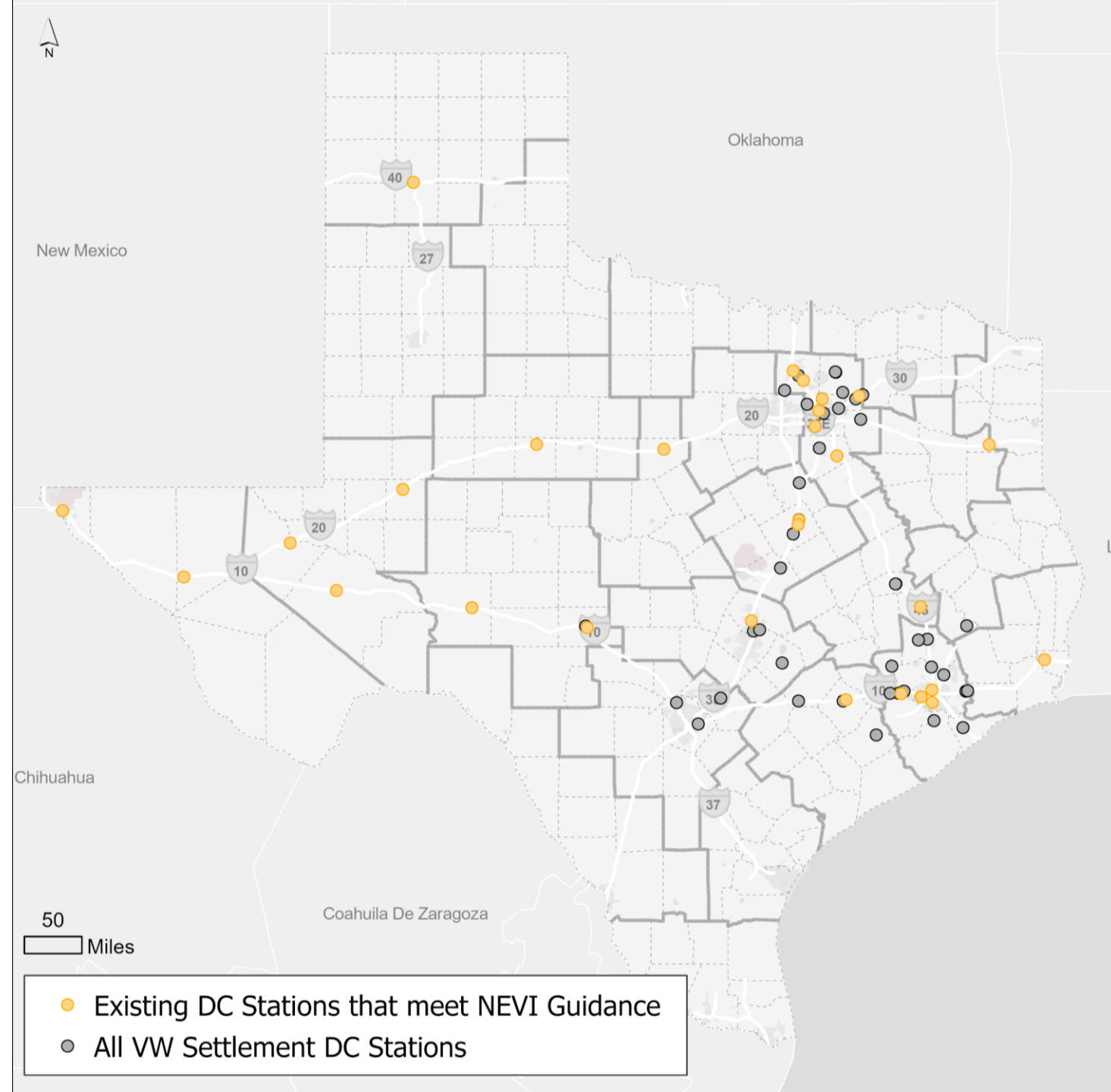


# Texas Electric Vehicle Infrastructure - Plan

# Texas Electric Vehicle Infrastructure Plan

In 2021, the Infrastructure Investment and Jobs Act (IIJA) established the National Electric Vehicle Infrastructure Program (“NEVI”). NEVI is a formula program for States to strategically deploy electric vehicle (EV) charging infrastructure.

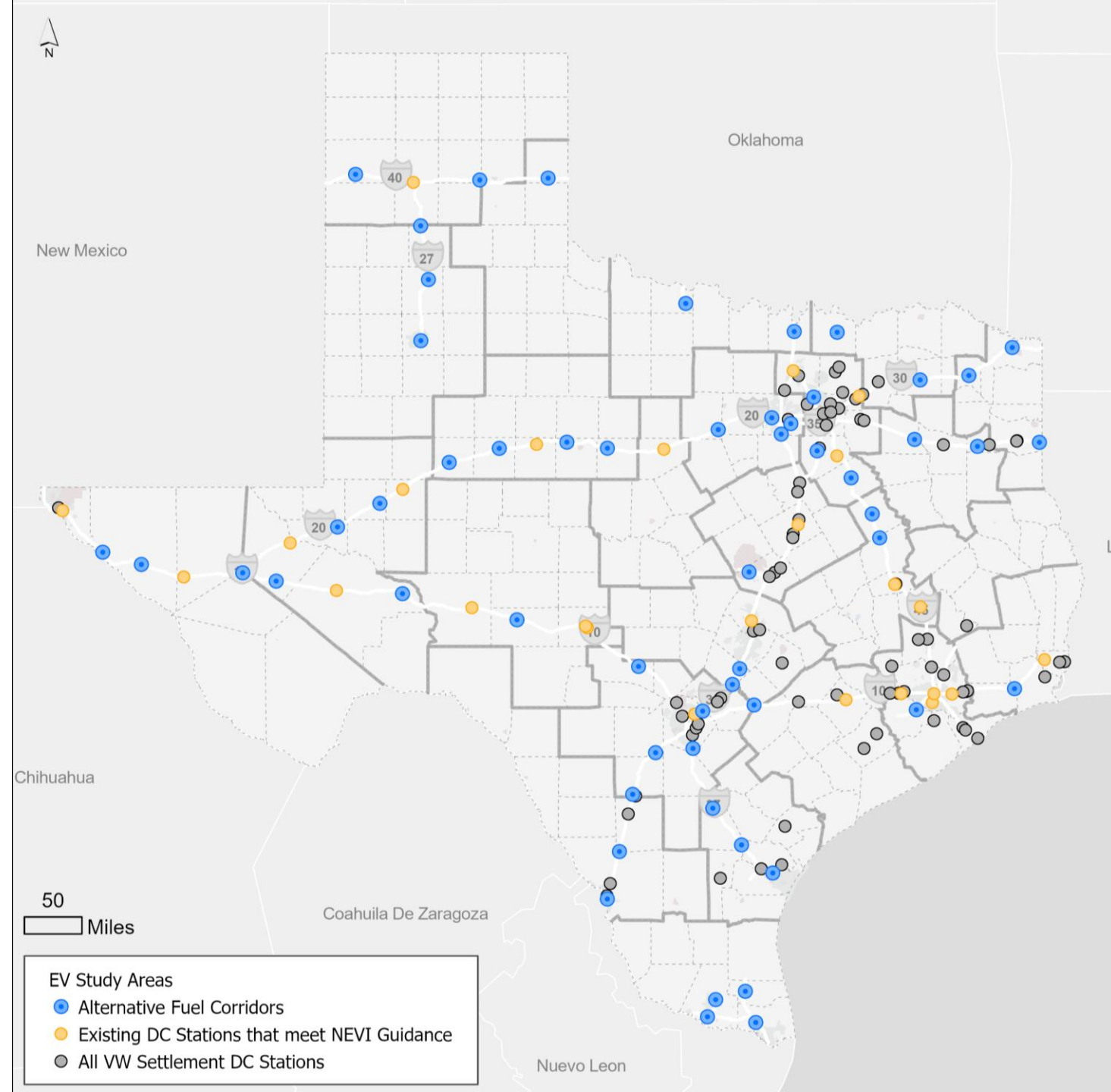
- \$2.5B Competitive Grants managed by FHWA (all alternative fuels)
- \$5B Formula Program for states to develop EV charging along the Electric Alternative Fuel Corridors



