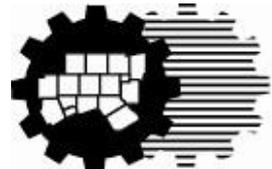




Pursuing Regional Transformations: NCTCOG Initiatives on Electric Vehicles and Solar Energy

**Humanists of Fort Worth
September 10, 2014**

Lori Clark, Principal Air Quality Planner



North Central Texas
Council of Governments





WHO AND WHAT IS NCTCOG?

**Voluntary Association of, by, and for Local Governments
Established in 1966**

16-County Region Centered around Dallas-Fort Worth (DFW)

240 Member Governments (Cities, Counties, Special Districts)

Goals Include Planning for Common Needs, Cooperating for Mutual Benefit, and Coordinating for Sound Regional Development

Metropolitan Planning Organization Designation

12-County Metropolitan Planning Area

10-County Ozone Nonattainment Area

Responsibilities Include Reducing Congestion, Enhancing Mobility, and Improving Air Quality

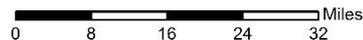
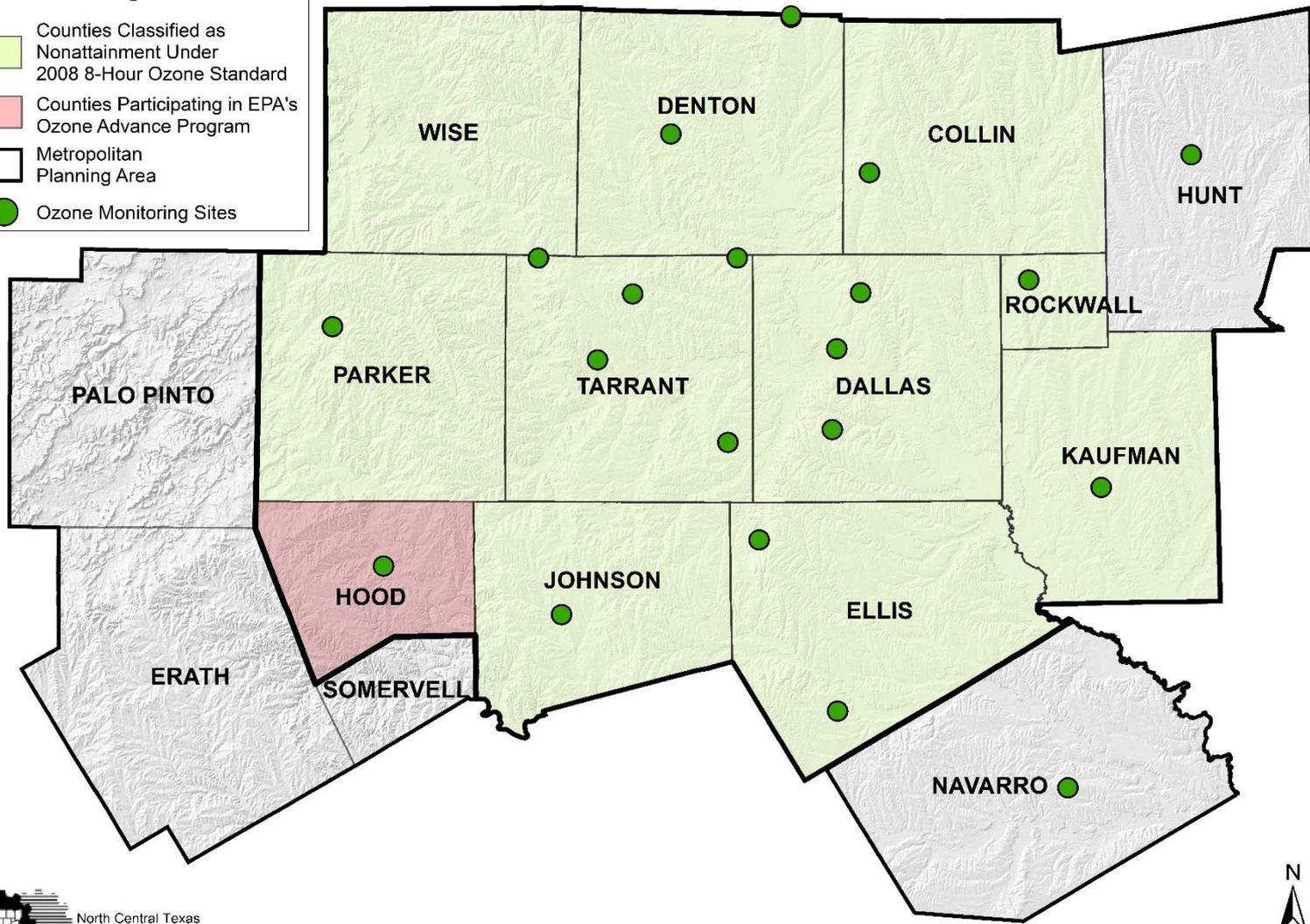
DFW Clean Cities Coalition

