

# S.A.M.E. 22<sup>ND</sup> ANNUAL INFRASTRUCTURE FORUM: INFRASTRUCTURE: DELIVERING OUR FRAMEWORK FOR THE FUTURE Edith Marvin, P.E. – December 2, 2022 at UT Arlington

## What is NCTCOG? (North Central Texas Council of Governments)

Voluntary association of member governments

Established in 1966 to assist member governments in:

- Planning for common needs
- Cooperating for mutual benefit
- Strengthen their individual and collective power
- Coordinating for sound regional development

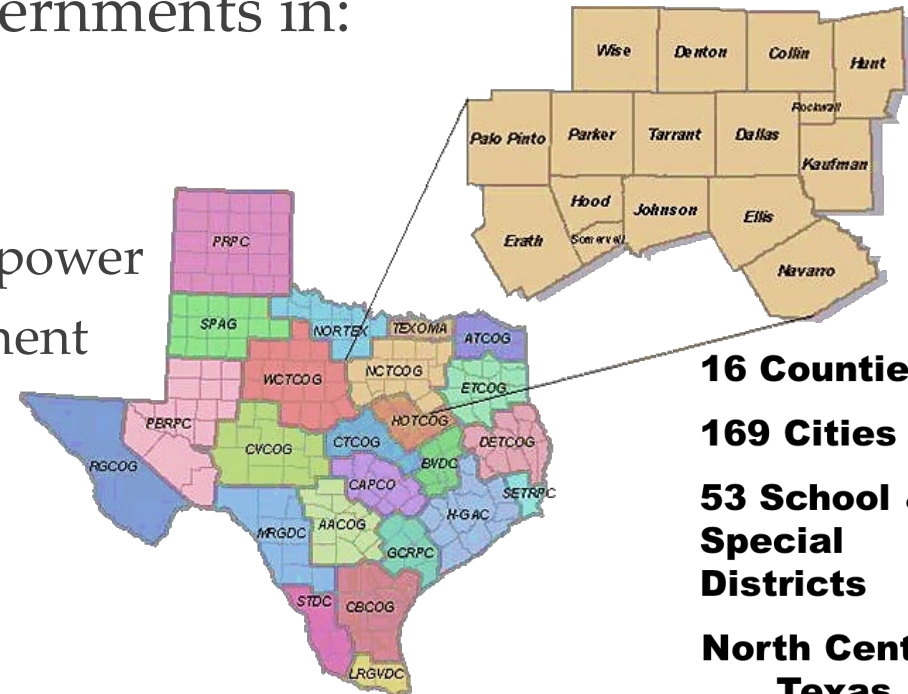
One of 24 COGs in Texas

A political subdivision of the state – non taxing entity

Governed by 18-member Executive Board

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

2022 Population of  
over 8 Million –  
4<sup>th</sup> largest metro  
area in the U.S.

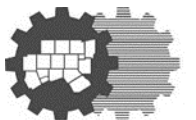


**16 Counties**

**169 Cities**

**53 School &  
Special  
Districts**

**North Central  
Texas**



**North Central Texas Council of Governments Environment & Development**

**Legend**

- Primary Highway
- Secondary Highway
- Access Ramp
- Major Arterial
- Texas Lakes
- Counties
- Airports
- Region Boundary