# Texas Electric Vehicle Infrastructure Plan

## Phase 1

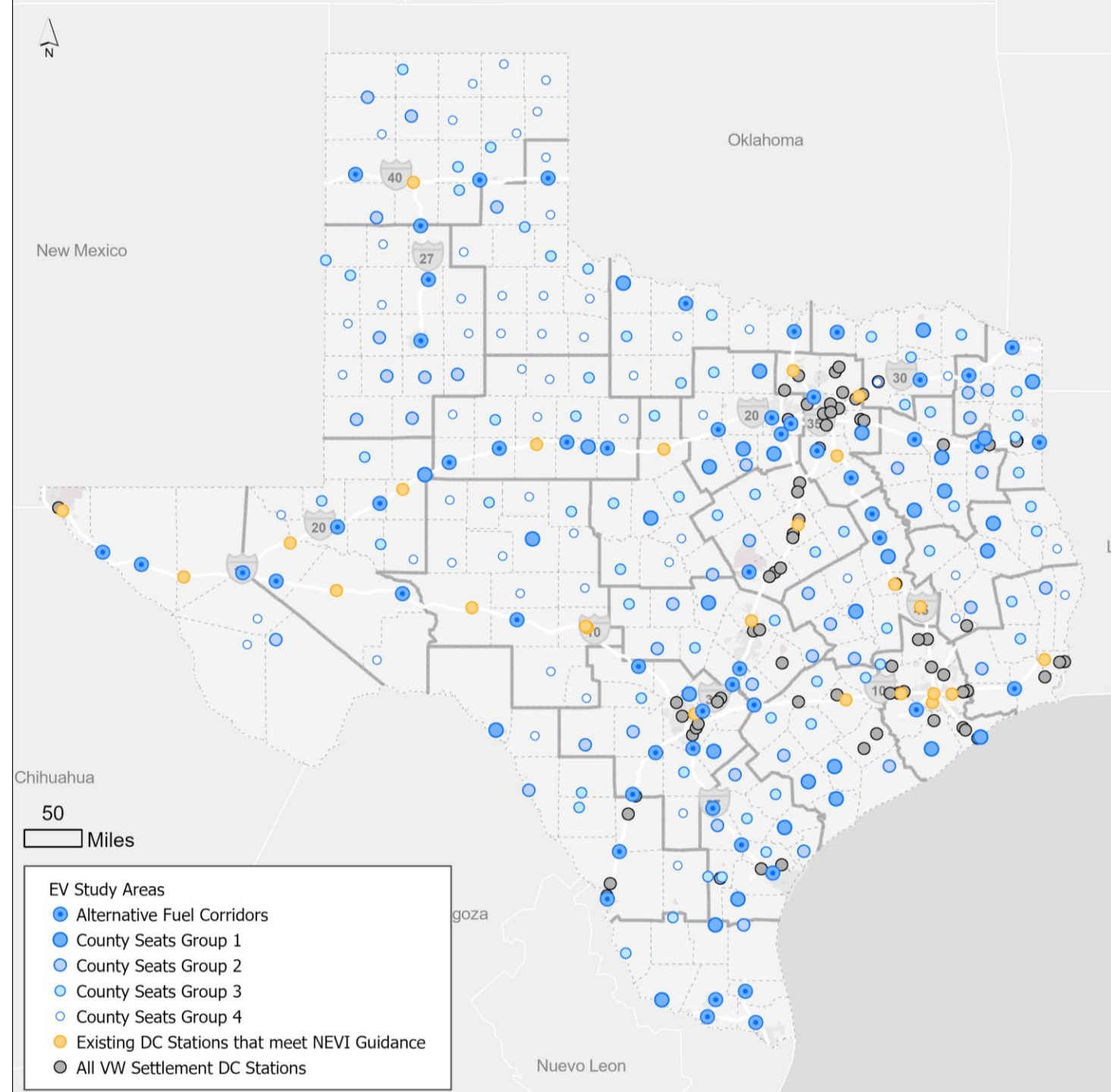
- Federal - \$408M over 5 years (funds available until spent)
- Private - \$102M
- Network will support 1 Million + Electric Vehicles
- Alternative Fuel Corridors first
- 312 DC Fast Chargers every 50 miles along Interstate Highways
- Plan was approved by FHWA on September 27, 2022



