Electrify America: Cycle 3 Comments North Central Texas Council of Governments Submittal August 2020

INPUT PROMPT: Cycle 1 and 2 Comments and Feedback — Specific feedback on Cycle 1 and 2 National and California ZEV Investment Plans, including approaches to metro and highway charging station locations, evaluation of their use cases, and integration of new technology.

Select a Submission Type

Submission Type

Cycle 1 and 2 Comments and Feedback

Submitter Affiliation

Submitter Type

Governments/Tribe

Category

Regional Authority

Submission Title

Submission Title: NCTCOG/DFWCC Feedback on Previous Cycles

Contact Information

First Name: Lori Last Name: Clark Organization Name: North Central Texas Council of Governments/Dallas-Fort Worth Clean Cities Job Title: Program Manager & DFW Clean Cities Coordinator Email Address: Iclark@nctcog.org Address 1: 616 Six Flags Dr. Address 2: City: Arlington State: Texas Zip Code: 76011

Phone: 817 695 9232

HOW TO SUBMIT: General Comments (10,000-character limit)

With more than 12,500 registered electric vehicles (EVs), the 12-county North Central Texas region accounts for approximately 40 percent of the state's registered EVs and ranks among the nation's top 15

metro areas, based on EV numbers. Without more public charging options, the impressive EV growth in the region could stall. Thus, it is recommended that Electrify America invest in public EVSE in the Dallas-Fort Worth region, particularly DCFC, as a means of facilitating increased EV adoption in this rapidly growing metropolis.

Cycle Investment Transparency

Increased awareness and transparency of Electrify America efforts and investment plans would help further promote the Electrify America brand and EV industry growth. With the new launch of Electrify America, Cycle 1 had significantly more interest and publicizing of intended plans, however, stakeholders have noted little awareness of what occurred within Cycle 2.

Interregional Gap Investments

Through Electrify America's efforts in creating an uninterrupted national EVSE network, interstate and interregional corridors that had previously been identified as large EV gaps, were greatly reduced. The EV gap along Interstate 45, for example, connecting Dallas to Houston was reduced from 150 to only 111 miles through addition of Electrify America stations in Ennis and Madisonville. NCTCOG appreciates Electrify America's investments to date but a few gaps do still remain, as illustrated by the Gap Analysis submitted under the "Other" submission type. These gaps have been confirmed by unsolicited public comments. A few key additional sites could help eliminate remaining range anxiety that still is a barrier to EV adoption by people who frequently travel from one urban area to the next.

Station Reliability

of EA stations was very well received by regional stakeholders in expanding charging options across the state. However, the deployment NCTCOG has heard stakeholder stories of problems with station reliability and functionality. As EV adoption is still in an early adopter phase, it is critical that drivers have a positive experience when they visit a public charging station. NCTCOG encourages Electrify America to review station operation closely and identify ways to ensure that software notifications can immediately alert Electrify America to reliability issues and ensure swift resolution so EV users are not deterred from the growing EA network.

INPUT PROMPT: Education & Access Suggestions — Suggestions concerning Electrify America's approach to education and access or specific events we should consider for participation.

Select a Submission Type

Submission Type

Education and Access Suggestions

Submitter Affiliation

Submitter Type

Governments/Tribe

Category

Regional Authority

Submission Title

Submission Title: NCTCOG/DFWCC Input on Education and Access in North Texas

Contact Information

First Name: Lori Last Name: Clark Organization Name: North Central Texas Council of Governments/Dallas-Fort Worth Clean Cities Job Title: Program Manager & DFW Clean Cities Coordinator Email Address: Iclark@nctcog.org Address 1: 616 Six Flags Dr. Address 2: City: Arlington State: Texas Zip Code: 76011

Phone: 817 695 9232

HOW TO SUBMIT: General Comments (10,000-character limit)

Education/Marketing:

Consumers:

The Normal Now campaign seems to be a great campaign for electric vehicles (EVs) but unfortunately the campaign is not visible in Texas. North Texas represents a region with much latent demand for EVs, as indicated by the fact that the Dallas-Fort Worth local National Drive Electric Week event is the second largest in the entire country, and the largest outside of California. Despite the fact that state law bars Tesla from selling direct to consumer, Teslas are the most popular EVs in Texas with over half of all EV registration, which suggests that much EV sales activity has been based on word-of-mouth and "neighbor effect". With Tesla building a manufacturing facility in Central Texas, the stage is set for a major shift toward more active state-level engagement supporting EVs. Texas is just missing the awareness piece and could benefit from more EV marketing investment in Texas to move the market beyond the early adopters. A small investment will likely yield substantial results in increased EV adoption.

Dealerships:

Lack of dealership understanding and awareness of available EVs remains a large barrier in EV adoption growth within North Texas. As OEMs are releasing more EV models, this exclusionary sales direction will become less and less sustainable, and effective dealership EV trainings will become necessary. The North Texas Auto Dealer Association has expressed great interest in increased education and training for both dealerships and technicians to promote and be ready for the growth of EVs.

Plug In America has developed an EV training course in conjunction with its PlugStar resources. PlugStar is a one-stop-shop for all things EV – making it one of the best resources to market EV availability. The EV training course is based off of insight received from dozens of interviews with dealers. This course is designed by and for dealers and includes training on the fundamentals of EVs as a product category, EV charging basics, nationwide and local EV incentives, utility rates, EV programs, PlugStar tool tutorial and setup, and EV sales best practices. DFWCC has featured PlugStar's EV training program on several platforms, sending to 200 dealers and over 2500 EV stakeholders in North Texas. Electrify America investment into EV dealer training could make a substantial difference in EV adoption.

Regional Interest in EV Technician Training

Multiple stakeholders have expressed the need for EV Technician training and technical college EV technician programs. NCTCOG has talked with the National Alternative Fuel Training Consortium (NAFTC) about the development of EV technician training, and interest in expanding the NAFTC training network in the North Texas region. Multiple Community Colleges in the area have expressed interest in expanding their EV Curriculum to help fill this training gap.

Access:

NCTCOG appreciates that Electrify America has, to date, focused installations at high-traffic retailers that are truly publicly accessible. This is helpful as some other facilities promoted as "publicly accessible" are actually limited-access based on patronage of the host site, such as facilities located at hotels along highway frontage roads, which creates driver confusion. NCTCOG encourages Electrify America to continue focusing installations at sites that refrain from imposing secondary restrictions contingent upon the driver patronizing the host business, and to ensure this topic is discussed with potential host locations to ensure true public access. NCTCOG also recommends that in the event a host site does impose these types of "patron-only" restrictions, that Electrify America not classify such a site as publicly accessible and/or clearly communicate any use restrictions. In addition to prioritizing EVSE investment based on current adoption trends, it is recommended for Electrify America to consider EVSE that could benefit underrepresented and emerging user groups. Individuals who lack access to home charging, for example, arguably have the greatest need for public charging and workplace charging. EVSE solutions such as workplace charging, and on-street residential charging is essential to making EV ownership a viable option for this demographic. Similarly, the emerging use case of electric shared mobility transportation are forecasted to represent almost 30 percent of vehicle miles traveled by 2040, according to the 2018 BP Energy Outlook, and will be accompanied by different charging needs. Based on assumptions about their expected routes and applications, shared mobility EVSE should be sited at locations that are densely populated and walkable.

SPECIFIC EVENTS

The Dallas-Fort Worth region has many annual major consumer facing events. An attached list provides a select inventory of major festivals or consumer gatherings that would provide key opportunities for Electrify America to support EV displays or ride and drives, or share network information. Several key events in which DFWCC has had a role in the past, or on which DFWCC has collaborated with the organizers, are outlined below.

Dallas Auto Show (March 25-28) & Fort Worth Show (November 15-21)

The North Texas Auto Dealer Association coordinates both the Dallas and Fort Worth Auto Shows which are held in spring and fall, respectively. Both 2020 shows planned to incorporate a greater EV component, but unfortunately due to the COVID-19 pandemic, both shows were canceled. The North Texas Auto Dealer Association has expressed great interest in expanding both auto shows to have special EV sections in upcoming shows and have additionally communicated interest in the idea of indoor EV test drives and "remote" test drive experiences. Learn more about the Auto Shows at their website https://www.dallasautoshow.com/.

