



## **AGENDA**

### **Electric Vehicles North Texas (EVNT) Stakeholder Meeting**

**North Central Texas Council of Governments  
Regional Forum Room  
Wednesday, February 18, 2015  
9:00 – 11:00 am**

1. Introduction ..... Marissa Fewell, NCTCOG
2. Recent Developments:
  - a. EPA Ozone Standard Update.....Jody Loza, NCTCOG
  - b. Clean Fleet Policy.....Amy Hodges, NCTCOG
  - c. DFW Clean Cities Annual Survey.....Kenny Bergstrom, NCTCOG
3. EVNT Update ..... Marissa Fewell, NCTCOG
4. Other Items .....All
5. Adjourn..... Marissa Fewell, NCTCOG

#### **Audio:**

Call-in: 800-250-3900

Participant PIN: 442318#

[www.dfwcleancities.org/evnt](http://www.dfwcleancities.org/evnt)

## EVNT Goals

### 1 Year Goals

<u>Vehicles</u>		
<u>Goal</u>	<u>Performance Measure</u>	<u>Timeline</u>
Continue/Expand Partnerships with Dealerships, Rental Car Companies, Service Centers, etc.		
Promote EV Adoption	3,000 Light-Duty EVs Registered by the End of 2015	Now
Continue Promoting LDPLI Program	All Funding Used (about \$5.4 million still available)	Now
<u>Infrastructure</u>		
<u>Goal</u>	<u>Performance Measure</u>	<u>Timeline</u>
Develop Maps & Analysis of EV Registration Data with Recharging Infrastructure Sites	Update Thematic Map Quarterly to Follow Trends	Now
Research Integrating EV-Ready Guidelines Into Building Codes		
Engage Local Businesses in Workplace Charging Challenge	5 Additional Workplaces Signed Up	Now
Initiate Conversation with TxDOT Regarding Recharging at Rest Areas		
<u>Both</u>		
<u>Goal</u>	<u>Performance Measure</u>	<u>Timeline</u>
Develop Marketing/Education Materials		Now
Host National Drive Electric Week Event(s)	100 People Attending	Now
Create Region Specific Fact Sheets	1 for General Public & 1 for Local Governments	Now
Monitor Local Interest Group Activities & Meetings	Attend Meetings & Participate at Events	Now

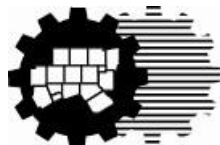
### 3-5 Year Goals

<u>Goal</u>	<u>Performance Measure</u>	<u>Timeline</u>
Develop multiple videos for educational and marketing purposes		
Further an electrification network on the heavily travelled road networks between the DFW, Houston, and Austin-San Antonio urban centers		
Pursue additional infrastructure deployment and engage transit agencies and universities in future infrastructure/rental/car loan projects		