# Texas Electric Vehicle Infrastructure Plan

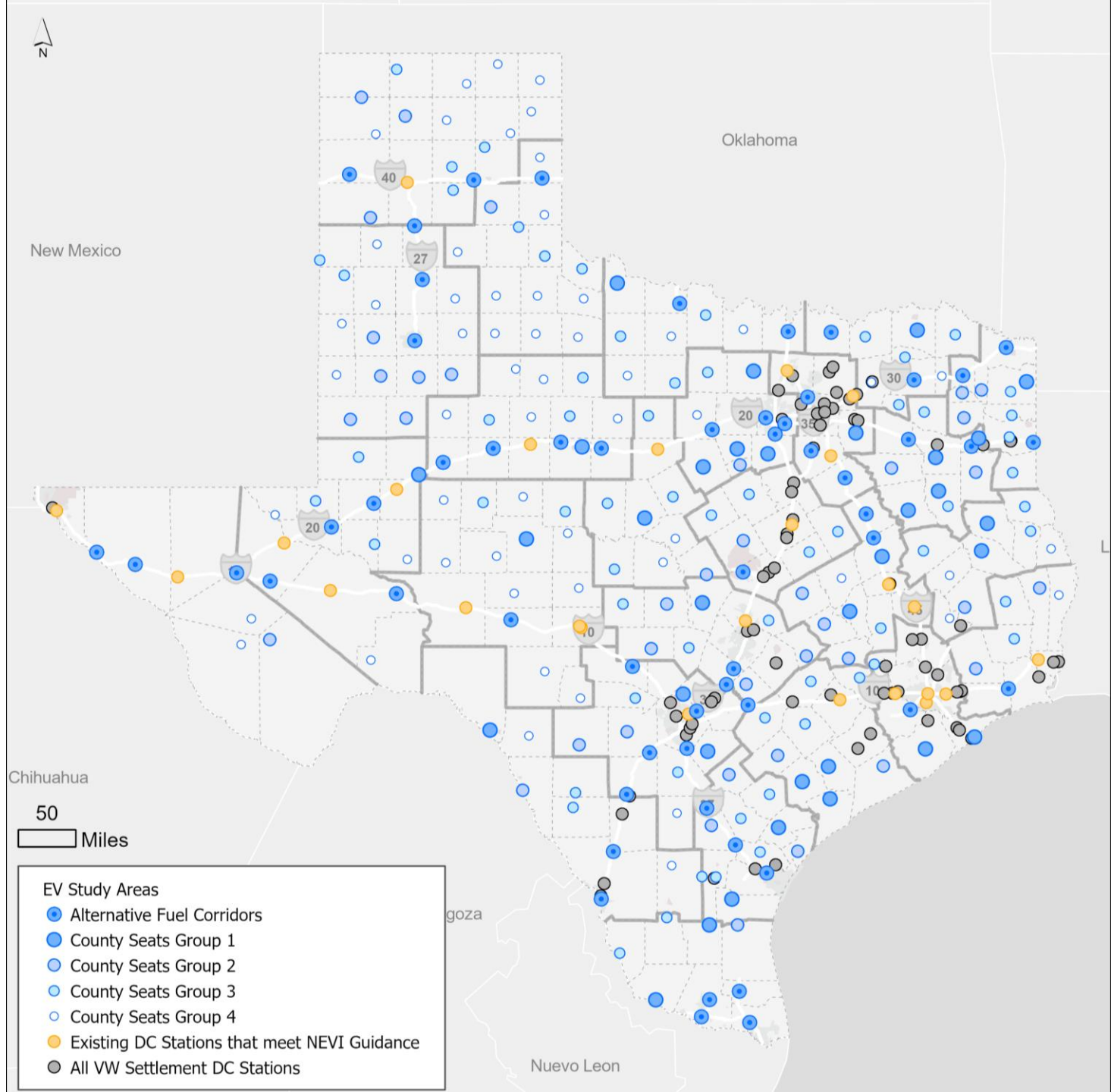
## Phase 2

- 1,014 DC Fast Chargers at or near County Seats
- 20K+ DC and Level II chargers inside MPOs and urban areas
- Phased rollout (higher VMT locations first)
- All major travel routes covered
- Theoretical peak 667MW



# Texas Electric Vehicle Infrastructure Plan

MPO Name	Allocation (Fed + Private)	5 YR Operations & Maintenance
Abilene MPO	\$765,303	\$191,326
Alamo Area MPO	\$18,672,318	\$4,668,079
Amarillo MPO	\$1,452,407	\$363,102
Bryan-CS MPO	\$1,200,824	\$300,206
CAMPO	\$18,342,083	\$4,585,521
Corpus Christi MPO	\$1,775,402	\$443,850
Eagle Pass MPO	\$327,061	\$81,765
El Paso MPO	\$5,941,734	\$1,485,434
Grayson County MPO	\$1,224,867	\$306,217
HGAC	\$53,588,122	\$13,397,030
Killeen-Temple MPO	\$2,324,076	\$581,019
Laredo/Webb MPO	\$1,063,244	\$265,811
Longview MPO	\$794,230	\$198,557
Lubbock MPO	\$1,486,663	\$371,666
NCTCOG	\$64,497,274	\$16,124,319
Permian Basin MPO	\$1,915,692	\$478,923
Rio Grande Valley MPO	\$6,325,223	\$1,588,056
San Angelo MPO	\$548,860	\$137,215
South East Texas RPC	\$2,502,701	\$625,675
Texarkana MPO	\$389,114	\$97,279
Tyler MPO	\$1,453,176	\$363,294
Victoria MPO	\$719,299	\$179,825
Waco MPO	\$1,846,634	\$461,658
Wichita Falls MPO	\$593,756	\$148,439