Mission Includes Reducing Petroleum Consumption

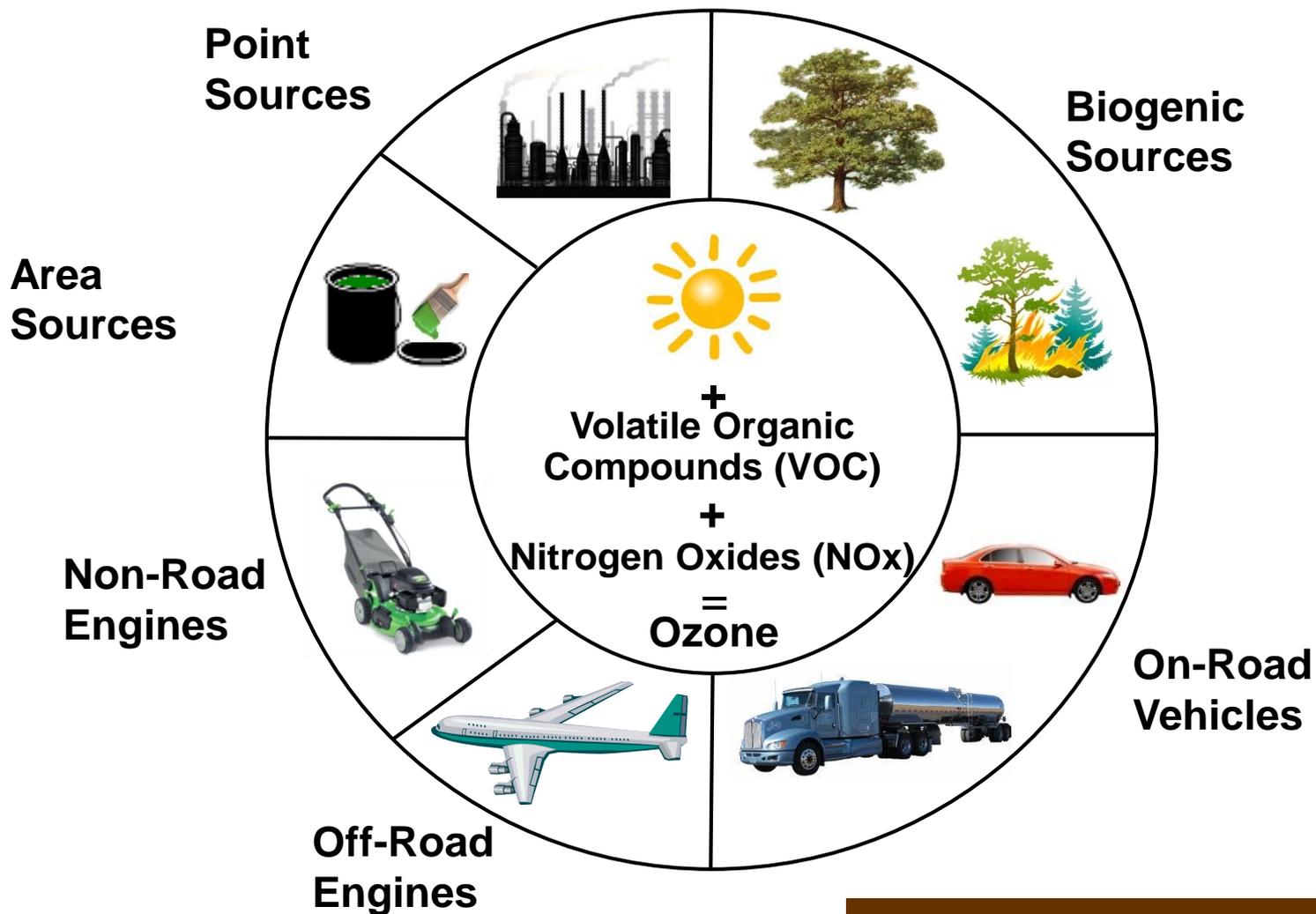
NCTCOG PLANNING AREA

Legend

- Counties Classified as Nonattainment Under 2008 8-Hour Ozone Standard
- Counties Participating in EPA's Ozone Advance Program
- Metropolitan Planning Area
- Ozone Monitoring Sites