EarthX (Week of April 22- Earth Day)

EarthX is an international nonprofit environmental organization dedicated to educating and inspiring people and organizations to take action towards a more sustainable future worldwide. The EarthX expo is a major annual public event as the largest Earth Day event in the world in April to celebrate progress and innovation. EarthX Expo is an engaging atmosphere which brings together environmental organizations, businesses, academic institutions, government agencies, speakers, interactive programming, and subject matter experts. At the 2019 Expo, EarthX added an EV alley which was a static display of EVs. NCTCOG and EarthX staff are in conversation about a future ride and drive portion of the event. https://earthx.org/

Earth Day; Clean Air Action Day (April 22; August 5)

Many cities in the DFW region have major consumer-facing events for Earth Day and Clean Air Action Day. These events would be ideal candidates for electric vehicle marketing and education.

National Drive Electric Week (week of September 26 – October 4)

National Drive Electric Week is a nationwide celebration to heighten awareness of today's widespread availability of plug-in vehicles and highlight the benefits of all-electric and plug-in hybrid-electric cars, trucks, motorcycles, bicycles, and more. Dallas-Fort Worth Clean Cities has hosted a regional National Drive Electric Week event since 2011 with great success as the largest National Drive Electric week event in Texas. <u>https://driveelectricweek.org/?s=piaw</u>

State Fair of Texas (Fall)

The State Fair of Texas has over 2.5 million attendees every year. Last year in particular, DFWCC partnered with the North Texas Tesla Owners Group to feature an electric vehicle corral. In the future, DFWCC would like to integrate a ride along and more electric vehicle signage so the public is more aware of the feature. <u>https://bigtex.com/</u>

Potential North Texas Events

The Dallas-Fort Worth (DFW) Region is full of high-profile events with large consumer attendance that are ideal for outreach and consumer-facing education campaigns. Below is a list of potential North Texas events that would be ideal for Electrify America participation. Suggested participation could be sponsoring an electric vehicle (EV) ride and drive, which could be organized by the North Central Texas Council of Governments (NCTCOG)/DFW Clean Cities, and/or adding EV marketing into these events:

	Р	otential Nor	th Texas Events			
Event Type			Host/Organizer	Estimated Attendance	Open to Press	
State Fair	State Fair of Texas	Fair Park, Tx	State Fair/North Texas Tesla Owners Group	2,600,000	Yes	
Ехро	EarthX	Fair Park, Tx	EarthX	137,000	Yes	
Auto Shows	Dallas Auto Show	Dallas, Tx	North Texas Auto Dealers Association	388,000	Yes	
	Fort Worth Auto Show	Fort Worth, Tx	North Texas Auto Dealers Association	131,000	Yes	
Public Festivals	Grapefest	Grapevine , Tx	City of Grapevine	250,000	Yes	
	Fort Worth Stock Show and Rodeo	Will Rogers Memorial Center, Fort Worth, Tx	Fort Worth Stock Show and Rodeo	1,100,000	Yes	
	North Texas Fair and Rodeo	Denton, Tx	North Texas State Fair Association	135,000	Yes	
	Addison Oktoberfest	Addison, Tx	City of Addison	70,000	Yes	
	Addison KaboomTown	Addison, Tx	City of Addison	18,000	Yes	
	Dallas Cowboys regular season games	ATt&t T Stadium, Arlington, Tx	Dallas Cowboys	731,672	Yes	
Sporting Events	Texas Rangers regular season games	Globe Life Park, Arlington, Tx	Texas Rangers	1,250,000	Yes	

Dallas	American	Dallas Mavericks	828,000	Yes
Mavericks	Airlines			
regular season	Center,			
games	Dallas, Tx			
Dallas Stars	American	Dallas Stars	711,000	Yes
regular season	Airlines			
games	Center,			
	Dallas, Tx			
FC Dallas	Toyota	FC Dallas	15,000	Yes
regular season	Stadium,			
games	Dallas, Tx			
Frisco	Dr.	Frisco	477,350	Yes
Roughriders	Pepper	Roughriders		
Minor League	Ballpark,			
Baseball	Frisco, Tx			
Games				
Cotton Bowl	AT&T	SMU Mustangs	71,500	Yes
	Stadium			
	Dallas, Tx			
Red River	Cotton	Texas	91,000	Yes
Rivalry game	Bowl	Longhorns,		
	Stadium,	Oklahoma		
	Dallas TX	Sooners		

INPUT PROMPT: Event invitations: Suggestions for specific events we should consider for participation.

Select a Submission Type

Submission Type

Event Invitations

Submitter Affiliation

Submitter Type

Governments/Tribe

Category

Regional Authority

Submission Title

Submission Title: NCTCOG/DFWCC Input on North Texas Event Invitations

Contact Information

First Name: Lori Last Name: Clark Organization Name: North Central Texas Council of Governments/Dallas-Fort Worth Clean Cities Job Title: Program Manager & DFW Clean Cities Coordinator Email Address: Iclark@nctcog.org Address 1: 616 Six Flags Dr. Address 2: City: Arlington State: Texas Zip Code: 76011 Phone: 817 695 9232

HOW TO SUBMIT: Specific Event

Event Name: National Drive Electric Week Event

Location: The Dallas-Fort Worth Clean Cities Coalition hosts a National Drive Electric Week event each year in the DFW region, usually in the mid-cities (Arlington, Grapevine, Irvng, etc)

Participants/Partners: National Drive Electric Week is a national consumer-focused event that includes participation from OEMs/dealerships showing vehicles, representatives from complementary organizations, and educational institutions. In 2019, 18 organizations participated as exhibitors, including, the North Texas Renewable Energy Group, Citizens Climate Lobby, Classic Chevrolet of Grapevine Texas, eCarra, EV.GRL.TV, EarthX, North Texas Tollway Authority, Texas Best Solar, The Winston Solar Team, Texas Best Solar, Longhorn and Maverick Harley-Davidson, 350Dallas, North Texas Electric Auto Association, Revitalize Charging Solutions, Inc., Innovative Sustainable Solutions, the City of Irving, Texas Electric Transportation Resources Alliance, and Oncor Electric Delivery.

Proposal Role for Electrify America: DFWCC welcomes Electrify America to join in National Drive Electric Week as an exhibitor, sponsor, ride & drive provider, and even site host.

Expected # of Attendees: 200-300

Is the event open to the press?

Yes

Estimated Cost for Electrify America to Attend: \$0

INPUT PROMPT: Suggestions and Data Relevant to Cycle 3 Investments — Specific inputs from your governmental entity or organization that are helpful to our decision-making process.

These inputs include the following:

- Unique opportunities to work with your organization in deploying impactful and financially sustainable ZEV investments.
- Specific actions your organization or state/local entity is taking to support EV adoption by taxi and ride-hail vehicles.
- Anonymized usage data from existing charging stations (DCFC and L2) in your community.
- Current/expected ZEV infrastructure plans or strategies for your community; and
- Fuel Cell Electric Vehicle (FCEV) data and/or adoption perspectives, especially with regard to medium and heavy-duty vehicles.

HOW TO SUBMIT:

Do you have any general or specific suggestions for how Electrify America should approach its Cycle 3 investment plan? Please provide an overview of your recommendation here. If necessary, please attach any additional detail or supporting attachments below. (Limit 10,000 characters)

Please limit attachments to no more than three written pages.

Select a Submission Type

Submission Type

Suggestions and Data Relevant to Cycle 3 Investments

Submitter Affiliation

Submitter Type

Governments/Tribe

Category

Regional Authority

Submission Title

Submission Title: NCTCOG/DFWCC Suggestions and Data Relevant to Cycle 3 Investments

Contact Information

First Name: Lori

Last Name: Clark

Organization Name: North Central Texas Council of Governments/Dallas-Fort Worth Clean Cities Job Title: Program Manager & DFW Clean Cities Coordinator Email Address: Iclark@nctcog.org Address 1: 616 Six Flags Dr. Address 2: City: Arlington State: Texas Zip Code: 76011 Phone: 817 695 9232

Overview

Do you have any general or specific suggestions for how Electrify America should approach its Cycle 3 investment plan? Please provide an overview of your recommendation here. If necessary, please attach any additional detail or supporting attachments below.

