



Transforming Roads, Unleashing Smart Technologies Texas TRUST Project

SAVING LIVES WITH CONNECTIVITY: ACCELERATING VEHICLE TO
EVERYTHING (V2X) DEPLOYMENT

TexITE 2026

April 10th, 2026

Conversations take place in many ways and places...



V2X is a conversation as well



Vehicles talking to roads...



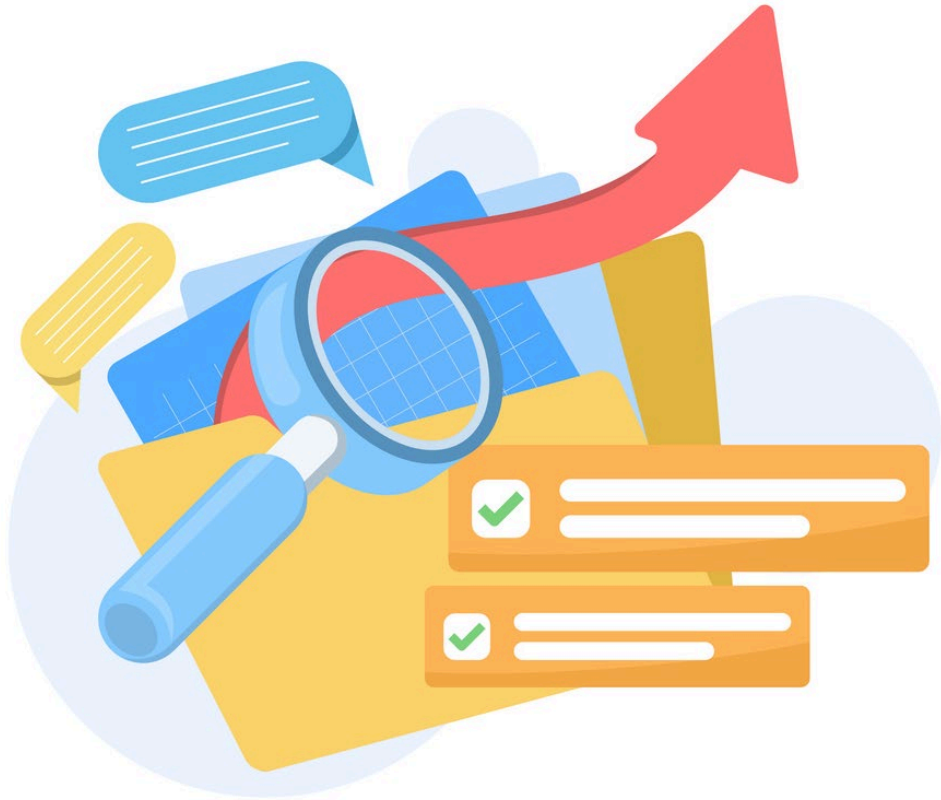
Infrastructure talking to vehicles...



Vehicles talking to vehicles...

