

## **Volkswagen Update - Electrify America Comments Submitted by NCTCOG/DFW Clean Cities**

On March 1, 2018, the North Central Texas Council of Governments (NCTCOG) and Dallas-Fort Worth Clean Cities Coalition (DFWCC) submitted comments to Electrify America, LLC, in response to the organization's call for comments. Electrify America is a subsidiary of the Volkswagen Group of America which has been charged with managing the Zero Emissions Vehicle (ZEV) Investment Plan. Under the ZEV Investment, a total of \$2 billion dollars will be spent nationally to support deployment of zero-emission vehicles.

Electrify America requested input regarding Cycle 2 of their National ZEV investment Plan, specifically related to local data or information regarding to infrastructure, outreach, and education. Comments were due March 1, 2018.

NCTCOG and DFWCC submitted comments responding to two topics: 1) Suggestions and Data Relevant to Cycle 2 Investments and 1) Education & Access Suggestions. A copy of the information submitted is attached as follows:

- **ATTACHMENT A** (Suggestions and Data Relevant to Cycle 2 Investments, pages 2-9 of this document)
  
- **ATTACHMENT B** (Education & Access Suggestion, pages 10-18 of this document)

This information is also available at the NCTCOG webpage about the Volkswagen Settlement, at <http://nctcog.org/trans/air/VWsettlement/>.

For more information, contact Lori Clark, Program Manager, at 817-695-9232 or [lclark@nctcog.org](mailto:lclark@nctcog.org).

# ATTACHMENT A

## North Central Texas Council of Governments and Dallas-Fort Worth Clean Cities Coalition Electrify America Cycle 2 ZEV Investment Plans Comments Submission

*Submitted on March 1, 2018*

**INPUT PROMPT:** Do you have any general or specific suggestions for how Electrify America should approach its Cycle 2 investment plan? Where possible, please provide specific data or evidence to support your rationale.

### INTRODUCTION

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. NCTCOG also houses the Dallas-Fort Worth Clean Cities Coalition, which serves the North Texas region as the local branch of the national Clean Cities program. In conjunction with DFW Clean Cities, NCTCOG administers Electric Vehicles North Texas (EVNT), which is active in promoting/facilitating adoption of electric vehicles (EVs) in North Texas. Because of its role, NCTCOG is well placed to understand these and other challenges associated with EV readiness in the region.

### NORTH CENTRAL TEXAS INTRA-REGIONAL INFRASTRUCTURE NEEDS AND RECOMMENDATIONS

With more than 4,600 registered electric vehicles, 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. See Attachment 1 for a map of Texas showing registered EV count, by county. Since 2011, when the region began tracking EV registrations, the number of North Texas EVs have grown steadily, showing an increase of almost 2,000 percent. At the same time, North Central Texas is one of the fastest growing and most vehicle-centric metropolitan areas in the country, indicating that EV registration growth will continue. Despite this growth, EVs represent less than 1 percent of all registered light-duty vehicles in the region and might continue to make up a fraction of total vehicle registrations unless significant and strategic charging infrastructure investments are made.

North Central Texas requires a robust network of public electric vehicle supply equipment (EVSE) infrastructure, particularly Direct Current Fast Charging (DCFC) stations. Recent studies conducted by the National Renewable Energy Laboratory (NREL), the Electric Power Research Institute, and Pacific Gas & Electric provide recommendations on the minimum number of Level 2 (L2) and DCFC needed per 1,000 EVs. For example, NREL recommends 1.5 DCFC and 36 L2 chargers per 1,000 EVs. Currently, with the exception of the City of Dallas, the region's cities and counties are falling behind the recommended charger to EV ratio, and EVSE investment catch-up is needed. EVSE investment need is especially critical in some of the region's fastest growing counties, like Collin and Denton, where coincidentally the most

significant infrastructure gaps already exist. For example, Collin County contains 21 percent of the region's EVs but zero DCFC charging stations. Denton County fares slightly better with 15 percent of the region's EVs but less than 4 percent of the region's DCFC charging stations. The mismatch of EVs to chargers is particularly problematic as both counties' populations are expected to grow by 65 percent or more, by 2045. A chart illustrating the EV to charger imbalance is found in Attachment 2. Accordingly, it is recommended that Electrify America funding should focus on helping municipalities with such vehicle-to-charger-imbalance catch up. Simultaneous consideration, nonetheless, must be given to cities like Dallas where sustained EVSE investment will be needed. Based on a 30% growth rate, 39,000 EVs are expected in the City of Dallas by 2030 which would require at least 60 DCFCs and 1,418 L2 chargers; an increase of 52 DCFC and 1,249 L2 chargers proving that continued EVSE investment is needed in the region's leading EV cities.

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.

