TASIG

Texas Ancillary Structures Interest Group

Welcome to the annual meeting

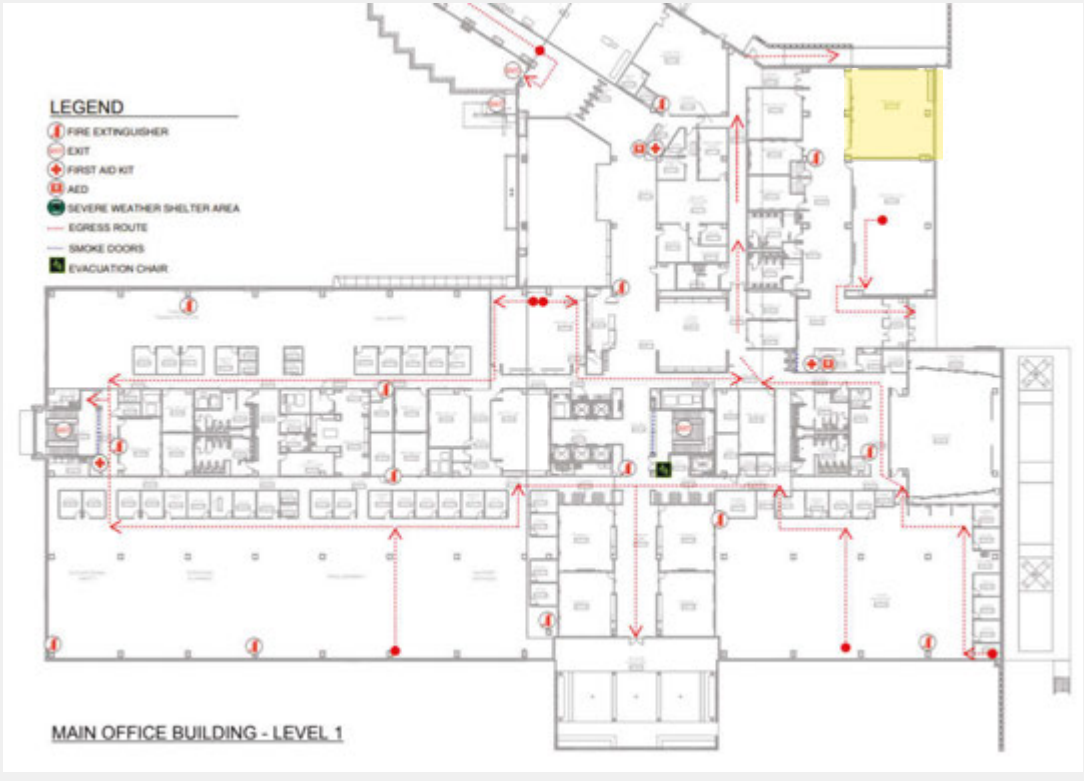
Texas Department of Transportation

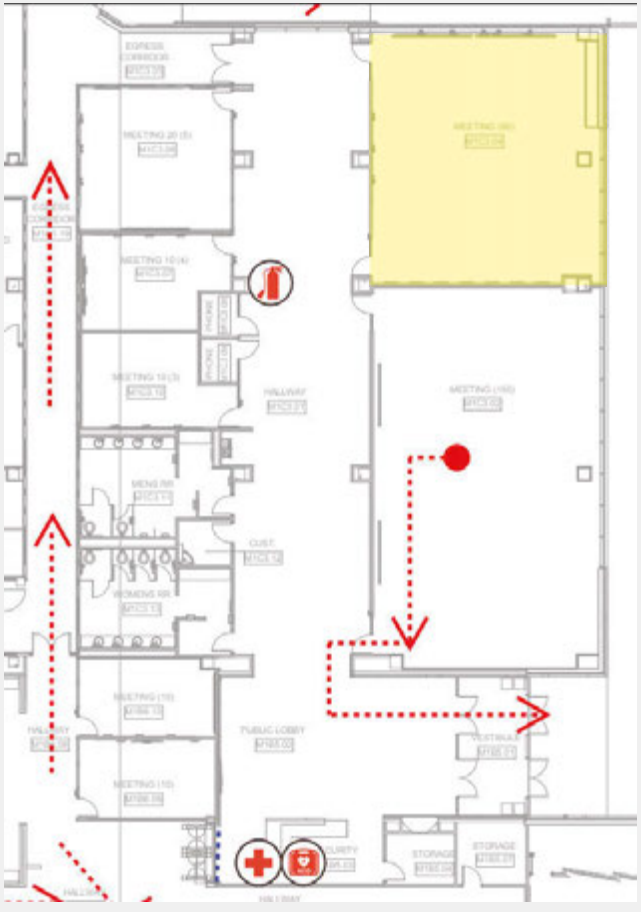
August 15, 2025

Housekeeping

- **Virtual attendees** are muted. Submit a message in the Q&A if you have a question.
- **In-person attendees**, please make sure that you've registered (helps with planning)
- Coffee bar – Need to get badge from security desk
- Lunch is off-site
- Restrooms