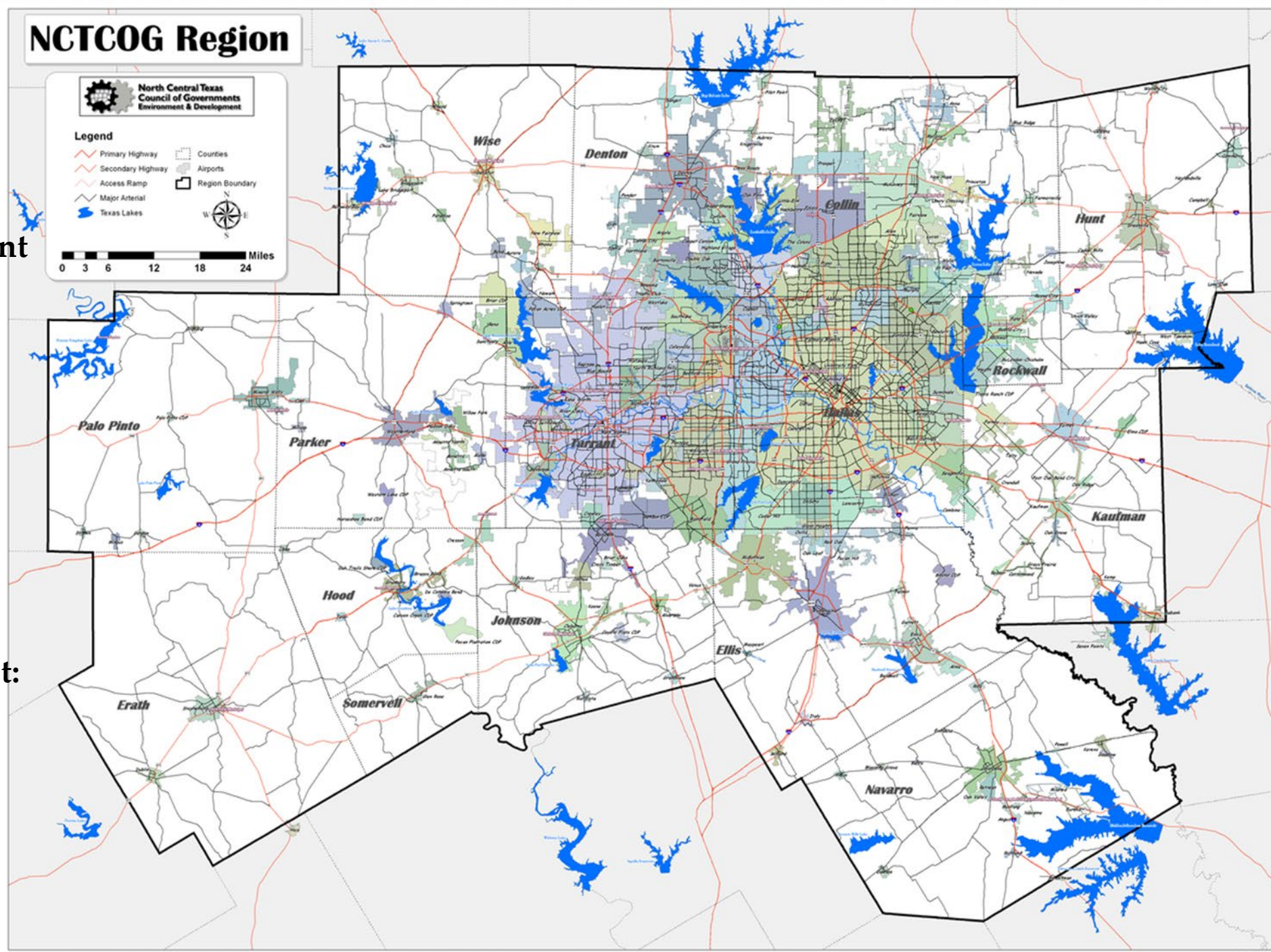
0 3 6 12 18 24 Miles

- **Environment & Development**
- **Transportation**
- **Emergency Preparedness**
- **NCT 9-1-1**
- **Workforce Development**
- **Aging Services**
- **Regional Data**
- **Economic Development**
- **Public Safety**

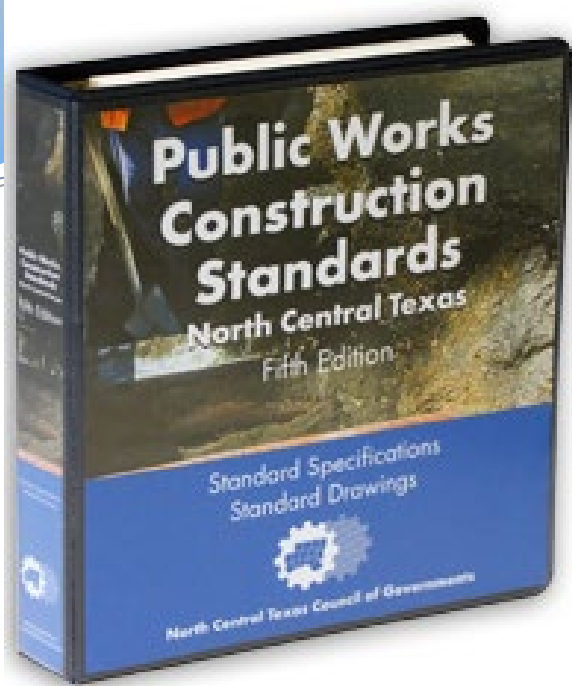
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1. **Materials Management**
2. **Natural Resources**
3. **Public Works**
4. **Regional Codes**
5. **Watershed Management**
6. **Development Excellence**