Please limit attachments to no more than three written pages.

The North Texas region is a critical region for Electrify America investment. The North Central Texas Council of Governments (NCTCOG) serves as staff to the Regional Transportation Council (RTC), which is the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth (DFW) metropolitan area and includes representatives of municipalities, counties, transit agencies, and Texas Department of Transportation Districts in the 12-county DFW metropolitan planning area (MPA).

In 2018, the regional population was 7.8 million, people making North Texas region is the 4th largest metropolitan area within the United States. The North Central Texas Council of Governments (NCTCOG) serves as the metropolitan planning organization (MPO) responsible for transportation planning for 12 counties spanning 9,448 square miles, centered on the Dallas-Fort Worth (DFW) urban core. This region is larger than five states in land area and is one of the fastest growing areas in the nation, with an anticipated population of 11.2 million people by 2045. NCTCOG also houses the Dallas-Fort Worth Clean Cities Coalition (DFWCC), which serves the North Texas region as the local branch of the national Clean Cities program.

Ten counties within the North Texas region are designated as nonattainment for the pollutant ozone in accordance with the 2008 8-hour ozone National Ambient Air Quality Standards. As approximately 67% of all ozone ozone-forming nitrogen oxide (NOx) emissions are from mobile sources, air quality initiatives in DFW are focused on pollution from the transportation sector, and a push to zero-emission vehicles (ZEVs), including electric vehicles (EVs), is a priority.

North Texas has become a leading region in deployment of EVs with light-duty registration growing at a rate of over 35% per year and multiple heavy-duty EV deployment projects in place, including all-electric transit vehicles and delivery trucks. Currently, the NCTCOG/DFWCC is leading statewide efforts to develop electric school bus pilot projects and the first Texas electric school bus project will launch by

end of 2020 in a North Texas school district. North Texas is home to a strong network of EV advocates, including the North Texas Electric Auto Association, North Texas Tesla Owners' Group, the Texas Electric Transportation Resources Alliance, and various public interest and environmental groups.

The growing population, ozone nonattainment status, and EV interest make North Texas a great candidate for ZEV investment. With more than 12,500 registered EVs, the 12-county North Central Texas region accounts for approximately 40 percent of the state's registered EVs and ranks among the nation's top 15 metro areas, based on EV numbers. However, these EVs comprise 0.5% of registered vehicles in DFW, indicating that there is substantial EV adoption yet to come. High-speed DC Fast Charging stations are particularly needed, as many of the existing stations are located at car dealerships and are not ideally placed for true public access. Without more public charging options, the impressive EV growth in the region could stall. Thus, it is recommended that Electrify America invest in public EVSE in the Dallas-Fort Worth region, particularly DCFC, as a means of facilitating increased EV adoption in this rapidly growing metropolis.

Due to the various roles that NCTCOG/DFWCC plays in North Texas, combined with the momentum surrounding EV adoption as described above, the North Texas region is a key market for Electrify America Investment. NCTCOG/DFWCC can serve as a key collaborator by providing a variety of datasets and other regional insights useful to Electrify America planning efforts, including regional registration data, demographic data, etc. NCTCOG develops demographic, development, economic, and geographic data found at https://www.nctcog.org/regional-data/regional-data-center. The attached narrative details additional information about the region, and opportunities for Electrify America and NCTCOG/DFWCC to work together.

Additional Suggestions and Data Relevant to Cycle 3 Investments, Provided by the North Central Texas Council of Governments/Dallas-Fort Worth Clean Cities

Unique opportunities to work with your organization in deploying impactful and financially sustainable ZEV investments: In conjunction with Dallas-Fort Worth Clean Cities (DFWCC), the North Central Texas Council of Governments (NCTCOG) administers Electric Vehicles North Texas (EVNT) and is active in promoting adoption of EVs in DFW. EVNT strives be a regional resource for electric vehicle (EV) trends and provide education on EV technology. Stakeholders include city staff, fleet managers/representatives, EV industry representatives, and EV owners. <u>www.dfwcleancities.org/evnt</u>.

EVNT provides resources and data to reduce barriers to EV adoption. One of the most utilized resources is the EV registration statistics and projections to help regional entities plan for EV growth. Using Texas Department of Motor Vehicles Registration Data and a VIN-decoding query, the developed EV registration analysis tools are integral in identifying regional EV trends, and is highly utilized by various stakeholders in their own EV analysis work, including Oncor Electric Delivery's EV planning functions.

As of August 2020, there are 12,957 EVs (73 percent BEVs/27 percent PHEV) in DFW, a 35 percent growth in the last calendar year. Currently, EVs comprise 0.5 percent of registered vehicles in DFW, but according to regional growth forecasts, are anticipated to comprise 30 oercebt of North Texas vehicles by 2040, equating to over 3 million EVs on the road in 20 years. Three publicly accessible tools are online: North Texas Regional EV Registration Analysis, Texas Regional EV Registration Analysis, and Historic EV Registration Trends. Using this published data, Electrify America can identify placement of new/needed EVSE stations based on density of registered vehicles and get a better story of local registration trends in Texas.

EVNT coordinates events to increase EV exposure to the public, including planning the DFW National Drive Electric Week, the largest gathering of EVs in Texas and second largest in the US. EVNT also works with local municipalities and organizations to participate in events, including the Cities of Granbury, Lewisville, Dallas, and Richardson to organize EV displays and ride and drives at events, such as Earth Day and Clean Air Action Day.

In 2019, EVNT coordinated the rEVolution Workshop: EV Growth and Readiness in North Texas. The workshop featured speakers from TxETRA, Oncor Electric Delivery, ChargePoint and the City of Dallas. This workshop was well-received, and a second workshop is set for fall 2020 to direct needs of EV fronts consistently across DFW. Insight from Electrify America would be integral in expanding the value of this regional workshop series and give Electrify America support and network connections of the top EV interest stakeholders within North Texas.

Specific actions your organization or state/local entity is taking to support EV adoption by taxi and ride-hail vehicles: The DFW region leads innovation with a variety of approaches related to first-mile/last-mile transport. These include a variety of electrified micro mobility options, such as e-scooters, e-bikes, low-speed autonomous EVs such as the Milo pilot program in the City of Arlington (https://www.arlingtontx.gov/visitors/transportation/autonomous_vehicles), and electrified robotic package deliveries at UT Dallas and Frisco (<u>https://www.friscotexas.gov/1642/Starship-Technologies-Robot</u>). The drive a autonomous on-demand pilot services conducted in the cities of Arlington and

Frisco, while not electrified, further demonstrate how the region has moved beyond conventional taxi and ride-hail services into next-generation deployments that can easily be envisioned to encompass EV-centered projects. Additional on-demand services, including autonomous services, have indicated plans to deploy EV-based services in DFW in the next few years, and NCTCOG is actively discussing transition to EVs with several existing ride-hail service providers.

In addition, NCTCOG is directly supporting deployment of all-electric shuttle and transit services. Examples include providing seed money for an electric circulator shuttle integrated into redevelopment of the old Collin Creek Mall site; facilitating creation of an on-demand electric paratransit shuttle service serving major employers and university campuses near the Intermodal Inland Port of Dallas; supporting launch of electric transit service provided by Trinity Metro and Dallas Area Rapid Transit, both of whom currently have electric buses on route; and funding a bleeding-edge deployment of electric airside buses at DFW International Airport. This commitment to electrified transportation solutions, on the part of both NCTCOG and the various local governments represented by these projects, underscore a broad commitment to EV adoption in all sectors.

Anonymized usage data from existing charging stations (DCFC and L2) in your community: Electric Vehicle Widescale Analysis for Tomorrow's Transportation Solution (EV WATTS) is an EV data collection project funded by the Department of Energy. Led by Energetics, EV WATTS will create a nationwide database of EV/EVSE information, leading to a better understanding of the current EV market and charging infrastructure investment needs, and inform the next generation of transportation electrification policies and investments. DFWCC was awarded as a regional partner to help connect Texas fleets with the project. Data will be collected through 2022. The project team will develop anonymized comprehensive reports noting the findings of data submitted from each region. This anonymized data will showcase EV/EVSE performance consistent with the climate factors, battery span, and charging efficiency correlated specifically with North Texas- a unique EV use perspective, only available in few regions across the country.