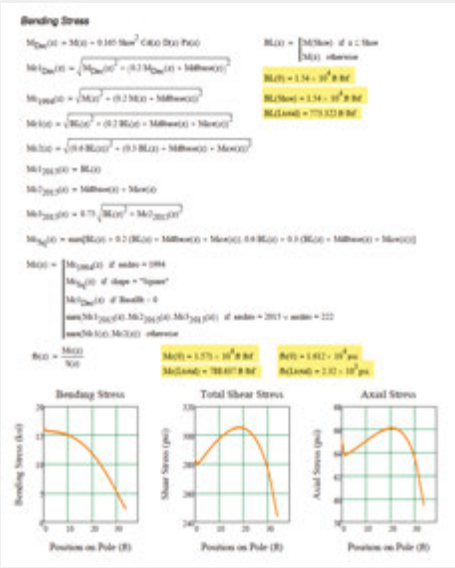
Building Safety





Texas Ancillary Structures Interest Group (TASIG)

Overview: This is a joint owner-industry forum aimed at guiding, advancing and improving ancillary structure aspects such as:



Design

Fabrication

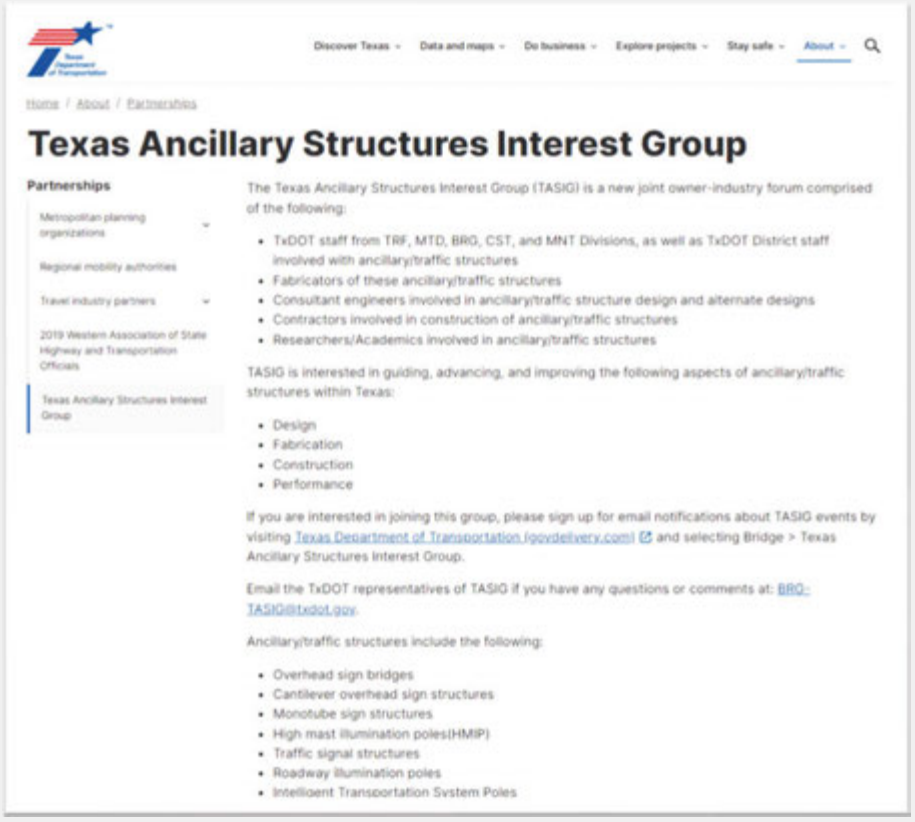
Construction

Texas Ancillary Structures Interest Group (TASIG)

Goals:

- Industry feedback, industry education
- Advance design/details/fabrication/construction
- Address procedural and performance issues

Texas Ancillary Structures Interest Group (TASIG)



Discover Texas · Data and maps · Do business · Explore projects · Stay safe · About

Home / About / Partnerships

Texas Ancillary Structures Interest Group

Partnerships

- Metropolitan planning organizations
- Regional mobility authorities
- Travel industry partners
- 2019 Western Association of State Highway and Transportation Officials
- Texas Ancillary Structures Interest Group

The Texas Ancillary Structures Interest Group (TASIG) is a new joint owner-industry forum comprised of the following:

- TxDOT staff from TRF, MTD, BRG, CST, and MNT Divisions, as well as TxDOT District staff involved with ancillary/traffic structures
- Fabricators of these ancillary/traffic structures
- Consultant engineers involved in ancillary/traffic structure design and alternate designs
- Contractors involved in construction of ancillary/traffic structures
- Researchers/Academics involved in ancillary/traffic structures

TASIG is interested in guiding, advancing, and improving the following aspects of ancillary/traffic structures within Texas:

- Design
- Fabrication
- Construction
- Performance

If you are interested in joining this group, please sign up for email notifications about TASIG events by visiting Texas Department of Transportation (govdelivery.com) and selecting Bridge > Texas Ancillary Structures Interest Group.