OZONE FORMATION

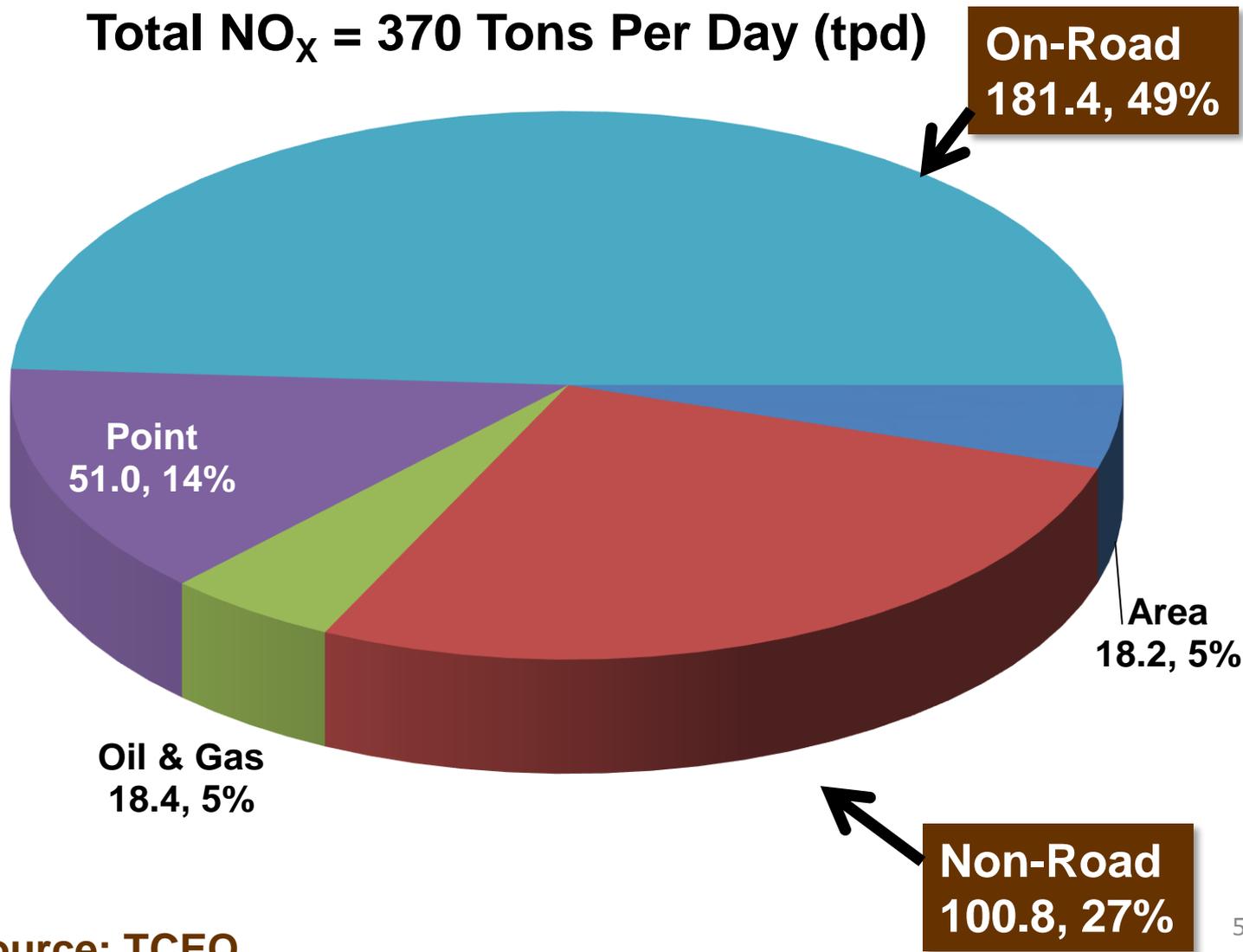


**Ozone: Good Up High,
Bad Nearby**

Optimum conditions for the formation of ozone include high temperatures and low winds.

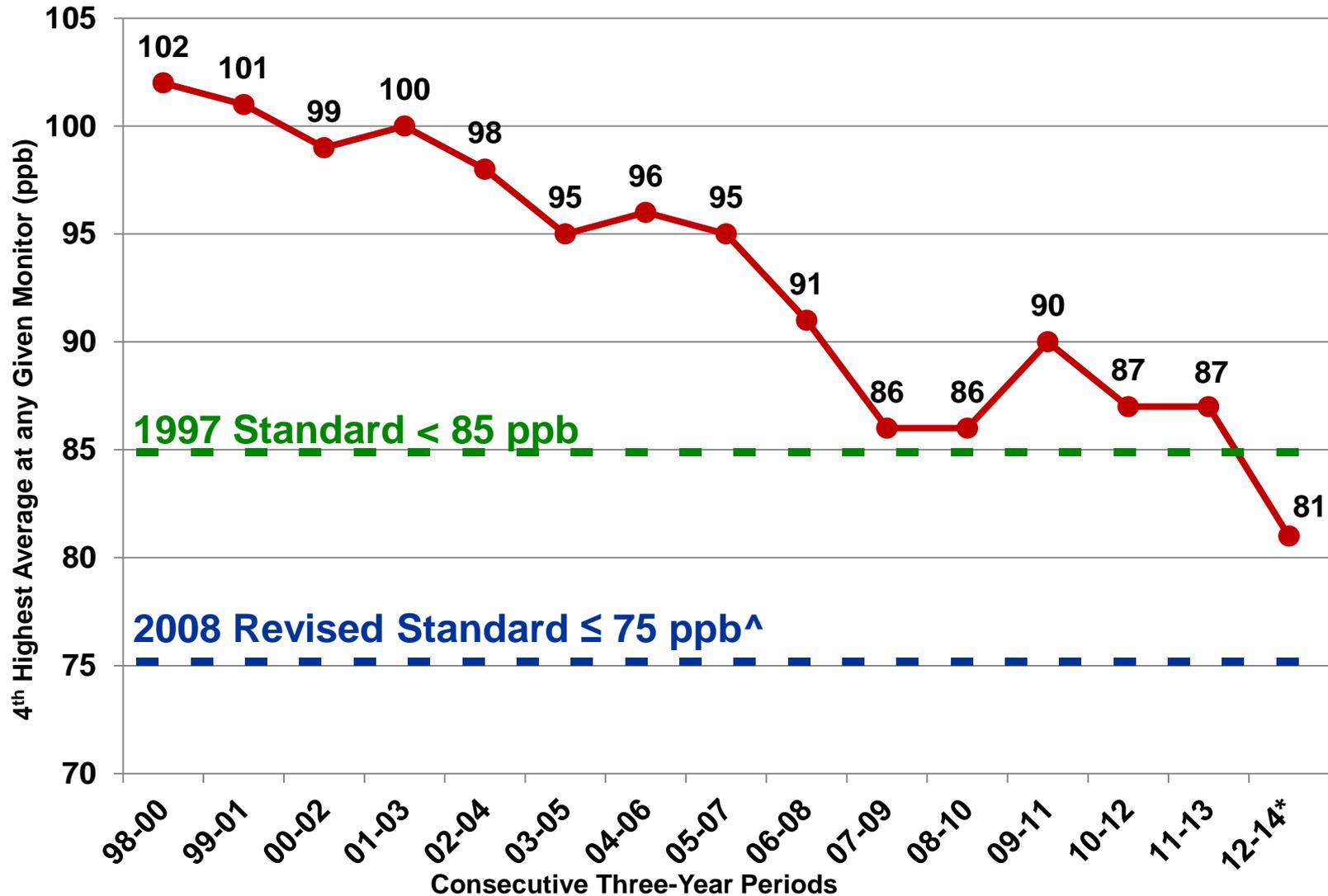
DFW NONATTAINMENT AREA 2012 NO_x EMISSIONS INVENTORY*

Total NO_x = 370 Tons Per Day (tpd)



*Source: TCEQ

8-HOUR OZONE STANDARD TRENDS



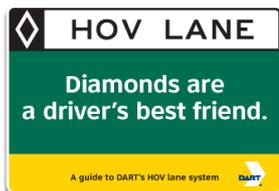
^Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is equal to or less than 75 parts per billion (ppb).