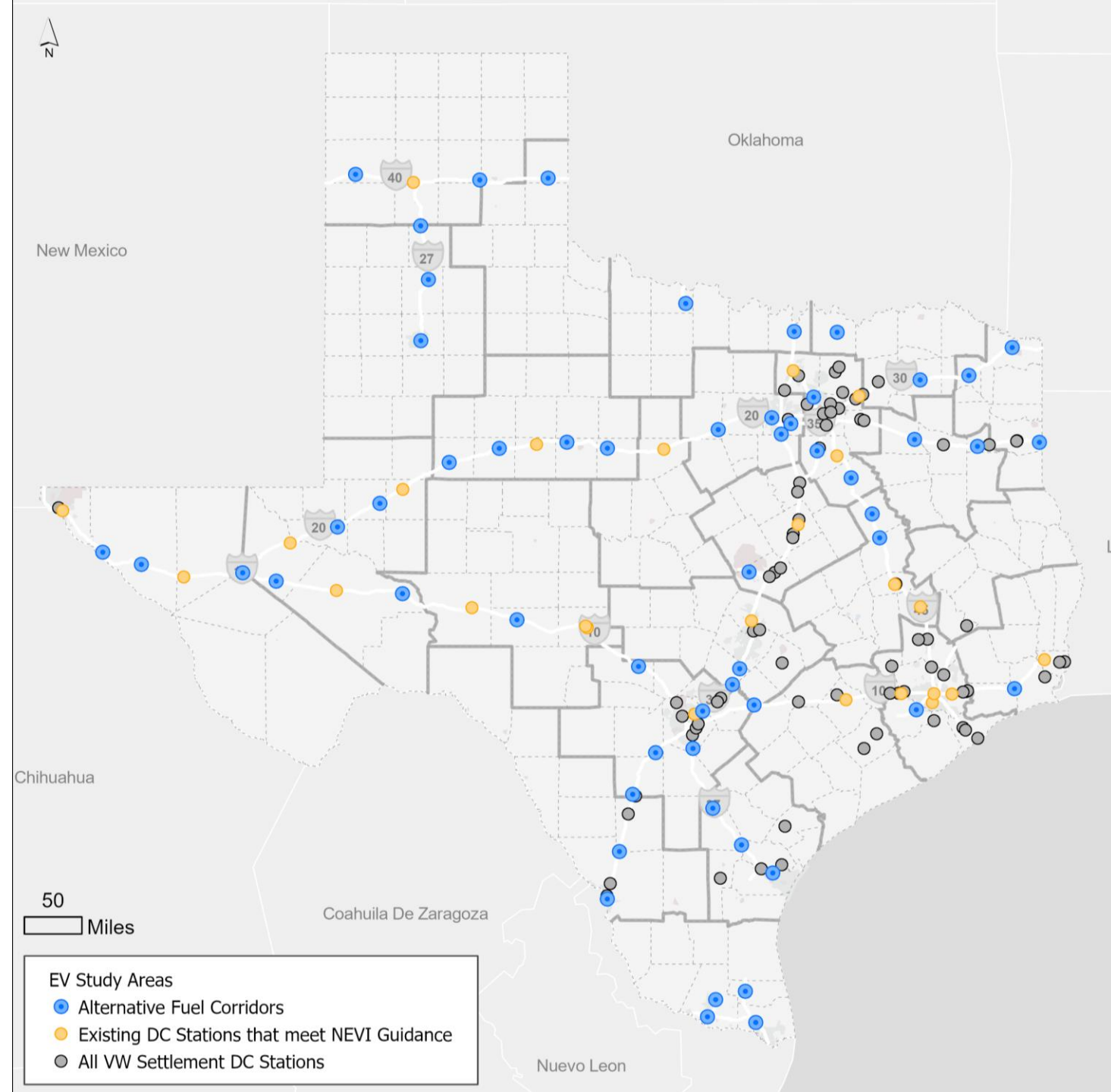


# Texas Electric Vehicle Infrastructure - Implementation

# Texas Electric Vehicle Infrastructure - Implementation

- Competitive Grant Program
- Phase 1 - Alternative Fuel Corridors
- 56 locations, 312 plugs
- Min power per connector 150kW
- Min 4 connectors per location
- Theoretical peak estimated at 46MW if all connectors in use at max rate at the same time

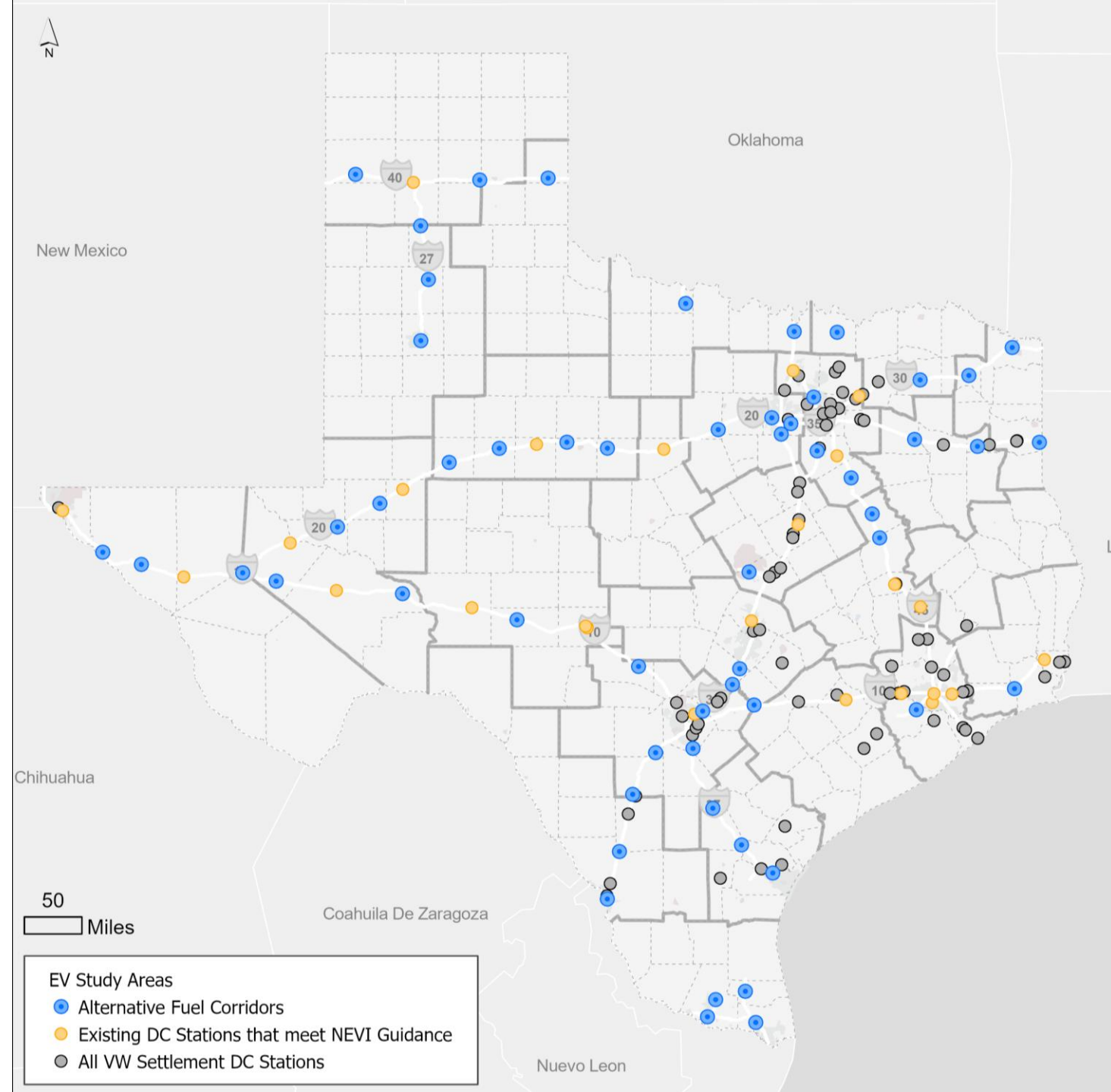
For comparison, bitcoin mining in Texas estimated around 1,500MW in 2022.