Current/expected ZEV infrastructure plans or strategies for your community: Starting in 2016, the Federal Highway Administration (FHWA) designated a national network of Alternative Fuel Corridors, required by section 1413 of the <u>FAST Act</u>. Texas nominations cover over 13,000 miles of the National Highway System, and covers all interstates and some US highways in DFW. Many designations are considered "corridor-ready" for EVs, but a few key segments are still "corridor-pending" and in need of additional infrastructure (more details provided under Input prompt 4). Interstate Highway 45 (I-45) is designated as "corridor-pending" for hydrogen. DFWCC will draft a ZEV Corridor Deployment Plan for I-45, funded by FHWA. The main goals of this plan are to develop working groups of key stakeholders from EV and hydrogen industries, engage corridor workshops, develop case studies for the FHWA website, and develop a plan for both EV and fuel-cell EV infrastructure along I-45 by May 31, 2021. This plan has enabled NCTCOG to compile a robust group of over 150 hydrogen stakeholders interested in hydrogen projects in Texas.

NCTCOG conducted a multi-family housing EV analysis using registration data to determine regional clusters in EVs registered to multi-unit dwellings, proving a majority are registered in a specific portion of the region. A map is attached to this prompt. As multi-family housing is notoriously underserved in charging capabilities, Electrify America can use this data to identify additional EVSE locations to further

serve areas near these clusters. To ensure equitable investment of EVs, NCTCOG plans on utilizing <u>environmental justice index data</u> from <u>https://www.nctcog.org/trans/involve/ej</u> to identify regional minority and low-income populations compared to existing EV registration/EVSE. <u>On the Road Lending</u>, <u>https://ontheroadlending.org/</u>, a nonprofit that provides vehicle selection assistance for lower income communities, has expressed interest in ensuring equality in EV and EVSE availability in North Texas.

Local governments have interest in building out high-visibility and high traffic charging stations at major community centers, libraries, and other municipal facilities. Some have established specific infrastructure goals, including the City of Dallas, which plans to install 1500 EV outlets by 2030, as published in their Comprehensive Environmental and Climate Action Plan (CECAP). <u>https://www.dallasclimateaction.com/cecap</u>. The city of Plano Cleaner Air and Reduced Emissions (CARE) and City of Denton Simply Sustainable Plan also note expanding EV infrastructure. These plans can be found at <u>www.plano.gov/DocumentCenter/View/45026/City-of-Plano-CARE-Strategy?bidId=</u> and <u>www.cityofdenton.com/CoD/media/City-of-Denton/Simply_Sustainable_Plan_2012.pdf</u>.

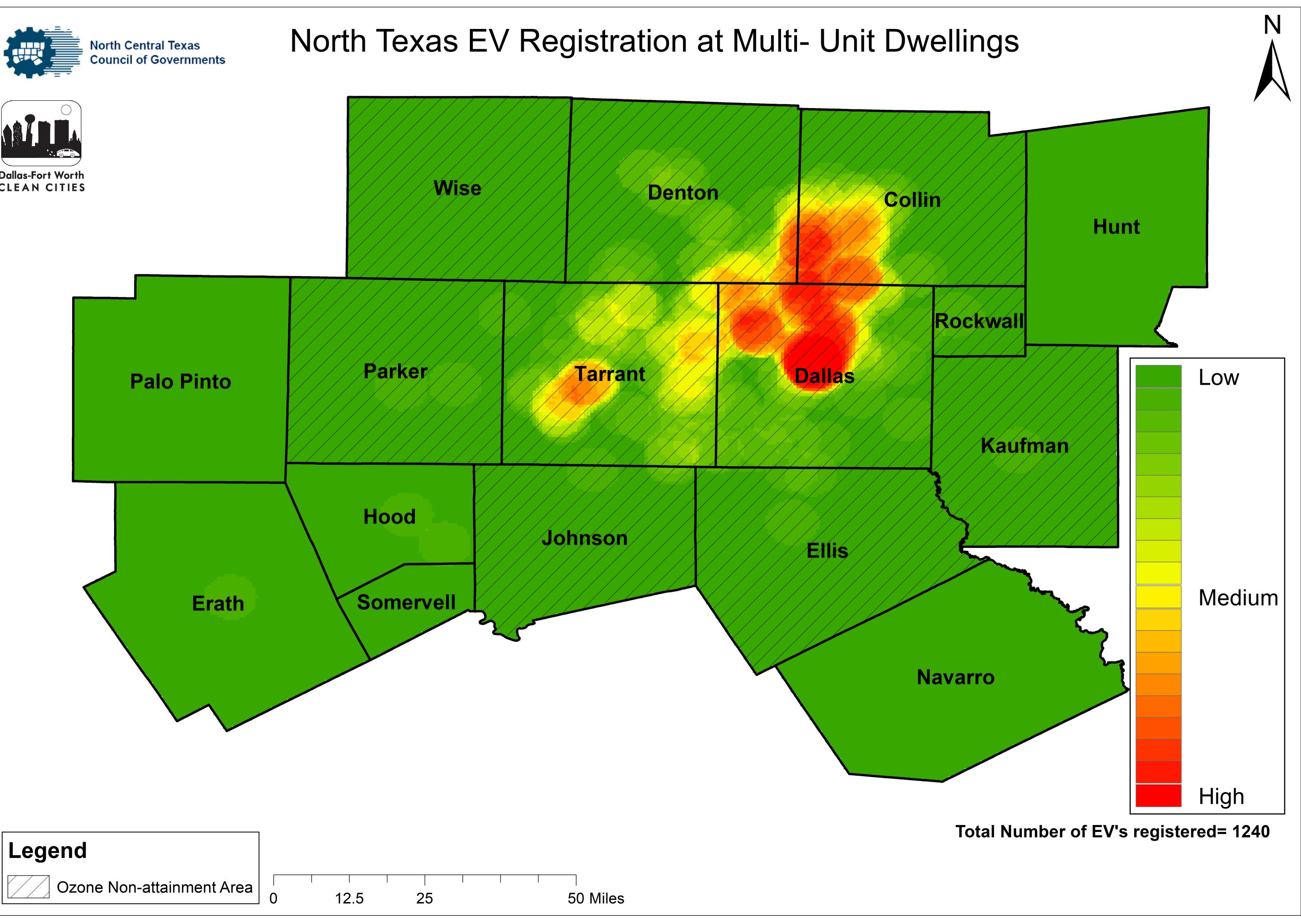
Fuel Cell Electric Vehicle (FCEV) data and/or adoption perspectives, especially with regard to medium and heavy-duty vehicles: The I-45 ZEV corridor project described in the previous section has led DFWCC to engage with multiple OEMs and fuel providers leading to increased excitement around FCEV, especially in the heavy-duty sector. Approximately 50% of all truck-based freight transported in Texas travels along the I-45 corridor between Houston and Dallas, and over the past year NCTCOG/DFWCC has brought together an informal stakeholder group of over 150 participants representing vehicle manufacturers, fuel providers, major national fleet, state agencies, and industry advocates to discuss how to advance FCEV adoption in Texas in the goods movement sector. Many in the hydrogen industry have indicated that Texas presents a natural "next market" for fuel cell projects beyond California due to the expansive hydrogen supply available along the Texas Gulf Coast.

Beyond interest in growing goods movement traffic along I-45, there is interest in developing a more geographically concentrated fuel cell deployment project that would involve a transit agency as an anchor medium/heavy-duty fleet and land provider, and a local government as a light-duty fleet user, with intent to facilitate a shared station. The project has matured to a point of submitting grant proposals to federal funding agencies, which have not yet been awarded. However, this group of stakeholders is committed to continuing to evaluate opportunities to bring the project to fruition, indicating the depth of interest in fuel cell deployments in DFW.





Dallas-Fort Worth CLEAN CITIES



INPUT PROMPT: Information regarding ZEV Policy in your Community — This option provides local governments and leaders with the opportunity to provide information about the policies and incentives available in your community to increase ZEV adoption.