## INTER-REGIONAL INFRASTRUCTURE NEEDS AND RECOMMENDATIONS

In addition to needed infrastructure within North Central Texas, EVSE investments are required to improve travel outside of the region, especially to connect DFW with the state's other metropolitan areas of Houston, San Antonio, and Austin. According to the U.S. Department of Energy's Alternative Fuel Data Center (AFDC) Alternative Fueling Station Locator, there are currently 650 publically accessible (non-Tesla) EV charging stations in Texas. However, only 56 of these stations are DCFC and less than a dozen are located along state highways. Because of their reduced charging time, DCFCs are the most desired charger type for long distance highway trips. As seen in Attachment 3, a map showing the locations of Texas DCFC, few DCFC are available along these corridors. For example, along the I-45 roadway, connecting Dallas-Fort Worth to Houston, not a single DCFC is located outside of the urbanized area, making it practically impossible for an all-electric vehicle to make this trip. With similar gaps in DCFC access along all Texas corridors, significant investment is needed to create a seamless corridor for EV drivers. A map of the state's DCFC infrastructure is available as Attachment 3. NREL and the Federal Highway Administration (FHWA) have issued guidelines on the maximum distance allowed between DCFC chargers for a corridor to be considered EV-ready; 70 and 50 miles, respectively. It is recommended that Electrify America to follow these guidelines when highway and interstate investments are considered. A second FHWA recommendation is that EVSE should be located within five miles of the highway. Since FHWA's position is silent on proximity to a highway exit, it is suggested for Electrify America to clarify direction that EVSE should be located within five miles or a *highway exit*. This revision can help ensure that new infrastructure is, in fact, as accessible as intended.

A second critical corridor issue relates to access type. While the AFDC and other EV infrastructure mapping databases show certain stations as "publically available", in reality many stations have secondary use restrictions contingent upon the driver patronizing the business where the station is located (e.g., driver must be a hotel guest to use a charging station on hotel property). This misclassification of "public" stations has created unintended infrastructure gaps throughout the state. It is recommended for Electrify America to coordinate with the authors of these mapping databases to clarify use restrictions and prioritize future investment in truly publicly accessible charging stations in the region and the state.

## IMPROVING ACCESS FOR UNDERREPRESENTED AND EMERGING GROUPS

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. EVSE solutions such as 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 cited at locations that are densely populated and walkable.

**INPUT PROMPT:** Does your jurisdiction or organization have plans, policies, or programs to encourage the deployment of zero emission vehicles or electric vehicle charging infrastructure?

## INTRODUCTION

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. NCTCOG also houses the Dallas-Fort Worth Clean Cities Coalition, which serves the North Texas region as the local branch of the national Clean Cities program. In conjunction with DFW Clean Cities, NCTCOG administers Electric Vehicles North Texas (EVNT), which is active in promoting/facilitating adoption of electric vehicles (EVs) in North Texas. Because of its role, NCTCOG is well placed to understand these and other challenges associated with EV readiness in the region.

## PROGRAMS

### *Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program*

NCTCOG serves as Regional Administrator for the Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP) for North Texas. LIRAP, which is also available in the Houston-Galveston and Austin areas, currently provides up to \$3,500 in assistance to repair or replace older vehicles, with the greatest amount being reserved to assist with the purchase of an electric vehicle. Financial assistance offered through this program has already contributed to the purchase of more than 550 low emission light-duty vehicles. With more than \$25 million of funds remaining, in \$3,500 increments, LIRAP can serve as a financial incentive to more than 7,000 North Central Texans interested in replacing an older vehicle with an EV. The LIRAP incentive can be coupled with federal and state incentives for significant savings on a new EV purchase. As new technologies and lower emitting vehicles become available, NCTCOG hopes to modernize the program to be inclusive of electric and autonomous vehicles on the market.

### *Texas Emissions Reduction Plan*

The Texas Commission on Environmental Quality administers the Texas Emissions Reduction Plan and offers two applicable funding opportunities, the Alternative Fueling Facilities Program (AFFP) and the upcoming Light-Duty Motor Vehicle Purchase or Lease Incentive Program (LDMVPLIP). The AFFP provides grants for the expansion or construction of alternative fueling stations, including electric charging. Grant funds can cover up to 50 percent of costs and all counties within the 12-county NCTCOG region are eligible. During the most recent legislative session, the LDMVPLIP was renewed making up to \$2,500 available towards the purchase or lease of a new light-duty EV. TERP incentives can be coupled with federal or private incentives to realize greater savings.