*Not a full year of data, current as of 9/1/2014

Note: The 2009-2013 data has been certified by TCEQ, and is currently undergoing review by the EPA for concurrence.

Source: NCTCOG TR Dept

EXAMPLES OF CURRENT CONTROL STRATEGIES



tryparkingit.com



GET INVOLVED

Attend an Air Quality Technical Committee Meeting

www.nctcog.org/trans/air/sip

Sign up for Air Pollution Action Day Alerts

Join the Air North Texas Campaign

www.nctcog.org/airnorthtexas

ELECTRIC VEHICLES NORTH TEXAS (EVNT)



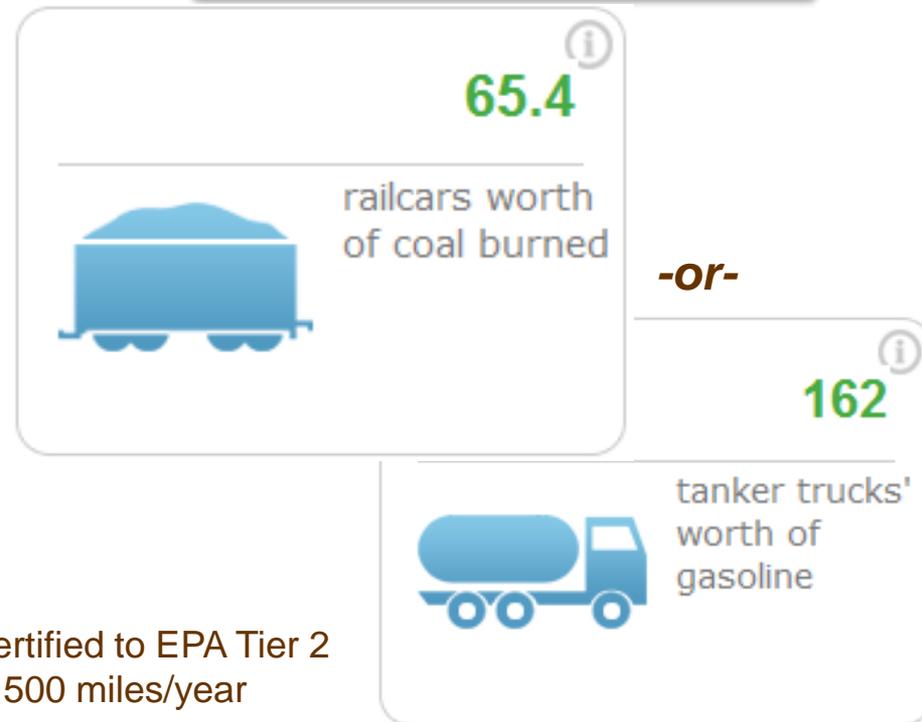
Dallas-Fort Worth
CLEAN CITIES

www.dfwcleancities.org/evnt

EV EMISSIONS BENEFITS

DFW EV Registration Emissions Impacts* Tons per Year	
NO _x	2.24
VOCs	0.57
CO ₂	13,452.22
PM	0.27
CO	137.81

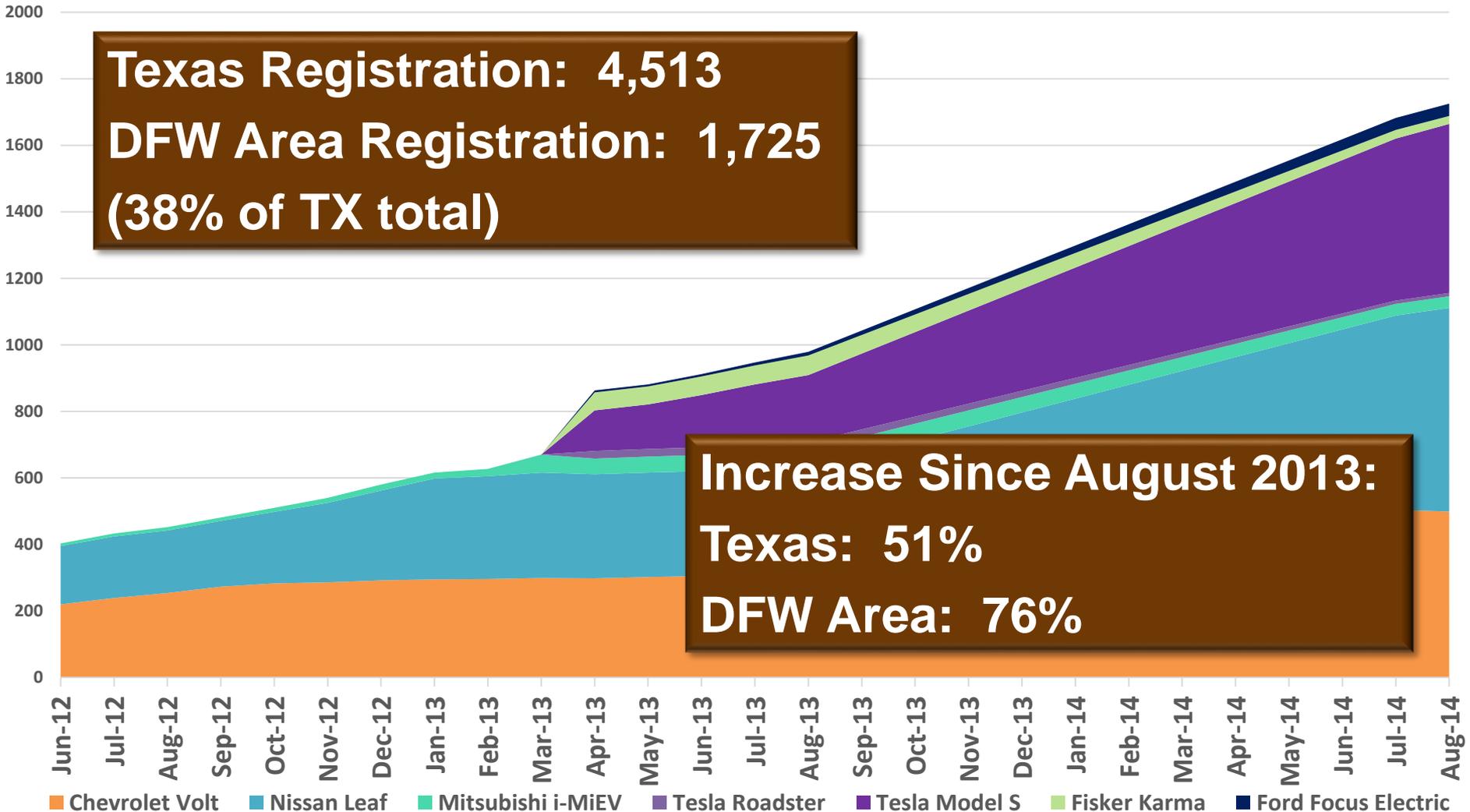
CO₂ Emissions
Reductions Equal
to**:



*Assuming each EV replaces a vehicle certified to EPA Tier 2 Bin 5 emissions standards that drives 19,500 miles/year

**Based upon the EPA Greenhouse Gas Equivalencies Calculator

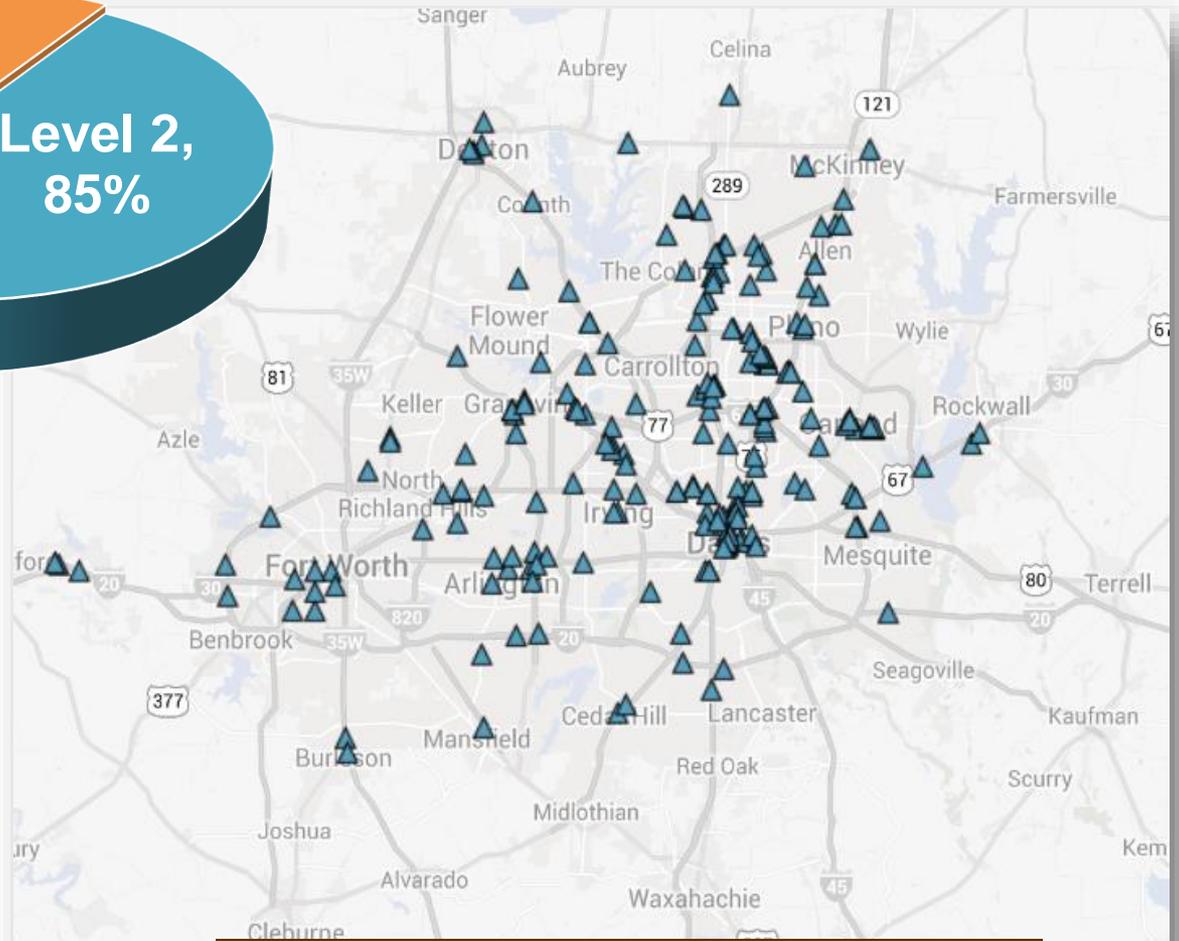
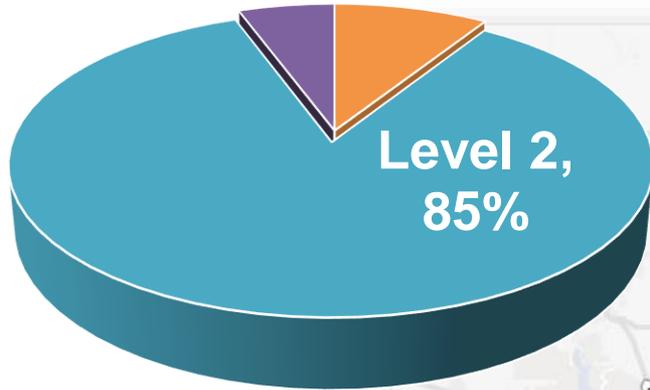
REGISTRATION BY EV MODEL IN NORTH TEXAS*