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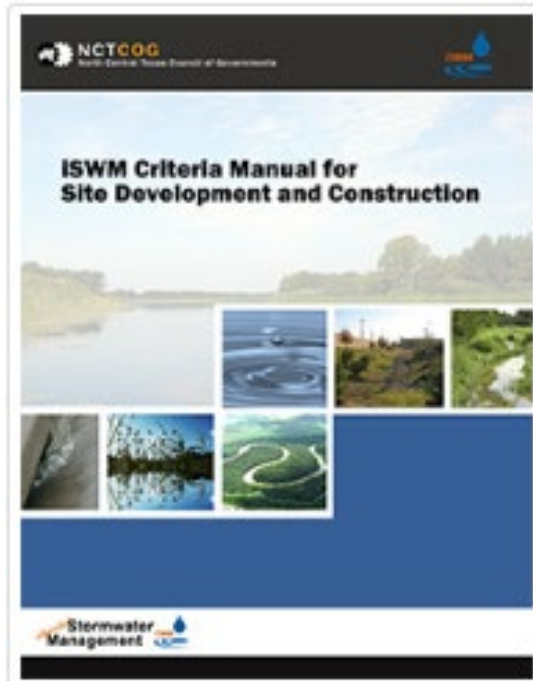




## Highlights for this year's theme: Infrastructure: Delivering Our Framework for the Future:



- 1) **Public Works Manual Updates:**
  - a) **Public Works Construction Standards – Standard Drawings**  
Divisions 1000-6000 for Erosion and Sediment Control, Pavement Systems, General Underground Conduit, Water Distribution, Wastewater Collection, and Stormwater Drainage
  - b) **Sustainable Public Rights of Way (SPROW) Guidebook – Best Practices Chapters for Landscape Planning and Vegetation Maintenance; Utilities, Complete Streets; Green Infrastructure and Low Impact Development; ROW Planning, Administration, and Policy**
  - c) **integrated Stormwater Management (iSWM) – Updates to the Criteria Manual and Technical Manual**



# CORRIDOR DEVELOPMENT CERTIFICATE MANUAL

TRINITY RIVER CORRIDOR – NORTH CENTRAL TEXAS



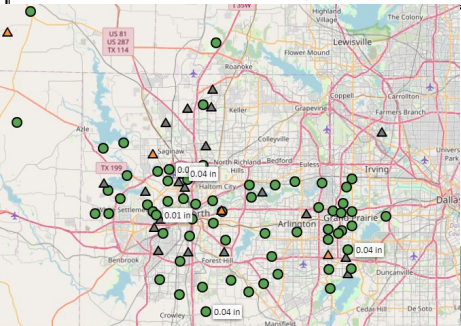
JOINTLY PREPARED BY:

CITIES:  
ARLINGTON, CARROLLTON, COPPELL, DALLAS, FARMERS BRANCH, FORT WORTH,  
GRAND PRAIRIE, IRVING, LEWISVILLE

COUNTIES:  
DALLAS, TARRANT

SPECIAL DISTRICTS:  
FEDERAL EMERGENCY MANAGEMENT AGENCY – REGION VI,  
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, TARRANT REGIONAL WATER  
DISTRICT, TRINITY RIVER AUTHORITY OF TEXAS, UNITED STATES ARMY CORPS OF  
ENGINEERS - FORT WORTH DISTRICT

FOURTH EDITION  
July 2009  
Amended October 2020



TRINITY RIVER  
Corridor Development Certificate

The goal of the Corridor Development Certificate (CDC) process is the stabilization of flood risk along the Trinity River. The CDC program originated in 1991 as part of the awareness in the 1980s that commercial and residential development in the Trinity River corridor, individually or cumulatively, were considered to have the potential to compromise existing flood control protection afforded to floodplain residents, and to impact wetlands and other natural resources. The CDC does not prohibit floodplain development, but ensures that any development that does occur in the floodplain will not adversely raise flood water levels or significantly reduce flood storage capacity.

