



# North Texas Regional Integration of Sustainability Efforts (RISE) Coalition

July 21, 2023



**RISE Coalition Website:** <https://www.nctcog.org/envir/development-excellence/rise-coalition>  
**RISE Coalition Committee Page:** <https://www.nctcog.org/envir/committees/regional-integration-of-sustainability-efforts-ri>

# Welcome and Housekeeping

- Please introduce yourself (name and organization) in the chat.
- Keep your microphone on mute unless you are speaking. Please use the “raise hand” feature if you’d like to speak, or use the meeting chat.
- During the meeting, we will prioritize comments from RISE members and other local government representatives.
- Members of the public, private sector, and nonprofit sector should hold verbal comments until the Roundtable at the end of the meeting. Feel free to put comments in the chat box until then.

The Regional Integration of Sustainability Efforts (RISE) Coalition works to engage interested local governments in peer-exchange opportunities to support sustainability and environmental initiatives.

# July 21, 2023

## RISE Coalition Agenda

1) Welcome and Introductions

### **Action Items and Discussion**

2) Meeting Summary

3) FY 2023 Work Program and Project Update

4) FY 2024 Work Plan Approval

5) FY 2024 Cost Share Commitments

6) 2019 Regional GHG Emissions Inventory

7) Regional GHG Emissions Reduction Toolkit

### **Informational Items**

8) NCTCOG Updates & Regional Opportunities

### **Other Business**

9) Participant Roundtable

10) Next Meeting Date & Future Agenda Items

11) Adjournment

# Action Items

**Meeting Summary:** [Approve May 12 Meeting Summary](#)

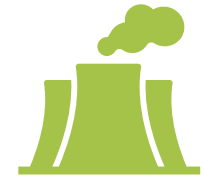
# FY 2023 Project Update and Discussion

Guided by FY2023 Work Program

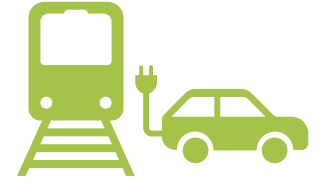
## Summary of FY2023 Goals:

- Hold quarterly public meetings
- Complete Regional GHG Inventory and Emissions Reduction Strategies Toolkit
- Host 2 webinars on key topics of interest
- Hold a Social Equity Workshop
- Hold a workshop series on Weatherization, Energy Efficiency, and Renewables
  - Sponsored by City of Dallas

## Current Focus Topics



**Regional Emissions  
Assessment**



**Sustainable Transportation  
& Air Quality Strategy  
Analysis**



**Energy Efficiency  
Programs & Regional  
Energy Resilience**



**Waste Reduction &  
Beneficial Reuse Programs**

# FY 2023 Project Update and Discussion

## Weatherization Workshop

- Held in-person on March 2, 2023
- 37 attendees
- [Presentation Slides and Recording](#)

## Energy Efficiency Funding Roundtable

- Held virtually on April 7, 2023
- 45 attendees
- [Presentation Slides and Recording](#)

## Solar@Scale Workshop

- Held in-person on May 5, 2023
- 46 attendees
- [Presentation Slides and Recording](#)

## Energy Efficiency Strategies Workshop

- Coming September 2023 – in-person
- In conjunction with CPRG regional strategies brainstorming

[nctcog.org/envir/committees/regional-integration-of-sustainability-efforts-ris](https://nctcog.org/envir/committees/regional-integration-of-sustainability-efforts-ris)

[conservenorthtexas.org/event-archive](https://conservenorthtexas.org/event-archive)

# FY 2024 Work Plan Discussion and Approval

## Draft FY2024 Work Program

### Summary of FY2024 Goals

- Hold quarterly public meetings
- Host 2 webinars on key topics of interest
- Continue workshop series – new topics?

### FY2024 Focus Topics

- Regional GHG Emissions Reduction Strategies
  - Continuation of work from the 2019 Regional Emissions Inventory
  - Connection with NCTCOG's Climate Pollution Reduction Grant work
- Communicating Sustainability to Leadership

## Proposed Focus Topics



**Regional Emissions  
Reduction Strategies**



**Communicating  
Sustainability to  
Leadership**

# FY 2024 Member Cost Share Commitments

- Cost share amounts for each entity are based on 2020 population estimates and are the same as FY23.
- Invoices will be mailed on October 1, 2023.

## FY24 Member Commitments received:

- City of Cedar Hill
- City of Dallas
- City of Denton
- City of Farmers Branch
- City of Plano
- Tarrant Regional Water District

2020 Population (NCTCOG Estimates)	Cost-Share
1 million+	\$3,750
750,000 – 999,999	\$3,500
500,000 – 749,999	\$3,000
350,000 – 499,999	\$2,500
200,000 – 349,999	\$2,075
100,000 – 199,999	\$1,625
50,000 – 99,999	\$1,075
25,000 – 49,999	\$ 700
10,000 – 24,999	\$ 500
Less than 10,000	\$ 250
Other Local Government Partners	\$1,000

If you'd like to join as a cost-sharing member for FY24, please fill out the [Membership Commitment Form](#). Email [Bjohnson@nctcog.org](mailto:Bjohnson@nctcog.org) if you need to confirm your cost share amount.



