City of Dallas

Regional Electric Vehicle(EV) Charging Infrastructure Investments Update

November 4, 2024

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Overview

- CECAP Goal 3
- Current Electric Vehicle Trends
- North Central Texas Council of Governments
 - Regional EV Charging Infrastructure Programs
- City of Dallas Efforts
- Next steps

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CECAP Implementation





O3 Dallas' communities have access to sustainable, affordable TRANSPORTATION options.

Goal 3 Objectives:

Shift the surface transportation system to move people and goods in fuel-efficient vehicles.

Reduce trips where people drive alone.

Synergize land use and housing with transportation infrastructure to increase access to walking and biking options, and public transit.

Ensure that walking, biking, public transit, vehicular transportation infrastructure is reliable and safe under all weather conditions.



City of Dallas EV Trends





Source: DFW Clean Cities

EV Registrations Per Zip Code and Charging Stations



Texas Data and Trends

Electric Vehicles and Charging Stations in Texas



Electric Vehicle (EV) Registration Data

<u>dfwcleancities.org/evnt</u> -> EVs and Texas

Region	October 2023	October 2024	Increase
Texas	226,740	309,807	37%
Dallas-Fort Worth (DFW)	84,242	113,176	34%
Austin	44,552	61,696	38%
San Antonio	21,733	27,464	26%
Houston	55,135	77,749	41%

Charging Sites Statewide (includes Tesla):

- 3,007 Level 2
- 554 DC Fast

afdc.energy.gov/stations

Parks, Trails, and the Environment Committee - NCTCOG

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Regional EV Charger Investments

North Texas Reliable EV Infrastructure (NTx-EVC-RAA (NTx-REVI) Eligible NCTCOG County Eligibility EV Charging Stations Eligible for DCFC Upgrade All Other Eligible Stations TX EV/Infrastructure R

\$3.6 million to <u>repair and replace non-</u> <u>operational chargers</u> in the 16-county NCTCOG region

North Texas Equitable EV Infrastructure (NTx-EEVI) Project

\$15 million to <u>build up to 100 EV charging</u> <u>ports</u> in the 16-county NCTCOG region, with emphasis on underserved areas

Texas EV Infrastructure Plan

~\$70 million to <u>build EV charging</u> in the NCTCOG Metropolitan Planning Area (MPA) and county seat sites (Managed by TxDOT)





EV Charger Investment Priorities

Program:	NTx-REVI \$3.6 Million	NTx-EEVI \$15 Million	Texas EV Infrastructure Plan: Phase 2 MPO Allocation ~\$60 Million
Eligibility	Subset of Locations Prescribed by FHWA "Like for Like" Charger Upgrade OR Upgrade to DC Fast Charge if within 1 mile of designated highway corridor	Public Sector Properties Level 2 or DC Fast Charge; proposal emphasized DC Fast Charge	Private Sector Properties Level 2, DC Fast Charge, or Medium/Heavy Duty Truck Charging; TxDOT has advised <i>against</i> Level 2
Emphasis Areas*	Connecting the Region Proximity to Existing/Planned Stations Increasing Access in Key Areas Streamlining NCTCOG Implementation	Justice 40 Areas Areas with Low Ratio of Private Parking or High Ratio of Multi- Family Housing Sites that can also Serve as Multi- Modal or Fleet Charging Hubs Rural Areas	To Be Determined; Preliminary Ideas: Evacuation Routes and "Secondary Highways" not Designated as Alternative Fuel Corridors (e.g. US 287, US 380, etc.) MHD Truck Charging Hubs



*Emphasis areas for NCTCOG-managed projects reflect elements presented to

Parks, Trails, and the Environment Committee - NCTCOG committees at time of proposal submittal