### *Congestion Mitigation and Air Quality Improvement Program*

For the DFW area in particular, NCTCOG is committed to facilitating opportunities for fleets and individuals to experience a zero-emission vehicle before they buy. A contract of \$500,000 in Congestion Mitigation and Air Quality Improvement Program funding is in place for NCTCOG to acquire alternative fuel vehicles, including electrified vehicles and technologies for a demonstration project in which vehicles would be loaned out to local fleets to increase their familiarity and comfort of these vehicles, with the intent of increasing their likelihood to purchase. These vehicles will also be taken to various “ride and drive” events around the North Texas region in partnership with Electrify America efforts.

## PLANS

### *Model EV Ready Construction Code language*

In response to interest from local governments, NCTCOG has commenced efforts to develop EV ready construction code model language that will make the installation of charging infrastructure less onerous and expensive for local municipalities and businesses in the near future. EV ready construction code model language will provide guidelines on elements including EV charging parking spots set-asides, the importance of laying adequate conduit in new construction, and sufficient electric panel capacity to handle the additional load created by EV charging. To date, NCTCOG has made progress, and gathered regional case studies, with a number of municipalities and employers, including Schneider Electric, Southwest Airlines, and DFW International Airport who chose to employ EV ready construction best practices. Additional local governments participating in the North Central Texas Stewardship Forum have expressed interest in developing EV ready construction template language for future deployment, and work is well under way along those lines. Sensitive to Texans’ occasional aversion to regulations and requirements, NCTCOG determined that creating voluntary EV ready construction language is the most appropriate approach for the region.

### *EV and EVSE Opportunities for Local Utilities*

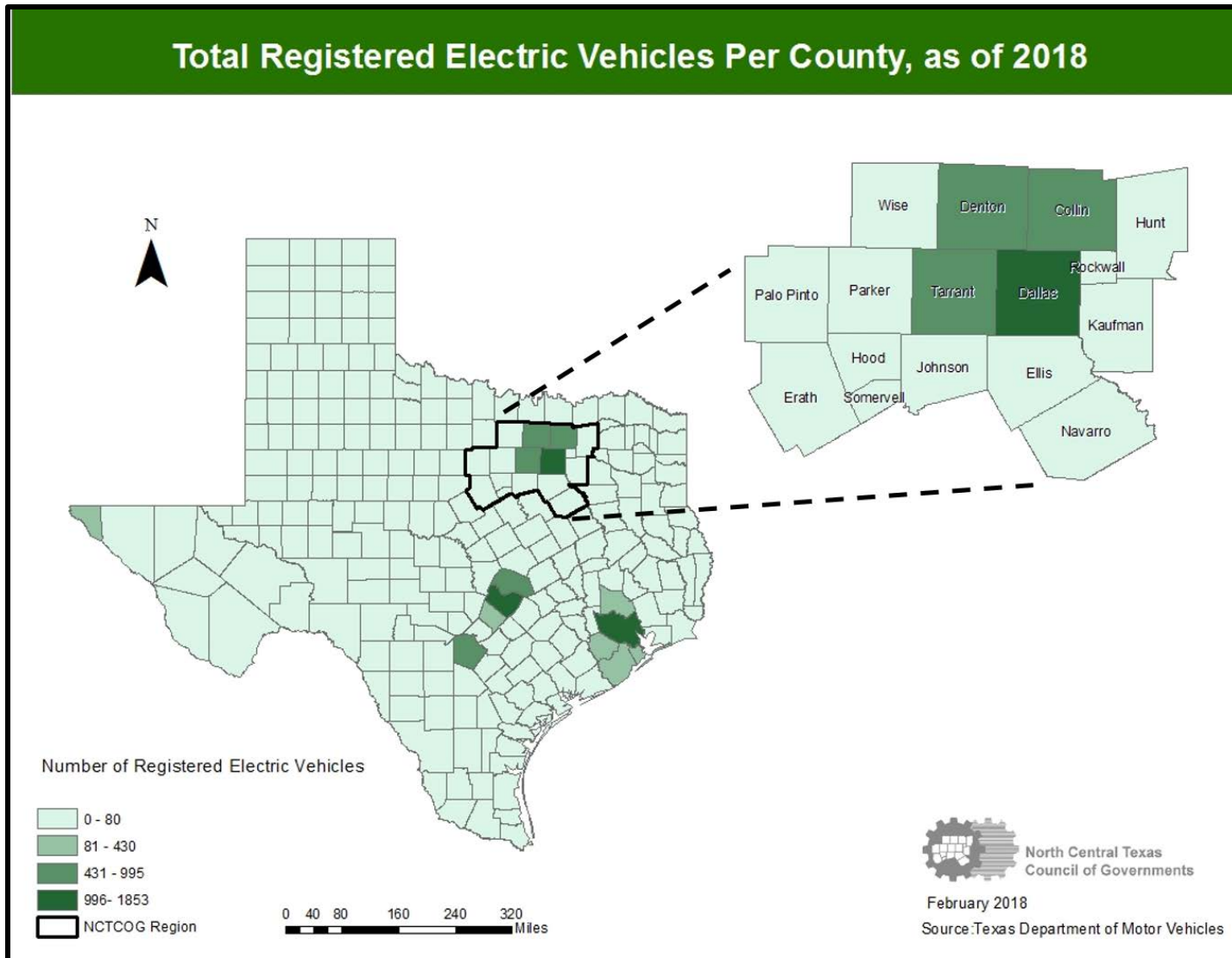
The NCTCOG region is home to eight municipally owned utilities, ten electric cooperatives, and one investor owned utility who could benefit from a better understanding of the opportunities that greater EV and EVSE deployment represents. For a utility, EV charging can result in greater electricity demand and revenue. According to Navigant Research, the gigawatt-hours of electricity consumed by electric vehicles is expected to increase over 13-fold by 2025, when compared to 2016 levels. Another benefit is that when strategically deployed, EV and EVSE can help manage existing resources and the growth of renewable power. Conversations with local utilities are occurring to share information about available incentives, such as the Texas Emissions Reduction Plan Alternative Fueling Facilities Program, and discussing the utility’s role in, and opportunity to capitalize on, EV growth. Utility efforts such as vehicle