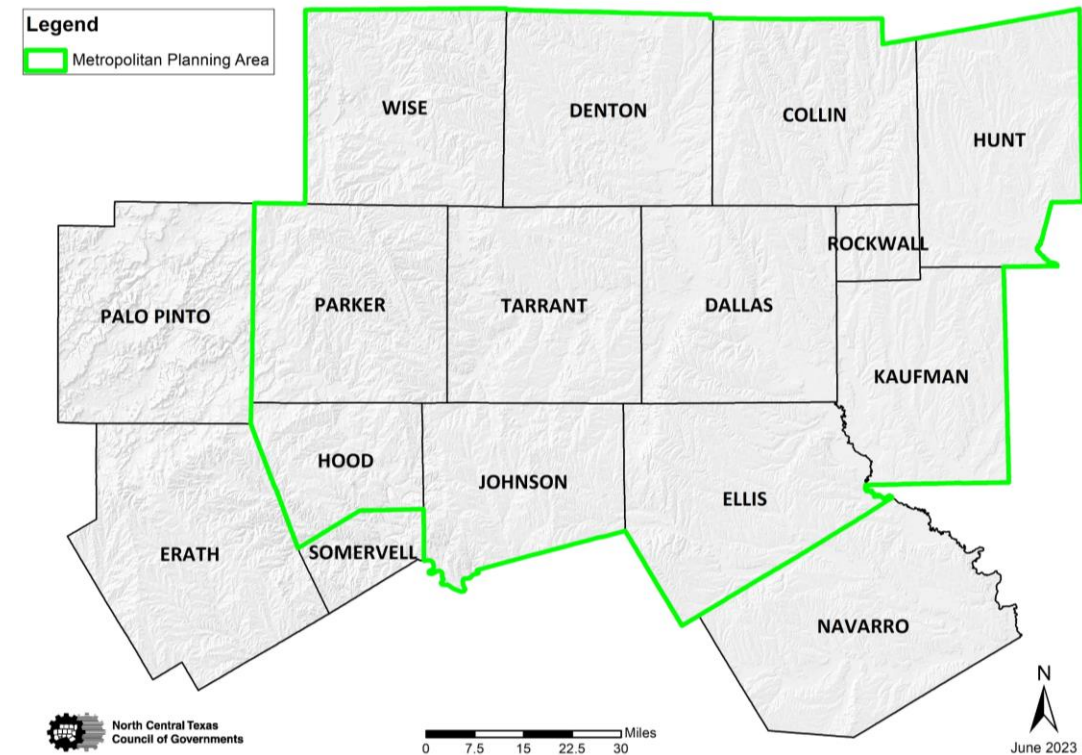
# **Regional GHG Emissions Inventory: 2019 Inventory Results & Discussion**

**Nick Van Haasen**  
**North Central Texas Council of Governments**

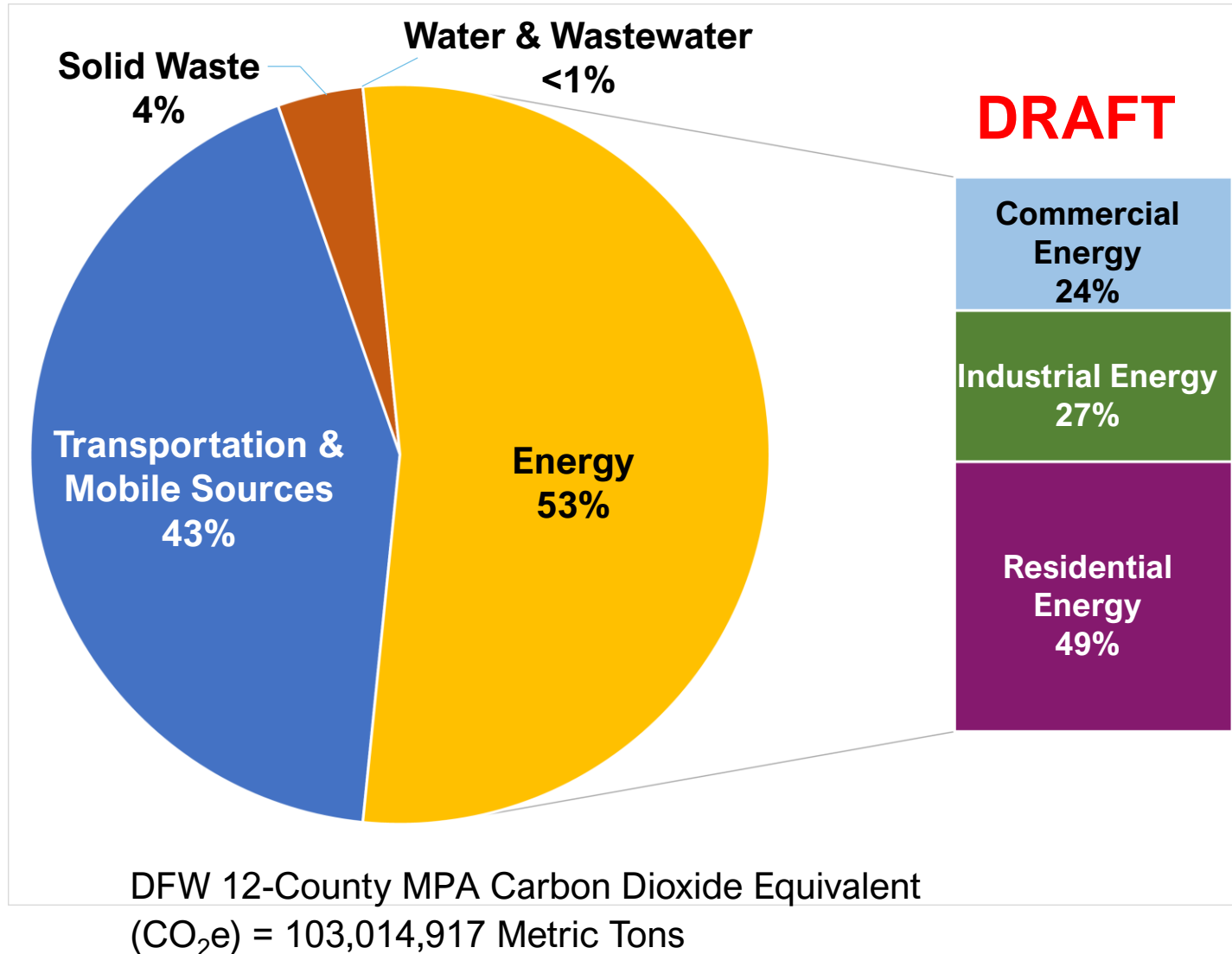
# Greenhouse Gas Emissions Inventory: Background