# Texas Electric Vehicle Infrastructure - Implementation

## 2023 Events

- Federal rulemaking finalized in February of 2023
- Added first 56 locations to the State Transportation Improvement Plan (STIP)
- Implementation plan approved by FHWA on June 12, 2023
- Authorization to open the program by the Texas Transportation Commission on Aug. 16, 2023
- Applications, scoring, selection, and environmental clearance fall 2023



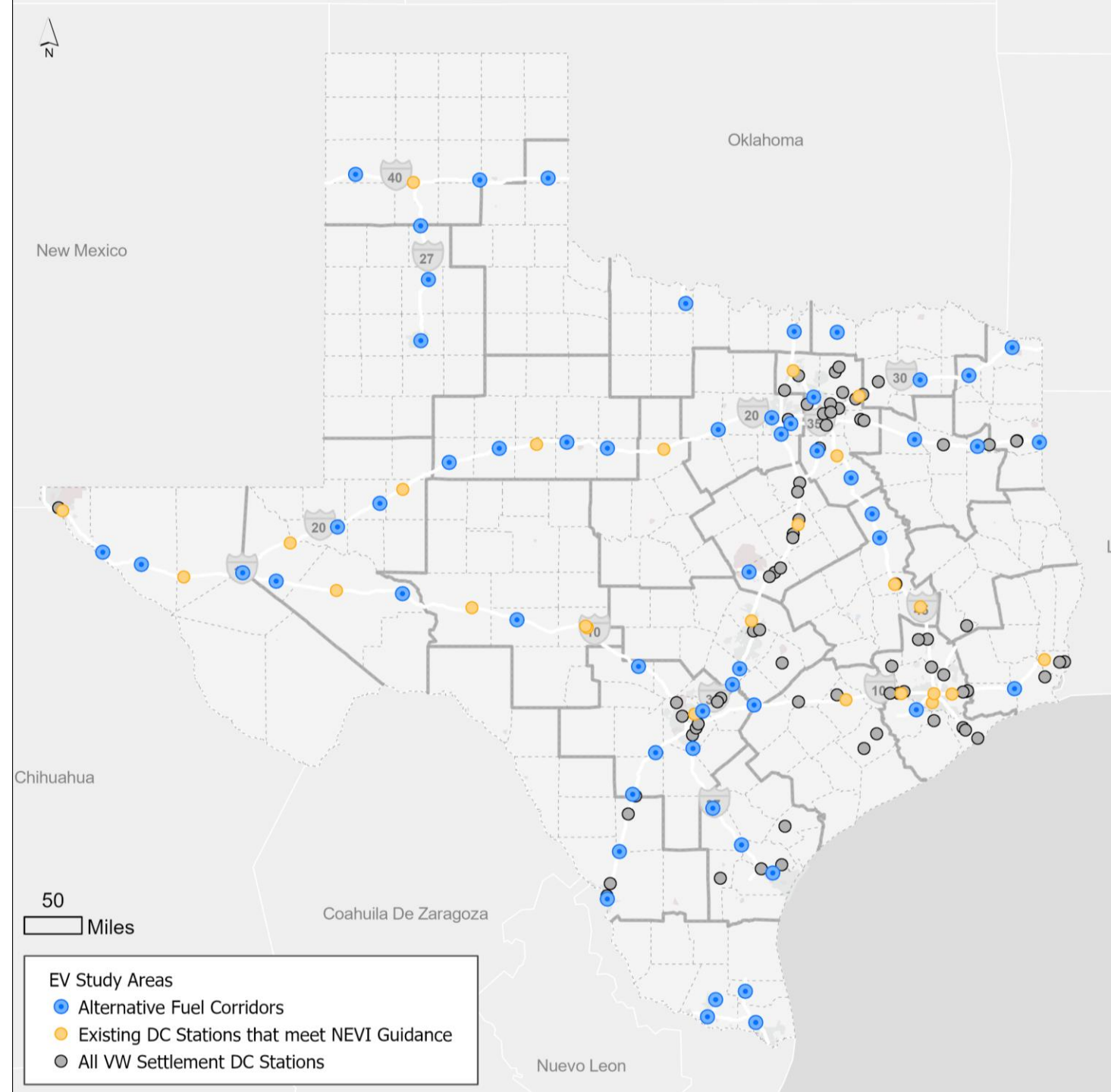


# Texas Electric Vehicle Infrastructure - Implementation

## Program Documents

- Request for Grant Application (RFGA)
- Program Manual
- Application
- Scoring Worksheet
- Site Hosting Form
- Environmental Clearance Form

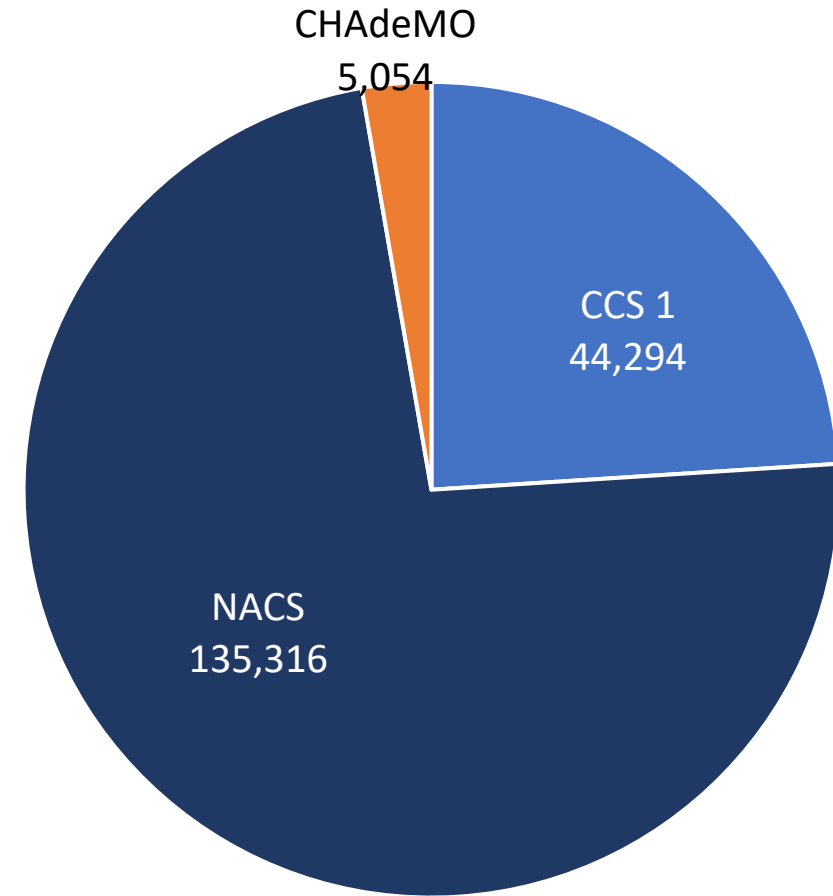
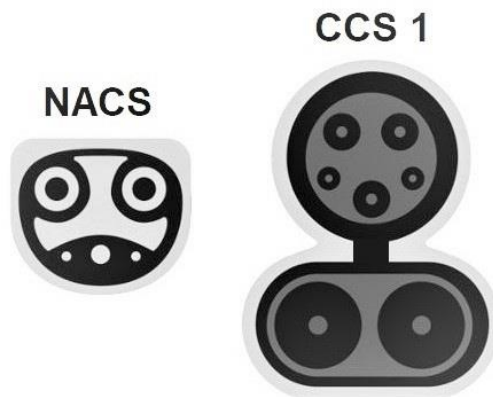
Phase 1 applications due Oct. 16, 2023