The CDC process allows local governments to retain ultimate control over floodplain permitting decisions, while other communities along the Trinity River Corridor are given the opportunity to review and comment on projects in their neighbor's jurisdiction. As the Metroplex economy continues to grow and develop, the CDC process will help prevent increased flood risks.



Map of CDC  
Permits

View map of all CDC project past and current.



Current Model

Download the current CDC Model. View past versions of the model with change details.



CDC Application

Download all forms and letters needed to complete a CDC Permit application.



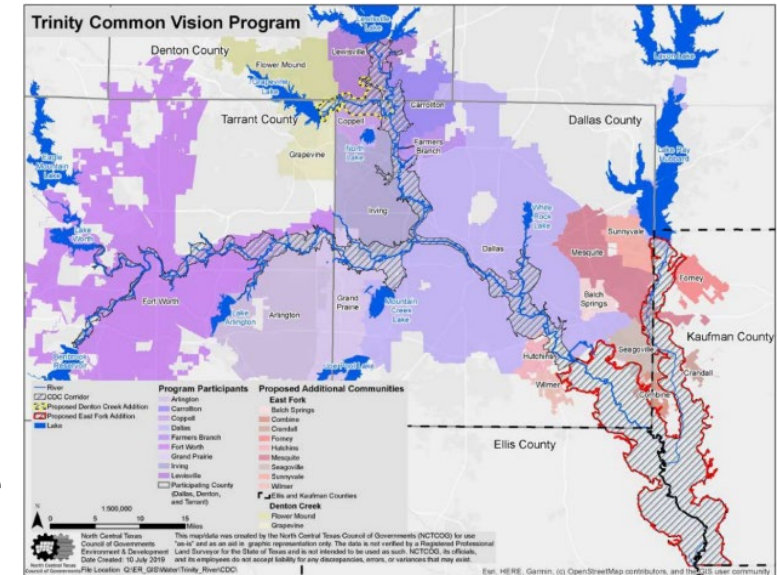
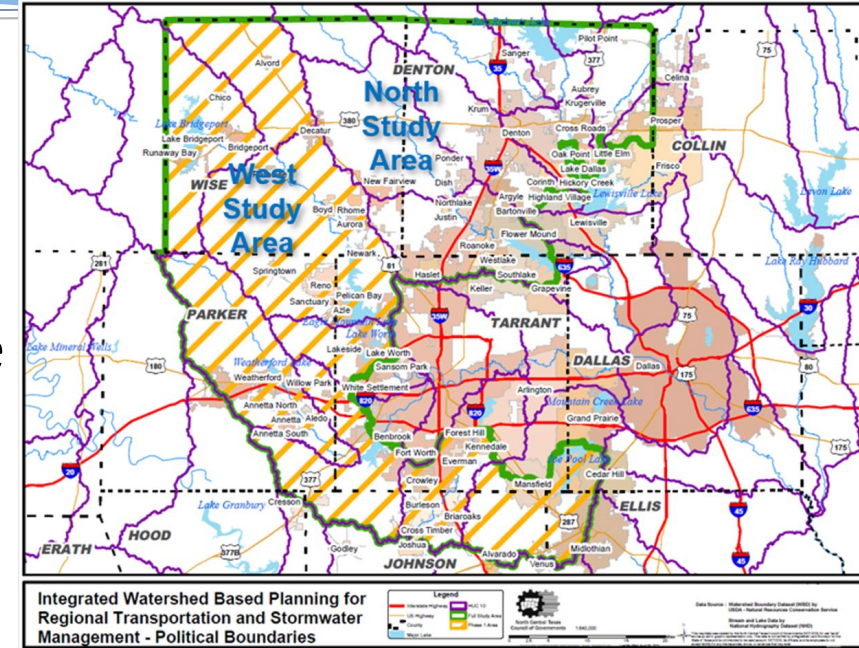
CDC Manual

Read the latest version of the CDC manual to understand how the CDC process works.

## Highlights for this year's theme: Infrastructure: Delivering Our Framework for the Future:

### 2) Trinity River Common Vision Corridor Development Certificate (CDC) Manual Update, Consolidated Model Update, and Early Flood Warning System

### 3) Flood Reduction - Transportation and Stormwater Infrastructure (TSI) Project – Advance Planning to blend the design of transportation and stormwater infrastructure as well as incorporate environment features and open space preservation in a rapid growth area upstream from the major metro area.





