

North Central Texas Council of Governments

RENEWABLE ENERGY, WASTE REDUCTION CLIMATE INSTABILITY, & CLEAN FLEETS

PLANNING AND ZONING COMMISSION INFORMATION
FOR THE CITY OF PLANO COMPREHENSIVE PLAN ELEMENTS
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Overview

Presentation Topics

Renewable Energy
Waste Minimization
Climate Instability
Clean Fleets

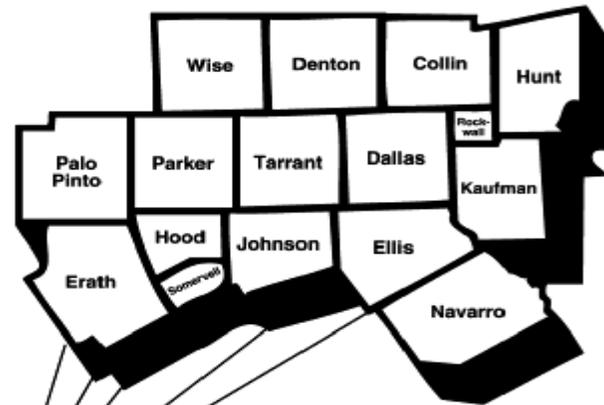
237 Member Governments

16 Counties

169 Cities

21 School Districts

31 Special Districts



North Central Texas Region

>6.5 Million People
in 2014

Regional Issues

Energy Security

Grid Reliability

Petroleum Dependence

Air Quality

Ozone Nonattainment

Changing Standards

Limited Resources

Landfill Capacity

Congestion

Changing Climate

Adaptation Measures

Renewable Energy - Regional Programs

Solar Ready II

Identify Solar Barriers

Promote Local Implementation of Best Management Practices

Local Success Stories

Irving – W. Irving Library, Street Lights

McKinney – Fire Station

Keller ISD – Carports

Plano – Solarize Plano

www.nctcog.org/solar

Renewable Energy – Local Examples



Irving – West Library



Keller ISD



McKinney



Irving – Street Lights

Renewable Energy - Regional Programs

Evolving Comprehensive Network

Develop & Deploy Strategies

Set Goals

Measure & Track Progress

Quantify Results

Educate & Promote

Fund Projects

www.nctcog.org/energy



Energy
Systems
Laboratory



Renewable Energy – Local Examples

City of Benbrook Alternative Energy Systems Ordinance

Town of Addison Wind-Powered Water Tower

EPA Green Power Partnership

Voluntary Program to Purchase Green Power

**Requirement Proportional to Annual Use - Ranges from
3% to 20%**

Eligible Renewable Resources

Local/Municipal Government Partners

- Austin
- Dallas
- Denton
- DFW International Airport
- Houston
- Tarrant Regional Water District
- Universal City



www.epa.gov/greenpower



Waste Reduction - Regional Programs

Solid Waste

Topics include: Recycling and waste minimization, stopping illegal dumping, and assuring adequate landfill capacity

2-year grant implementation projects

Regional Solid Waste Management Plan for North Central Texas

2013 Dallas Local Solid Waste Management Plan

Diversion goals 40% by 2020, 60% by 2030, “zero” ~80 by 2040

2007 & 2011 Regional Recycling Rate studies

www.nctcog.org/envir/SEELT/The_Program.asp

www.nctcog.org/envir/SEELT/funding/index.asp

Climate Instability - Regional Programs

Public Works Emergency Response Team

Mutual Aid Agreements for voluntary local response to tornado damage, high winds, winter storm, flooding, earthquake, or other

www.nctcog.org/ep/Special_Projects/PWERT/Index.asp

Public Works Council

2013 Ice Storm Reflection Meeting

www.nctcog.org/envir/committees/pwc/PWC_Summary_01282014.pdf

Climate Instability - Regional Programs

Multi-Jurisdictional Hazard Mitigation Action Plans

Local planning for reduction of natural risks to meet the planning standards of the Federal Emergency Management Agency



**Dam/Levee
Failure**

Expansive Soils

Landslides

Erosion

Wildfire

Drought

Extreme Heat

Flood

Hailstorms

High Winds

Lightning

Thunderstorms

Wind storms

Tornadoes

www.nctcog.org/envir/SEEsafe/hazmap/index.asp

Climate Instability - Regional Programs

Collaborative Adaptive Sensing of Atmosphere (CASA)

Radars that make high resolution observations at low altitudes on a scale that benefits public safety and commerce.

www.nctcog.org/ep/Special_Projects/CASAWX/Index.asp



Climate Instability - Regional Programs

National Flood Insurance Program Certification Training

Annual training for flood insurance issues & CFM certification

Cooperative Technical Partnerships (FEMA & TWDB)

2002 Map Modernization; 2009 Upper Trinity River Basin Mapping Needs Assessment; 2013 Discovery for Lower West and Elm Forks of the Trinity; 2014 flood risk study in Village Creek

COMMON Vision

Flooding along the Trinity River Corridor (CDC permits) – Interlocal Agreements with 9 local communities, 3 counties, 2 districts

Region C Water Planning/Water Resources Council

Water resource planning/water conservation

www.nctcog.org/envir/committees/wrc/fy2009/Water_Conservation.asp

Climate Instability - Regional Programs

Climate Change/Extreme Weather Vulnerability Assessment

Federal Highway Administration Pilot Study

NCTCOG and Regional Partners

City of Dallas

Fort Worth Transportation Authority

**University of Texas at Arlington (through Sustainable and Resilient
Civil Infrastructure (SARCI) Center of Excellence**

