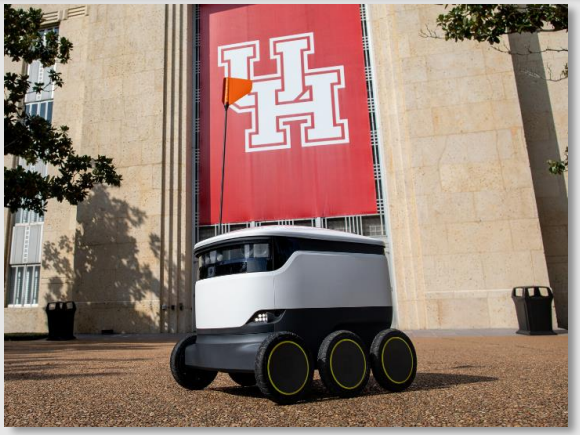




Nuro & Starship, Houston

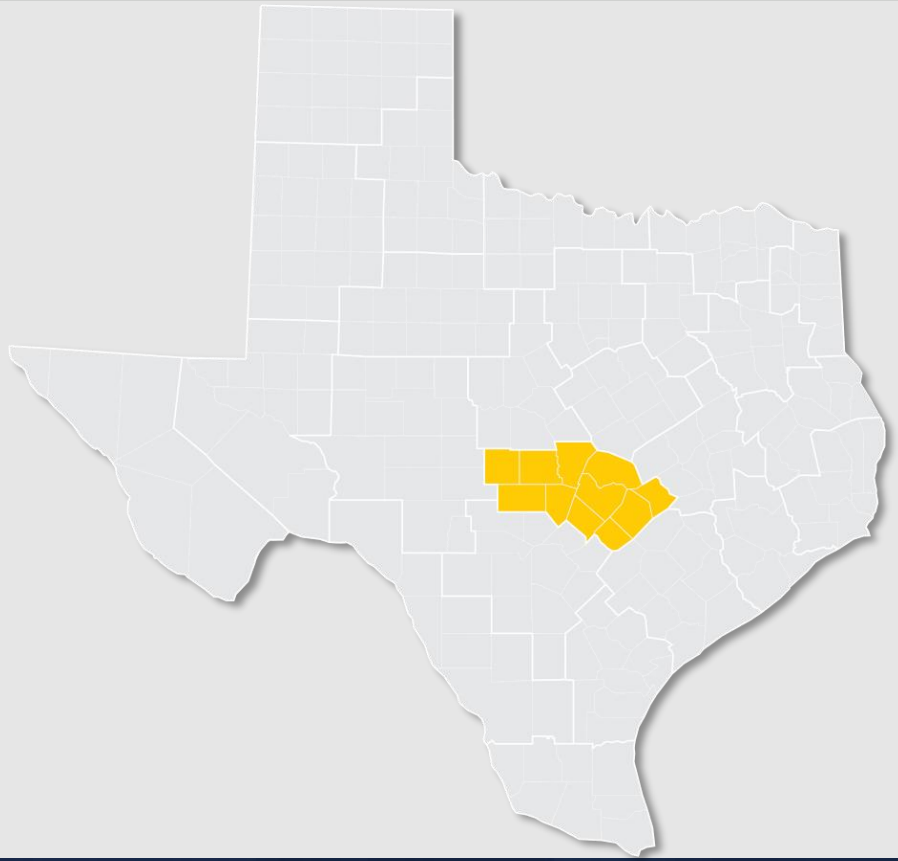


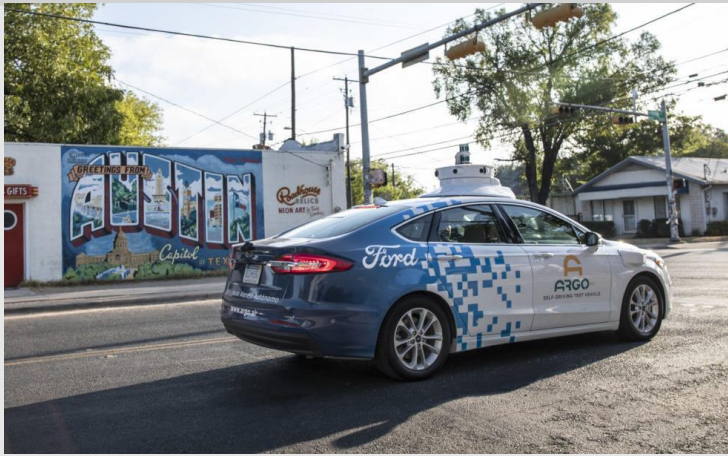
Source: Nuro



Source: UH, Starship

Ford, Austin





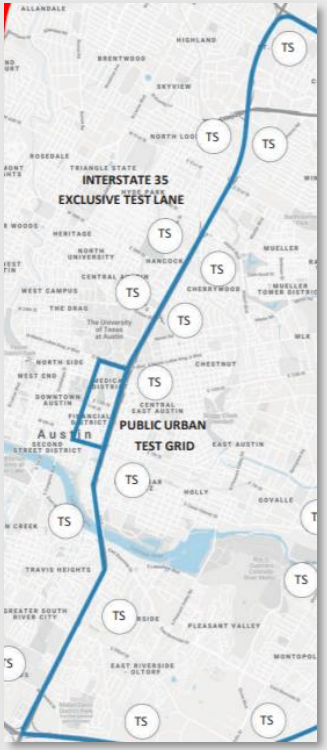
Source: Argo

The Ray

- Originated in Georgia along I-85 (Ray C. Anderson Memorial Highway)