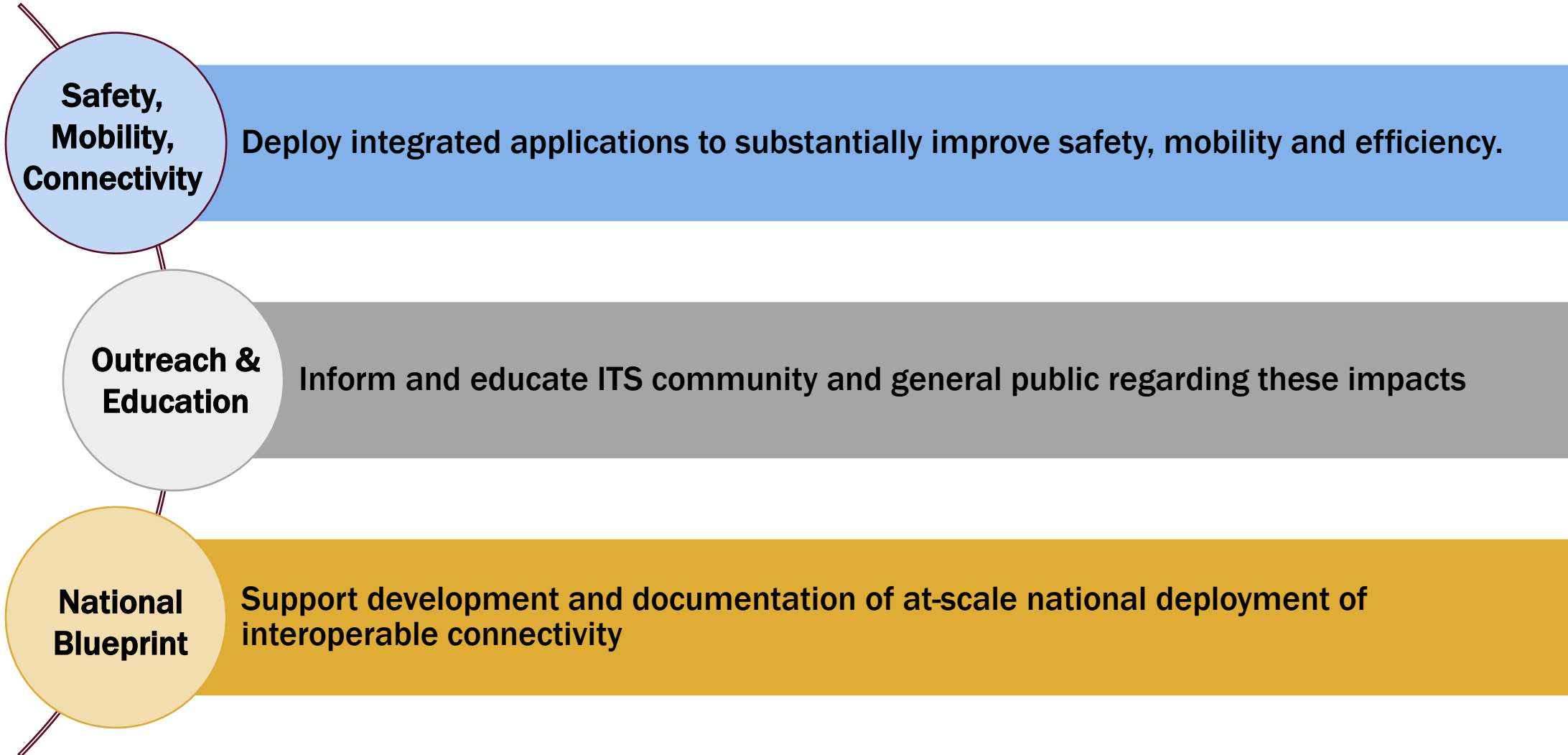


From Conversations to Use Cases...



- **Safety conversations**
- **Operational conversations**
- **Emergency conversations**
- **Multi-modal conversations**