## Regional GHG Inventory

- Contracted with Local Governments for Sustainability (ICLEI), formally known as the International Council for Local Environmental Initiatives, thanks to generous contribution from Burlington-Northern Santa Fe (BNSF) railroad
- Cohort participants
- 2019 baseline
- Energy, Transportation, Solid Waste, Water, and Wastewater sectors for region
- Community Protocol
- County-based breakdown



# 2019 Greenhouse Gas Emissions Inventory: Results



Carbon Dioxide Equivalent  
(CO<sub>2</sub>e)

=

Greenhouse Gases  
(Carbon Dioxide CO<sub>2</sub>  
Methane CH<sub>4</sub>  
Nitrous Oxide N<sub>2</sub>O)

x

Respective  
Global Warming Potentials  
(GWP)

U.S. Total – 6.3 Billion Metric Tons\*

\*Based on 2021 data

*Note: The agricultural emissions, process & fugitive emissions were not part of this inventory*

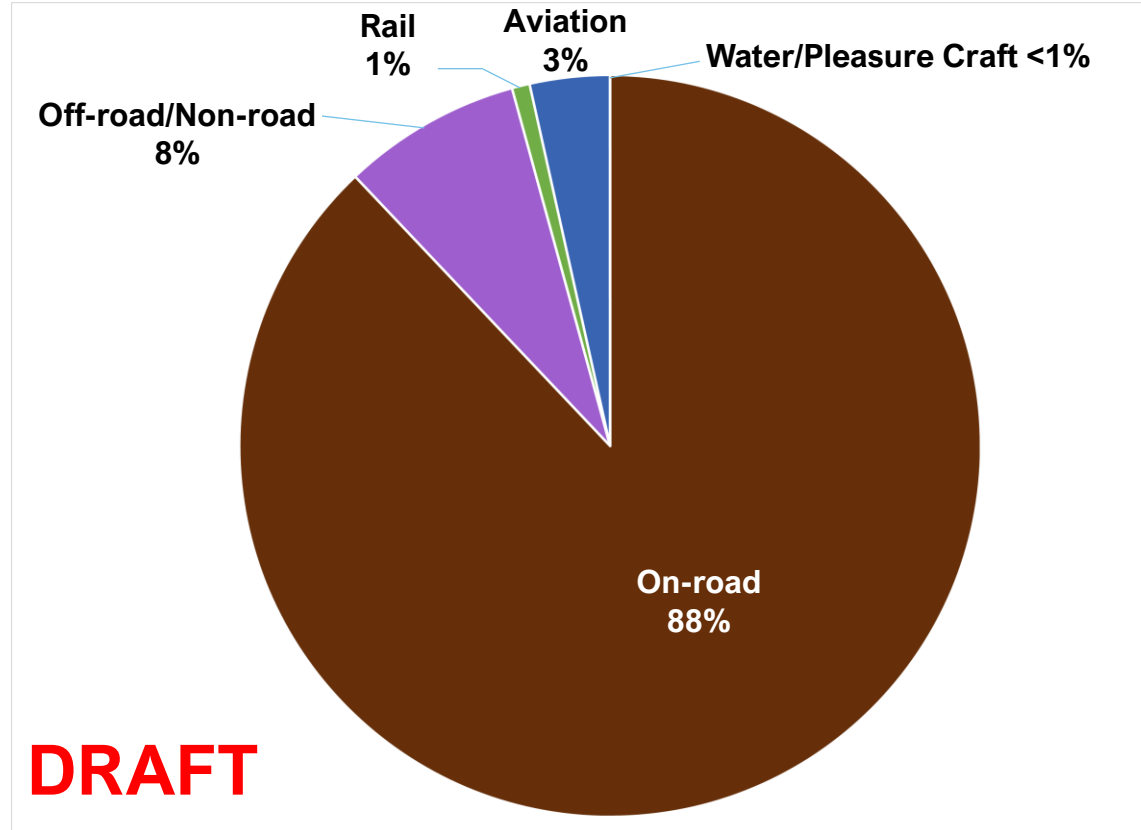
# 2019 Greenhouse Gas Emissions Inventory:

## County Breakdown

County	Transportation & Mobile Sources	Energy	Solid Waste	Water*	Wastewater
Collin	10.96%	12.37%	19.51%	9.58%	14.21%
Dallas	36.92%	38.67%	39.68%	55.59%	47.21%
Denton	8.66%	9.02%	12.96%	6.34%	2.21%
Ellis	3.54%	3.62%	4.23%	2.22%	0.58%
Hood	0.87%	0.73%	0.00%	0.24%	0.25%
Hunt	2.29%	1.13%	4.08%	0.67%	1.05%
Johnson	2.43%	2.34%	6.68%	2.00%	1.29%
Kaufman	2.95%	1.31%	0.00%	2.00%	1.32%
Parker	2.46%	1.66%	4.28%	0.66%	0.29%
Rockwall	1.12%	1.17%	0.00%	0.96%	0.71%
Tarrant	26.03%	27.01%	8.59%	19.59%	30.50%
Wise	1.77%	0.96%	0.00%	0.15%	0.38%

\*For Information Only. The emissions have been included under the Energy Sector in the inventory.

# 2019 Greenhouse Gas Emissions Inventory: Transportation Sector



DFW 12-County MPA Transportation and Mobile Sources  
CO<sub>2</sub>e = 44,322,788 Metric Tons

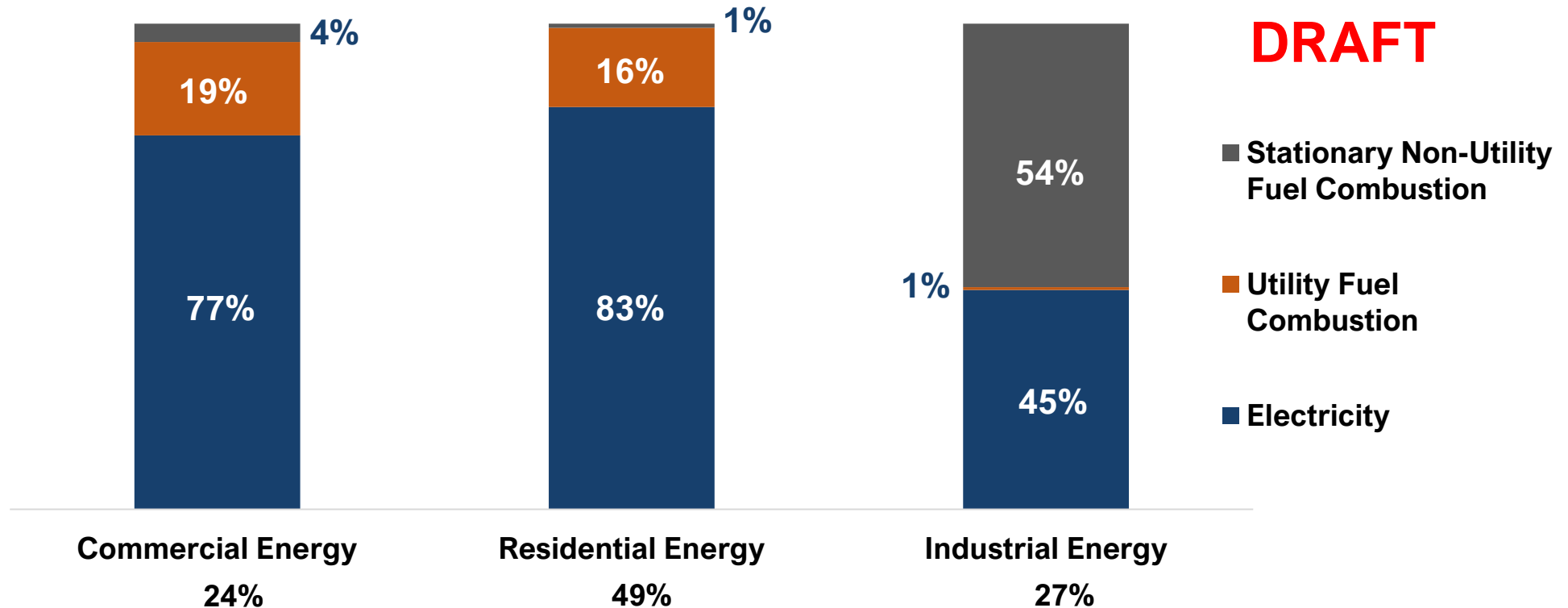
Vehicle Types	Fuel	On-road CO <sub>2</sub> e
Light-Duty	Gas	70.02%
Light-Duty	Diesel	0.94%
Medium-Duty	Gas	4.54%
Medium-Duty	Diesel	0.48%
Heavy-Duty	Gas	3.65%
Heavy-Duty	Diesel	20.37%