# Trinity River Paddling Trail



The Trinity River Paddling Trail consists of 130 miles of river accessed by 21 official launch sites. The paddling trail traverses 9 municipalities including Dallas and Ft. Worth, and is located in the middle of America's 4th largest metro area with a population of 7.5 million people. Over 5 million people live within 30 minute drive of the trail.

One of 35 in the nation  
[www.nps.gov/subjects/nationaltrailssystem/national-water-trails-system.htm](http://www.nps.gov/subjects/nationaltrailssystem/national-water-trails-system.htm)



## Highlights for this year's theme: Infrastructure: Delivering Our Framework for the Future:

- 4) Ecotourism: Trinity River Designation as a NPS National Water Trail – partnership with the Trinity Coalition
- 5) Solid Waste – Western Area Waste Capacity Alternatives, Regional Tire Task Force, Organic Waste Study

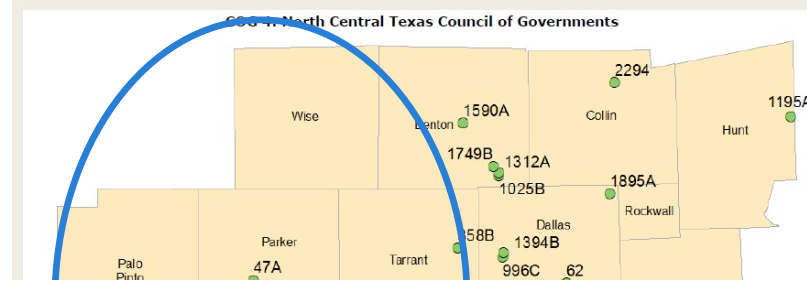


### Projected Waste Disposal

Current disposal rate per capita

County	2010	2040	Change in Annual Tons	2010 tpd	2040 tpd	Change in Daily
Erath	43,287	68,646	25,359	119	188	69
Hood	40,087	56,480	16,393	110	155	45
Johnson	172,435	307,297	134,863	472	842	369
Palo Pinto	17,384	23,795	6,411	48	65	18
Parker	133,583	343,653	210,070	366	942	576
Somervell	9,699	15,347	5,648	27	42	15
Tarrant	2,066,731	3,474,271	1,407,540	5,662	9,519	3,856
Wise	67,550	149,053	81,504	185	406	223
Total	2,550,756	4,438,543	1,887,787	6,988	12,160	5,172
Pounds / Capita / Day	6.26	7.38				

### 2016 Landfill Location Map



North Central Texas Organic Waste to Fuel Feasibility Study

Learn More

Organic Waste Gap Analysis Study

Learn More

Regional Materials Management Plan

Learn More

Closed Landfill Inventory

Learn More

Regional Recycling Survey and Campaign - Know What To Throw

Learn More

Regional Tire Task Force

Learn More

Source Reduction/Recycling

Learn More

Report Illegal Dumping

Learn More

Grants

Learn More

Resources

Learn More

Regional Electronics Recycling Contract

Learn More

Western Region Solid Waste Capacity Study

Learn More



# Urban Forests and Heat Island Mitigation

North Central Texas Council of Governments  
June 2, 2022



## NCTCOG Energy Management & Renewable Energy Newsletter

August 2020



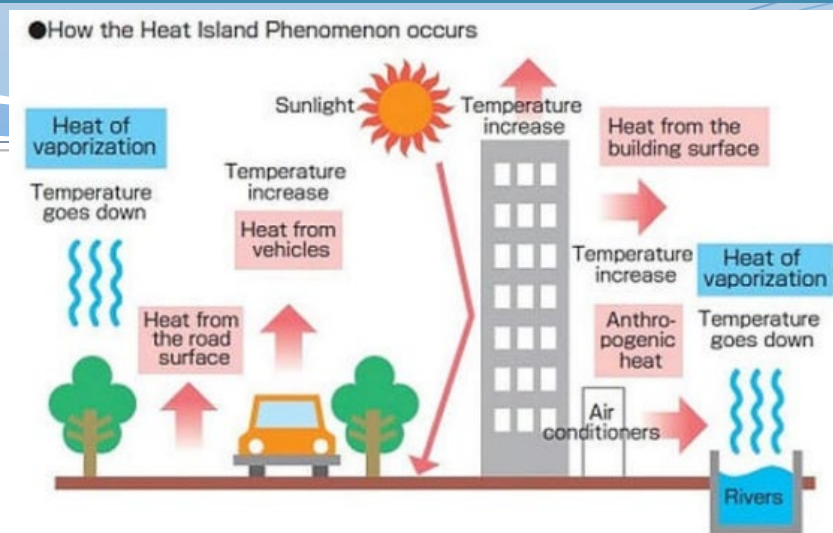
## NCTCOG Energy Management and Renewable Energy Resources