USDOT Goals



Scaling V2X: Cities to Corridors



CITIES:
Intersection-level intelligence



REGIONS:
Cross-agency system coordination

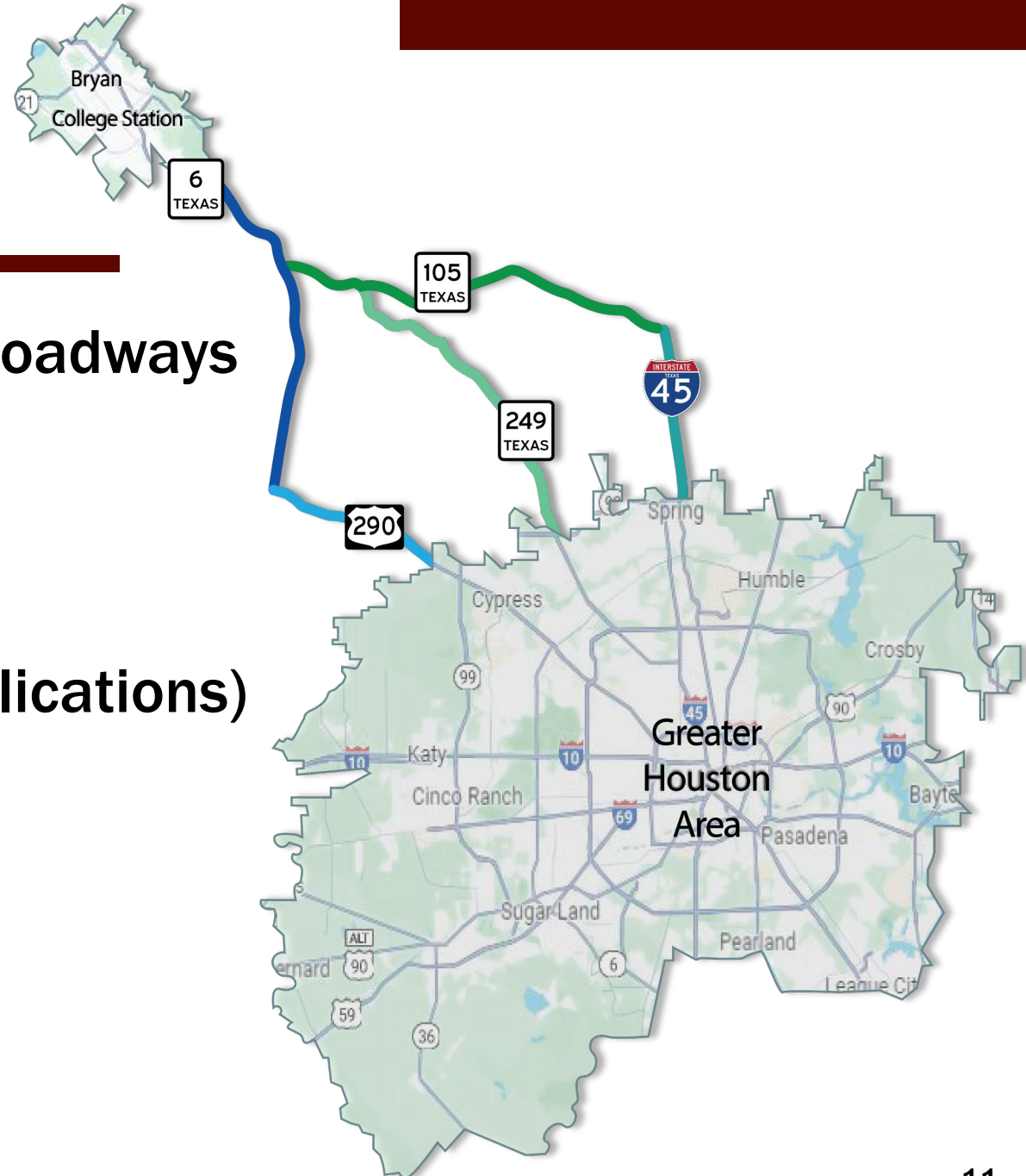


CORRIDORS:
End-to-end connectivity



Deployment Region

- Collaborate with IOOs that operate roadways
- Build a foundation that's solid
- Be aspirational for end results
- Broad range of 'use cases' (aka applications)



Our Approach

- **Deploy V2X technology on and within:**
 - **TxDOT Roadways,**
 - **City of Houston,**
 - **Missouri City,**
 - **Fort Bend County,**
 - **College Station,**
 - **Transit Fleets,**
 - **Emergency Vehicles, and,**
 - **Construction Vehicles.**
- **Enhance existing infrastructure.**
- **Install new roadside equipment as warranted.**
- **Enable the delivery of safety messages and V2X communications.**