# Electric Vehicles North Texas (EVNT) Update

## EVNT Stakeholder Meeting

Marissa Fewell, Transportation Planner  
February 18, 2015

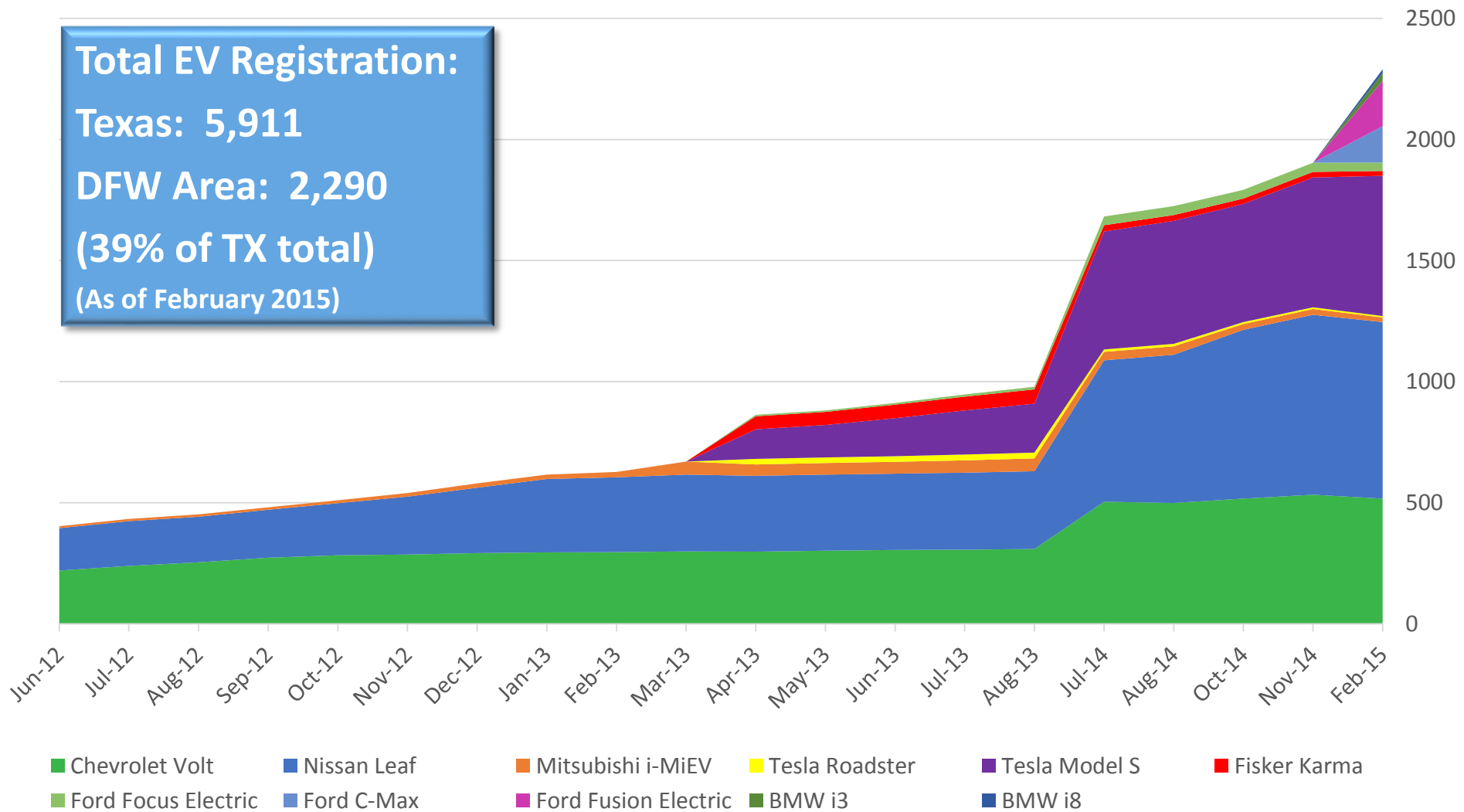


North Central Texas  
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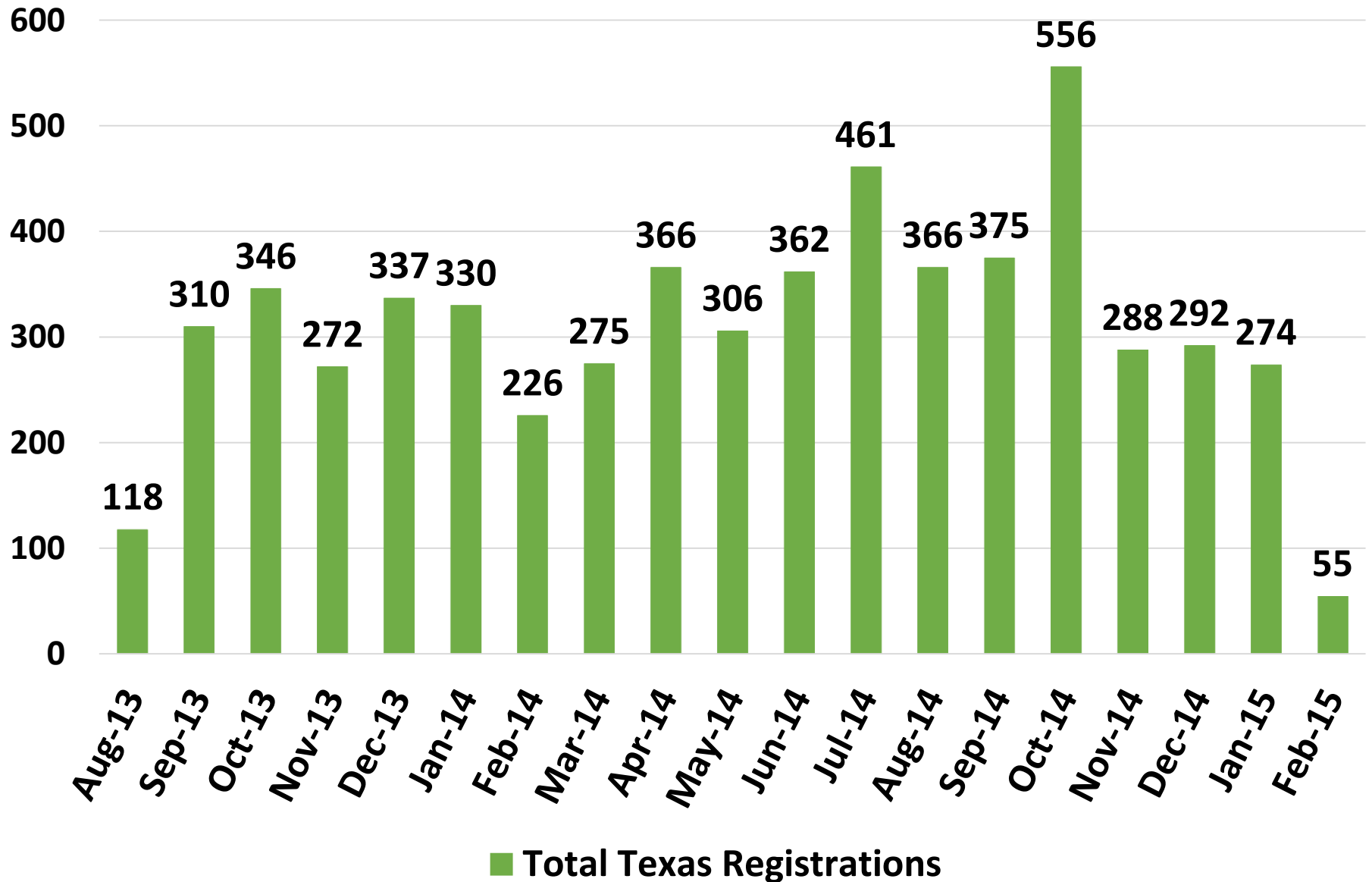
# Registration by Electric Vehicle (EV) Model in North Texas

**Total EV Registration:**  
**Texas: 5,911**  
**DFW Area: 2,290**  
**(39% of TX total)**  
**(As of February 2015)**



\*NCTCOG staff plans to include additional models including: Cadillac ELR, Chevrolet Spark, Fiat 500e, Honda Accord Plug-In & Fit EV, Toyota Plug In Prius, & RAV4 EV

# EV Registration Frequency



# EV Emissions Benefits

## DFW EV Registration Emissions Impacts\* Tons per Year

NO <sub>x</sub>	2.70
VOC	0.68
CO <sub>2</sub>	16,883.01
PM	0.31
CO	167.51

\* Assuming each EV replaces a vehicle certified to EPA Tier 2 Bin 5 emissions standards that drives 15,000 miles/year