- Go Solar Texas - [www.gosolartexas.org](http://www.gosolartexas.org)
- Conserve North Texas - [www.conservenorthtexas.org](http://www.conservenorthtexas.org)
- NCTCOG Energy Management and Renewable Energy - <https://www.nctcog.org/envir/natural-resources/energy-efficiency>
- Dallas-Fort Worth Clean Cities Coalition - [www.dfwcleancities.org](http://www.dfwcleancities.org)

## Highlights for this year's theme: Infrastructure: Delivering Our Framework for the Future:

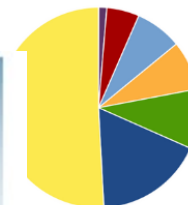
### 6) Sustainability Related Efforts:

- a) Regional Greenhouse Gas Inventory
- b) Urban Heat Islands and Weatherization
- c) Energy Efficiency and Management



### COMMUNITY EMISSIONS INVENTORY RESULTS

CO2e By Category



Upstream Impacts of Activities

Industrial Energy Solid Waste

Residential Energy Transportation & Mobile Sources

Community inventory results summary by sector

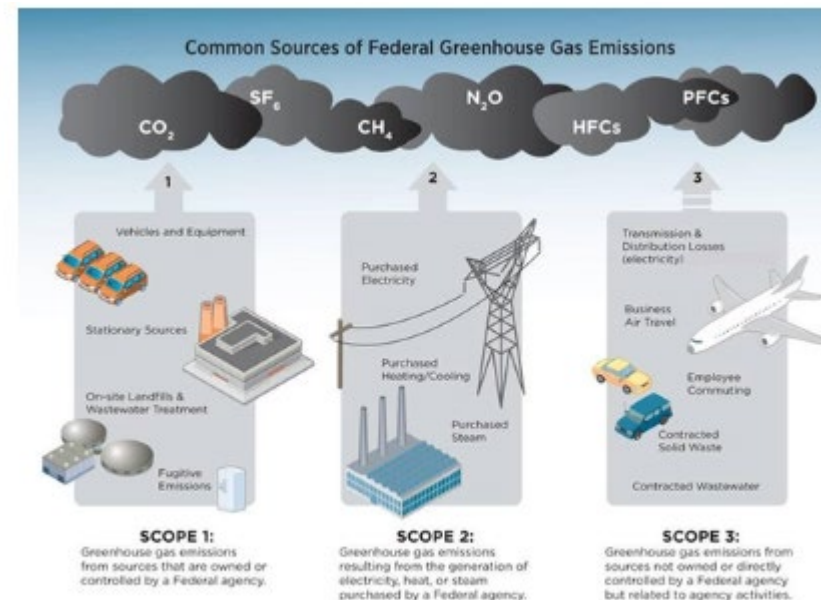
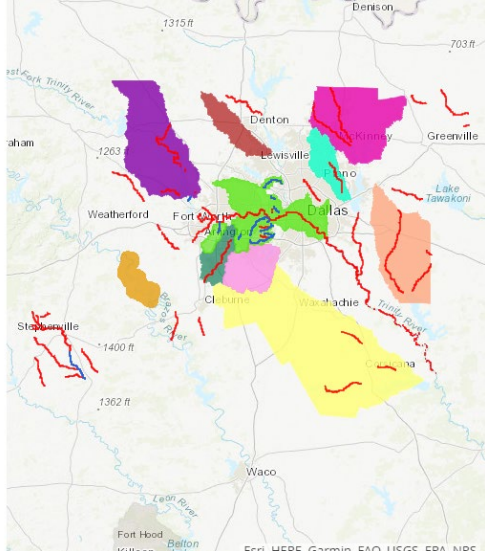