Select a Submission Type

Submission Type

Information Regarding ZEV Policy in Your Community

Submitter Affiliation

Submitter Type

Governments/Tribe

Category

Regional Authority

Submission Title

Submission Title: NCTCOG/DFWCC Input on Regional ZEV Policy

Contact Information

First Name: Lori

Last Name: Clark

Organization Name: North Central Texas Council of Governments/Dallas-Fort Worth Clean Cities

Job Title: Program Manager & DFW Clean Cities Coordinator

Email Address: lclark@nctcog.org

Address 1: 616 Six Flags Dr.

Address 2:

City: Arlington

State: Texas

Zip Code: 76011

Phone: 817 695 9232

HOW TO SUBMIT:

ZEV Policy in your Community

 Plug-in EV (PEV) Purchase Incentives: According to <u>NASEO and Cadmus</u>, "numerous academic studies indicate vehicle purchase incentives play an important role in encouraging customer adoption of PEVs." These policies encompass any policy that reduces the upfront cost of PEVs, through rebates, tax incentives, or other methods. The impact of this policy varies depending on its size, type and longevity of funding.

- a. Is there an upfront incentive for buying/leasing a PEV in your jurisdiction? yes
- b. IF Yes, what is the total dollar value of upfront incentives provided for buying/leasing an PEV?

Statewide up to 2500, Varies locally

c. What type of upfront incentive for buying/leasing a PEV?

Rebate after purchase

c. What is the longevity of funding for the purchase incentive?

Funding is provided through semi-secure mechanisms with some uncertainty due to legal challenges or shifts in government spending priorities.

- Long Term Market Signals: <u>NASEO and Cadmus</u> found that "policies in the "Sending a Long-term Signal to Market" section provide a publicly visible, long-term commitment to deploy PEVs—or complementary climate commitments with PEV components—in the form of mandates and targets." This Policy Category is comprised of two Sub-Categories: (1) PEV Deployment Targets/Mandates and (2) Transportation Climate Policy.
 - (1) FEV Deployment rargets/Wandates and (2) transportation climate Foncy.
 - Does your jurisdiction have PEV or ZEV deployment targets or mandates? Yes

Are the targets mandatory? No

b. Does your jurisdiction have Transportation Climate Policies that shift consumers toward lower emission products through market-based, technology-neutral approaches, such as clean fuel standards, feebates, vehicle emission standards, and other similar policies?

Yes

If yes, Please describe in 2,500 characters or less and provide a web link as appropriate.

Electrification Goals in City Climate and Sustainability Plans:

Cities throughout North Texas are committing to transportation electrification with plans to increase electric vehicle (EV) adoption, infrastructure, and community outreach. Objectives in Dallas' Comprehensive Environmental and Climate Action Plan (CECAP) include installing 1500 EV chargers by 2030, and fully transitioning light-duty and bus fleets to electric energy by 2040. In addition to that, the city is developing an incentive and fee program that will allow shared mobility services to increase the size of their fleet as long as they are increasingly electrified. The city has also pledged to increase EV education and outreach for businesses and the community. The Plano Cleaner Air and Reduced Emissions (CARE) strategy sets the goal of having 75% of passenger vehicles be electric by 2050, as well

expanding EV infrastructure, and promoting the electrification of fleets and private vehicles. This comes, in part, from their aim to be completely carbon neutral by 2050. The City of Denton is also exploring ways to better EV infrastructure, discussed in their Simply Sustainable Plan and targeted via resident survey on social media. Each plan can be found at the following webpages:

Dallas CECAP: <u>https://www.dallasclimateaction.com/cecap</u>.

Plano CARE: <u>https://www.plano.gov/DocumentCenter/View/45026/City-of-Plano-CARE-</u> <u>Strategy?bidId=</u>

Denton Simply Sustainable: <u>https://www.cityofdenton.com/CoD/media/City-of-Denton/Simply_Sustainable_Plan_2012.pdf</u>

- 3. Non-Financial Incentives: <u>NASEO, Cadmus</u> and other researchers have found that policies that create non-financial incentives, such as high occupancy vehicle (HOV) lane access, privileges at airports, exclusive parking, or cutting lines at ferries can impact EV adoption, although there is a large range of findings in the literature about the impact of these policies, from no impact to strong impact.
 - a. Does your jurisdiction have policies that create a non-financial incentive?

Yes

If yes, please describe in 2,500 characters or less and provide a web link as appropriate.

NCTCOG regional policies: At the NCTCOG level, two policies incentivize clean vehicle actions, including EV adoption, by local fleets. The NCTCOG Clean Fleet Policy provides a framework for fleets to reducing petroleum consumption and reduce emissions, including the implementation of EV applications. Adoption of the Clean Fleet Policy ensures eligibility for clean vehicle funding made available through the Regional Transportation Council, and also eligibility for fleet recognition at the regional level, creating both financial and non-financial incentive for adoption. As of May 2020, 73 entities have adopted the Clean Fleet Policy. Details are available at www.nctcog.org/fleetpolicy.

The Metropolitan Transportation Plan (MTP) policy bundle initiative includes a voluntary list of policies that local governments and transportation agencies can choose to adopt, including the Clean Fleet Policy. By voluntarily adopting 50 percent of the listed policies, participating agencies will receive an offset of local funds in federal transportation projects in the form of Transportation Development Credits. As the Clean Fleet Policy is one of the listed policies, local governments are incentivized to adopt this vehicle policy, inclusive of EV adoption, to reduce the amount of local funding required to build transportation projects. See details at <u>www.nctcog.org/policybundle</u>.

<u>Airport vehicle Charging Options:</u> North Texas is home to two large airports, DFW International Airport and Dallas Love Field. Both airports have prioritized installation of EV charging

stations within parking garages. While not an official privilege, stations at both airports were sited conveniently at front-facing and easily accessible portions of garages, giving EV users a de-facto preferential parking advantage. As of August 2020, DFW International Airport has 26 EVSE charging ports available across various locations. Dallas Love Field has 14 EV charging stations with 26 ports available. https://www.dfwairport.com/evchargers/index.php, http://www.dallas-lovefield.org/parking-transportation.html

- 4. Electricity Rates: Utility rates can reduce the cost of operating EV charging stations. In particular, residential rates can reduce the cost of charging EVs at home. And commercial or special EV rates can reduce the cost of operating a public EV charging station, especially if those rates avoid high demand changes.
 - a. Does the utility in your jurisdiction offer EV specific rates that lower the cost of charging at home?
 - No
 - Does the utility in your jurisdiction offer EV specific rates that lower the demand charges associated with charging in public?
 No
- Improving Economic Viability of Charging: <u>NASEO and Cadmus</u> identified policies that increase EV adoption by improving the economic viability of charging, either through direct incentives for EVSE installation or by helping the business case of EVSE. This Policy Category is comprised of two Sub-Categories: (1) EVSE Installation, and (2) EVSE Operation.
 - a. Is there an incentive for installing EV charging stations? Yes
 - b. Is there an incentive for operating and maintaining EV charging stations? No

Please describe in 2,500 characters or less and provide a web link as appropriate.

Texas Emissions Reduction Plan (TERP):

The Texas Commission on Environmental Quality (TCEQ) administers the Texas Emissions Reduction Plan (TERP). Through TERP, TCEQ offers a funding opportunity for alternative fuel infrastructure, including EV charging stations, via the Alternative Fueling Facilities Program (AFFP). The AFFP provides grants of up to 50 percent of construction and installation costs for the expansion or construction of EV charging stations. All counties within the 12-county NCTCOG metropolitan planning area are eligible. During the most recent funding round, which closed March 2020, almost \$16 Million in applications were submitted, including over \$2 Million in applications submitted from the DFW region for EVSE. https://www.tceq.texas.gov/airquality/terp/ctt.html

Texas Volkswagen Environmental Mitigation Plan:

The TCEQ also administers the Texas Volkswagen Environmental Mitigation Plan, in which Texas chose to fund the maximum 15% allotment to EVSE incentives. The main goals of the plan are to reduce

Nitrogen Oxides (NOX) emissions, reduce the potential for exposure of the public to pollutants, prepare for increased and sustained use of zero-emission vehicles (ZEV), and complement other incentive funding programs, such as TERP.