*As of August 2014; NCTCOG staff plans to include additional models including: BMW i3 & i8, Cadillac ELR, Chevrolet Spark, Fiat 500e, Ford C-Max Energi & Fusion Energi, Honda Accord Plug-In & Fit EV, Toyota Plug In Prius & RAV4 EV

PUBLIC CHARGING INFRASTRUCTURE

Level 3, 6% Level 1, 9%



248 Locations, 588 Ports*

Source: NCTCOG
*Data as of August 11, 2014

GET INVOLVED

Attend National Drive Electric Week

- September 15-21
- Participating Dealerships
- North Texas Electric Auto Association
- #texasEV
- www.dfwcleancities.org/ndew

Attend Quarterly EVNT Meetings

- www.dfwcleancities.org/evnt

Evaluate EVs for You!

- Find Available EV Makes/Models
- Use Petroleum Reduction Planning Tool
- Find Stations with Station Locator
- www.afdc.energy.gov/tools



**U.S. DEPARTMENT OF ENERGY (DOE)
SUNSHOT INITIATIVE ROOFTOP
SOLAR CHALLENGE**



www.nctcog.org/solar



DFW SOLAR READY II PROJECT

Funded Under the U.S. DOE SunShot Initiative Rooftop Solar Challenge

Seeks to Reduce “Soft Costs” of Solar Energy to Clear Path for Rapid Expansion of Solar Energy