Email the TxDOT representatives of TASIG if you have any questions or comments at: BRG-TASIG@txdot.gov.

Ancillary/traffic structures include the following:

- Overhead sign bridges
- Cantilever overhead sign structures
- Monotube sign structures
- High mast illumination poles(HMIP)
- Traffic signal structures
- Roadway illumination poles
- Intelligent Transportation System Poles

TASIG Email:

BRG-TASIG@txdot.gov

TASIG Website:

https://www.txdot.gov/inside-txdot/division/bridge/ancillary-structures.html

2025 TASIG AGENDA

TASIG
Texas Ancillary Structures Interest Group

Time	Topic	Speaker
9:00 AM	Welcome to TASIG 2025	TxDOT
9:05 AM	TxDOT Updates on Ancillary Structures	TxDOT
9:40 AM	Open Discussion	
10:00 AM	**Break**	
10:20 AM	Research Updates Presentation	
	0-7193: Develop Assessment and Mitigation Guidance for Ancillary Highway Structures with Existing Cracks	UT and A&M
	0-7192: Develop Performance of Baseplate Connections in COSS and Traffic Signal Structures	TTI
	0-7236: Development of Standardized LRFD Design Methods for Ancillary Highway Structure Foundations	TxDOT
11:20 AM	Open Discussion	
11:45 AM	**Lunch** (11:45am-1pm offsite)	
1:00 PM	Resources	TxDOT
1:30 PM	Open Discussion	
1:50 PM	**Break**	
2:10 PM	Shop Drawings	TxDOT
2:30 PM	Open Discussion	
2:55 PM	Closing Remarks	
3:00 PM	Adjourn	

Traffic Safety Division

Standard Updates

Rafael Riojas, Traffic Engineering Section Director

Texas Department of Transportation

Connecting you with Texas

HELP MAKE TEXAS SAFER FOR EVERYONE

DRIVE *like a* TEXAN

Kind. Courteous. Safe.

ED-25 Sheet Updates

- Sheets where released April 14, 2025
- These standard sheets may be used immediately and shall be used for all applicable PS&E sets beginning with the October 2025 letting.

ED-25 Sheet Updates

- ED
  - Changed the length of conductors outside of weatherheads to be 18 in. to 36 in. as required by the electric utility.
- ED(1)
  - Clarified RMC minimum burial measurements to 18” below grade or bottom of ground box.
- ED(4)
  - Modified ground box detail to specify concrete without the class.

