National Drive Electric Week: Virtual Events and Local Successes

Dallas-Fort Worth
CLEAN CITIES

Bethany Hyatt Air Quality Planner November 9, 2020





NATIONAL DRIVE ELECTRIC WEEK

NATIONAL DRIVE ELECTRIC WEEK:

PAST SUCESS

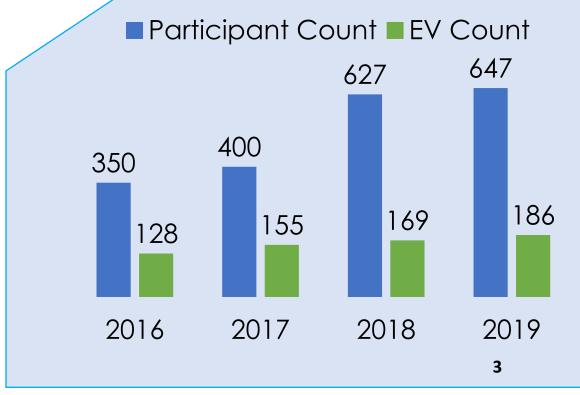
- Raising Awareness & Education of Electric Vehicles
- Providing Opportunities for Direct Conversation with EV Owners
- Creating Opportunities for Ride and Drives
- 2nd Largest Event Nationwide



Imagery Provided by NCTCOG



Imagery Provided by Ken Oltmann/Coserv



NATIONAL DRIVE ELECTRIC WEEK 2020 DFW EVENT

- DFW LIVE Event
- Second Annual Oncor EV Road Rally
- Using Clean Cities Tools to Implement Electric
 Vehicle and EV
 Infrastructure Goals
- Electric Vehicle Fleet
 Manager Roundtable







EV Fleet Manager Roundtable



What are the most attractive elements of electric vehicles?

LOCAL EV SUCCESSES

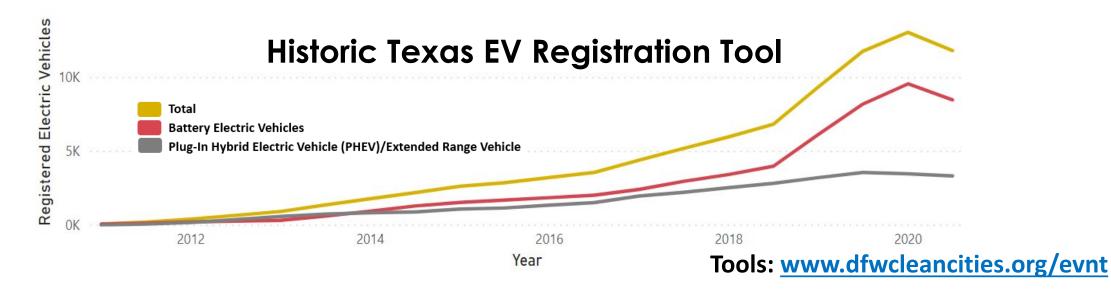
NORTH TEXAS ELECTRIC VEHICLE REGISTRATION

TRENDS

North Texas

Statewide

Historic Trendline



North Texas
EV Fleet
Composition
72% BEV/28% PHEV

12,821 EVs

in North Texas as of September 2020 35% 2019 North Texas Growth Rate

LOCAL ELECTRIC VEHICLE SUCCESSES

Municipalities with EVs

ill
ill
111
ne
-
€
)
ound

Lewisville Case Study

- 10 BEVs
- 14 HEVs
- Saves \$1,000 annually on Maintenance
- 2 Cents per mile in Charging Costs
- 150-260 miles of Range per charge.



Fleet electrification has become an ever-increasing hot topic in the last few years. Data supporting fuel and maintenance savings and available funding for electric vehicles (EV) have many fleet managers considering incorporating EVs into their fleet for the first time. However, the idea of fleet electrification can also invoke a lot of anxiety for fleet managers.

Many fleet managers worry that an EV may not be well suited to crucial fleet operations, and that charging infrastructure and charging time may be a hassle.

However, one North Texas fleet has found great success in using light-duty EVs in various applications.

The City of Lewisville first began exploring ways to improve sustainability in 2013, when Internal Services Manager Francis Mascarenhas was tasked by City Management with improving sustainability in the city's

Following a detailed city data audit on all fleet and facilities as part of the Lewisville 2025 plan, a report was released on ways the Lewisville's fleet could improve is sustainability. Mascarenhas then approached city management and the city council to discuss EVs.

"I went to a couple of departments," says Mascarenhas.
"The answer I got was 'these are small, there's no

In spite of initial concerns, after test driving two Nissan LEAFs for two weeks through a local Nissan dealer, the city found that full EV best served departments such as Neighborhood, Environmental

As of 2020, Lewisville now owns and operates ten battery EVs, including both Nissan LEAFs and Chevy Bolts, as well as 14 hybrid-electric vehicles.