The TCEQ released details on the Statewide Light-Duty ZEV Supply Equipment Funding in August 2020. A total of \$10.4 million will be available for reimbursement of up to \$2500 on level 2 chargers. Grants will be awarded on a first-come, first-served basis and will fund 70% of costs for publicly available stations and 60% of costs for workplace or multi-unit dwellings. A second funding round is expected to be released late 2020 and focus on fewer, higher funding awards for DCFC. The TCEQ has stated that the program may prioritize funds for multifamily or workplace charging stations. <u>www.texasvwfund.org</u>

6. PEV-Ready Building Codes and Permitting Ordinances: PEV-ready building codes and ordinances or practices to expedite permitting prepare buildings and neighborhoods for PEV market growth and reduce costs of installation of EVSE in the future. A recent study by Rocky Mountain Institute found that soft costs, such as permitting, represent a major barrier to EV adoption.

- a. Is there an EV-ready building code in place in your jurisdiction? No
- b. Is there a policy or ordinance to expedite EV charging station permitting? No
- 6. 7. ZEV Marketing and Communication: <u>NASEO and Cadmus</u> found that policies that increase the level of public awareness of ZEVs can impact ZEV adoption. Examples include promotional campaigns informing consumers of ZEV attributes, workplace charging programs, and ride-and-drive event programs.
 - a. Is there a ZEV marketing or communications program active in your jurisdiction? Yes

If yes, please describe the program in 2,500 characters or less and provide a web link

In conjunction with DFW Clean Cities, NCTCOG administers Electric Vehicles North Texas (EVNT), which is active in promoting adoption of electric vehicles (EVs) in North Texas. EVNT started as the Electric Fuel Subcommittee of DFW Clean Cities Coalition in 2011. Comprised of a various group of stakeholders, including city staff, fleet managers/representatives, (EV) industry representatives, and passionate EV owners, EVNT strives to educate interested parties in EV technology and be a regional resource for North Texas EV trends. EVNT produces unique EV registration data tools and projections that are utilized in communications to stress the rapid growth trends of EVs. This data is especially important in identifying specific pockets of greater EV adoption within the region, which allows for more effective outreach and messaging to specific populations and identifying events. EVNT plans various EV events or presence at existing events to increase exposure to the general public, including DFW National Drive Electric Week celebration, the largest gathering of EVs in Texas and second largest in the U.S. EVNT also works with local municipalities, organizations, and stakeholders to participate in events with the objective of public awareness of EVs. DFWCC has worked with the City of Granbury, Lewisville, Dallas, and Richardson to organize EV displays and ride and drives at their local public events. DFWCC attends many outreach events to feature EVNT education materials, presentations, and maps. Some of these events include Earth Day Festivals, Texas Environmental Health Association Meetings, EarthX, EarthX Tesla Car Club Exhibit, and Public Works Roundup Convention. EVNT also actively promotes workplace

charging initiatives and has presented resources to various professional groups, including active participation with the Dallas 2030 district, which focuses on reducing the environmental impacts of building construction and operation in Dallas. <u>https://www.dfwcleancities.org/evnt</u>

Oncor Electric Delivery created an EV campaign to showcase utility engagement with anticipated EV growth. Oncor created a campaign webpage with various EV resources to help guide consumers in choosing the right EV. Also, a wrapped Nissan Leaf with the campaign tagline and Oncor branding was created and brought to various public facing events around North Texas to continue promoting EV adoption. <u>https://www.oncor.com/SitePages/ElectricVehicles.aspx</u>

8. Other Comments

Are there any other policies in your jurisdiction not covered above that are designed to encourage ZEV adoption or the promotion of ZEV infrastructure?

RE: Q 1: The TERP Light-Duty Purchase or Lease Incentive Program funds up to \$2,500. TERP recently moved from year to year appropriation in the state general fund to a new trust fund with a legislation change in effect in 2021. Denton Municipal Electric offers customers a \$300 EV rebate. Oncor partnered with Nissan to offer \$3000 LEAF rebates to customers/employees of Oncor, through December. RE: Q 4: The response provided is reflective only of the transmission & distribution service provider (TDSP) serving deregulated portions of the NCTCOG service area, as the region is covered by multiple utilities. Deregulated portions of the Texas market separate electric generating utilities, TDSPs, and retail electric providers (REPs) into three groups. TDSPs are responsible for a portion of the delivered charge and have not developed special time-of-use rates as marginal delivery costs do not vary. EV-specific rates are available from REPs only. Several offer time-of-use rates, which generally supports EV adoption as home charging often occurs overnight. Beyond deregulated boundaries, Municipally Owned Utilities and Cooperative Utilities each may offer special EV rates and other incentives. RE: Q 6: The answer reflects regional "average", but individual entities may have policies in place. Creation of regional code and ordinance templates is a priority, similar to work done by NCTCOG a few years ago related to solar permitting and ordinances; see Best Management Practices at www.gosolartexas.org. NCTCOG hosts a regional codes committee that acts as a conduit for progressing such policies. Staff will propose adding these measures to the Mobility Plan policy bundle discussed under Question 3 in the next few years, which will create a regional incentive for individual local government adoption. Staff also attends the Fuels Institute EV Council, which focuses on research to reduce barriers in regulatory analysis, site host education, market evaluation, consumer insight and anticipated behavior. More on Policy: Institutes of higher education, state agencies and political subdivisions are required by state law to reduce electricity consumption, and report on progress each year, as a measure to help attain air quality goals. NCTCOG conducts outreach on this requirement and has begun working with the state to ensure that increased electricity use linked to EVs does not "count against" the statutory requirement and hinder reporting entities from adopting EVs.

NCTCOG Suggested Site Locations Based on Infrastructure Gap Analysis

An Electric Vehicle Supply Equipment (EVSE) gap analysis was conducted for the Dallas-Fort Worth (DFW) region and its corresponding corridors connecting to other regions. In order to select potential site locations for future EVSE, the Station Finder tool on the Alternative Fuels Data Center (AFDC) website was used. Existing publicly available stations with both CCS and CHAdeMO connectors were identified along Alternative Fuel Corridors in Texas designed for electric vehicle (EV) charging by the Federal Highway Administration, which are Interstate Highway (IH)-35, IH-35W, IH-35E, IH-30, IH-20, US-75, IH-40, and IH-44. The stretch of interstates analyzed started from the Dallas-Fort Worth Area and stopped at the next urbanized area. For example, station gaps were identified on US-75 within the stretch between Dallas, TX and Tulsa, OK.

After establishing the locations of the existing stations along these corridors, the distance between abutting stations were measured and those with a gap of 40 miles or greater were selected for new site location analysis. Gaps in all the Alternative Fuel Corridors were identified and by using Google Maps, land for potential sites for EVSE was pinpointed.

The North Central Texas Council of Governments (NCTCOG)/DFW Clean Cities has identified the properties listed on the spreadsheet as being located along highway corridors in areas that potentially fill gaps in the existing EVSE network. Listing of a particular site does not imply any endorsement or promotion of EVSE at any specific company location over another, nor does it imply any intent or agreement by these sites to install EVSE. This list was developed for informational purposes only.

To determine possible site locations and exits to install new EVSE, certain criteria were followed: prospective locations are within two miles of the interstate, restrooms are easily accessible, and food/snacks are available for purchase. These criteria were used as they coincide with the Texas Department of Transportation's Signage Policy, which is available in the attachments. In addition, if the distance between two existing stations exceeds 100 miles, multiple locations were suggested so there is a station available at least every 50 miles. Lastly, when looking at potential locations, the partnership between Electrify America and Walmart was considered, and that is why many suggested sites are Walmart stores.

A matrix outlining each of these identified possible station locations and their corresponding information are attached.

NCTCOG has been in contact with the Texas Electric Transportation Resources Alliance (TxETRA), which is also submitting station location suggestions across Texas, and is familiar with and supports their methodology. NCTCOG has identified recommended sites that are also recommended by TxETRA to assist in short-listing priority EVSE installation locations.