DFW 12-County MPA On-road  
CO<sub>2</sub>e = 39,006,087 Metric Tons

County	On-road CO <sub>2</sub> e
Collin	11.25%
Dallas	37.54%
Denton	8.91%
Ellis	3.55%
Hood	0.89%
Hunt	2.46%
Johnson	2.47%
Kaufman	3.11%
Parker	2.59%
Rockwall	1.13%
Tarrant	24.30%
Wise	1.79%

# 2019 Greenhouse Gas Emissions Inventory: Energy Sector

DFW 12-County MPA Energy CO<sub>2</sub>e = 54,835,545 Metric Tons



Utility Fuel Combustion includes Natural Gas

Stationary Non-Utility Fuel Combustion includes Kerosene, Distillate Fuel Oil, Propane, and Wood

# EPA's Climate Pollution Reduction Grant (CPRG)

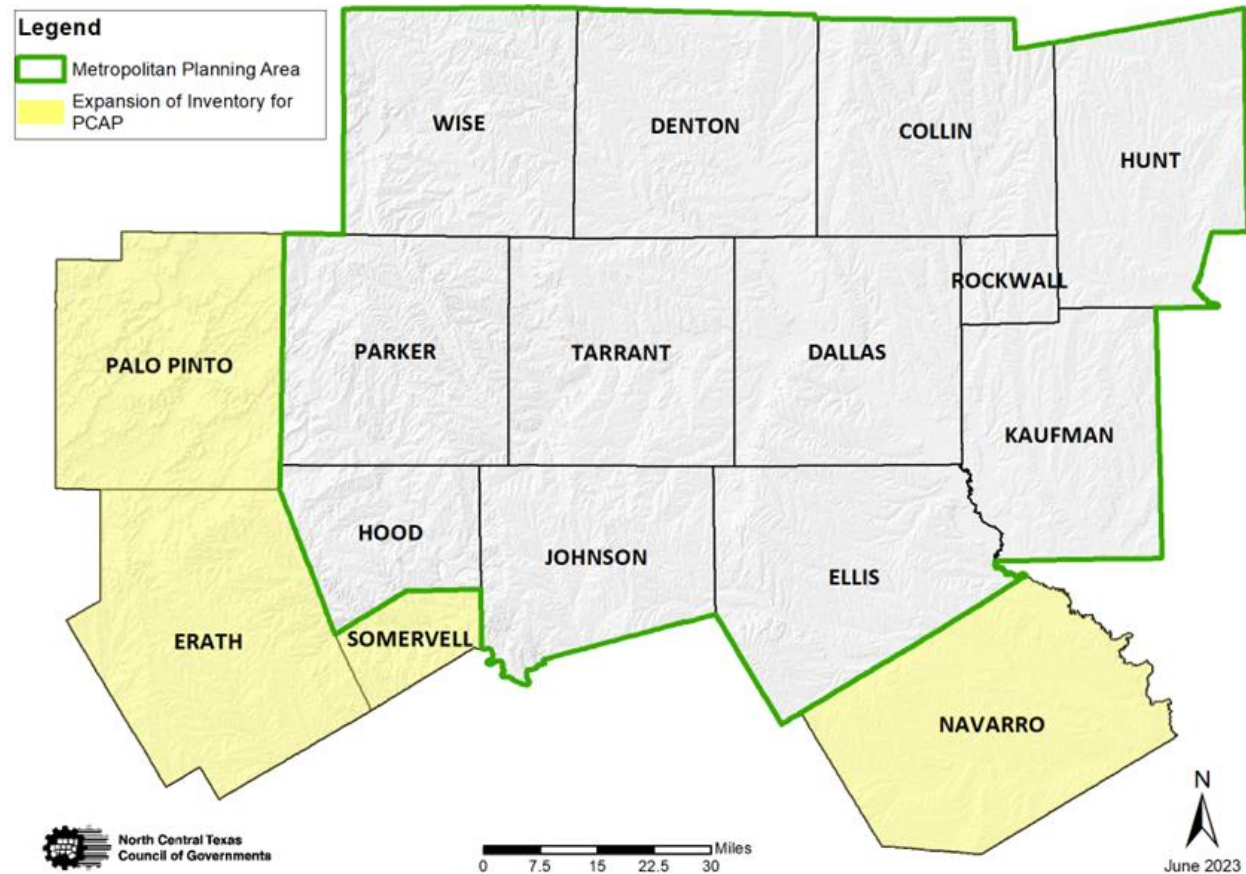
- Funding program to develop and implement a regional plan for GHG emission reductions
  - Multipollutant focus includes criteria pollutants
- NCTCOG participating in CPRG on behalf of the Dallas-Fort Worth Metropolitan Statistical Area (MSA)
  - Full list of participants can be found at <https://www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants>
- NCTCOG submitted the full application on May 31, 2023
- Organizing working group for collaborating entities to provide feedback on development of regional GHG emission reduction plan, reduction measures to be included, and community engagement
  - Hybrid meeting to provide input on GHG reduction measures for the Transportation Sector
    - August 14, 2023
- For more information, please go to <https://publicinput.com/nctcog-cprg>

# Greenhouse Gas Emissions Inventory

## Area Expansion for PCAP

What we are doing:

- 2019 baseline
- Utilizing existing data from 2019 inventory
- Collect data for new counties:
  - Erath
  - Navarro
  - Palo Pinto
  - Somervell
- ICLEI's ClearPath Tool
- Community Protocol
- County-based breakdown
- Creation of Emission Reduction Strategy Toolkits