Applications in College Station

SPaT-Enabled Intersections for VRU Identification and Protection

Traffic Signal Preemption and Priority

Transit Fleet Integration

Every Day a Gameday

Enhanced Highway Construction Worker Safety



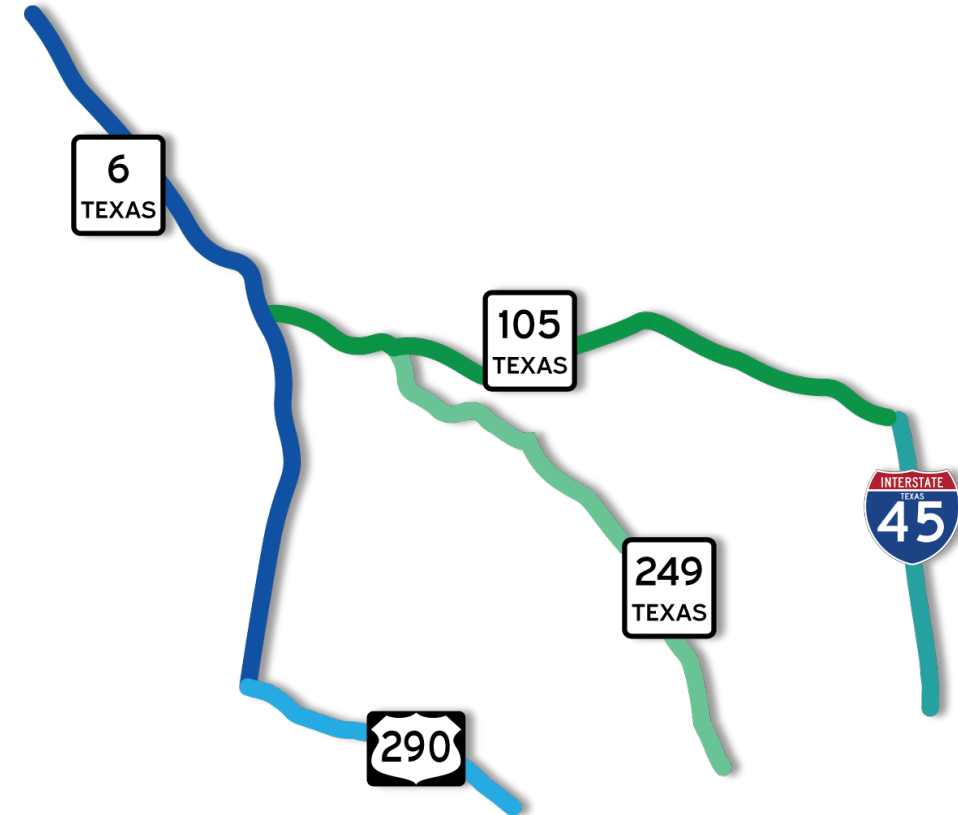
Applications on NHS

Incident Management

Adverse Weather Events / Flooding

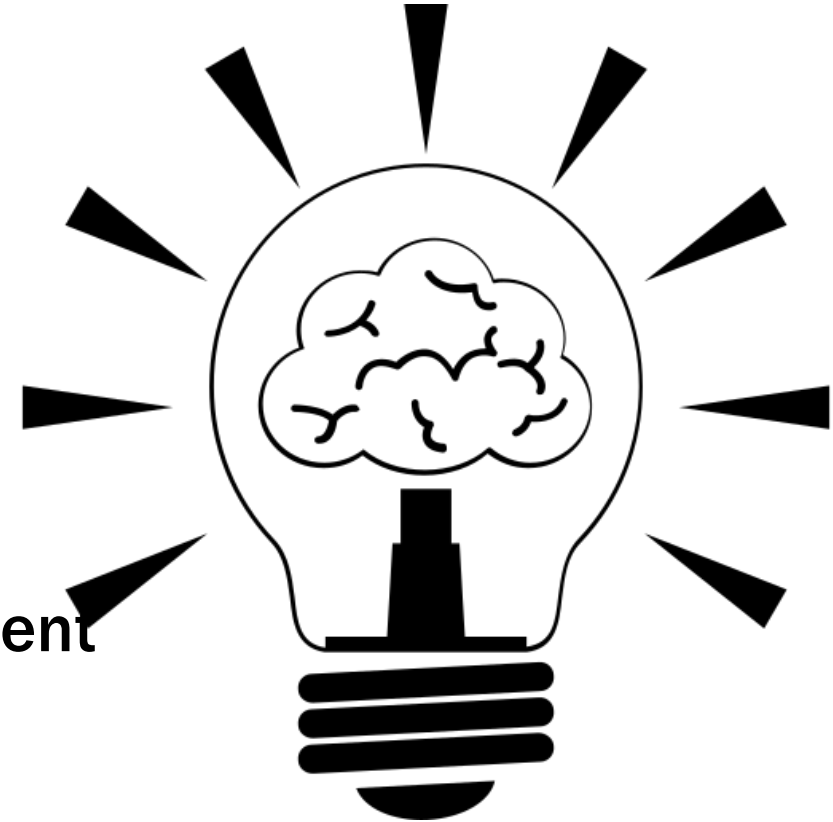
Construction events

Curve speed warning



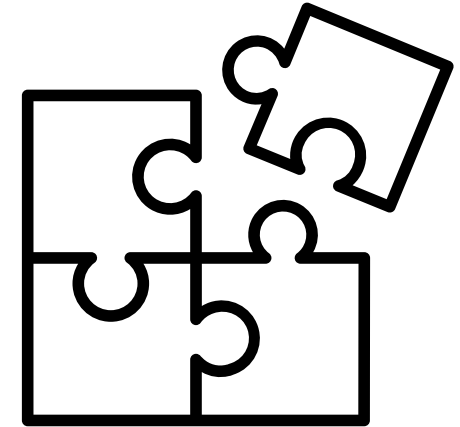
Project Innovations

- **15 different use cases.**
- **Diverse environments.**
- **Both DIRECT and NETWORK applications.**
- **Bridging NETWORK applications into a development version of Google Maps.**
- **Multiple OEMs as partners with test vehicles.**
- **Phase 2:**
 - **Performance Measurement**
 - **VRU OBU applications (bikes)**
 - **Additional fleet vehicles (Peterbilt)**
 - **'virtual' RSUs.**



Our Status

- **Continuing system documentation**
- **100% of equipment in house**
- **95% installed**
- **85% configured**
- **MAP messages set**
- **OEM vehicles in progress**
- **Google Maps (development version) in progress (75% complete)**
- **Fully equipped test intersection in closed course setting**



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THANK YOU VERY MUCH!



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