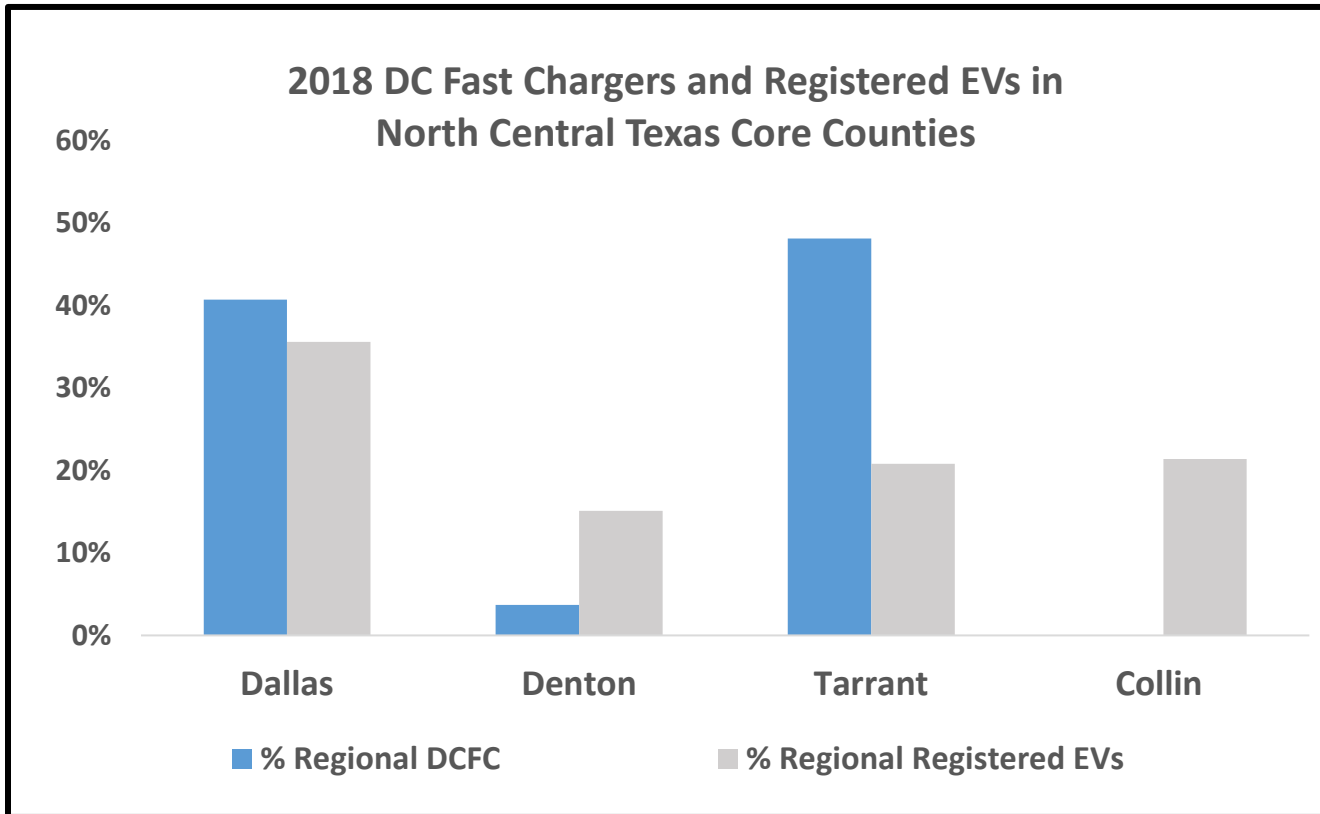
purchase incentives or charging station investment and ownership could open up access to EVs and much needed charging infrastructure.