NCTCOG Suggested Site Locations Based on Infrastructure Gap Analysis*													
Interstate	Exit	Address	City	State	Zip Code	Latitude	Longitude	Select Site Type	Parking Type	24 Hr Access	Public/Private	Nearest retail space	Also Recommended By TxETRA
10514	45	1003 E Criner St	Grandview	TX	76050	32.27248	-97.171786	Truck stop	Surface	Y	Private	Colocated	N
135W	15	1002 E Criner St	Grandview	TX	76050	32.27187	-97.171579	Truck stop	Surface	N	Private	Colocated	N
	TV 24	1021 Dale Evans Dr	Italy	TX	76651	32.19352	-96.898771	Truck stop	Surface	Y	Private	Colocated	N
1255	TX-34	110 L R Campbell Rd	Italy	TX	76651	32.19705	-96.89985	Truck stop	Surface	Y	Private	Colocated	N
135E	403	1211 N Hwy 77	Waxahachie	TX	75165	32.41886	-96.841097	Truck stop	Surface		Private	Colocated	N
		800 N Hwy 77	Waxahachie	TX	75165	32.41202	-96.839796	Store/Retail	Surface	N	Private	Colocated	Ν
135	302	1314 W Adams Ave	Temple	TX	76504	31.10232	-97.35355	Store/Retail	Surface	N	Private	Colocated	Y
135		1608 W Adams Ave	Temple	TX	76504	31.10265	-97.3576	Truck stop	Surface	N	Private	Colocated	Y
		1750 S Broadway St	Sulphur Springs	TX	75482	33.10573	-95.595526	Store/Retail	Surface	Y	Private	Colocated	Y
	124	1321 S Broadway St	Sulphur Springs	TX	75482	33.11545	-95.596912	Truck stop	Surface	Y	Private	Colocated	Y
		1234 S Broadway St	Sulphur Springs	TX	75482	33.11733	-95.595973	Truck stop	Surface	Y	Private	Colocated	Y
130		708 N McCoy Blvd	New Boston	TX	75570	33.47297	-94.408669	Truck stop	Surface	Y	Private	Colocated	Ν
	201	905 N McCoy Blvd	New Boston	TX	75570	33.47617	94.409821	Truck stop	Surface	N	Private	Colocated	Ν
	201	900 N McCoy Blvd	New Boston	TX	75570	33.47609	94.408866	Truck stop	Surface	Y	Private	Colocated	Ν
		800 James Bowie Dr	New Boston	TX	75570	33.47121	-94.403896	Store/Retail	Surface	Y	Private	Colocated	N
	178	706 East I-20 Frontage Rd	Big Spring	TX	79720	32.2657	-101.47481	Truck stop	Surface	Y	Private	Colocated	N
	1/8	Texas 350, I-20BL	Big Spring	TX	79720	32.26841	-101.473803	Truck stop	Surface	N	Private	Colocated	N
	217	2272 Co Rd 139	Colorado City	TX	79512	32.40993	-100.842927	Truck stop	Surface	Y	Private	Colocated	Y
	200	1650 TX-351	Abilene	TX	79601	32.48083	-99.698013	Store/Retail	Surface	Y	Private	Colocated	Y
	288	1602 TX-351	Abilene	TX	79601	32.47842	-99.699111	Store/Retail	Surface	N	Private	Colocated	Y
		14100 US-281	Santo	TX	76472	32.60605	-98.111698	Truck stop	Surface	N	Private	Colocated	N
	386	14000 US-281	Santo	TX	76472	32.6079	-98.111232	Truck stop	Surface	Y	Private	Colocated	N
		87125 I-20	Santo	TX	76472	32.61147	-98.109678	Truck stop	Surface	Y	Private	Colocated	N
	444	4800 U.S. 287 Frontage Rd	Arlington	TX	76017	32.66698	-97.209196	Store/Retail	Surface	Y	Private	Colocated	N
	444	4930 Little Rd	Arlington	TX	76017	32.66947	-97.204329	Truck stop	Surface	Y	Private	Colocated	N
		105 W Centennial Blvd	Lindale	TX	75771	32.47486	-95.387809	Store/Retail	Surface	Y	Private	Colocated	Ν
120	556	11369 US Hwy 69 N	Tyler	TX	75706	32.46768	95.388078	Truck stop	Surface	Y	Private	Colocated	Ν
	550	13821 US Hwy 69 N	Tyler	TX	75706	32.4666	-95.387531	Store/Retail	Surface	N	Private	Colocated	N
		3318 S Main St	Lindale	TX	75771	32.47164	-95.388809	Truck stop	Surface	Y	Private	Colocated	N
		1700 Wilson Rd	Terrell	TX	75161	32.69085	-96.24417	Truck stop	Surface	Y	Private	Colocated	Ν
		1619 TX-34 S	Terrell	TX	75160	32.70393	-96.274794	Truck stop	Surface	Y	Private	Colocated	Ν
	503	301 I-20 Frontage Rd	Terrell	TX	75160	32.70306	-96.274892	Truck stop	Surface	Y	Private	Colocated	Ν
		1700 TX-34 #100	Terrell	ТΧ	75160	32.69992	-96.275569	Truck stop	Surface	Y	Private	Colocated	Ν
		1703 TX-34	Terrell	TX	75160	32.69958	-96.274079	Truck stop	Surface	Y	Private	Colocated	Ν
		822 S Access Rd	Longview	TX	75602	32.44972	94.707269	Store/Retail	Surface	N	Private	Colocated	Ν
	596	3607 S Eastman Rd	Longview	TX	75602	32.44827	-94.7103	Truck stop	Surface	N	Private	Colocated	Ν
	596	3305 S Eastman Rd	Longview	TX	75602	32.45188	-94.709167	Truck stop	Surface	Y	Private	Colocated	Ν
		3302 S Eastman Rd	Longview	ТΧ	75602	32.45244	-94.707494	Truck stop	Surface	Y	Private	Colocated	Ν
US-75	48	521 S Central Expy	Anna	ТΧ	75409	33.34821	-96.582251	Store/Retail	Surface	Y	Private	Colocated	Ν
		1701 US-75	Anna	ТХ	75409	33.345	-96.58418	Truck stop	Surface	Y	Private	Colocated	Ν
		1700 US Hwy 75	Anna	TX	75409	33.3449	-96.588955	Truck stop	Surface	Y	Private	Colocated	Ν
		1983 S Mississippi Ave	Atoka	ОК	74525	34.36624	-96.142656	Store/Retail	Surface	Y	Private	Colocated	Ν
	Turn Left	1954 S Mississippi Ave	Atoka	ОК	74525	34.36504	-96.140668	Truck stop	Surface	Y	Private	Colocated	Ν
		1935 S Mississippi Ave	Atoka	ОК	74525	34.36697	-96.141098	Truck stop	Surface	Y	Private	Colocated	N