Figure 8: Scopes and common sources of GHG emissions (Environmental Protection Agency 2022  
<https://www.epa.gov/greeningepa/greenhouse-gases-epa>)



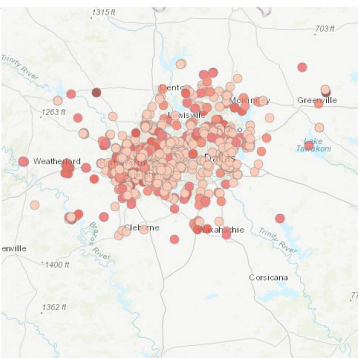
## Water Quality Monitoring

The North Central Texas region has an extensive network for water quality monitoring, which is supported by state and local governments as well as citizen scientists. NCTCOG has gathered data on the water quality monitoring activities occurring in the region to provide a more complete view of efforts being implemented to improve or maintain water quality. The map shows TCEQ's Surface Water Quality Monitoring stations in orange along with the sites currently monitored in association with NCTCOG's Regional Stormwater Monitoring Program in green. [1]



## Sanitary Sewer Overflows

Sanitary sewer overflows (SSOs) are a type of unauthorized discharge of untreated or partially treated wastewater from a collection system or its components. [1] SSOs can occur if there is significant inflow/infiltration, if the collection system is poorly operated or maintained, or the collection system lacks adequate capacity to collect or store flows for treatment. The map shows the total number of reported SSOs from January - December 2021 for the NCTCOG region.



Infrastructure solutions to address SSOs can be both time consuming and costly. The NCTCOG region has recognized that

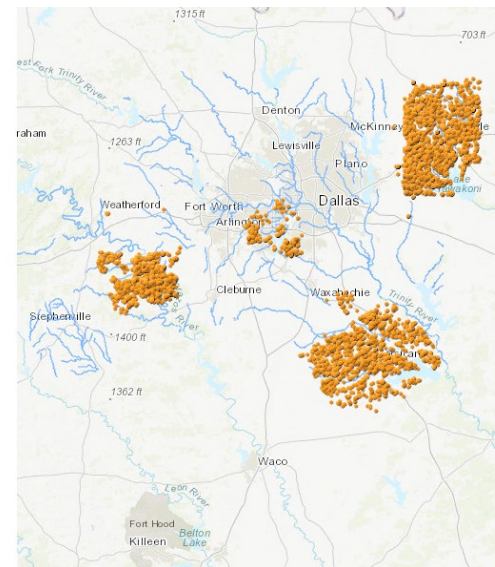
# Highlights for this year's theme: Infrastructure: Delivering Our Framework for the Future:

- 7) Building Code Updates for Electric Vehicle Ready Construction
- 8) Water Resources issues with bacteria, OSSFs, and growth-related water well/groundwater supply explosion

## On-Site Sewage Facilities

For last year's update to the WQMP, NCTCOG initiated work to create a centralized, spatial database of On-site Sewage Facilities (OSSF) in the 16-county NCTCOG region. An OSSF, also known as a septic system and usually consisting of a septic tank and a drainage field, treats and disposes wastewater at the site where the wastewater is created. These sites are typically single-family residences and businesses that do not have access to public wastewater infrastructure and can be found in either rural or urban areas. In Texas, there are over 2 million OSSFs, and they are installed at approximately 20% of the new homes built. [1], [2]

NCTCOG obtained the locations of OSSFs shown on the map from OSSF permit data in the region. A permit is



## Electric Utility and Local Government Electric Vehicle Working Group

Bailey Muller, Senior Planner  
North Central Texas Council of Governments  
August 27, 2021



2020 National Electrical Code Amendments	Download Format
2020 National Electrical Code - Regional Amendments	<a href="#">[PDF]</a> <a href="#">[Word]</a>

Energy-Related Amendments, Guidance, and Methodology	Download Format
Residential Buildings Compliance Path	<a href="#">[PDF]</a>
Residential Buildings Compliance Certificate	<a href="#">[PDF]</a>
Commissioning Compliance Checklist	<a href="#">[PDF]</a>
Energy Systems Laboratory IECC Amendments Letter	<a href="#">[PDF]</a> <a href="#">[Word]</a>

# Thank you!!

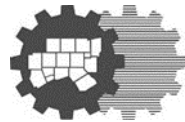
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