## POLICIES

### *Clean Fleet Policy*

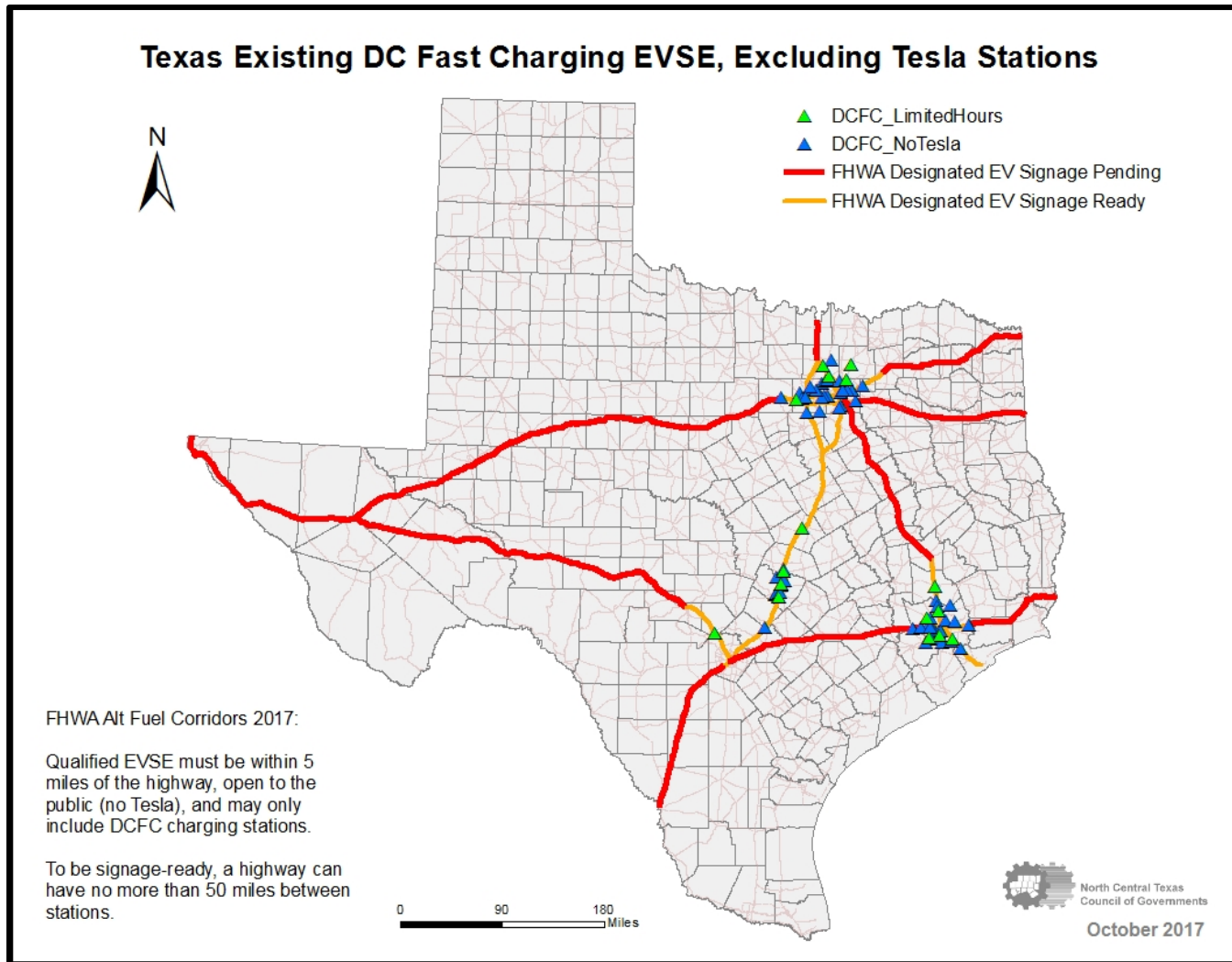
The region's Clean Fleet Policy provides guidance and incentives to local governments and private-sector entities committed to reducing petroleum consumption by choosing low-emissions, alternative fuel vehicles, for their fleets. As of February 2018, 65 entities have adopted the Clean Fleet Policy. Adoption of the policy ensures eligibility for clean vehicle funding made available through the Regional Transportation Council and fleet recognition from DFWCC.