\*\* Based upon the EPA Greenhouse Gas Equivalencies Calculator

## CO<sub>2</sub> Emissions Reductions Equal to\*\*:

90.5



railcars worth  
of coal burned

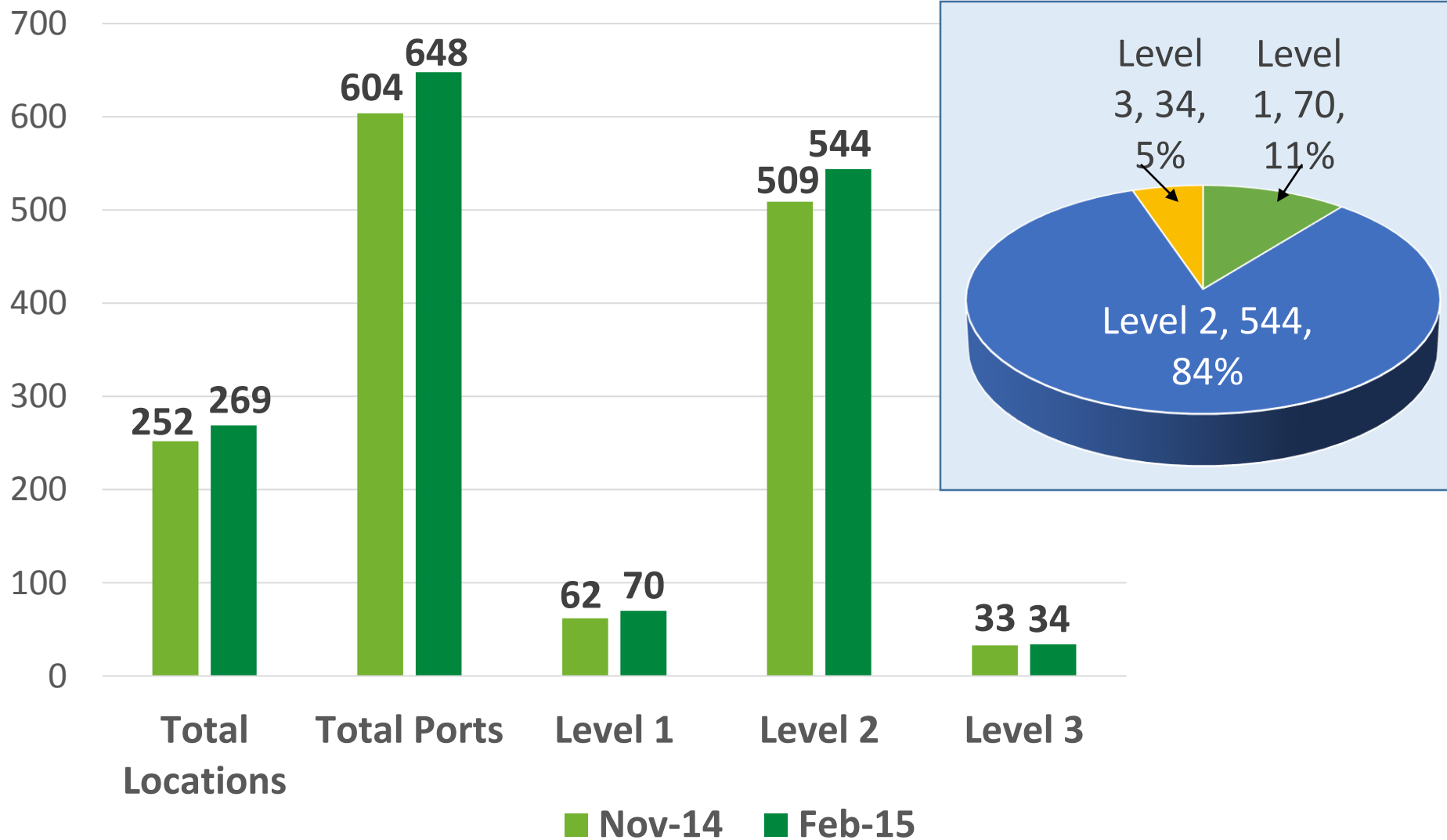
-or-

223



tanker trucks'  
worth of  
gasoline

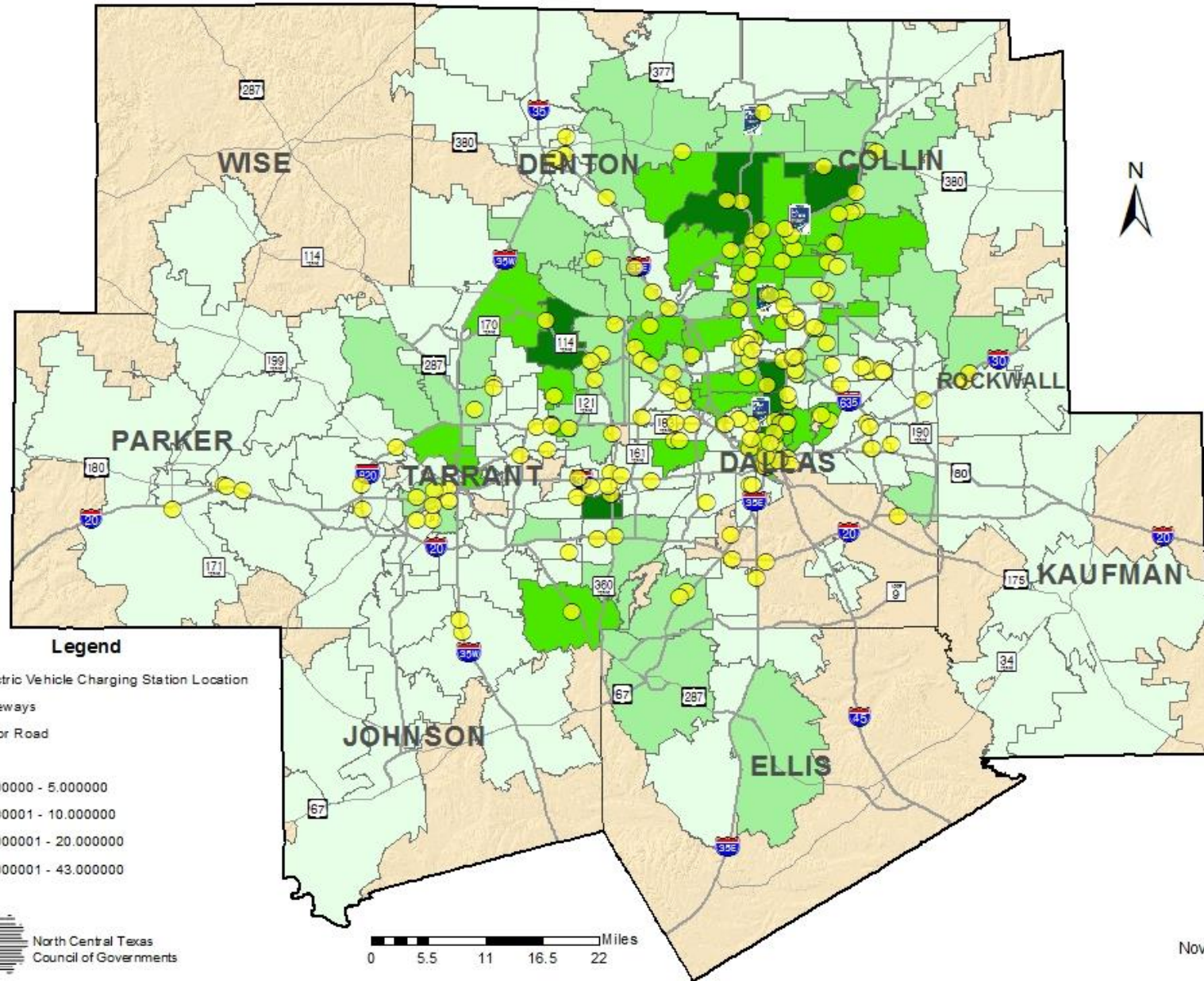
# DFW Public EV Charging Infrastructure



Source: NCTCOG

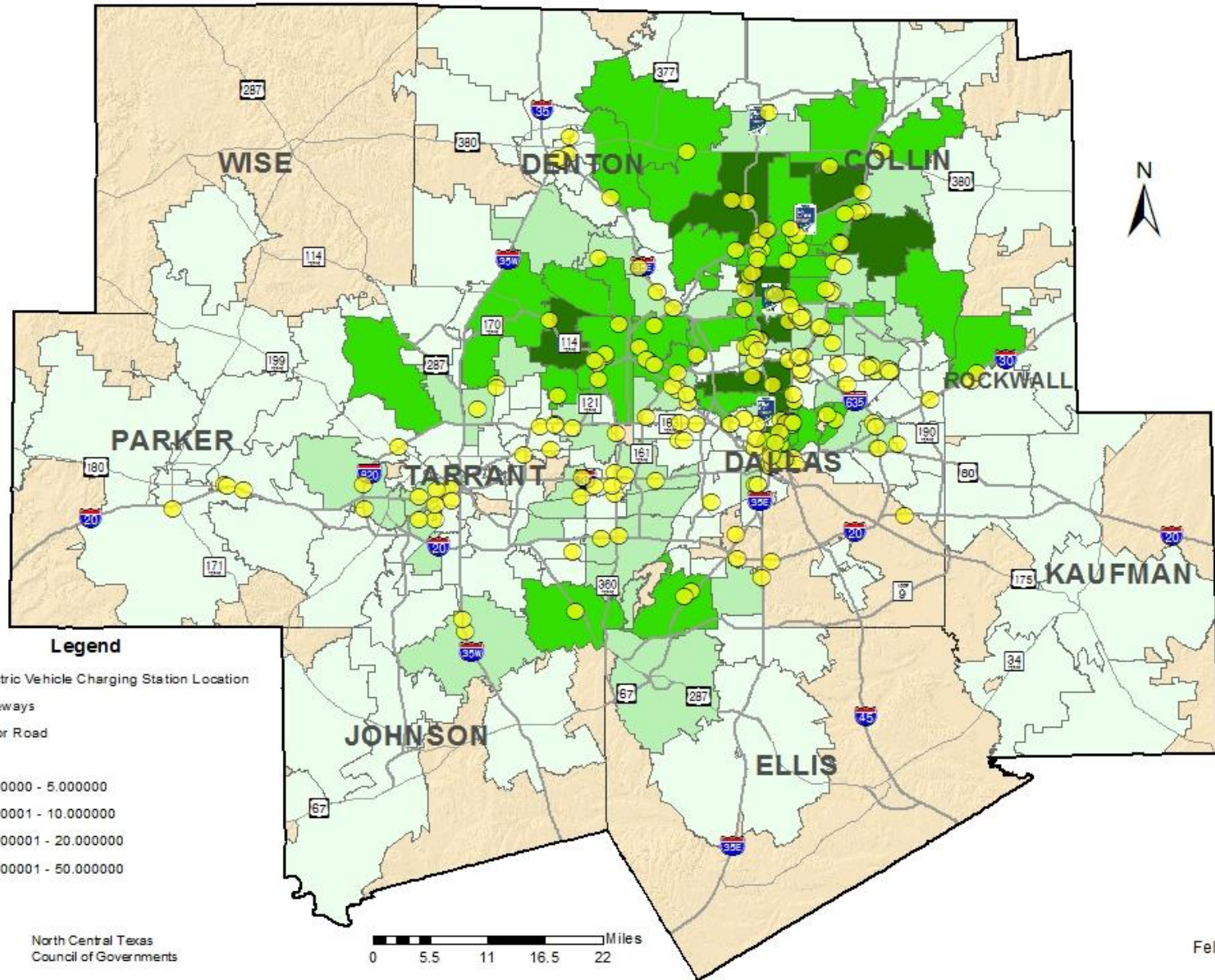
\*Data as of February 13, 2015

# Electric Vehicle Recharging Stations and Registration Density by Zip Code



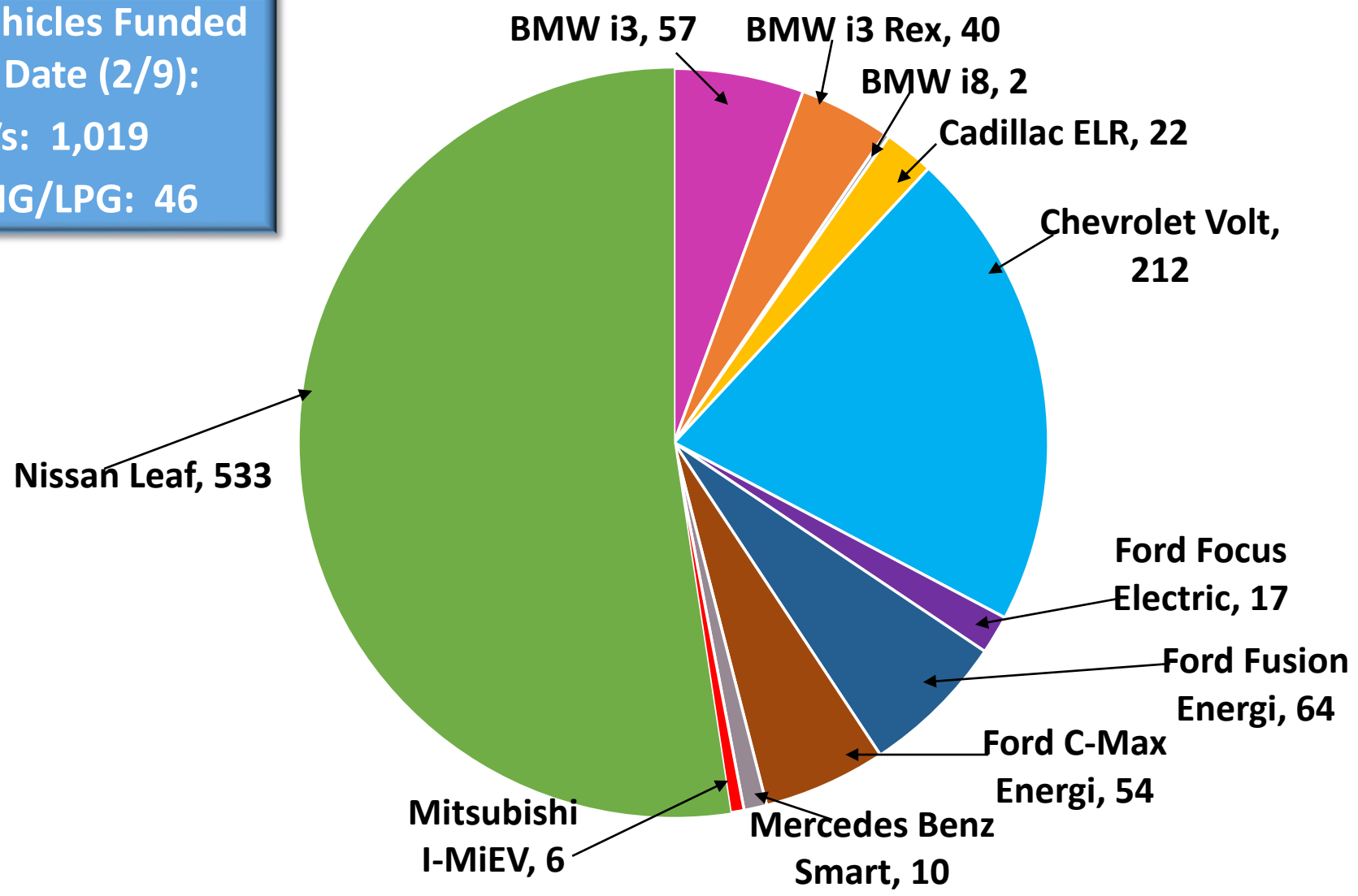


## Electric Vehicle Recharging Stations and Registration Density by Zip Code



# Light Duty Motor Vehicle Purchase or Lease Incentive Program (LDPLI) Update

**Vehicles Funded to Date (2/9):**  
EVs: 1,019  
CNG/LPG: 46



# Guide to Claiming the State Incentive for Electric Vehicles (EVs)



## Guide to Claiming the State Incentive for Electric Vehicles (EVs)

**What:** Texas Commission on Environmental Quality (TCEQ) Light-Duty Motor Vehicle Purchase or Lease Incentive Program

**How Much:** \$2,500 rebate per vehicle for purchases

Up to \$2,500 rebate per vehicle for leases, pro-rated based on lease term

- 4-year or longer term = \$2,500
- 3-year to less than 4-year term = \$1,875