# Texas Electric Vehicle Infrastructure - Implementation

## Connectors

- The Texas Electric Vehicle Infrastructure Plan includes two connectors per unit. The two-connector solution covers 98% of electric vehicles with fast charge ports in the state.



- Data Source: Registration data from TxDMV Oct 17, 2023
- Plug in hybrid vehicles not included

# Texas Electric Vehicle Infrastructure - Implementation

## The Two-Connector Solution Supports

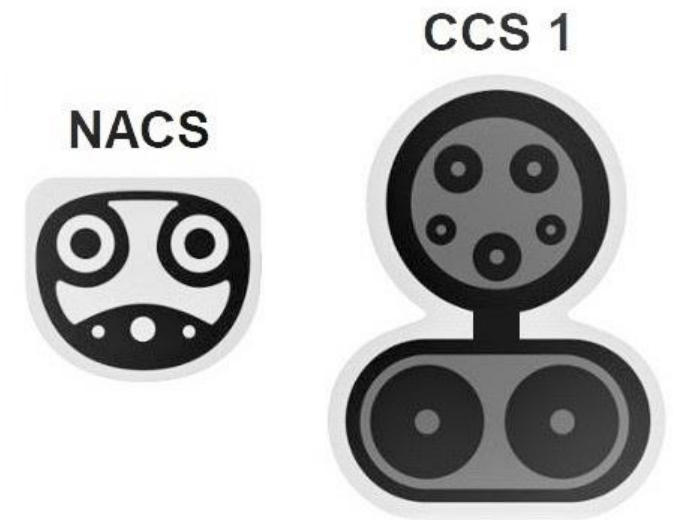
- All CCS 1 and NACS vehicles in the state today
- All CCS 1 and NACS vehicles that will be purchased in 2023 and 2024
- Future proofs NEVI stations from 2025 +

## Fourteen (14) auto manufacturers switching to NACS late 2024/2025

- Ford, GM, Rivian, Volvo, Polestar, Mercedes-Benz, Nissan, Honda, Acura, Fisker, Jaguar, Hyundai, Kia, Genesis

## Thirty-three (33) equipment manufacturers/network operators supporting NACS 2023-2025

- ABB, ADS-Tec, AmpUp, Autel Energy, Blink, BTC Power, ChargeLab, ChargePoint (soon), Electrify America, Eaton, Emporia, Enel X Way, EnviroSpark, EVgo, Evercharge, EV Range, EVPassport, FLO Charging (2023), FreeWire Tech. (2024), i-charging, Ivy Charging Network, Kempower, Lectron, SK Signet, Shell Recharge, Tritium, WallBox, XCharge North America





# EV Landing Page Resources

## Texas Electric Vehicle Infrastructure Plan



As required by the National Electric Vehicle Infrastructure Formula Program, TxDOT submitted its Texas Electric Vehicle Infrastructure Plan to the federal Joint Office of Energy and Transportation. The submitted Plan can be found below.

 [Review the EV Infrastructure Plan](#)

TxDOT will continue to be open to questions and comments as it continues the NEVI program, and those can be [submitted online](#). We encourage the public to periodically visit this site for updates on new locations, FAQs, and further planning updates as the program progresses. TxDOT thanks the public for its extensive input on the Plan and looks forward to working with you as it develops. We also encourage you to explore the links below to find further details and interactive information about the progress of electric vehicle charging capabilities across the state.

## Plans approved

The Texas Electric Vehicle Infrastructure Plan and Phase 1 Implementation Plan have been approved by the Federal Highway Administration.

-  [Texas Electric Vehicle Infrastructure Plan – Approval Letter](#)
-  [Phase 1 - Texas Electric Vehicle Implementation Plan – Approval Letter](#)