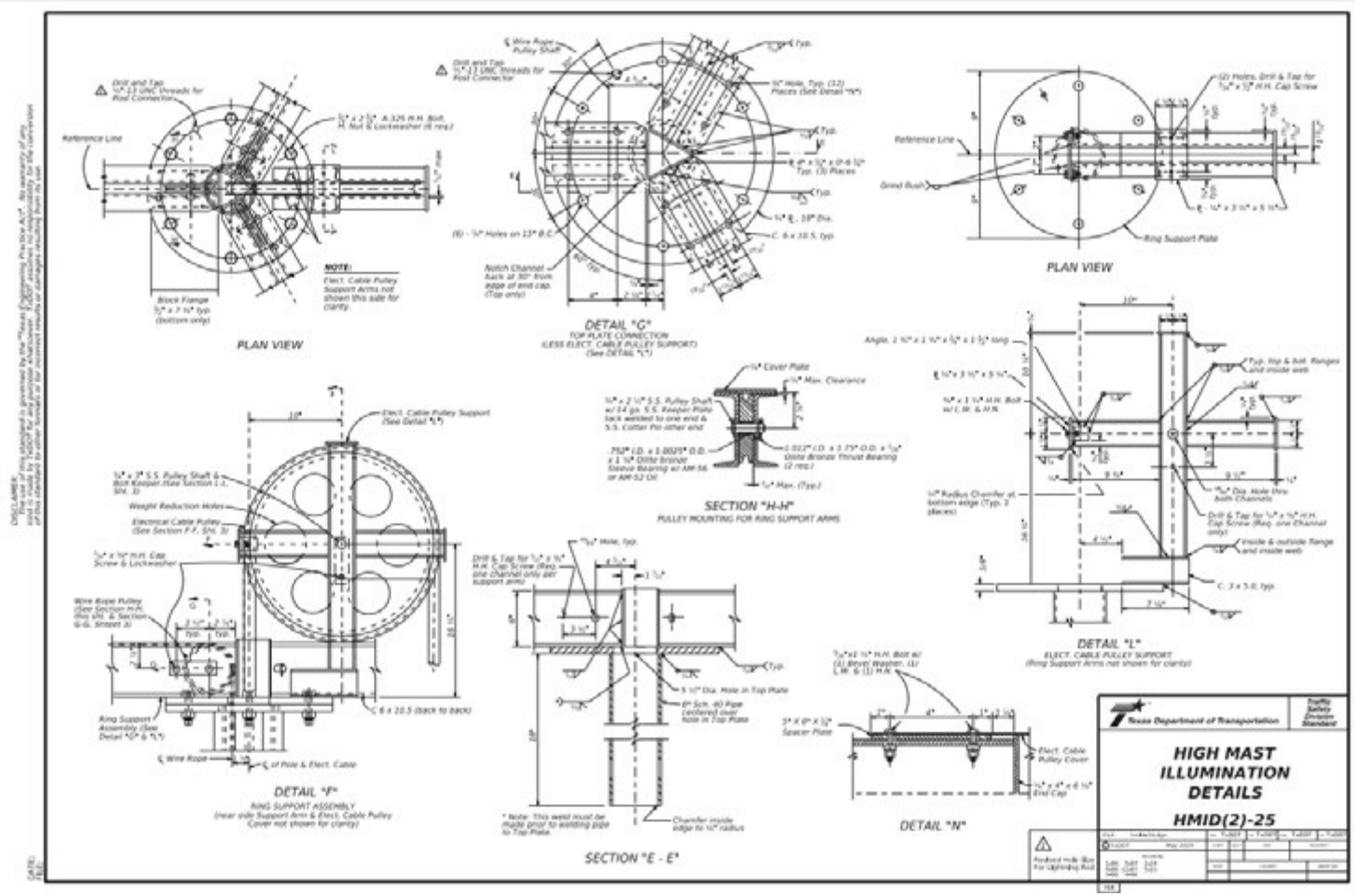
ED-25 Sheet Updates

- ED(7)
  - Increased the quantity of rebar for underground service foundations to satisfy NEC requirements for concrete-encased grounding electrodes.
- ED(11)
  - Revised foundation detail to remove callouts associated with RMC elbows.
- ED(12)
  - Revised Section A-A detail to show:
    - Conduit entering the ground box on one side;
    - The callout for concrete without specifying the class.

HMID(2)-25 update

- Sheets where released May 21, 2025
  - Revised the weld in Detail “G”. This revision reverts the weld to its original configuration on the support arm [per HMID-03].

HMID(2)-25 update



HMID(2)-25 update

Existing Welding Symbol (on 2024 updates):

Proposed Welding Symbol:

Texas Department of Transportation

BRIDGE (STRUCTURES)

TxDOT Ancillary Structure Standards
BRG maintains the *structural aspects* of:

Standard Description	Standards	Current Design Spec.	Upcoming Design Spec.
High Mast Illumination Assy	HMIP, HMID	LTS-3 (1994)	LTS-6
Roadway Illumination Assy	RIP, RID	LTS-6 (2013)	LRFD-LTS
Overhead Sign Structures	OSB, HOSB, COSS, HCOSS	LTS-3 (1994)	LRFD-LTS
Monotube Sign Structures	MS, MC	LTS-6 (2013)	
Traffic Signal Poles	SP, SMA, DMA, MA, MAC, MAD, TS, LUM, CFA, LMA	LTS-3 (1994)	LRFD-LTS
Wind and Ice Maps	WV & IZ	LTS-3 (1994) & LTS-6 (2013)	LRFD-LTS