- 2-year to less than 3-year term = \$1,250
- 1-year to less than 2-year term = \$625

**Application Process:**



**Eligible EVs:**

Type	Make	Model
Electric Vehicle	BMW	i3, i3 w/range extender
Plug-In Hybrid Electric Vehicle	BMW	i8
Plug-In Hybrid Electric Vehicle	Cadillac*	ELR
Plug-In Hybrid Electric Vehicle	Chevrolet	Volt
Electric Vehicle	Ford*	Focus
Plug-In Hybrid Electric Vehicle	Ford*	C-Max, Fusion
Electric Vehicle	Kia*	Soul EV
Electric Vehicle	Mercedes-Benz*	B-Class E-Cell
Electric Vehicle	Mitsubishi	i-MiEV
Electric Vehicle	Nissan	LEAF (S, SV, & SL)
Plug-In Hybrid Electric Vehicle	Porsche	Panamera S E-Hybrid
Electric Vehicle	SmartCar	Smart for two Cabriolet & Coupe

\*Model Year 2015; check with dealer for availability

**Eligibility:** Individuals, Businesses, and State/Local Governments

- First-Come, First-Served Basis until June 26, 2015, or Until All Funding is Awarded
- Purchase/Lease Must be Made After May 13, 2014
- Must be Registered and Operated in Texas for One Year

The Rebate [Application Form](#) and additional information is available at [www.terpgrants.org](http://www.terpgrants.org)

Source: NCTCOG EVNT Program

[www.dfwcleancities.org/evnt](http://www.dfwcleancities.org/evnt)