*Comparison of % registered EVs and % of regional DCFCs for Dallas, Denton, Tarrant, and Collin Counties*





Prepared by NCTCOG in October 2017, the above map illustrates the shortage of DCFC along Texas corridors.

## North Central Texas Council of Governments and Dallas-Fort Worth Clean Cities Coalition Electrify America Cycle 2 ZEV Investment Plans Comments Submission

*Submitted on March 1, 2018*

### **INPUT PROMPT: Education and Access**

#### EXECUTIVE SUMMARY

Serving as the North Central Texas Metropolitan Planning Organization and Clean Cities Coalition, the North Central Texas Council of Governments appreciates the opportunity to provide recommendations to Electrify America as it develops the Cycle 2 ZEV Investment Plans. To achieve increased ZEV adoption, NCTCOG and the DFWCC Coalition recommends for Electrify America funds and efforts to target the region's greatest barriers: 1) lack of education about the advantages of driving an EV including misconceptions about vehicle cost and range, 2) limited range of available vehicles, and 3) infrastructure deficiencies. Overcoming these barriers will require targeted education. Specifically, NCTCOG and the DFWCC recommend that a portion of the investment dollars are set aside to fund educational opportunities such as trainings and EV showcase events, and to address specific charging infrastructure needs. Detailed infrastructure recommendations can be found in NCTCOG's "Data Relevant to Cycle 2 Investments" comments. Moreover, it is recommended that these funds be directed through the national network of Clean Cities Coalitions, who can host events and trainings in a venue that is brand-neutral and unbiased, with the backing of the U.S. Department of Energy program. Clean Cities Coalitions are also well suited to manage the funds due to their familiarity with regional political climates available incentives, local EV advocacy groups, and region-specific population trends.

#### GENERAL EDUCATION AND SUGGESTIONS

The North Central Texas Council of Governments (NCTCOG) is pleased to submit these recommendations to Electrify America. NCTCOG serves as staff to the Regional Transportation Council, which is the Metropolitan Planning Organization 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. NCTCOG also houses the Dallas-Fort Worth Clean Cities (DFWCC) Coalition, which serves the North Texas region as the local branch of the national Clean Cities program. In conjunction with DFWCC, NCTCOG administers Electric Vehicles North Texas (EVNT), which is active in facilitating adoption of electric vehicles (EVs) in North Texas. EVNT's work includes hosting events, facilitating workshops and trainings, developing EV-specific resources, providing assistance on funding opportunities, and building and maintaining relationships with industry stakeholders.

In part because of the foundations laid by EVNT, the region has experienced tremendous growth in the number of registered EVs. Between 2014 and 2017, registered EVs increased by almost 30 percent regionwide and as much as 150 percent in individual counties (see Attachment 1 for regional EV growth). State EV and electric vehicle supply equipment (EVSE) incentives contribute to a positive environment for increased EV deployment and a sound investment of Electrify America funds. The Texas Commission on Environmental Quality administers the Texas Emissions Reduction Plan and offers two applicable funding opportunities, the Alternative Fueling Facilities Program (AFFP) and the upcoming Light-Duty Motor Vehicle Purchase or Lease Incentive Program. Both provide substantial incentives to North Texas businesses and residents. NCTCOG is committed to facilitating opportunities for fleets and individuals to try a zero-emission vehicle (ZEV) before they buy. A contract of \$500,000 in Congestion Mitigation and Air Quality Improvement Program funding is in place for NCTCOG to acquire alternative fuel vehicles. This includes many EVs for a demonstration project in which vehicles will be loaned to local fleets to increase their familiarity and comfort with EVs, with the intent of increasing their likelihood to purchase. These vehicles may also be taken to various “ride and drive” events around the North Texas region in partnership with Electrify America efforts.

Despite available incentives and regional EV growth, EVs still represent less than 1 percent of registered light-duty vehicles in North Central Texas. Without additional investment, growth could stall. Increased adoption can only be achieved by addressing the region’s greatest barriers: 1) lack of education about the advantages of driving an EV including misconceptions about vehicle cost and range, 2) a limited range of available vehicles, and 3) infrastructure deficiencies. Overcoming these barriers will require targeted education. To this end, NCTCOG and the DFWCC recommends that Electrify America set aside a portion of the investment dollars to fund educational opportunities such as trainings and EV showcase events, and to address specific charging infrastructure needs. Detailed infrastructure recommendations can be found in NCTCOG’s “Data Relevant to Cycle 2 Investments” comments. Moreover, it is recommended that these funds be directed through the national network of Clean Cities Coalitions, who can host events and trainings in a venue that is brand-neutral and unbiased, with the backing of the U.S. Department of Energy (DOE) program. Clean Cities Coalitions are also well suited to manage the funds due to their familiarity with regional political climates available incentives, local EV advocacy groups, and region-specific population trends.