https://www.dot.state.tx.us/insdtdot/orgchart/cmd/cserve/standard/toc.htm

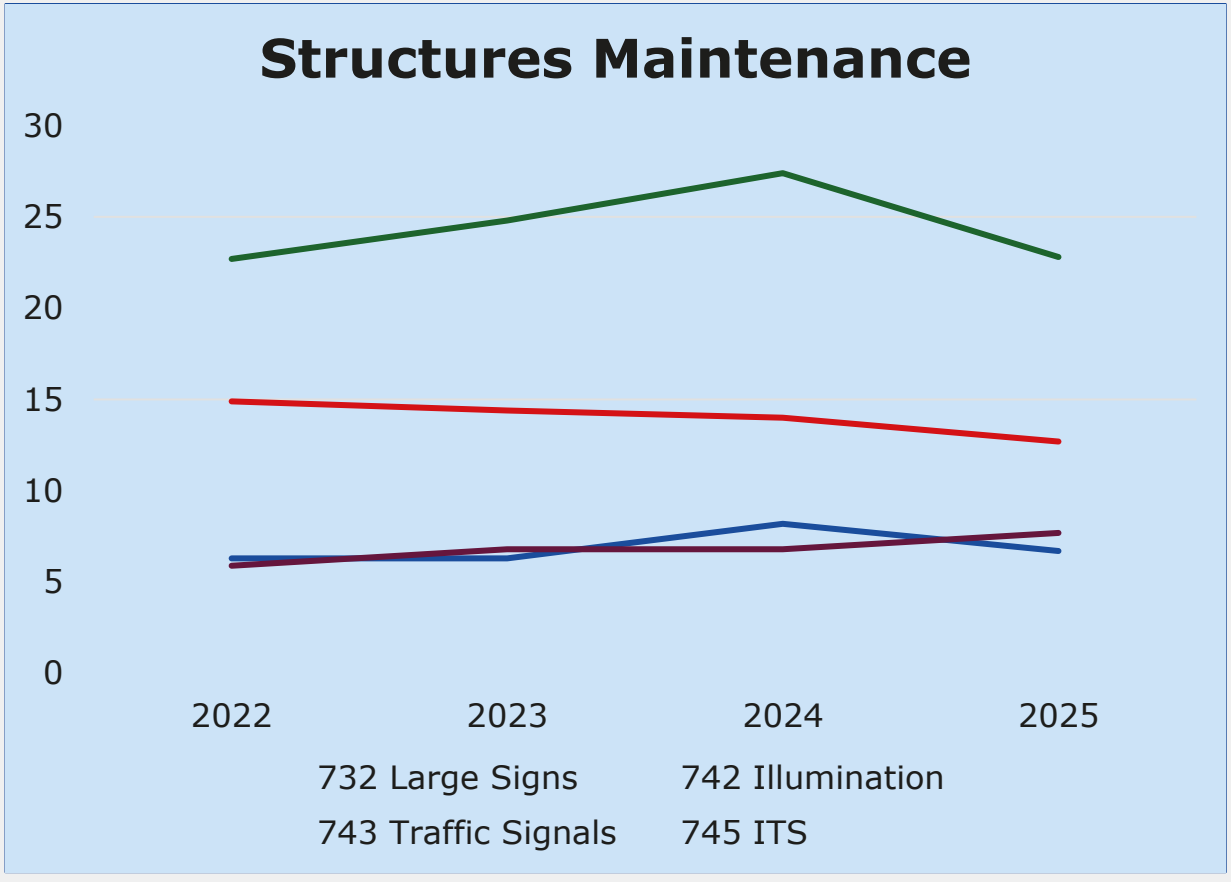
TxDOT Ancillary Structure Standards
BRG maintains the *structural aspects* of:

Special Details	Standards	Current Design Spec.
DMS Attachment Details	DMS-TM & DMS-HZ	LTS-3 (1994)
Connection between concrete column & truss sign support	Upcoming	LTS-6 (2013)
Bridge Railing Sign Mount	SMD(BR)	LTS-6 (2013)
Sign Mounting Details	SMD	LTS-3 (1994)