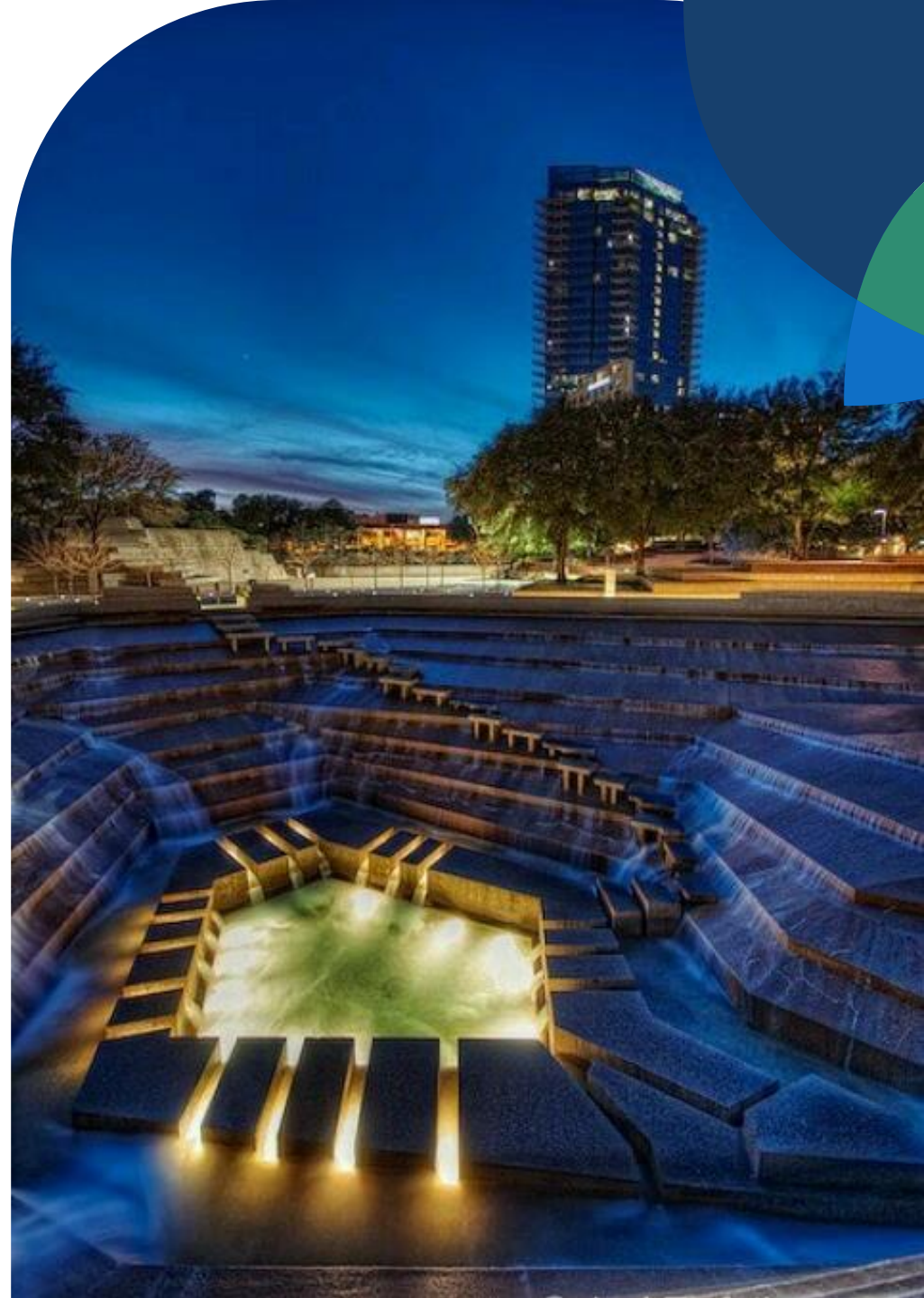
# **Regional GHG Emissions Reductions Toolkit: Solid Waste, Water, & Wastewater Sectors**

**Meghan Reisenauer**  
**North Central Texas Council of Governments**  
**Environmental Defense Fund Summer Fellow**

# WASTE & WASTEWATER SECTOR EMISSIONS REDUCTION TOOLKIT

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Meghan Reisenauer, MPP/MS EnvEng candidate  
2023 NCTCOG Climate Corps Fellow



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AT A GLANCE

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NEXT STEPS





# 1

## INTRODUCTION

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GHG Reduction Toolkit: What and Why?