Date: 10/13/2014

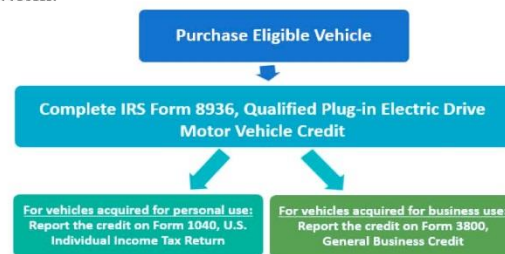


## Guide to Claiming the Federal Incentive for Electric Vehicles (EVs)

**What:** Plug-In Electric Drive Vehicle Credit (IRC 30D)

**How Much:** \$2,500 - \$7,500 Tax Credit per Vehicle

**Application Process:**



**Eligible EVs:**

Make	Model Year	Model	Credit Amount
AMP	2012	GCE Electric Vehicle	\$7,500
		MLE Electric Vehicle	\$7,500
Azara	2011, 2012	Dynastix Trans Connect Electric Vehicle	\$7,500
BMW	2014	i3 Sedan & i3 Sedan with Range Extender	\$7,500
Boulder	2013	i3	\$3,793
BYD	2012, 2013, 2014	Electric Delivery Van, Shuttle, Flat Bed, Service Body DV500	\$7,500
Cadillac	2014	ELR	\$7,500
Chevrolet	2011, 2012, 2013, 2014, 2015	Volt	\$7,500
	2014, 2015	Spark EV	\$7,500
CODA	2010, 2012	Sedan	\$7,500
Electric Vehicles International (EVI)	2011, 2012	EVI MD (Medium Duty) Electric truck	\$7,500
EMC	2010	EVI-WI (Walk-In) Electric truck	\$7,500
Fiat	2013, 2014	E367 Passenger Wagon, E367 Pick-Up Truck, E36v Utility Van	\$7,500
Fisker	2012	500e	\$7,500
	2012, 2013, 2014	Karma Sedan	\$7,500
Ford	2013, 2014	Focus Electric	\$7,500
	2013, 2014	C-MAX Energi	\$4,007
	2013, 2014	Fusion Energi	\$4,007
Honda	2014	Accord Plug-In Hybrid	\$3,626
Mercedes-Benz	2013, 2014	smart Coupe/Cabrio EV	\$7,500
	2014	B-Class EV	\$7,500
Mitsubishi	2012, 2014	i-MiEV	\$7,500
Nissan	2011, 2012, 2013, 2014	Leaf	\$7,500
Porsche	2013	91R Spyder	\$3,867
	2014, 2015	Panamera S E-Hybrid	\$4,751.80
Smart	2011	fortwo Electric Drive Vehicle	\$7,500
Tesla	2008, 2009, 2010, 2011	Roadster	\$7,500
	2012, 2013, 2014	Model S Vehicle	\$7,500
Think	2011	City EV (Electric Vehicle)	\$7,500
		Prize Plug-In Electric Drive Vehicle	\$2,500
Toyota	2012, 2013, 2014	RAV4 EV	\$7,500
VIA	2014	2500 Extended Range Electric Passenger Van or Cargo Van	\$7,500
		1500 Extended Range Electric Truck 2WD & 4WD (All body styles)	\$7,500
Whisper	2011	Life Electric Vehicle	\$7,500
Zenith	2014	Electric Van	\$7,500

Additional information available at [www.irs.gov/Businesses/Plug-In-Electric-Vehicle-Credit-\(IRC-30-and-IRC-30D\)](http://www.irs.gov/Businesses/Plug-In-Electric-Vehicle-Credit-(IRC-30-and-IRC-30D))

Source: NCTCOG EVNT Program

[www.dfwcleancities.org/evnt](http://www.dfwcleancities.org/evnt)

Date: 09/18/2014



# Legislative Update

## **HB 735** - filed January 15

- Establishes a program to collect information about the number of alternatively fueled vehicles registered on an annual basis.
- Includes: electric plug-in drives, hybrid electric drives, hybrid electric plug-in drives, flexible fuel, fuel cells, natural gas, propane, or other alternative fuels.
- If passed, will take effect September 1, 2016

## **HB 1184** - filed February 5

- Authorizes “alternative fuel programs resulting in energy cost savings and reduced emissions for local government vehicles, including fleet vehicles” as eligible for local government energy savings performance contracts.
- If passed, will take effect September 1, 2015

# Program Goals

# Contact Information

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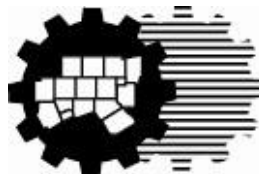
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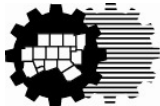


**Other Items?**

# **Clean Fleet Policy Revisions**

**Electric Vehicles North Texas  
February 18, 2015**

**Amy Hodges  
Air Quality Planner  
Air Quality Planning & Operations**



North Central Texas  
Council of Governments



# Clean Fleet Vehicle Policy Background

**Regional Transportation Council Adopted Policy in October 2005 Sections:**

- Acquisition**
- Operations**
- Maintenance**
- Compliance Verification**

**Working Group Developed in October 2013 to Update Policy Goal-Oriented Structure:**

- Reduce Emissions from Fleet Activities**
- Reduce Overall Fuel Consumption, Particularly Use of Conventional Petroleum Fuels**
- Partner with NCTCOG and DFW Clean Cities**
- Ensure Drivers/Operators and Fleet Personnel are Familiar With Air Quality and Petroleum Reduction Goals**

# Fleet Representative Working Group

## Participants

City of Allen

Frito-Lay North America

City of Burleson

HT Bar, Inc.