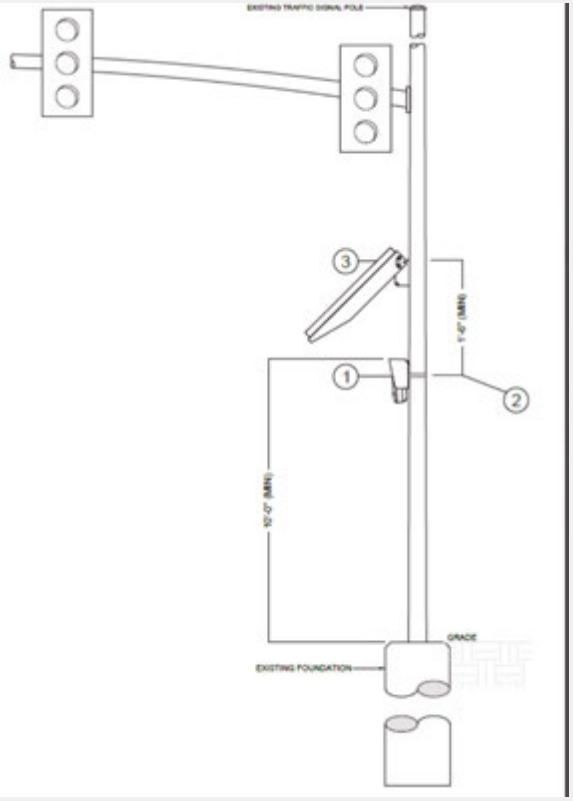
Texas Department of Transportation

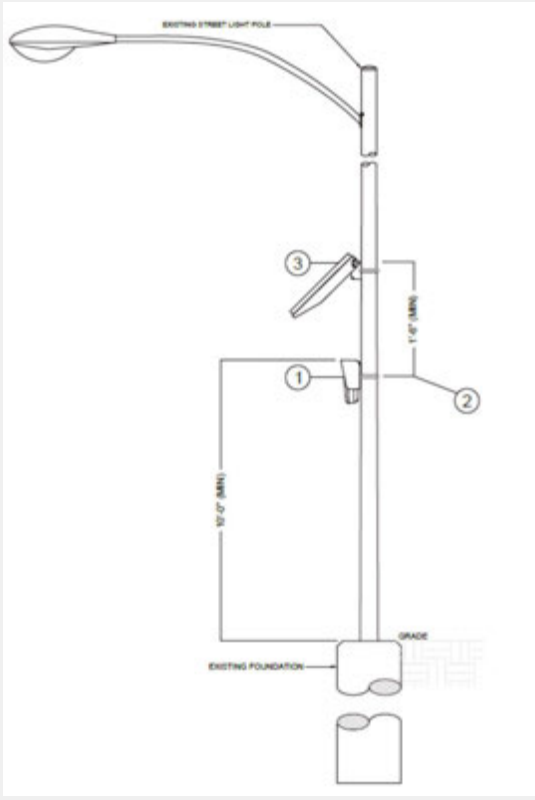
MAINTENANCE

- Looking at $1.85B next year for maintenance
- Approximately $50M per year in signals, illumination, large signs, and ITS
- About $4M is structural work

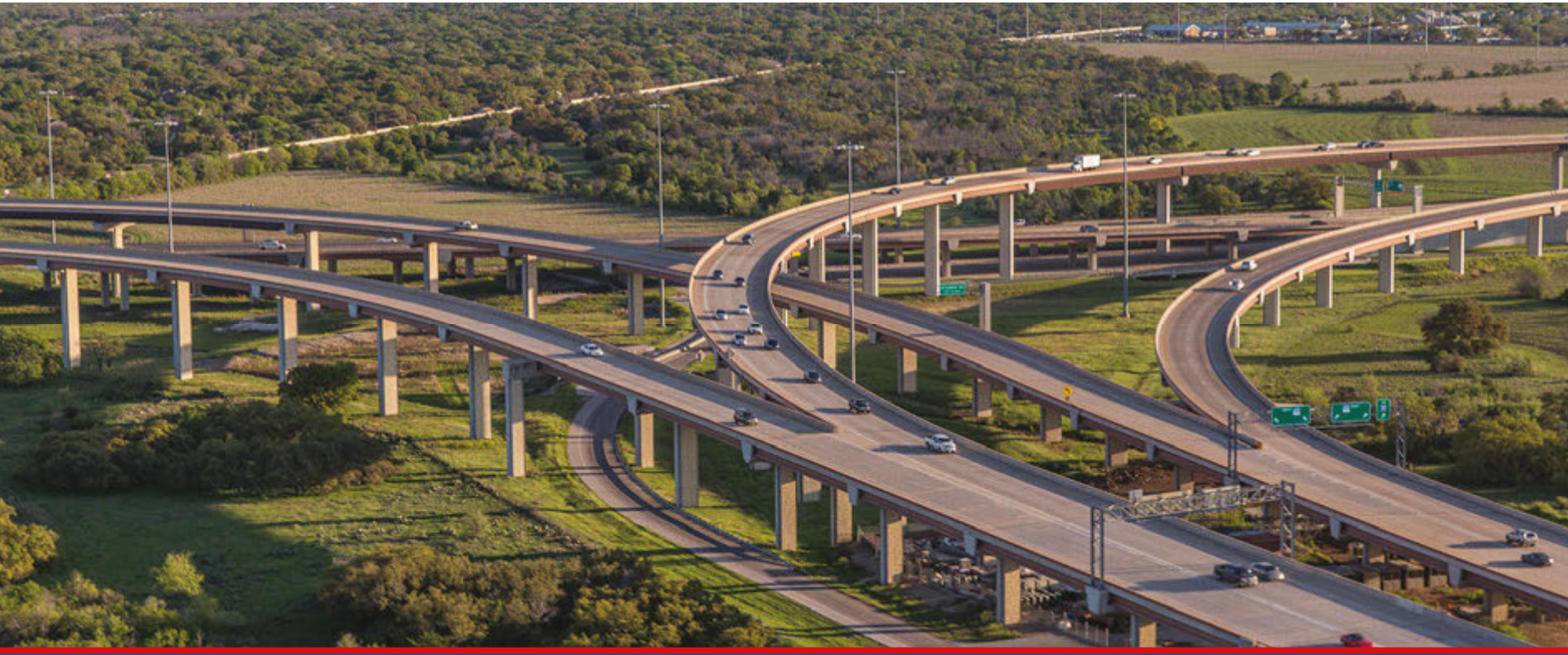


Pole Attachment Connections





- License Plate Reader Attachments
- Best practices for attachments?



HMIP/OHSS Inventory and Inspection

Greg Jones, P.E.