# MOTIVATIONS

## **CROSS-SECTOR EMISSIONS REDUCTION**

- Inform strategies for local & county governments
- Previous toolkit reports: Energy & Transportation sectors



## **ENVIRONMENTAL JUSTICE**

- Prioritize equity & community engagement

## **HEALTH BENEFITS**

- North central Texas air quality and water supply concerns
  - Adaptation and future resiliency
- 



8,284,892 (NCTCOG, 2023)

Residents of NCT region (36% statewide)

10.8 million (NCTCOG, 2022)


Tons of waste from NCT region sent to landfills in a year  
(30% statewide)

3.9 million (NCTCOG, 2019)

Metric tons of GHG emissions from NCT waste & water sector  
annually (26% statewide)

10.3 million (EPA, 2021)

Metric tons of GHG emissions statewide from  
waste/water sector annually (#1 in US)





DALLAS



2

# STRUCTURE

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Toolkit Framework



# TOOLKIT STRUCTURE

## **DIVIDED BY EMISSIONS AREA**

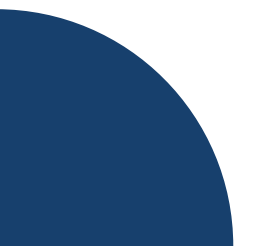
- Emphasis areas described in following section



## **ACCESSIBLE**

- Strategies described in language that is useful for a variety of communities in NCTX
- Report is a comprehensive overview of options available

## **FEASIBILITY**

- Each strategy will be given an overall score of feasibility from 1 to 5
  - Consideration of financial, infrastructural, time feasibility etc.
- 





# 3

## EMPHASIS AREAS

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Best opportunities for emissions reduction

# EMISSIONS REDUCTION AREAS



## POINT SOURCE

Landfills emit greenhouse gases like methane and carbon dioxide



## EFFICIENCY

Reducing energy use for less energy-related emissions



## WASTE REDUCTION

Reduce quantity of high-emission waste at the source



## CONSERVATION

Water use reduction and reuse; water-efficient systems



# 4

## AT A GLANCE

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Highlighted strategies



# STRATEGIES - WASTE

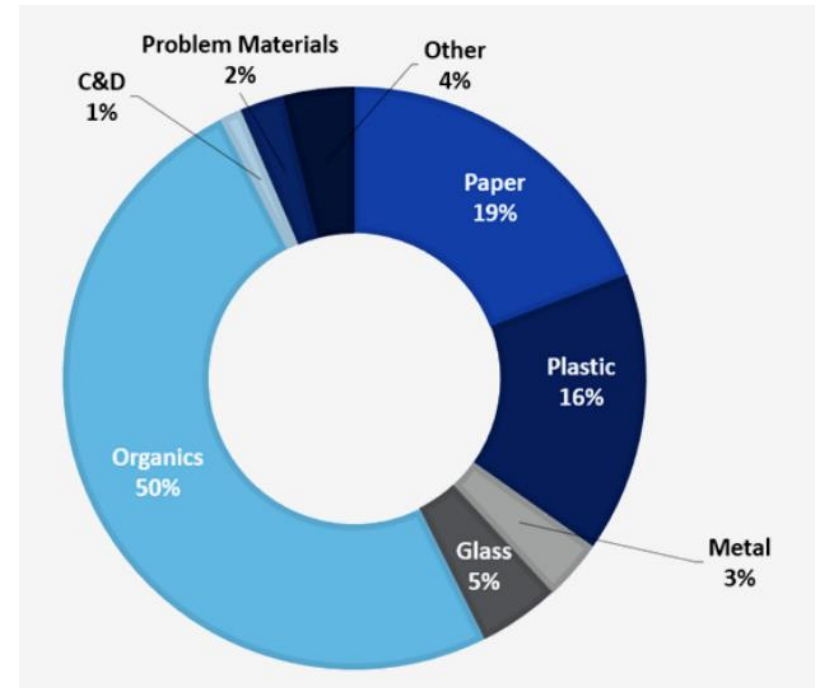
## GAS COLLECTION

- Already in progress at 17 landfills in the region
- Others can be upgraded
- 8 million tons organic waste collected annually
- Use as vehicle fuel, pipeline gas, industrial processes

## FOOD WASTE COMPOST

- High opportunity for gas collection and emissions reduction
- Food service industry collection: 789,000 tons
- High-density residential is also promising

Note: Yard waste is widely composted, but is less suited for gas collection, due to slow degradation