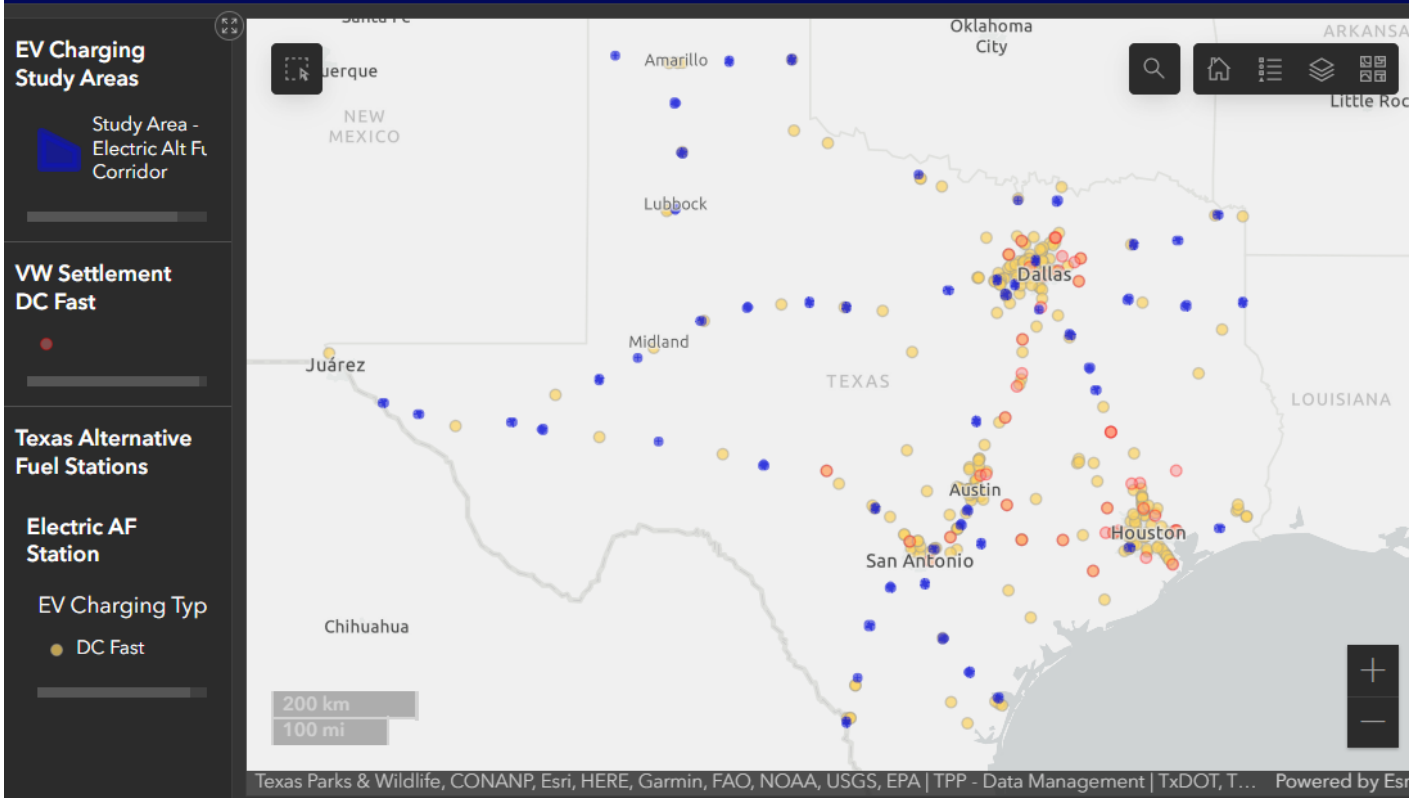


**Subscribe to updates**

[Sign up](#)

# Phase 1 Dashboard

## Phase One - Electric Vehicle Study Areas (Alternative Fuel Corridors)



## Electric Charging Study Areas

Select a record from the table to zoom map location

CITY NAME	CONNECTORS	EST COST	5 YR O&M
Adrian	4	600,000	150,000
Arlington	8	1,200,000	300,000
Balmerhea	4	600,000	150,000
Big Spring	4	600,000	150,000
Buda	6	900,000	225,000
Buffalo	4	600,000	150,000
Burleson	8	1,200,000	300,000
Carrollton	8	1,200,000	300,000
Clyde	4	600,000	150,000
Colorado City	4	600,000	150,000

# Registration Dashboard

## Texas Electric Vehicle (EV) Registration Tool

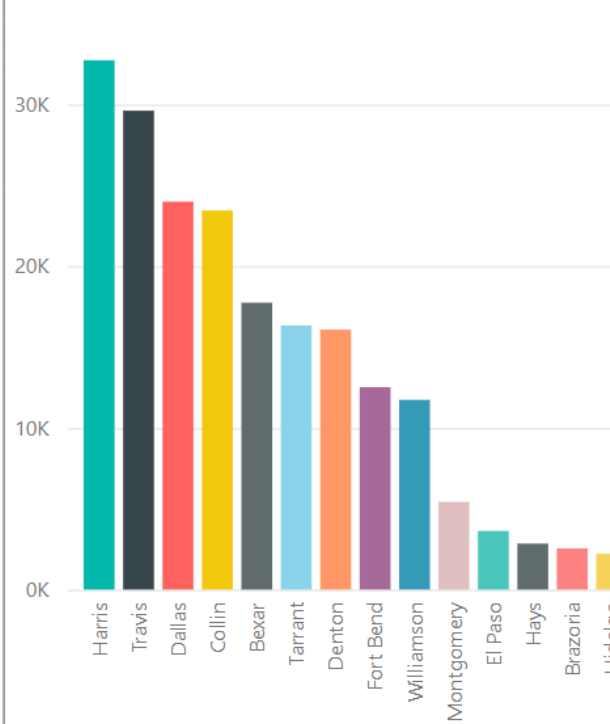


Dallas-Fort Worth  
CLEAN CITIES

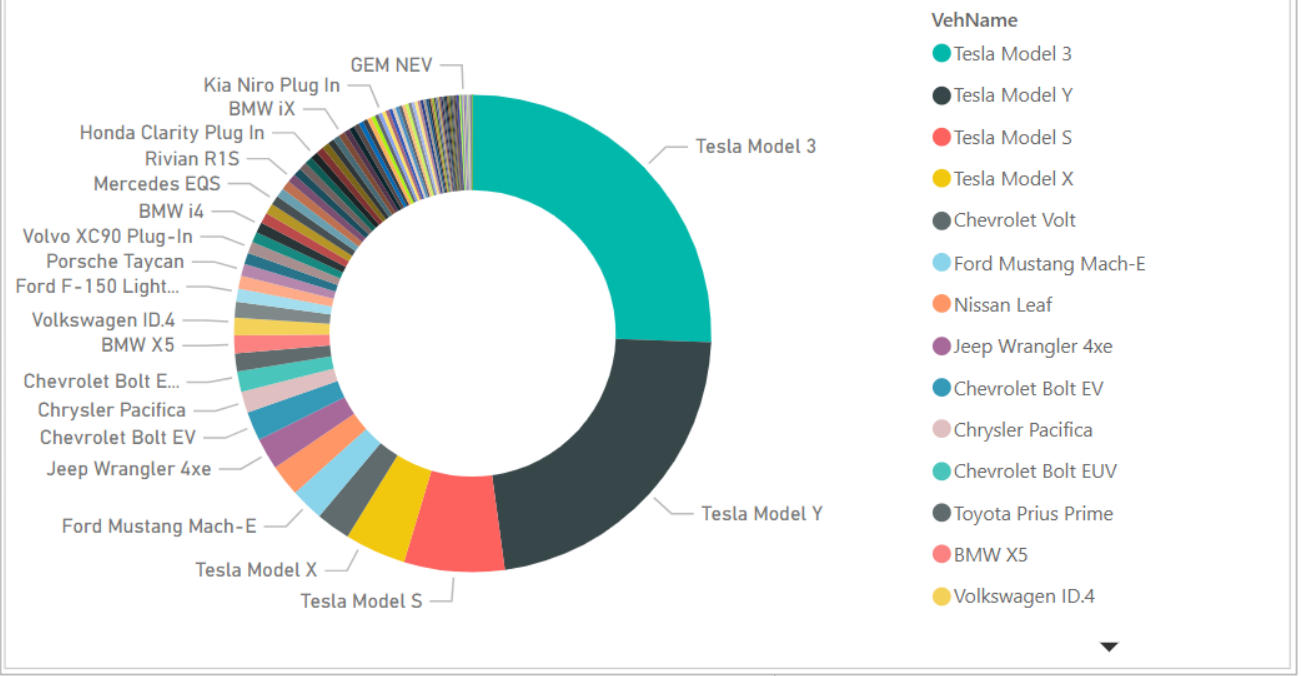
230,706 EVs

EV's in Texas as of October  
17, 2023

EV Registration by County



EV Registration by Model



# Charging Station Summary

Electric Vehicle (EV) Charging in Texas (updated weekly)