City of Coppell

City of Richardson

City of Dallas

Southeastern Freight Lines

Dallas Area Rapid Transit

City of Southlake

City of Denton

Tarrant County

DFW International Airport

UT Southwestern Medical Center

City of Fort Worth

City of Wylie

**2013-2014 Meetings in October, November, February, May, June, August and October**

# Major Considerations for Revision

**Remain Relevant/Effective**



**Remove Obsolete  
Emissions References  
Engage Private Sector and  
Non-Road Equipment**

**Capture Comprehensive  
Air Quality Goals**



**Incorporate Volatile  
Organic Compounds**

**Reflect Role as DFW Clean  
Cities Coalition**



**Incorporate Petroleum  
Reduction  
Streamline Annual  
Reporting Requirements**

# New Concepts

## **Implement Separate Idle-Reduction Policy/Standard Operation Procedure (SOP)**

**Goal: Ensure Idle Reduction is Part of Emissions Reduction Strategy**

## **Support Peer Fleets' Efforts by Sharing and Maximizing Resources**

**Goal: Promote Innovative Collaborations**

## **Encourage Activities to Minimize Water, Solid Waste, or Other Environmental Impacts**

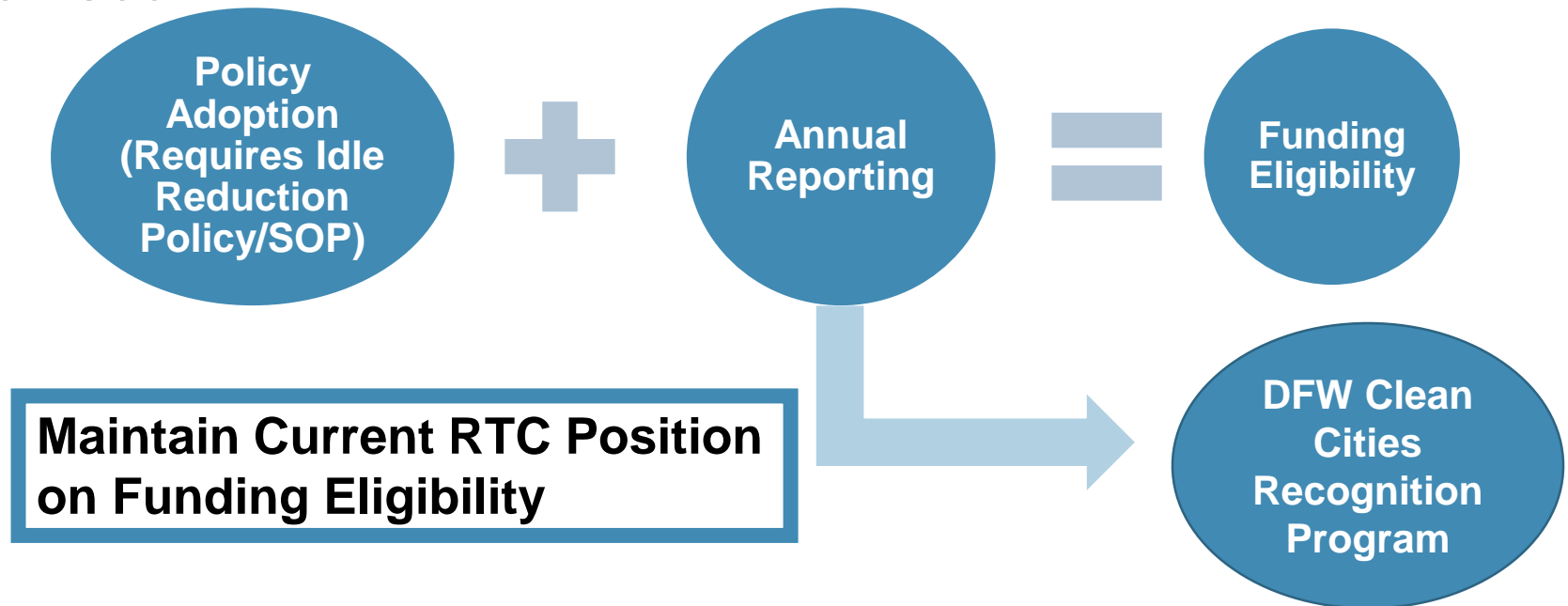
**Goal: Address Indirect Air Quality Impacts and Ensure Air Quality Improvement is Not at Expense of Other Environmental Issues**

# Clean Fleet Policy Implications

## Original



## Revised



# RTC Position on Funding Eligibility

**Policy Adoption and Compliance Required for all Vehicle Funding**

**Adoption and Compliance May be Considered in Other RTC Funding Actions**

**Utilized for Regional Toll Revenue Call for Projects**

# Next Steps

**Continue to Simplify and Improve Reporting Template**

**Coordinate with Department of Energy Staff for Report Streamlining Opportunities**

# Revised Schedule

Task/Milestone	Date
STTC/RTC Information	August/September 2013
DFW Clean Cities Meetings	July 2013 and June 2014
Working Group Meetings	October 2013 – October 2014
STTC/RTC Information	March/May 2014
STTC Information	July 2014
STTC and RTC Information	October/November 2014
Final Clean Fleet Policy	November 2014
STTC/RTC Action	December 2014
Adoption by Regional Fleets	Beginning January 2015



# Regional Fleet Adoptions – Revised Policy

## Re-adoptions

City of Euless

City of Lancaster

City of North Richland Hills

City of Richland Hills

City of Wylie

Lipan ISD

SPAN, Inc.

## New Adoptions

City of Aubrey

City of Krum

City of Springtown

# Contact Information

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**Lori Clark**

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Program Manager

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**Website**

[www.nctcog.org/fleetpolicy](http://www.nctcog.org/fleetpolicy)



## DFW Clean Cities Annual Survey

February 18, 2015

**Kenny Bergstrom**

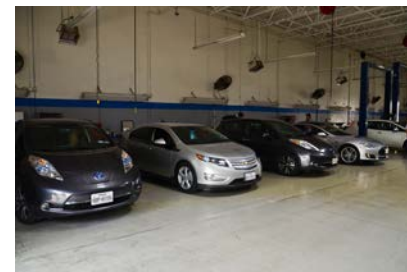
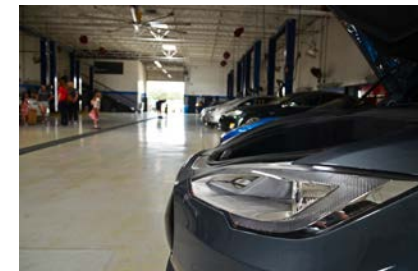
DFW Clean Cities Staff

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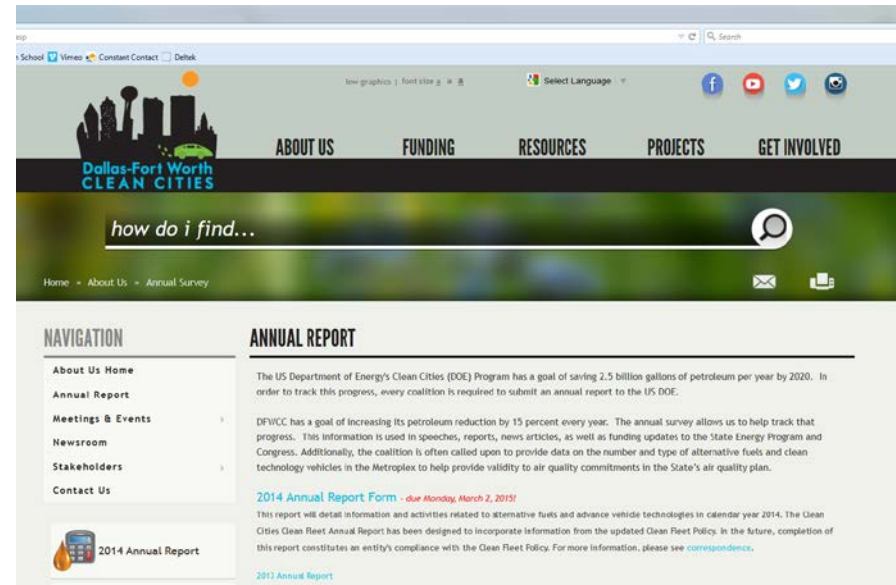
# DFW Clean Cities Committee Overview



- Cover the 16 County North Central Texas Region
- Fuel specific committee structure covering different fuel types
- Electric vehicle committee provides key feedback on real world trends and ideas to expand adoption of EVs in North Texas
- EV committee crucial to understanding ownership experience, concerns with vehicles and/or recharging, and utilizing available incentives.
- All EV committee stakeholders will be DFW CC stakeholders
- Membership is free



- Collected every year and sent to the Department of Energy (DOE)
- DOE goal to save 2.5 billion gallons of petroleum per year by 2020
- DFWCC goal to increase petroleum reduction by 15 percent every year
- Combined with Clean Fleet Policy



