

North Central Texas Council of Governments Dallas-Fort Worth

CLEAN CITIES

REGIONAL EV INFRASTRUCTURE WORKING GROUP

Jared Wright, Senior Air Quality Planner March 20, 2024



Agenda

- 2:00 2:05pm Introduction
- 2:05 2:20pm Tesla Charger Donation Program
- 2:20 2:50pm City of Grapevine EV Charger Moratorium/Regulations
- 2:50 3:00pm Working Group Survey Results

Working Group Priorities:

Coordinate EV Infrastructure efforts across North Texas

Provide guidance, resources, and collaboration opportunities to local governments and

Meetings are recorded and posted on www.dfwcleancities.org/events



Texas Data and Trends



Electric Vehicle (EV) Registration Data

www.dfwcleancities.org/evnt -> EVs and Texas

Region	March 2023	March 2024	Increase
Texas	177,106	263,272	49%
Dallas-Fort Worth (DFW)	63,652	97,430	53%
Austin	36,653	51,986	42%
San Antonio	17,526	24,091	37%
Houston	41,849	65,276	56%

<u>Charging Sites Statewide (includes Tesla):</u>

- 2,771 Level 2
- 453 DC Fast

https://afdc.energy.gov/stations



Purpose

Increase local access to EV charging infrastructure by partnering with organizations that have a direct presence in their communities, and often also serve disadvantaged communities that may otherwise not have access to charging.

Charger Type

- Generation 3 Wall Connector or the Universal Wall Connector.
- The Universal Wall Connector can charge both Tesla and non-Tesla vehicles (J1772 or NACS connectors).
- These are Level-2 AC chargers common for home, workplace, and public charging and get an average of 32 miles of driving range per hour of charge.

Donation Details

- Tesla does not cover installation or energy costs. We donate the chargers and you are responsible for installing them. We can recommend <u>electricians</u> for you to work with.
- The amount and type of charger is based on identified partner organization needs and available equipment inventory.





POC: orichert@tesla.com

Permitting/Codes

Common challenges to EVSE installation

- ✓ Unstandardized Permitting processes
- ✓ Multiple rounds of sequential review between Depts
- ✓ Long Timelines





ELECTRIC VEHICLE (EV) CHARGING IN THE CITY OF GRAPEVINE

AGENDA

- ①Early Permitting
- 2 Moratorium
- 32023 Ordinance Amendments
- (4) Current Permitting





EARLY PERMITTING 2011 -2023

Without a defined use or use-specific standards, EV Charging Stations did not have a consistent permitting process. When they first appeared in Grapevine in 2011, they were generally permitted in one of two ways:



Building Services Electric Permit Staff-level Site Plan Amendment



INITIAL CONCERNS

PLANNING & ZONING COMMISSION WORKSHOPS

The Commission expressed a need for a consistent permitting process in Summer 2023, a defined use and use-specific standards, management from a safety perspective, sign advertising, and EV stations as a secondary commercial use.



ORDINANCE NO. 2023-051

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF GRAPEVINE, TEXAS AMENDING THE CITY OF GRAPEVINE CODE OF ORDINANCES BY CREATING CHAPTER 15, ARTICLE VI, ELECTRIC VEHICLE CHARGING STATIONS, PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR INCORPORATION INTO THE CODE OF ORDINANCES; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, the City of Grapevine is authorized to adopt and enforce ordinances necessary to protect health, life, and property to preserve good government and the security of its inhabitants; and

WHEREAS, the City of Grapevine has adopted a comprehensive Zoning Ordinance to regulate the location and use of buildings and land in full accordance with Chapter 211 of the Local Government Code; and

WHEREAS, electric vehicle charging stations are not currently listed as a permitted use in any Zoning District within the City; and

WHEREAS, there has been an increasing number of requests to install electric vehicle charging stations in the City; and

WHEREAS, in the absence of being listed as a permitted use in any Zoning District, electric vehicle charging stations are prohibited under the City's Zoning Ordinance; and

WHEREAS, the impacts of electric vehicle charging stations have not been fully assessed, including but not limited to infrastructure impacts; and

WHEREAS, the City of Grapevine City Council has determined that it is a necessity to regulate electric vehicle charging stations to safeguard the public; and

WHEREAS, the City of Grapevine is authorized by law to adopt the provisions contained herein; and

WHEREAS, the City is a Home Rule municipality having full powers of selfgovernment and may enact ordinances relative to its citizens' health, safety, and welfare that are not inconsistent with the Constitution and laws of the State of Texas; and

WHEREAS, the City Council has determined that there is a need to establish a moratorium on further approvals of new electric vehicle charging stations until a further assessment of them and their associated impacts and a new ordinance can be drafted to address them; and

SIX MONTH MORATORIUM

Established on September 5, 2023 for any new EV charging stations and upgrades to existing stations.