	Turn Left	3299 US-75	Holdenville	OK	74848	35.08728	-96.248285	Truck stop	Surface	N	Private	Colocated	Ν
	Turn Left	1800 S Wood Dr	Okmulgee	ОК	74447	35.60637	-95.9643	Store/Retail	Surface	Y	Private	Colocated	Ν
		1400 S Wood Dr	Okmulgee	OK	74447	35.60985	-95.962061	Truck stop	Surface	N	Private	Colocated	Ν
		1220 S Wood Dr	Okmulgee	OK	74447	35.61035	-95.962143	Truck stop	Surface	Y	Private	Colocated	Ν
		305 W Abrahames Rd	Moriarty	NM	87035	35.0106	-106.046648	Truck stop	Surface	Y	Private	Colocated	N
	196	1700 U.S. Rte 66 West	Moriarty	NM	87035	35.01001	-106.065443	Truck stop	Surface	Y	Private	Colocated	N
		301 Us Hwy 366	Moriarty	NM	87035	35.00511	-106.046958	Truck stop	Surface	Y	Private	Colocated	N
		1028 NM-156	Santa Rosa	NM	88435	34.95134	-104.638084	Truck stop	Surface	Y	Private	Colocated	N
	277	2634 U.S. Rte 66	Santa Rosa	NM	88435	34.94406	-104.640569	Truck stop	Surface	Y	Private	Colocated	N
	2//	2464 U.S. Rte 66	Santa Rosa	NM	88435	34.94703	-104.651266	Truck stop	Surface	Y	Private	Colocated	Ν
		3630 Will Rogers Dr	Santa Rosa	NM	88435	34.94812	-104.643667	Truck stop	Surface	N	Private	Colocated	Ν
140	369	1583 Frontage Road 4132	Glenrio	NM	88434	35.17548	-103.104069	Truck stop	Surface	Y	Private	Colocated	N
140	36	6555 US-385	Vega	ТΧ	79092	35.23617	-102.428573	Truck stop	Surface	Y	Private	Colocated	Ν
		1000 S Main St	Vega	ТΧ	79092	35.23819	-102.428964	Truck stop	Surface	N	Private	Colocated	Ν
		3650, I-40	Vega	ТΧ	79092	35.23584	-102.427275	Truck stop	Surface	N	Private	Colocated	Ν
	113	612 Eastern Ave	Groom	ТХ	79039	35.20726	-101.099233	Truck stop	Surface	N	Private	Colocated	Ν
	163	1249 N Main St	Shamrock	ТХ	79079	35.22995	-100.249687	Truck stop	Surface	Y	Private	Colocated	Ν
		1402 N Main St	Shamrock	ТХ	79079	35.22914	-100.24869	Truck stop	Surface	N	Private	Colocated	N
		1627 N Main St	Shamrock	ТХ	79079	35.23219	-100.24972	Truck stop	Surface	N	Private	Colocated	N
	71	10331 N2310 Rd	Clinton	ОК	73601	35.51852	-98.870862	Truck stop	Surface	Y	Private	Colocated	N
144	53	7740 US-277	Elgin	ОК	73538	34.78276	-98.297015	Truck stop	Surface	Y	Private	Colocated	N
	231	1950 Martin Luther King Jr Blvd	Corsicana	ТХ	75110	32.09874	-96.442404	Truck stop	Surface	Y	Private	Colocated	N
		500 I-45	Fairfield	TX	75840	31.71194	-96.177029	Truck stop	Surface	Y	Private	Colocated	N
	197	466 I-45	Fairfield	ТХ	75840	31.71363	-96.178669	Truck stop	Surface	Y	Private	Colocated	N
	197	685 US-84	Fairfield	TX	75840	31.71677	-96.174905	Truck stop	Surface	N	Private	Colocated	N
145		630 W US-84	Fairfield	TX	75840	31.71811	-96.174768		Surface	N	Private	Colocated	N
145		2605 W Commerce St	Buffalo	ТХ	75831	31.44833	-96.078824	Truck stop	Surface	Y	Private	Colocated	Y
	178	2430 W Commerce St	Buffalo	ТХ	75831	31.44896	-96.077209	Truck stop	Surface	Y	Private	Colocated	Y
		2431 W Commerce St	Buffalo	ТХ	75831	31.44942	-96.078124	Truck stop	Surface	Y	Private	Colocated	Y
		1609 W Commerce St	Buffalo	ТХ	75831	31.45403	-96.074147	Truck stop	Surface	Y	Private	Colocated	Y
	164	1021 W St Marys St	Centerville	ТХ	75833	31.2585	-95.990198	· · ·	Surface	Y	Private	Colocated	N
		1008 W St Marys St	Centerville	ТХ	75833	31.25784	-95.990101	Truck stop	Surface	Y	Private	Colocated	N
		947 St Mary's	Centerville	ТХ	75833	31.2585	31.258497		Surface	Y	Private	Colocated	N
		Ih 45 & Hwy 7	Centerville	ТΧ	75833	31.25787	-95.986024	Truck stop	Surface	Y	Private	Colocated	N
	Source: NCTCOG/DEW Clean Cities												

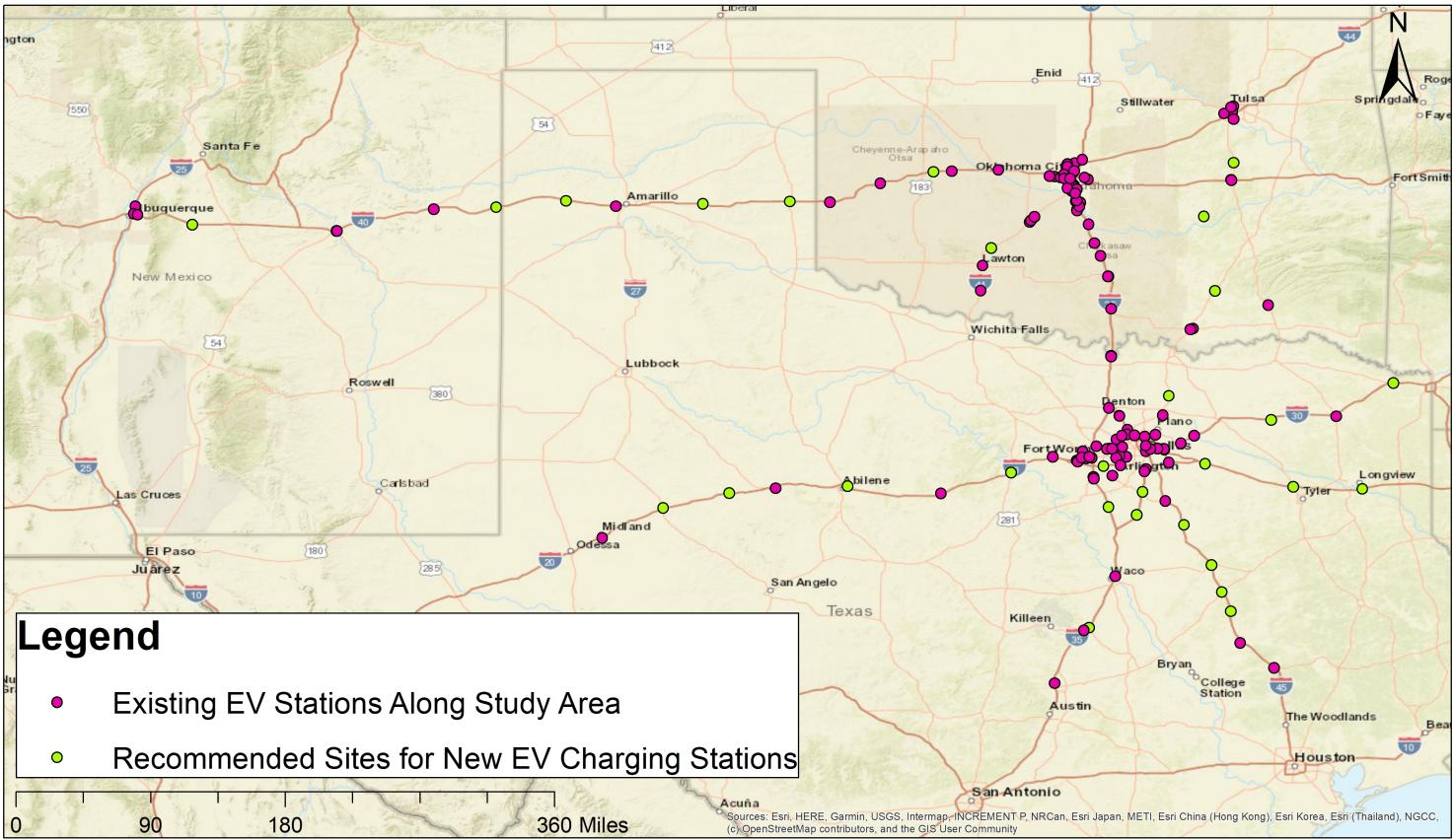
Source: NCTCOG/DFW Clean Cities

*NCTCOG/DFW Clean Cities has identified the properties listed above as being located along highway corridors in areas that potentially fill gaps in the existing EV charging network. Listing of a particular site does not imply any endorsement or promotion of EV charging at any specific company location over another, nor does it imply any intent or agreement by these sites to install EV charging. This list was developed for informational purposes only.

Data of existing Electric Vehicle (EV) charging stations was gathered by using the Alternative Fueling Station Locator tool from the Alternative Fuels Data Center (AFDC) website on June 2020. Initial data included EV charging stations with CCS and CHAdeMO connectors.



Evaluation of Gaps in Existing EV Charging Corridors





North Central Texas Council of Governments