Streamline Permit Processes

Update Planning and Zoning Codes

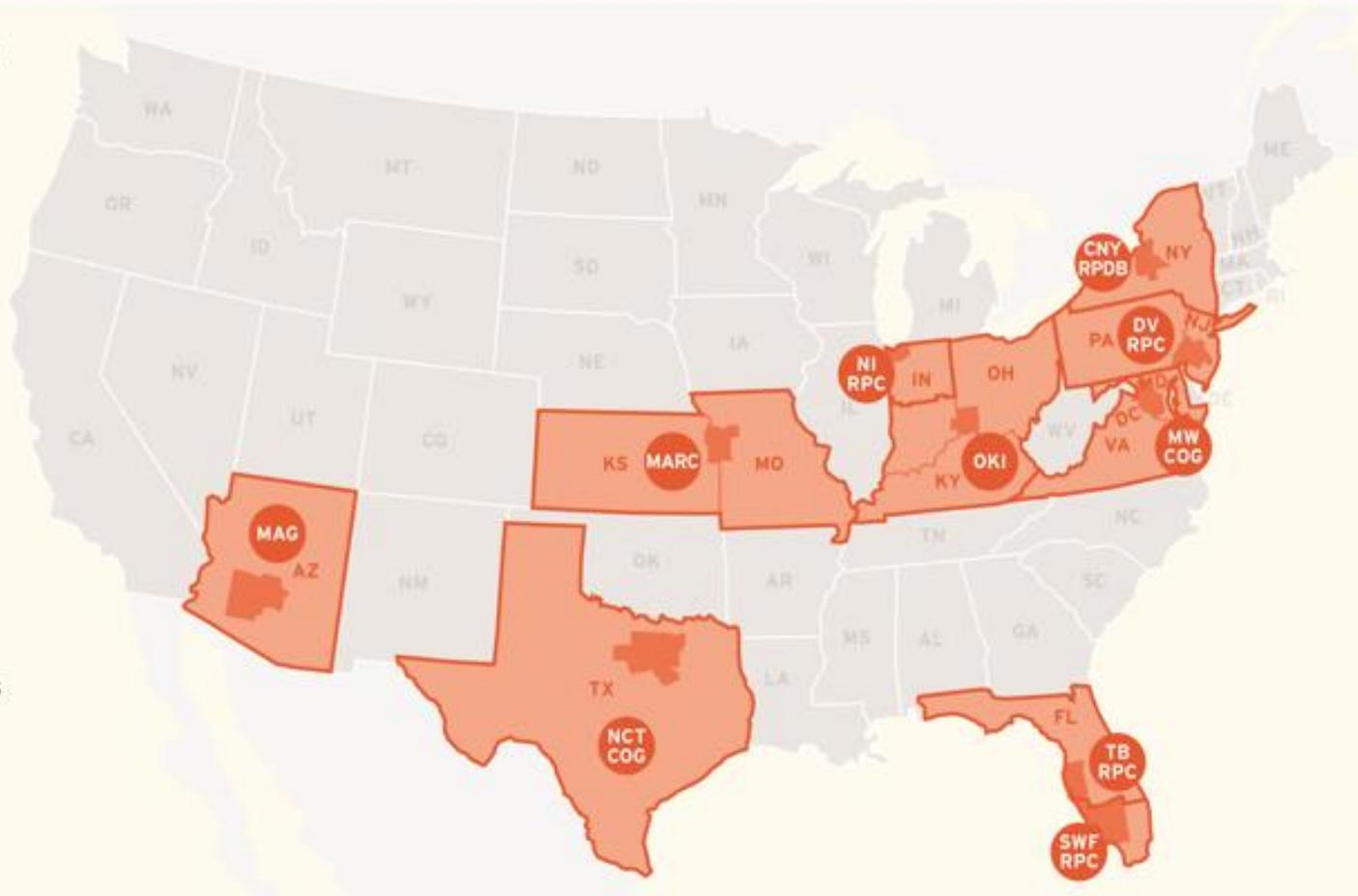
Improve Standards for Grid-Connection

Increase Access to Financing

Leverage Best Management Practices (BMPs) Identified by Mid-America Regional Council Solar Ready I Project

SOLAR READY II REGIONAL PARTNERS

- CNY RPDB** Central New York Regional Planning and Development Board
- DV RPC** Delaware Valley Regional Planning Commission
- MAG** Maricopa Association of Governments
- MW COG** Metropolitan Washington Council of Governments
- MARC** Mid-America Regional Council
- NCT COG** North Central Texas Council of Governments
- NI RPC** Northwestern Indiana Regional Planning Commission
- OKI** Ohio-Kentucky-Indiana Regional Council of Governments
- SWF RPC** Southwest Florida Regional Planning Council
- TB RPC** Tampa Bay Regional Planning Council



PARTICIPATING LOCAL GOVERNMENTS

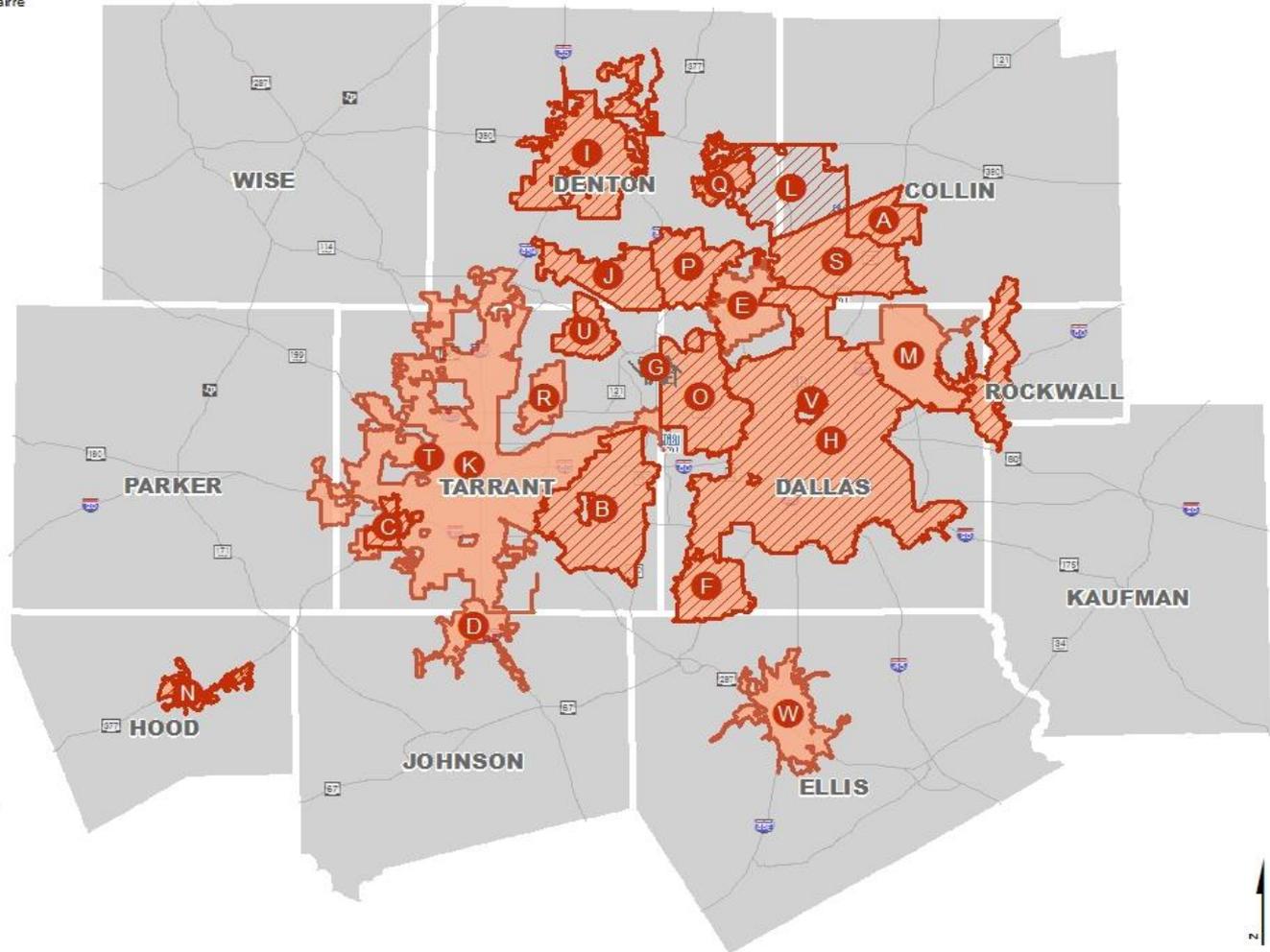
Legend

-  Submitted BMP
-  Submitted Questionnaire

CITY

- A** Allen
- B** Arlington
- C** Benbrook
- D** Burleson
- E** Carrollton
- F** Cedar Hill
- G** DFWIA
- H** Dallas
- I** Denton
- J** Flower Mound
- K** Fort Worth
- L** Frisco
- M** Garland
- N** Granbury
- O** Irving
- P** Lewisville
- Q** Little Elm
- R** North Richland Hills
- S** Plano
- T** River Oaks
- U** Southlake
- V** University Park
- W** Waxahachie