### *Education*

The aforementioned barriers can be addressed by education, in the forms of trainings and workshops. Training for automobile dealers could possibly increase the number and variety of EVs available for purchase. Dealer training is the most critical type of education needed in North Central Texas, as it is the dealers who currently limit the number and variety of EVs on the market. To a great extent, local dealers are ill-equipped, unprepared, and, at times, reluctant to sell EVs. Furthermore, less than half of local dealers representing EV-producing automakers carry a single EV model. Training dealer staff on the benefits of EVs for the Texas buyer (performance, smooth and quiet operation, safety, incentives, and cost savings) and for the dealership (exposure to a new market and incentives) is the first step towards increasing the number of EVs offered for sale.

Another audience that could significantly increase access to infrastructure and vehicles, if educated, are utilities. The North Central Texas 12-county region is home to more than a dozen utilities, municipally owned utilities, electric cooperatives, and one investor owned utility; all of which could benefit from a

better understanding of the opportunities that greater EV and EVSE deployment represents. For a utility, EV charging not only presents an opportunity for greater electricity demand and revenue but can also be used to more efficiently manage existing resources and the growth of renewable power. Conversations with local utilities are occurring to share information about available incentives, such as AFFP, and discussing the utility's role in, and opportunity to capitalize on EV growth. Utility efforts such as vehicle purchase incentives or charging station investment and ownership could open access to EVs and much needed charging infrastructure.

For the general public, education is needed to dispel common myths about EVs, especially those relating to cost and range. While EVs have historically cost more than their traditional counterparts and have given customers good cause to worry about range, both of these are changing today. Regarding initial cost, price parity will soon be realized as battery costs drop and as automakers continue to invest heavily in EV technologies. More affordable makes and models are expected in the near future. When cost is considered as total cost of ownership, price parity has already been achieved for EVs in the Texas market. This is due to reduced maintenance costs, incentives (federal in addition to the state's Light-Duty Motor Vehicle Purchase or Lease Incentive Program), and reduced fuel costs. At 11.4 cents per kilowatt-hour, the Texas average electricity rate is one of the lowest in the country, making fueling an EV an affordable option. In addition to reductions in battery cost, range has increased expeditiously. Mass-market EV models like the Nissan Leaf, Chevy Bolt, and Tesla Model S can all travel more than 150 miles on a single charge. NCTCOG/DFWCC have already developed and regularly disseminates handouts addressing EV costs, general concerns, and how to claim federal and state incentives. With Electrify America funds, these resources can be revised and marketed to suit dealer, utility, as well as general public audiences.

### *Access Activities*

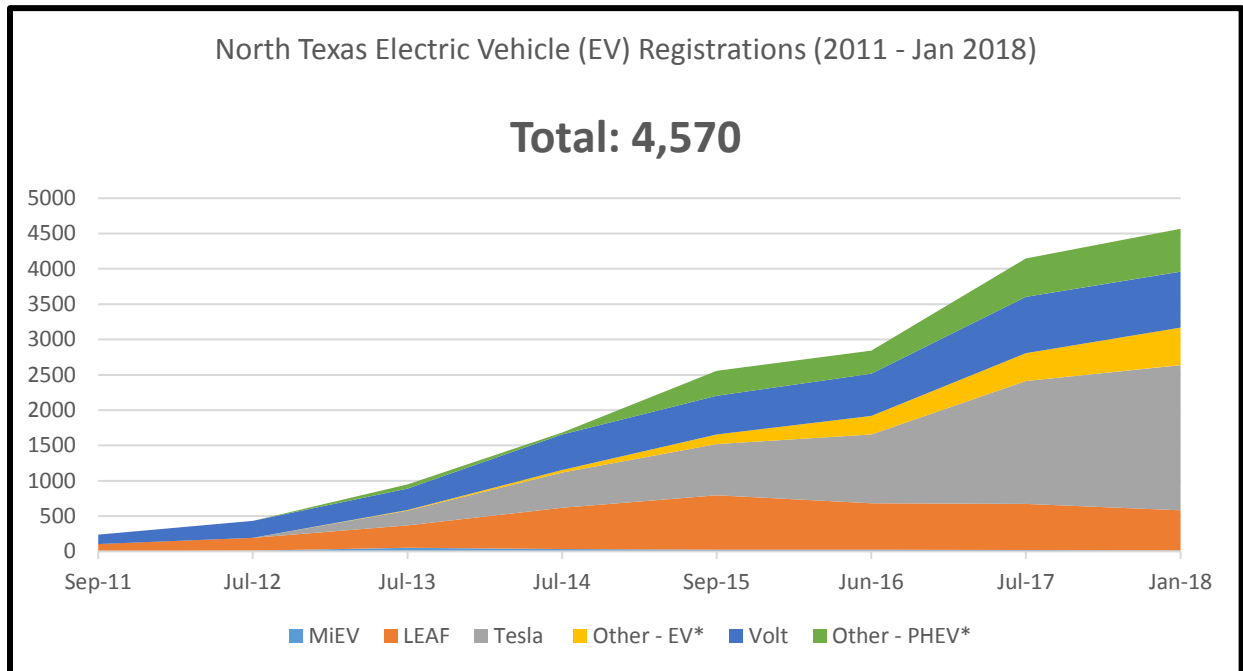
Large- to small-scale EV showcase events, modeled after the region's National Drive Electric Week (NDEW), can dramatically increase consumer exposure to EVs and represent important opportunities to educate a variety of audiences. NCTCOG/DFWCC annually hosts NDEW which gathers EV owners, enthusiasts, and potential customers with exhibitors to educate and foster enthusiasm for electric vehicle technologies. The North Texas NDEW event boasts one of the largest turnouts in the country, with only San Diego surpassing the North Texas event in terms of vehicles and attendees. A YouTube video showcasing some of the 2017 event's highlights is accessible from Attachment 3. This type of event is ideal for sharing information and addressing barriers to vehicle access by providing potential consumers the opportunity for vehicle ride-and-drives. Ride-and-drives are widely considered one of the most effective ways of overcoming poor public awareness and access to EVs. Hosting EV showcases at regional events, such as state fairs, auto shows, and sporting events is an especially good way to carry a redundant message and reach new audiences in slow EV-adoption markets in light of large population growth forecasts. Attachment 2 lists a sample of possible North Texas events.