Texas Department of Transportation

August 15, 2025

The Need

Before 2020 - No statewide records of large traffic structures:

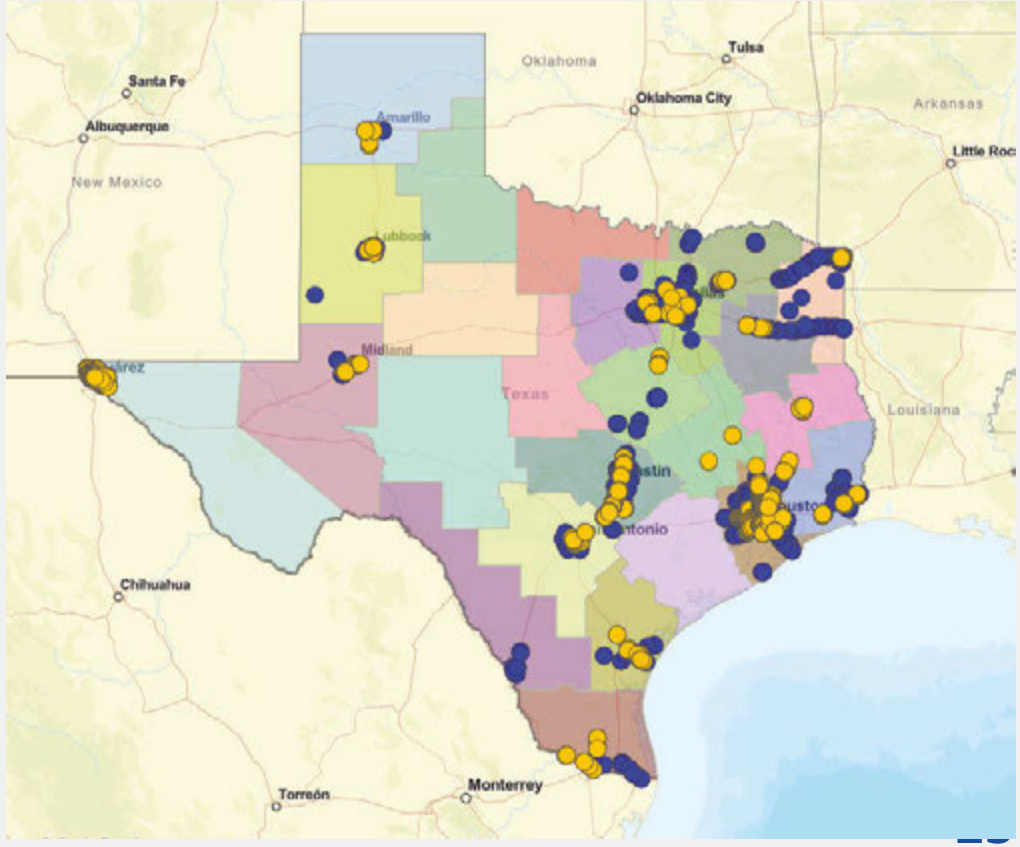
- Locations
- Quantities
- Conditions – age, damage

Contract with MBI

- Tasks:
  - Inventory, Inspection, Database
- Ancillary Structures:
  - High Masts, Overhead Sign Structures, ITS Poles, Signals
- Sept 2025 – End of contract

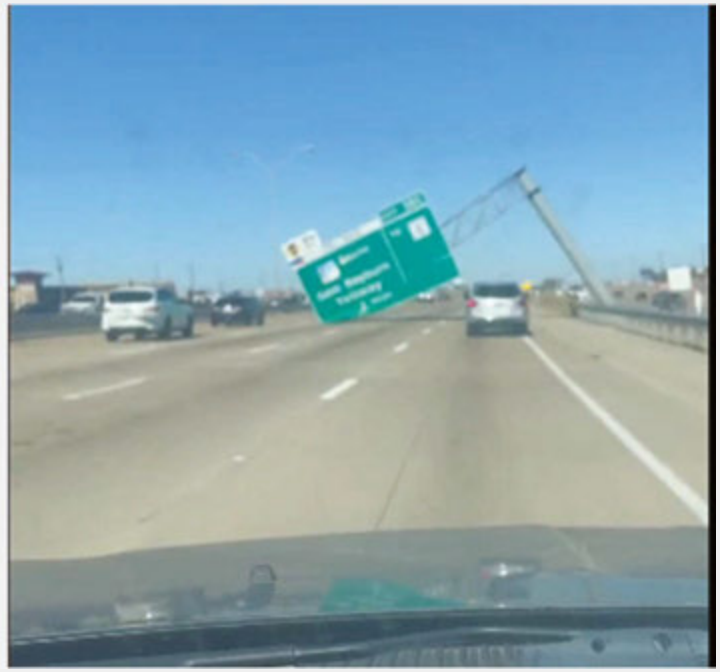
High Mast Poles

- 2025: Completed HM Inventory
- Over 6000 HM poles
- Structural inspection of 1 in 4