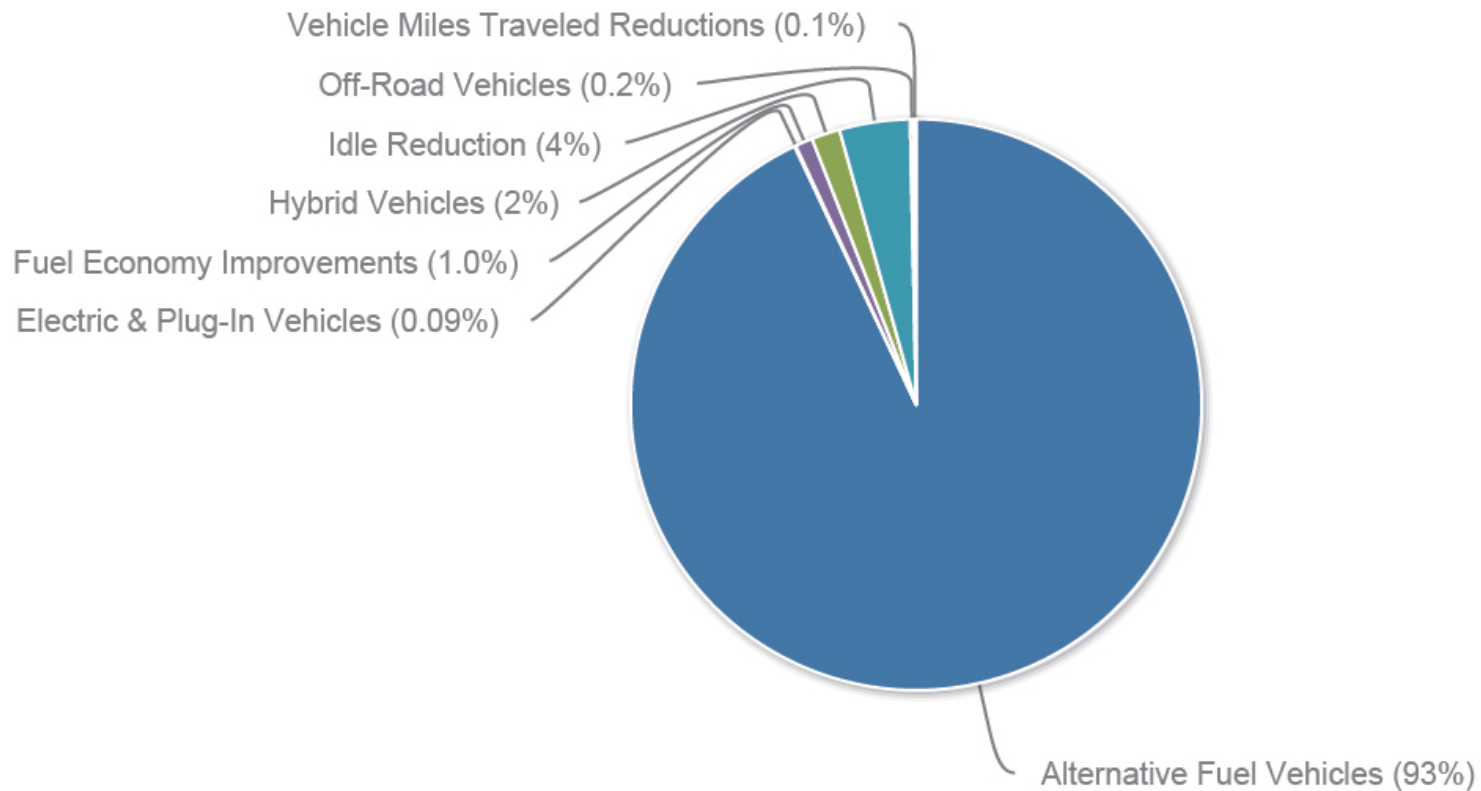
[www.dfwcleancities.org/annualreport](http://www.dfwcleancities.org/annualreport)



## Over 17 Million GGE Reduced

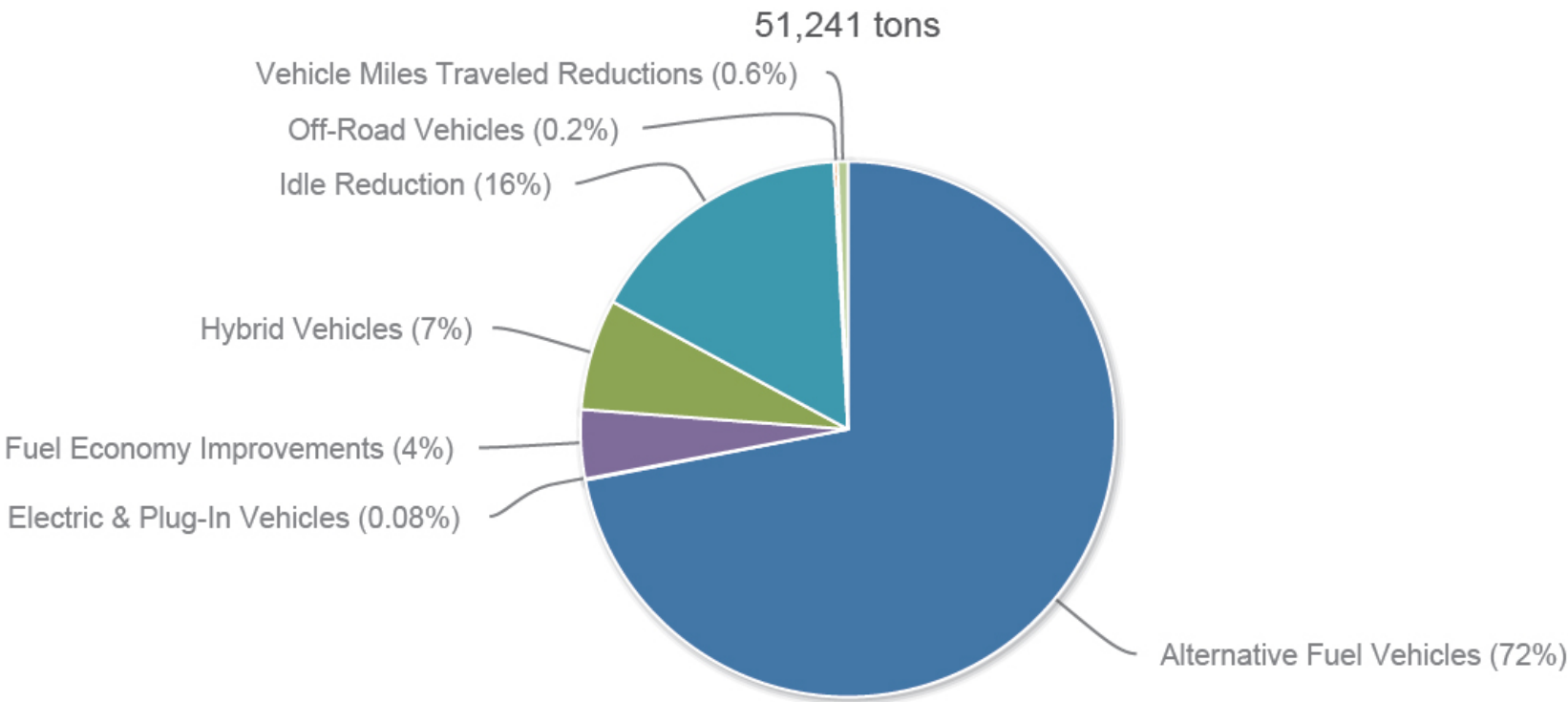
### 2013 Gallons of Gasoline Equivalent Reduced