Goals

Identify Key Climate/Weather Event Impact Thresholds

**Determine Risks to Critical Transportation Infrastructure for Range of
Scenarios**

**Highlight Vulnerable Facilities to Factor into Project Prioritization
Process**

Clean Fleets - Regional Programs

Clean Fleet Vehicle Policy

Local Adoption Supported by Regional Transportation Council

Adoption Incorporated into Funding Programs

Framework Established for Low-Emitting Fleet Practices

Updates will Address Broader Goals

Multi-Pollutant Emissions

Petroleum Reduction

Non-Road Equipment and Private Sector Fleets

Innovative Partnerships Between Fleets

Streamlined Reporting Integrated with Recognition Program

www.nctcog.org/fleetpolicy

Clean Fleets - Regional Programs

DFW Clean Cities Coalition

Department of Energy Initiative

Improve Air Quality

Advance Energy Security Goals

Create Local Energy-Related Jobs

Support for Local Fleets' Efforts

Primary Goal: Petroleum Reduction

Alternative and Renewable Fuels

Idle Reduction Measures

Fuel Economy Improvements

New Transportation Technologies, As They Emerge



Dallas-Fort Worth
CLEAN CITIES

Alternative Fuels - Local Examples

Fleet Efforts: Built Refueling Facilities

Dallas: CNG, EVs, Hybrids

Denton: CNG, EVs, Ethanol, Biodiesel, Hybrids

Fort Worth: EVs, Hybrids, Propane

Plano: Hybrids, Propane

Southlake: Ethanol, Biodiesel, Hybrids

Fleet Efforts: Partnership Approaches

Dallas: Public Access CNG

Denton County Transportation Authority: Denton

Fort Worth: Innovative Contract Approach for CNG?

Irving: Public Access CNG



Clean Fleets – Local Opportunities

Alternative Fuels Data Center Refueling Station Locator

Within 5 Miles:

11 Electric

1 Propane

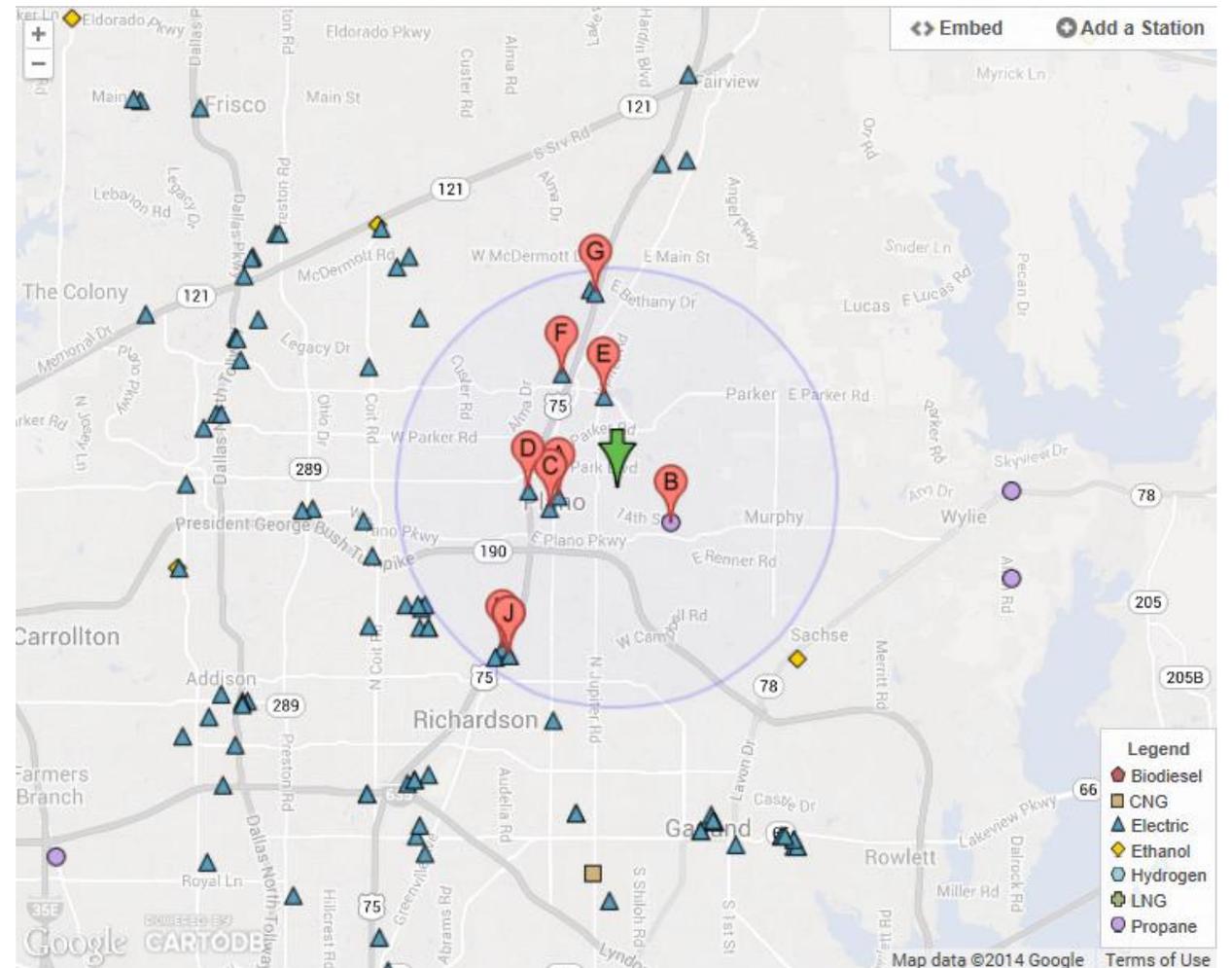
Within 10 Miles:

1 CNG

78 Electric

2 Ethanol

3 Propane



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