Locations

3,322

Locations by Owner

66

eVgo

0

SemaCharge

176

Volta

1,555

ChargePoint

134

Tesla

444

Blink

22

AMPUP

31

Electrify America

298

Tesla Destination

329

Non-Networked Stations

Locations by Charge Rate

31

Level 1 (Slow Charge Rate)

2,923

Level 2 (Medium Charge Rate)

440

DC Fast (Rapid Charge Rate)

Connector Count by Type

6,203

J1772 (Medium Charge Rate)

547

CHAdEMO (Rapid Charge Rate)

709

CCS (Rapid Charge Rate)

1,536

NACS (Rapid Charge Rate)



# EV Landing Page Resources - Tips

## EV charging stations

### Charging guide

#### How to charge



##### Level 1:

- Standardized connector.
- At home using a normal wall outlet; cable included with car.
- Slow charge rate; 3-5 miles per hour.
- Useful for drivers traveling 40 miles or less daily; level 2 preferred if available.



##### Level 2:

- Standardized connector.
- At home using a dedicated charging station.
- Medium charge rate; 15-30 miles per hour.
- Useful for drivers traveling 100+ miles daily.



##### DC fast charging:

- Three connector types; CCS, CHAdeMO, Tesla.
- Just off the highway using dedicated high power stations.
- Fast charge rate; 150-400 miles per hour.
- Useful for long distance driving 300+ miles daily.

How to charge

When to charge

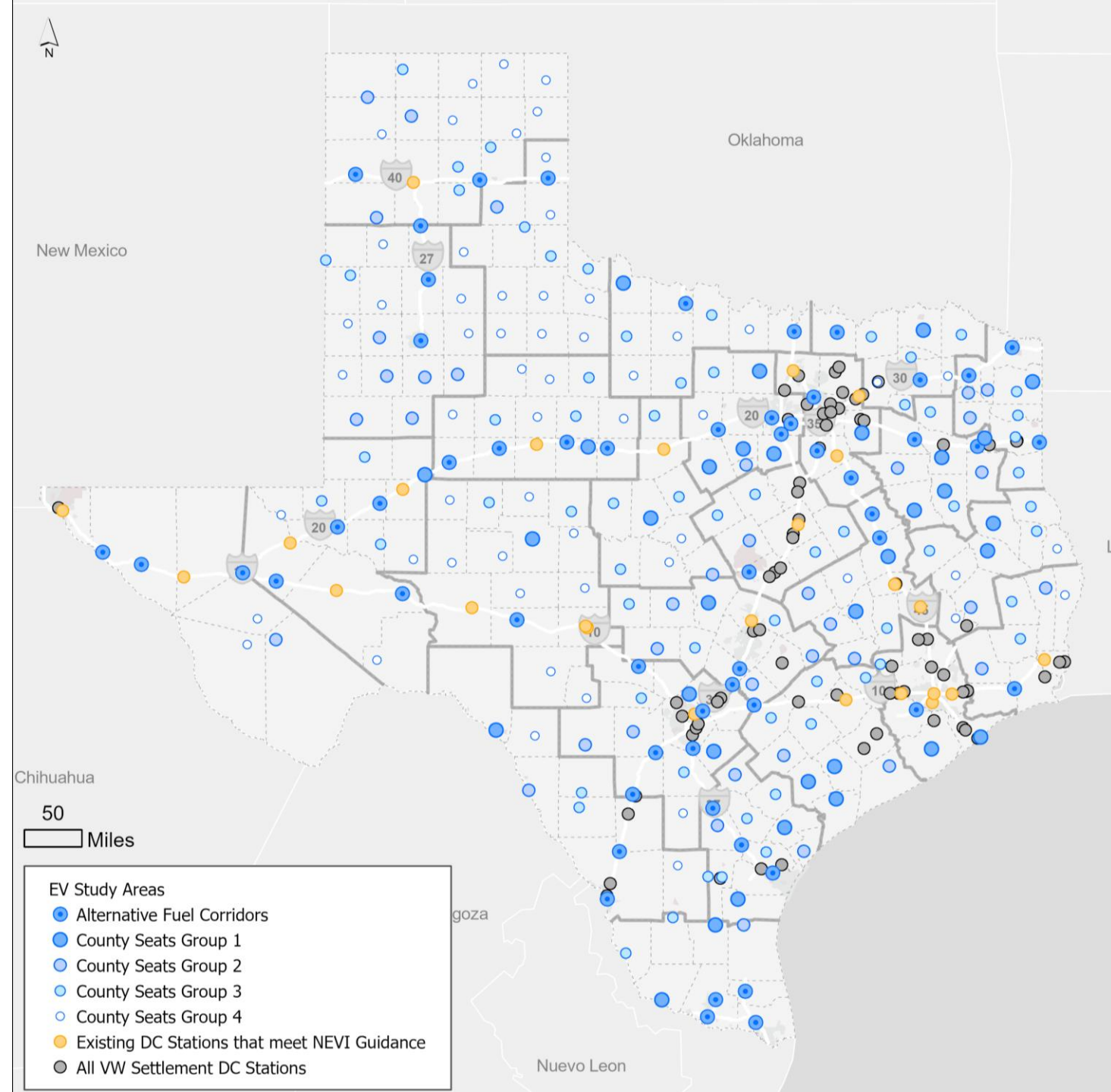
How full to charge

Where to charge

Additional information

## Closing Thoughts

- Texas adding approx. **2,000** EVs week
  - Last year, **1,000** EVs week
- 2027 battery manufacturing capacity in the US est. at **1,200 GWH** year.
  - Capacity to build **13,000,000** EVs per year at 77 kWh each
  - In 2022, US bought **13,750,000** vehicles of all types
- The Home Depot Example



# Thank You

Michael Chamberlain  
Texas Department of Transportation  
[Michael.Chamberlain@txdot.gov](mailto:Michael.Chamberlain@txdot.gov)  
512.851.9039

Program Email Address:  
[TxDOT\\_NEVI@txdot.gov](mailto:TxDOT_NEVI@txdot.gov)

Much more found here:  
[EV Program Landing Page](#)