Solar Ready II Project Participants



North Central Texas
Council of Governments

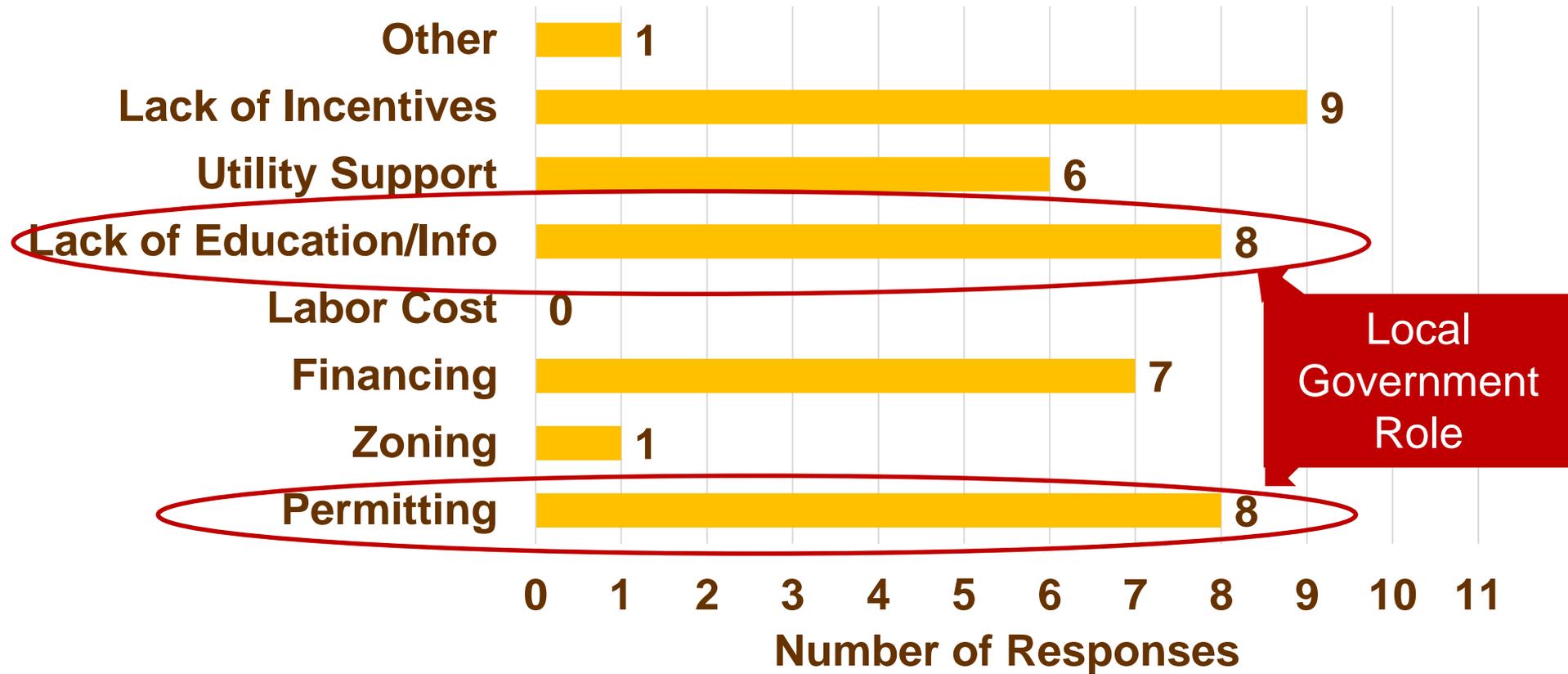
0 5 10 20 Miles

Current as of August 8, 2014

LOCAL “SOFT COST” BARRIERS

Survey of Dallas-Fort Worth Area Installers:

Which soft cost areas create the most difficult barriers?



PROCESS IMPROVEMENTS: TOP BMP CHOICES

Streamline Permits

- Develop Criteria for Expedited Process
- Create a Permit Checklist
- Provide a Central Information Source

Standardize Permit Fees

- Fixed Fees for Residential Permits
- Calculator for Commercial Permits

Pre-Qualify Plans and Installers

- Pre-qualify Installers
- Pre-qualify Electrical Plans

Permitting
and
Education
Barriers

GET INVOLVED

Attend a Solar Ready II Meeting

- Anticipated October 2014
- www.nctcog.org/solar

Participate in DFW Solar Tour

- October 4, 2014, 10 am – 4 pm
- www.dfwsolartour.org

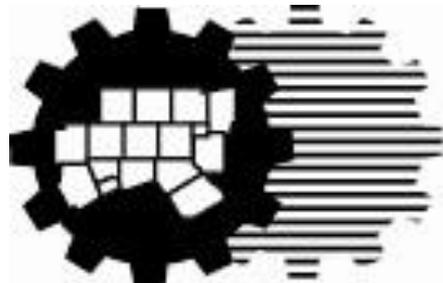
Start a Local Solarize Effort

- Group Purchase for Discounted Solar



CONTACT INFORMATION

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lclark@nctcog.org



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Council of Governments**