County Eligibility by Funding Program

County	NTx- REVI	NTx- EEVI	Texas EV Infrastructure Plan Phase 1	Texas EV Infrastructure Plan Phase 2 - MPO	Texas EV Infrastructure Plan Phase 2 - County Seats	Total Programs
Collin	Х	Х	Х	Х		4
Dallas	Х	Х	Х	Х		4
Denton		Х	Х	Х		3
Ellis		Х	Х	Х		3
Erath		Х			Х	2
Hood		Х		Х	Х	3
Hunt		Х	Х	Х		3
Johnson		Х		Х	Х	3
Kaufman		Х	Х	Х	Х	4
Navarro		Х	Х			2
Palo Pinto		Х			Х	2
Parker		Х		Х		2
Rockwall		Х		Х		2
Somervell		Х			Х	2
Tarrant	Х	Х	Х	Х		4
Wise		Х		Х	Х	3

Parks, Trails, and the Environment Committee - NCTCOG

Grid Impacts of EV Charging

Electric Vehicle Numbers Today			Energy Usage Projections	
309,807 EVs registered in Texas as of October 2024	1.2% of vehicles in Texas were EVs as of October 2024		EVs will use 1.25% Of ERCOT's load by 2029	
41% annual growth rate of EV adoption in Texas as of September 2024			In Comparison	
Every DC Fast and Level 2 charger working at the maximum rate at the same time would consume 667.3 MW of ERCOT's 2024 expected peak demand capacity of 103,609 MW			Data centers will use up to 9.1% Of ERCOT's load by 2030	

Source: <u>September 2024 ERCOT</u> Fact Sheet, <u>TxDOT Texas Electric</u> <u>Vehicle Infrastructure Plan</u>



Center Energy Consumption

Current Focus

North Texas Reliable EV Infrastructure (NTx-REVI) Project

Finalize Site Selection and Subawards

North Texas Equitable EV Infrastructure (NTx-EEVI) Project

Procure Deployment Dream Team

Solicit Input from Local Governments and Residents

Texas EV Infrastructure Plan

Facilitate Transportation Improvement Plan Approvals Solicit Input from Local Governments and Residents

https://www.publicinput.com/nctcogevcharging

TxDOT's EV Plan interactive mapping survey tool



https://engagetxdot.mysocialpinpoint.com/texas-electric-vehicle-evcharging-plan-interactive-map



City of Dallas Efforts: Prepare for Funding Opportunities

City of Dallas Electric Vehicle Charging Infrastructure Siting Study

- Contracted Modern Geosciences to conduct a siting study and identify suitable City of Dallas properties for public EV charging stations.
- Developed siting criteria and a weighted model.
- Conducted site inspections to confirm physical site characteristics.
- Recommended 90 Level 2 locations.



Potential Public EV Charging Locations

City of Dallas Efforts: Prepare for Funding Opportunities



Public Facing EV Charging Station Selection Criteria

Site Location and Demographic Characteristics:

- Commercial Development Density
- Multi-Family Housing Unit Density
- Proximity to Highway/Major Corridors
- Pre-1940 Single Family Housing Unit Clusters
- Proximity to Electrical Infrastructure
- Proximity to Current Charging Stations (negative weight)

City Facility Uses:

- Libraries and Museums
- Recreation Facilities
- Business Service Providing Facilities
- Municipal Courts, Airports, and Dallas Zoo
- Park and Ride Facilities (COD-owned public parking at/near Dallas Streetcar/MATA Stations)
- Parks with a Pavilion
- Convention Center
- Theater & Arts/Cultural Event Centers
- Police Stations
- Fire Stations

City of Dallas Efforts: Explore Funding Opportunities

Charging and Fueling Infrastructure (CFI) Discretionary Grant – Round 2

- City of Dallas Equitable Deployment of Public Facing EV Infrastructure
- Grant would support public engagement opportunities and the installation, operation, and maintenance of Level 2 chargers on City facilities
- Applied for the grant in September 2024
- Anticipate award announcements in January 2025





Next Steps



Collaborate and Support NCTCOG's Regional Efforts

Continue to explore EV Charging Infrastructure Funding Opportunities for the City of Dallas

If awarded, implement Dallas' Equitable Deployment of Public Facing EV Infrastructure Program



Questions?

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