- 501(c)(3) non-profit
- Experts in Public Private Philanthropic Partnerships
- Collaboration efforts on I-85
  - Right-of-Way Solar
  - V2X Connected Technology
  - Road Striping
  - Smart Planting and Bioswales
  - Vehicle Charging

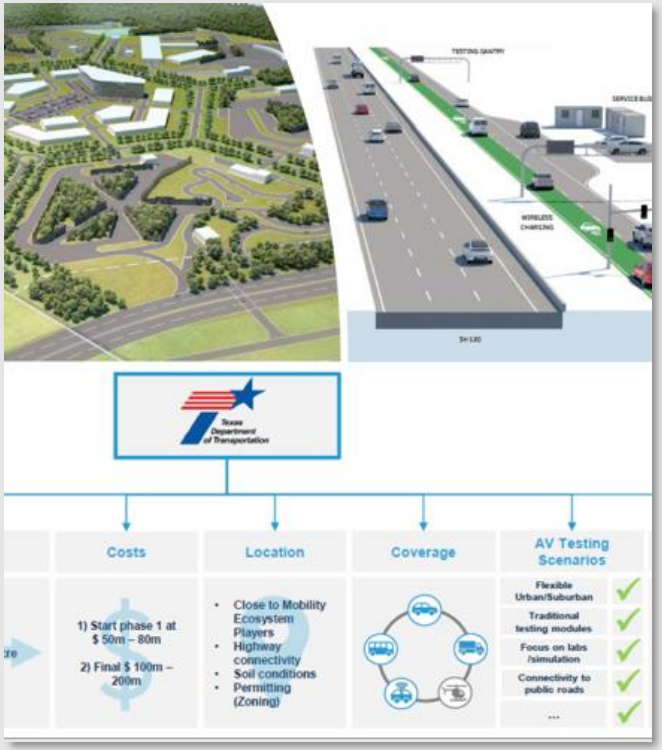
TxDOT Austin District's Three Priority Areas