HB929 public hearing Notifications



Postcards were sent to property owners that had been identified to have existing EV charging stations on their property. COLLABORATION WITH **BUILDING** AND **FIRE** DEPARTMENTS



Received input from Building and Fire Departments regarding safety measures and concerns.



2023 ORDINANCE AMENDMENTS

EV Charging Stations a separate land use which requires a **conditional use permit** (public hearing process).

Section 12. Definitions	Two new definitions for Electric Vehicle (EV) Charging Station and Electric Vehicle Supply Equipment (EVSE).
Districts where a Conditional Use Permit is required:	R-MF", Multifamily District Regulations "CC", Community Commercial District "HC", Highway Commercial District "CBD", Central Business District "LI", Light Industrial District, "BP", Business Park District "GU", Governmental Use District



2023 ORDINANCE AMENDMENTS

USE-SPECIFIC STANDARDS





2023 ORDINANCE AMENDMENTS USE-SPECIFIC STANDARDS



Prohibited in parking structures

"Open parking structures emerge as the main area of concern regarding fires..." -NFPA.org

"As of January of 2021, FM Global data sheets have also increased the hazard category for parking garages and car parks from a Hazard Category 2 to a Hazard Category 3." - NFPA.org



2023 ORDINANCE AMENDMENTS

USE-SPECIFIC STANDARDS









CURRENT PERMITTING

EV Charging Stations as a use requires a **conditional use permit** (public hearing process). There is a notable level of interest among the stakeholders in pursuing the public hearing process.



CONDITIONAL USE APPLICATION GENERAL PROCESS



From submittal to final decision is generally a 45 day process



THANK YOU!



Erica Marohnic

City of Grapevine Planning Services Director emarohnic@grapevinetexas.gov

Survey Results – Meeting Frequency

5. How often do you feel Working Group meetings should occur going forward?

More Details





'Monthly' received nine votes (39%), but 14 total votes (61%) were for 'less frequently'



Survey Results – In-Person Meetings

6. How often should Working Group meetings be held in-person?

More Details





Continue quarterly – may incorporate breaks to plan for other meeting types or additional events



Survey Results – Types of Meetings

9. What types of meetings would you like to see going forward?

More Details





Other events (expo, site visit, etc.) 6

Will continue with Presentation and Q&A style and work to incorporate other formats



Survey Results – Future Meeting Topics

- Vendor procurement opportunities and process
- Fleet electrification
- Funding application training sessions
- Process schedules as initiatives move forward
- University research on important topics
- Regional EV infrastructure, public parking for EVs, funding available for EVs
- Strategies for getting DC fast chargers into a community without the City having to own them
- Facilitating installations at businesses
- Small business opportunities



Recent Announcements

Request for Information on the J3400 (NACS) Connector, due April 5

The Federal Highway Administration announced a Request for Information to solicit feedback regarding the FHWA minimum standards for electric vehicle charging stations, specifically about the J3400, or North American Charging Standard (NACS). See the full announcement <u>here</u>.

Report on Demand Charge Mitigation Strategies for Public EV Chargers

The Transportation Energy Institute's Electric Vehicle Council released the Demand Charge Mitigation Strategies for Public EV Chargers study to evaluate the potential effects of different strategies on various stakeholders, including utilities, EV charger site hosts and EV drivers. Download the free report <u>here</u>.



Next Meeting – DFWCC Project Showcase

In lieu of the April Working Group meeting, the Working Group is invited to attend the DFWCC Project Showcase

Dallas-Fort Worth Clean Cities Project Showcase Date: Wednesday, April 24, 2024 Time: 12PM-4PM Location: Transportation Council Room at 616 Six Flags Dr, Arlington, TX 76011

In-depth presentations on:

Multimodal Drone Delivery Demonstration Project, H2LA Hydrogen Infrastructure Planning, Regional Energy Demand Management, Resilient EV Charging Infrastructure, Charging Smart Program, GUMBO, CFI Corridor and Community







Lori Clark Senior Program Manager & DFWCC Director Iclark@nctcog.org



Jared Wright Senior Air Quality Planner jwright@nctcog.org



Joslyn Billings Air Quality Planner jbillings@nctcog.org











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