Smaller scale events, at dealerships and workplaces, can be hosted as dealerships add EV models to their inventory or as workplaces install charging infrastructure. Testimonials from local employers who offer workplace charging, such as Schneider Electric, suggest that hosting "launch events" is a successful method of educating staff about the new resources.

Recognizing employers who offer workplace charging is also an important step in increasing access, especially to infrastructure. According to a recent DOE survey, workplaces represent the second most

common location for EV drivers to charge their vehicles, after their homes. For EV owners who lack home charging, their workplace will likely be their primary charge point. The same survey found that employees with access to workplace charging are 20 times more likely to drive an EV than those without access.

In summary, North Central Texas presents a tremendous opportunity for EV growth that would benefit from strategic investments. NCTCOG and the DFWCC appreciates the opportunity to submit these recommendations and looks forward to collaborating with Electrify America, as we work together toward greater EV adoption and cleaner air. If you have any questions, please feel free to contact Lori Clark, Program Manager, at 817-695-9232 or [lclark@nctcog.org](mailto:lclark@nctcog.org).



Date	MiEV	LEAF	Tesla	Other - EV*	Volt	Other - PHEV*	Total
Sep-11		104			135		<b>239</b>
Jul-12	9	185			239		<b>433</b>
Jul-13	51	318	206	9	306	57	<b>947</b>
Jul-14	35	584	497	36	504	26	<b>1682</b>
Sep-15	26	768	725	138	547	352	<b>2556</b>
Jun-16	23	660	974	260	601	323	<b>2841</b>
Jul-17	19	651	1742	396	795	542	<b>4145</b>
Jan-18	13	569	2054	533	791	607	<b>4570</b>
% Change**	144%	547%	997%	5922%	586%	1065%	1912%

\*PHEV= Plug-in Hybrid Electric

\*\*\*%Change is calculated from when first year model was tracked to present

**ATTACHMENT 2**

<b>Potential North Texas Events</b>		
<b>Event Type</b>	<b>Event Name</b>	<b>Estimated Attendance</b>
State Fair	State Fair of Texas	2,600,000
Auto Shows	Dallas Auto Show	388,000
	Fort Worth Auto Show	131,000
Public Festivals	Grapefest	250,000
	Earth Day Texas	50,000
	Fort Worth Stock Show and Rodeo	1,100,000
	Denton Fair and Rodeo	135,000
	Addison Oktoberfest	70,000
	Scarborough Renaissance Fair	200,000
Sporting Events	Dallas Cowboys regular season games	731,672
	Texas Rangers regular season games	1,250,000
	Dallas Mavericks regular season games	828,000
	Dallas Stars regular season games	711,000
	FC Dallas regular season games	15,000
	Frisco Roughriders Minor League Baseball Games	477,350
	Cotton Bowl	71,500
	Red River Rivalry game	91,000
<b>Total</b>		<b>9,099,522</b>



*You Tube video recap of the 2017 North Texas National Drive Electric Week Event is live and accessible at: <https://youtu.be/-SVc6aR4KvQ>*