Mopac

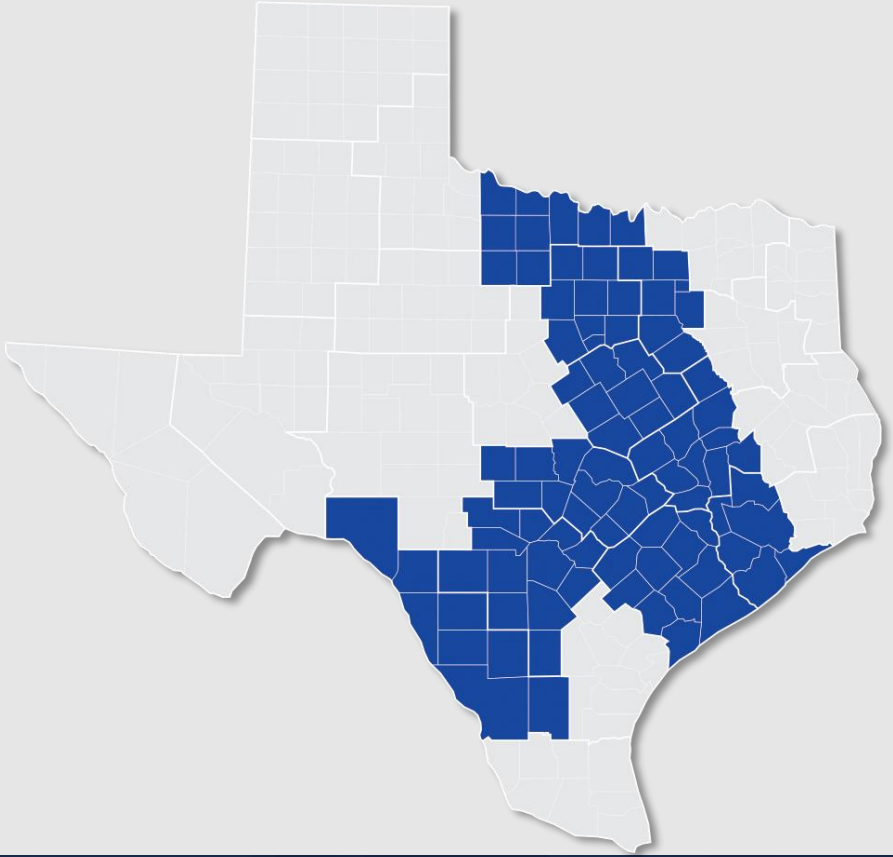


SH-130

Assesment Center



Texas Connected Freight Corridors



Tier 1	Work Zone Warning	Queue Warning	Wrong-Way Drivers	Advanced Traveler Information System
Tier 2	Road Weather Warning	Freight Signal Priority	Truck Parking Availability	Bridge Height Warning
Tier 3	Emergency Electronic Brake Light	Pedestrian & Animal Warning	Eco-Dynamic Routing	Border Wait Times

Source: https://www.txdot.gov/inside-txdot/division/traffic/freight-corridors.html

Freight Network Technology Operations Plan

- Automated Vehicle Infrastructure, Connected Signing, and Data ConOps
- Blocked Rail Crossing Traffic Management System
- High-Resolution Advanced Freight Traveler Information System
- Safety Warning Detection System
- Smart Freight Connector
- Statewide Traffic Operations Center

https://www.txdot.gov/government/partnerships/freight-planning/texas-freight-network-technology-and-operations-plan.html

Research

Recently Completed

- Evaluate Potential Impacts, Benefits, Impediments, and Solutions of Automated Trucks and Truck Platooning…

In Progress

- Defining Operational Design Domains (ODDs) for the Safe Blending of Levels 0-4 Connected and Autonomous Vehicles (CAVs)…
- Develop Roadway and Parking Design Criteria to Accommodate Automated and Autonomous Vehicles

Coming Soon

- Legal analysis of TxDOT's positions regarding CAV and data
- TCFC and cooperative automation
- Digital copy of TxDOT infrastructure
- Working with AV trucking companies