**Waste Categories Collected (NCTCOG, 2019)**

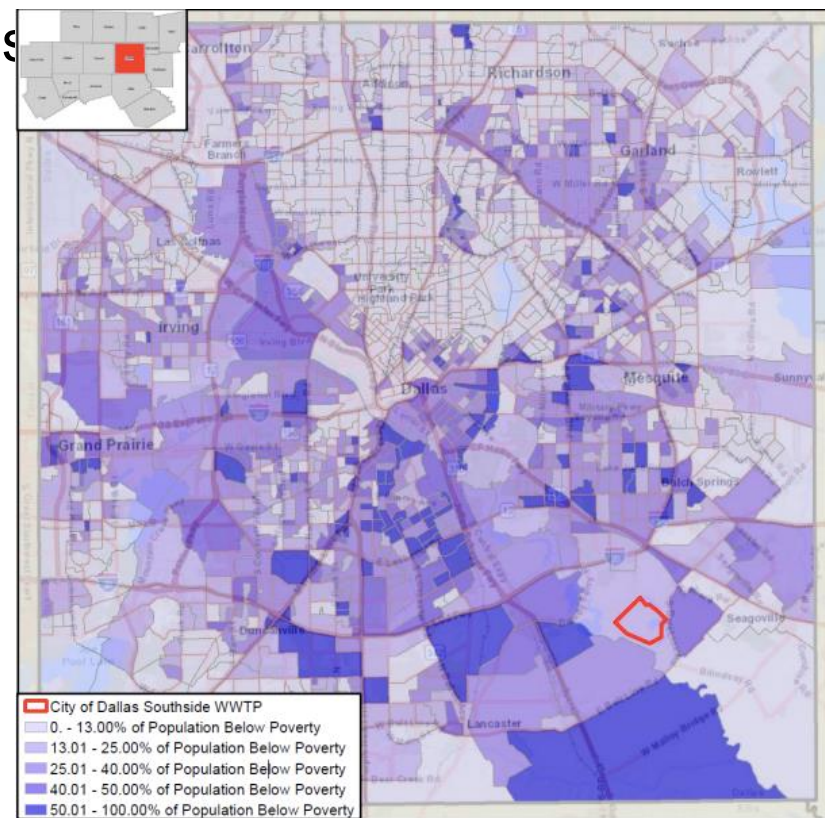
# STRATEGIES - WATER

## ANAEROBIC DIGESTION

- Step in the wastewater treatment process; microbes convert organic material to biogas (methane & CO<sub>2</sub>)
- Can reduce electricity usage by up to 26%
- 4 million kg/year GHG reduction with Dallas Southside WWTP alone

## ENERGY EFFICIENCY

- Total region WWT: 347 million kWh/yr
- Modify WW treatment configurations
- Electricity usage savings in NCT:
  - Anaerobic Digestion: Up to 78 million kWh/yr
  - Biosolids incineration: Up to 175 million kWh/yr
- Reduce solids retention time:
  - 8% decrease in emissions per 20-day SRT reduction





# 5

## NEXT STEPS

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# WHAT'S NEXT?

## REPORT

- Draft strategy toolkit written report completed mid-August

## DISTRIBUTION

- All strategy toolkits available online
- More sectors covered; eventual cross-sector compiled report

## IMPLEMENTATION

- Local governments determine best approaches and most useful strategies
- Equity focus





# THANK YOU!

## ANY QUESTIONS?

**Meghan Reisenauer**  
[mreisen@berkeley.edu](mailto:mreisen@berkeley.edu)  
[EDF Climate Corps](#)





# NCTCOG Regional Updates and Opportunities

## REGIONAL INITIATIVES AND UPDATES – Alternative Fuels/Electric Vehicles

### Pursuing Grant Proposals to Expand Electrification and Other Zero-Emission Transportation

- Federal Highway Administration Charging and Fueling Infrastructure
  - Community EV Charging
  - Hydrogen Fueling Network
- Joint Office Ride and Drive Electric FOA Topic 1- Planning EV Charging Resiliency

### National Drive Electric Week (NDEW) Sponsors and Exhibitors

- NCTCOG and DFWCC are seeking sponsors and exhibitors for the 2023 DFW NDEW event to be held on Sunday, October 1.
- For information on previous NDEW events, see [driveelectricdfw.org](https://driveelectricdfw.org).
- Please complete this survey if interested in exhibiting or sponsoring the event: [2023 DFW National Drive Electric Week Sponsorship and Exhibitor Form \(office.com\)](#)

### Department of Energy EMPOWER Workplace Charging Project

- Outreach and education project that provides support and resources to employers and employees interested in workplace charging
- NCTCOG participates as an unfunded partner, deciding next steps
- For more information and resources go to [Home | WorkplaceCharging](#)

# NCTCOG Regional Updates and Opportunities

## UPCOMING MEETINGS AND EVENTS

### **Bicycle & Pedestrian Advisory Committee**

**Date:** Wednesday, August 16, 2023

**Time:** 2:00 pm

**Where:** NCTCOG Offices, Transportation Council Room. [More information here.](#)

### **Regional Electric Vehicle (EV) Infrastructure Working Group Meeting**

**Date:** Thursday, August 17

**Time:** 10:00 – 11:00 am

**Where:** Virtual – email [jbillings@nctcog.org](mailto:jbillings@nctcog.org) to join the Working Group.

### **NCTCOG Energy Resiliency Roundtable**

**Date:** Tuesday, August 29, 2023

**Time:** 10:30 am – 12:00 pm

**Where:** Virtual – [More information and registration here.](#)

### **24<sup>th</sup> Annual Public Works Roundup**

**Date:** Friday, September 29, 2023

**Time:** 8:30 am – 4:00 pm

**Where:** Grapevine Convention Center. [More information and registration here.](#)

Past events related to electric vehicles and other alternative fuels available at: [www.dfwcleancities.org/events](http://www.dfwcleancities.org/events)

# Other Business

## **Participant Roundtable**

*Members will be called on first, and then others will have the opportunity to share what is happening within their organization.*

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## **Future Agenda Items**

# Next Meeting Dates

## **Next RISE Coalition Meeting:**

**Friday, October 20, 2023**

**9:30 a.m.**

**In person at NCTCOG's offices in Arlington**

## **NCTCOG's Free E-Mail Lists and Committee Updates**

<https://www.nctcog.org/stay-informed?ext=>

<https://www.nctcog.org/envir/mail>

## **RISE Website:**

<https://www.nctcog.org/envir/development-excellence/rise-coalition>

<https://www.nctcog.org/envir/committees/regional-integration-of-sustainability-efforts-ris>

# NCTCOG RISE Coalition Contacts

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**Thank you!**