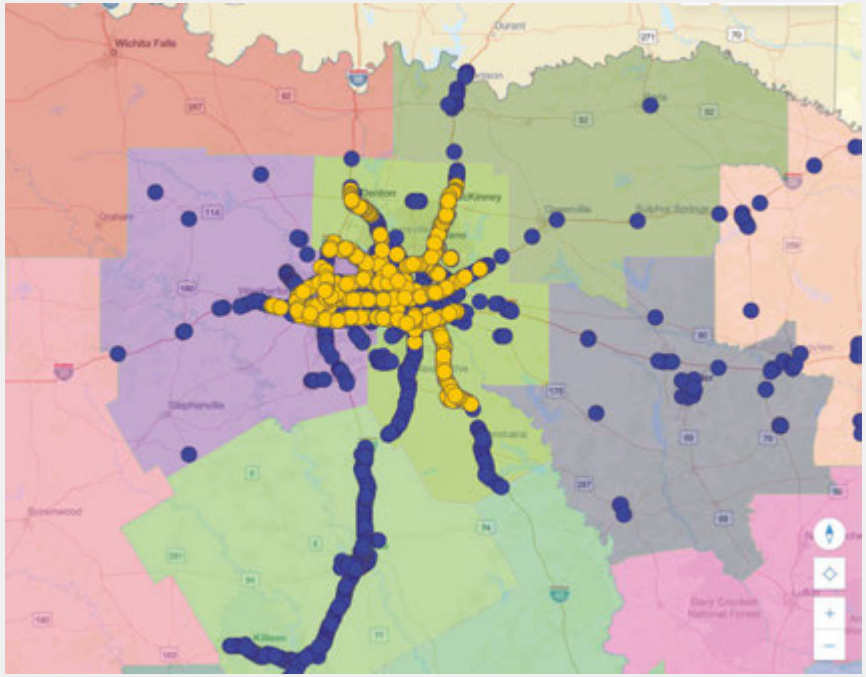
Overhead Sign Structures

- 2022: Failure of COSS on US 75 in N Texas
- 2022: TxDOT Statewide inspection of COSS anchor bolts



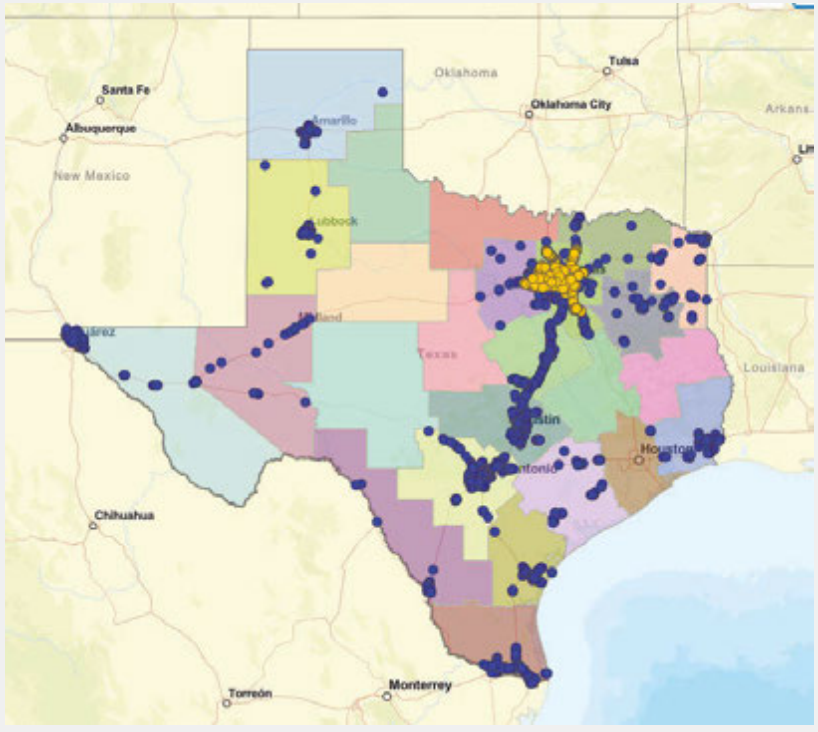
Overhead Sign Structures

- 2022: Failure of COSS on US 75 in N Texas
- 2022: TxDOT Statewide inspection of COSS anchor bolts
- 2023: Inspected OHSS in FTW and DAL



Overhead Sign Structures

- 2022: Failure of COSS on US 75 in N Texas
- 2022: TxDOT Statewide inspection of COSS anchor bolts
- 2023: Inspected OHSS in FTW and DAL
- 2024: Completed OHSS statewide inventory



Overhead Sign Structures

- 2025: NDT of FTW and DAL COSS
- Structures with >2 loose nuts
- 15 of 87 inspected structures had cracks in weld to base plate.
- Up to 5 cracks 1” to 3” long
- Notified Districts

Indication #1 and #2 at Tension End of the Structure

GIS database

- ArcGIS Online
- On TxDOT ArcGIS Online system
- All data available Sept 2025
- Get account through Service Desk
- Group - TxDOT HMI and OSS Inspection Reporting

Next Contract

- Planned for FY2027
- Add new construction
- Inspect more structures
- May add other structure types