City of Lewisville's DCFC Charging Station on Their Fleet Lot

Lewisville's fully electric fleet has traveled a total of 91 thousand miles since their implementation in March 2016, and experiences with the vehicles have been overwhelmingly positive.

"Based on staff response, things have gone pretty well, and they seem pretty happy with the maintenance part," says Chris McGinn, Director of Neighborhood and Inspection Services.

Lewisville's EV Fleet by the Numbers



Battery Electric

Vehicles in 2020

\$1000

Annual Savings on

4

ehicle Miles

2¢ per mile in

150-260
in Miles of Range

osts per Charge

LOCAL ELECTRIC VEHICLE SUCCESSES

DART:

- 7 Heavy-Duty Electric Transit Buses
- Reduced 255 pounds Nitrogen Oxides and 116 Tons GHGs in 2019

Trinity Metro:

- 4 Heavy-Duty Electric Transit Buses
- Reduced 95 pounds
 Nitrogen Oxides and 43
 Tons GHGs in 2019

Everman ISD:

- 3 Electric School Buses First in Texas
- Expected to Reduce 51 pounds of Nitrogen Oxides and 18 Tons GHGs per Year
- Received Texas Volkswagen Environmental Mitigation Program Grant of \$969,295

Emissions Reduction Calculation: https://afleet-web.es.anl.gov/afleet/



ELECTRIC BUS. CLEANER AIR.

TRINITY A METEROLOGY.



LOCAL ELECTRIC VEHICLE DATA COLLECTION PROGRAM **FINATTS**

Electric Vehicle Widescale Analysis for Tomorrow's Transportation Solutions (EV-WATTS)

- Collect Real-World Use Data from EVs and EV Charging Stations
- Share Aggregated & Anonymized Data with Department of Energy, National Laboratories, and the Public

How EV Owners Can Participate:

- Own/Operate EVs (Both Battery-Electric and Plug-In Hybrid Desired)
- Allow Installation of Free Data Loggers
- Fill Out <u>EV Owner Survey</u>

Contact bmuller@nctcog.org for More Information

-chargepoin+



























ELECTRIC VEHICLE FUNDING



Plug-In Electric Drive Vehicle Tax Credit

Funds: Up to \$7,500 Tax Credit on a New Plug-in Vehicle

Deadline: Credit Amounts Phased out By Manufacturers when at

Least 200,000 Qualifying Vehicles have been sold for use in the

United States

Texas Light-Duty Motor Vehicle Purchase or Lease Incentive Program

Funds: Up to \$2,500 Rebate

Deadline: January 7, 2021

Electric Rebates Remaining: 1,046

Texas Volkswagen Environmental Mitigation Plan: Zero Emissions Vehicle Infrastructure

Funds: Up to \$2,500 on Level 2 Infrastructure, Not to exceed 70%

per Activity

Deadline: First Come- First Served until August 11, 2021

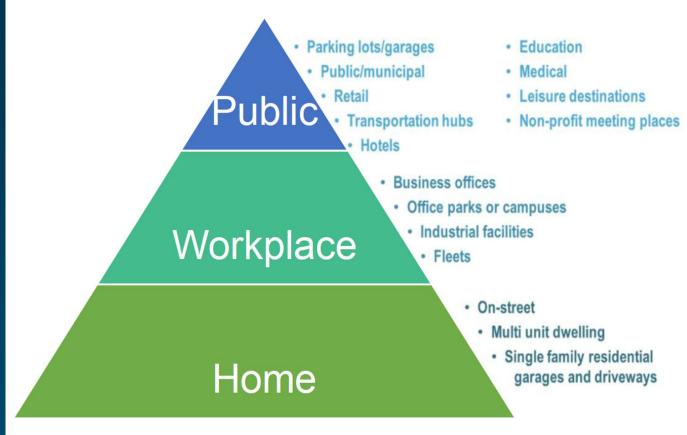
10

EV CHARGING AT WORKPLACES & MULTI-UNIT DWELLINGS

- Differentiate a Property
- Show a Public Commitment
- Double EV Commuting Range
- Plan and Accommodate to Save

GET EVSE AT WORKPLACES OR MULTI-UNIT DWELLINGS

Connect with companies, developers, and facility managers to request on-site infrastructure and share details on funding opportunities



20x

An individual who has access to EV charging at work is 20 times more likely to buy a plug-in" - U.S. DOE 2018

Learn More About Workplace Charging and
Download our Info Flyer

www.dfwcleancities.org/workplace-charging

CONTACT

Bethany Hyatt

Air Quality Planner NCTCOG/DFWCC bhyatt@nctcog.org (817) 704 5663



Dallas-Fort Worth CLEAN CITIES

dfwcleancities.org

Lori Clark

Program Manager & DFWCC Coordinator NCTCOG/DFWCC lclark@nctcog.org (817) 695 9232