17,377,293 gallons



## Over 50,000 Tons GHG Emissions Reduced

**2013 Greenhouse Gas Emissions Reduced**



**Pamela Burns**  
**Communications Supervisor**  
**DFW Clean Cities Coordinator**  
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DFW Clean Cities Website  
[www.dfwcleancities.org](http://www.dfwcleancities.org)

NCTCOG Funding Website  
[www.nctcog.org/aqfunding](http://www.nctcog.org/aqfunding)

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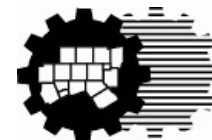


**Dallas-Fort Worth**  
**CLEAN CITIES**



# EPA OZONE STANDARD UPDATE

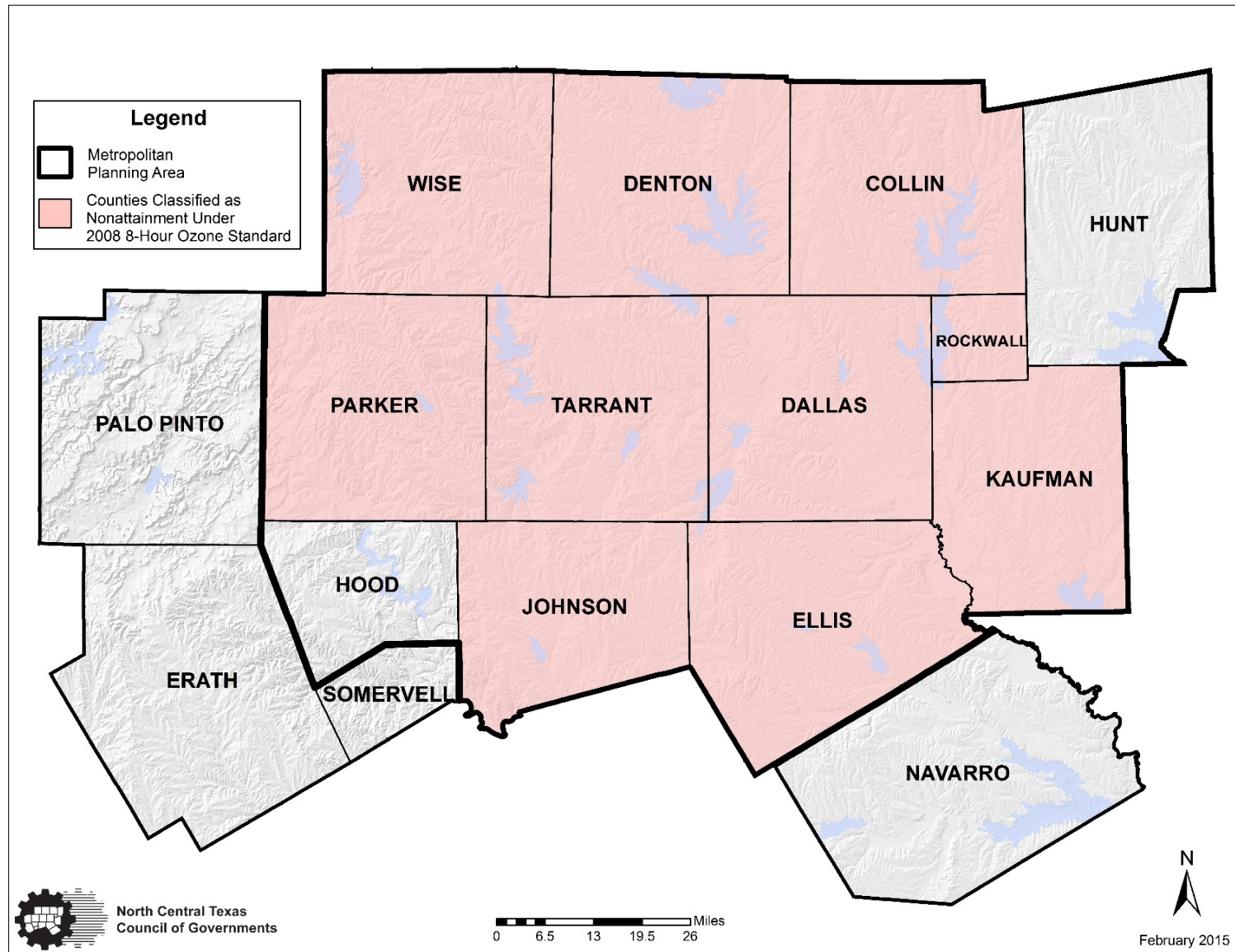
**Jody Loza, Air Quality Planner  
Electric Vehicles North Texas  
February 18, 2015**



**North Central Texas  
Council of Governments**

# 10-County Nonattainment Area

## 2008 Eight-Hour Ozone Standard



# 2008 EIGHT-HOUR OZONE STANDARD

## Timeline

July 20, 2012	Dallas-Fort Worth Nonattainment Area Designated as “Moderate” Nonattainment
November 21, 2014	SIP Package Filed with the TCEQ Chief Clerk’s Office
December 10, 2014	TCEQ Commissioners' Proposal Agenda
December 26, 2014 thru January 30, 2015	Public Comment Period and Public Hearings
February 13, 2015	EPA Signed Final Rule - <i>Implementation of the 2008 National Ambient Air Quality Standards for Ozone: State Implementation Plan (SIP) Requirements</i>
July 20, 2015	SIP Package Due to EPA
July 20, 2018	Attainment Date

# EIGHT-HOUR OZONE STANDARD

## Proposed Revision

**Clean Air Act Requires EPA to Periodically Review all NAAQS**

**EPA Policy Assessment – Recommend Lowering Ozone NAAQS from  $\leq 75$  ppb to Between 60 to 70 ppb**

**November 26, 2014 – Proposed Rule Released by EPA<sup>1</sup>**

**65 – 70 ppb to Protect Public Health and Environment**

**EPA Accepting Comments on  $\leq 60$  ppb**

**Ozone Season Extended to March – November<sup>2</sup>**

**New EPA Air Quality Index to be Developed Based on New Standard**

**December 17, 2014 – Proposed Rule Published in the *Federal Register*<sup>3</sup>**

**90-day Public Comment Period (Closes March 17, 2015)**

**Additional Counties Added to Nonattainment Area Under Revised Standard**

<sup>1</sup><http://www.epa.gov/glo/actions.html#nov2014>

<sup>2</sup>January – December for South Texas

<sup>3</sup><http://www.gpo.gov/fdsys/pkg/FR-2014-12-17/pdf/2014-28674.pdf>

# EIGHT-HOUR OZONE STANDARD

## Revision Timeline

By October 1, 2015

Final Rule

December 1, 2015

Effective Date for Revised Standard<sup>1</sup>

By October 1, 2016

States to Submit Nonattainment Designation Recommendations<sup>2</sup>

By October 1, 2017

EPA Nonattainment Area Designations<sup>3</sup>

2020 – 2037

Potential Attainment Dates for Revised Standard, Based on Region's Classification

60?

65?

70?

<sup>1</sup>Approximate - Effective date is 60 days after publication of Final Rule in the *Federal Register*.

<sup>2</sup>States have one year from "Final Rule" to recommend areas to be designated as nonattainment under the revised 8-hour ozone standard.

<sup>3</sup>EPA has two years from "Final Rule" to designate areas as nonattainment under the revised 8-hour ozone standard.

# EPA OZONE STANDARD UPDATE

## For Further Information

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