## METROPOLITAN PLANNING ORGANIZATION ROLES AND RESPONSIBILITIES IN AIR QUALITY

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**Chris Klaus Senior Program Manager** 



## **OVERVIEW**

What is an MPO?

**MPO Federal Requirements** 

Involvement in Air Quality Planning Activities

Implementation of Emission Reduction Activities (Management & Operations)

**Looking Forward** 

## YOUR FRIENDLY NEIGHBORHOOD MPO

Policy Board of a Regional Organization Carrying Out the Metropolitan Transportation Planning Process

Required to Represent Localities in all Urbanized Areas (UZAs) with Populations Over 50,000, as Determined by the US Census

#### 25 MPO's in Texas



## MPO FEDERAL REQUIREMENTS

#### Metropolitan Transportation Plan (MTP)

Multi-Modal Long Range Planning Document Outlook of at Least 20 Years into the Future Minimal 4-Year Update Cycle

#### **Transportation Improvement Program (TIP)**

Staged, Multi-Year Program of Projects Approved for Funding Updated Every 2 Years Regional Component of the State Transportation Improvement Program

#### **Congestion Management Process (CMP)**

Assesses Alternative System and Demand Management Strategies Region-wide or Corridor-Level Basis Required in Metro Areas of Over 200,000 (Transportation Management Areas)

#### **Unified Planning Work Program (UPWP)**

**Outlines Transportation and Air Quality Planning Activities Developed Every 2 Years** 

#### **Transportation Air Quality Conformity**

**Required in Areas Designated Nonattainment** 

## INVOLVEMENT IN AIR QUALITY PLANNING

#### Rules, Regulations, and Guidance

Transportation Conformity Rules/Requirements (CAA)
Nonattainment Designation Implementation Rules
Emission Estimation Models (MOVES) and Procedures (MOSERS)

#### Legislature/Local Municipalities

**Ability to Shape Future Planning and Funding** 

#### **Emissions Inventories**

Results go into developing Motor Vehicle Emissions Budgets (MVEB) in the State Implementation Plan (SIP)

Many Local Assumptions that go into Vehicle Emissions Model State Responsible for the SIP

#### **Transportation Conformity**

In Nonattainment Areas, Required Prior to Project Implementation Ties Emissions from Regional Projects to MVEB in the SIP MPO = Local Determination, USDOT = Federal Determination

Essential for MPO to stay informed and be involved in elements of air quality, to ensure successful transportation conformity

## **FUNDING RESOURCES**

**Transportation Planning Funds – TxDOT** 

Congestion Mitigation and Air Quality (CMAQ) Program – FHWA

**Surface Transportation Block Grant Program – FHWA** 

**Diesel Emissions Reduction Act Funding – EPA** 

**Clean Cities Coalition – DOE** 

Low-Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program – TCEQ

**Local Initiative Projects – TCEQ** 

**Draft Volkswagen Beneficiary Mitigation Plan – TCEQ** 

TERP, FTA, SECO, P3, PACE, Funding Swaps, etc.

https://www.nctcog.org/aqfunding

## FRAMEWORK TO SUCCESS

3 "E"s

**Engineer** 

**Develop Initiative** 

**Educate** 

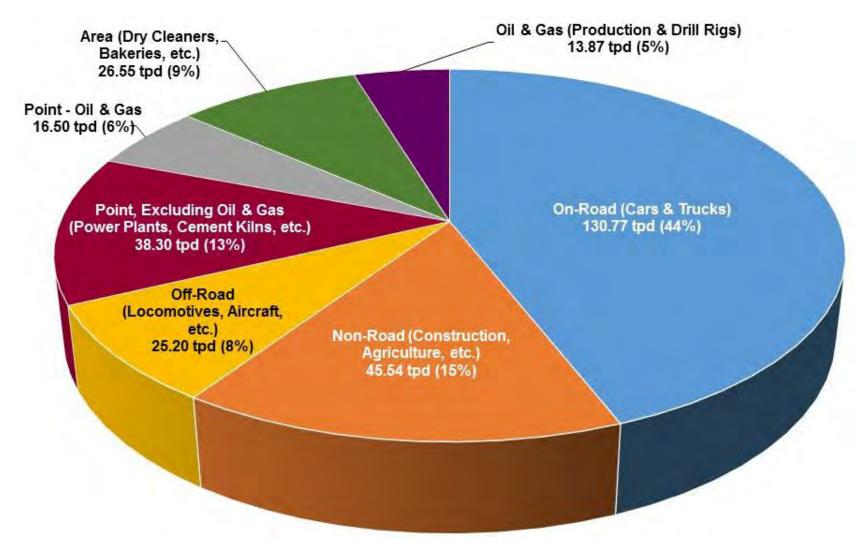
**Outreach Audience on Initiative** 

**Enforce** 

Make Sure Initiative is Being Implemented

## DFW EMISSIONS SOURCES

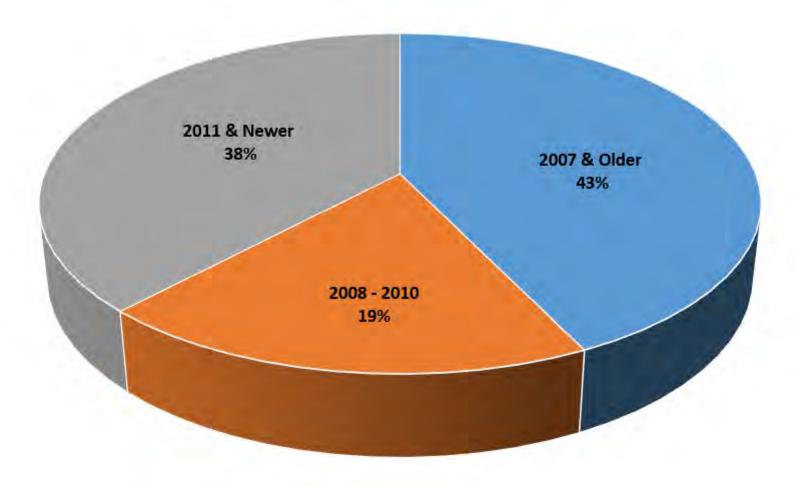
### 2017 Oxides of Nitrogen (NO<sub>X</sub>)



Total  $NO_X = 296.73$  tons per day (tpd)

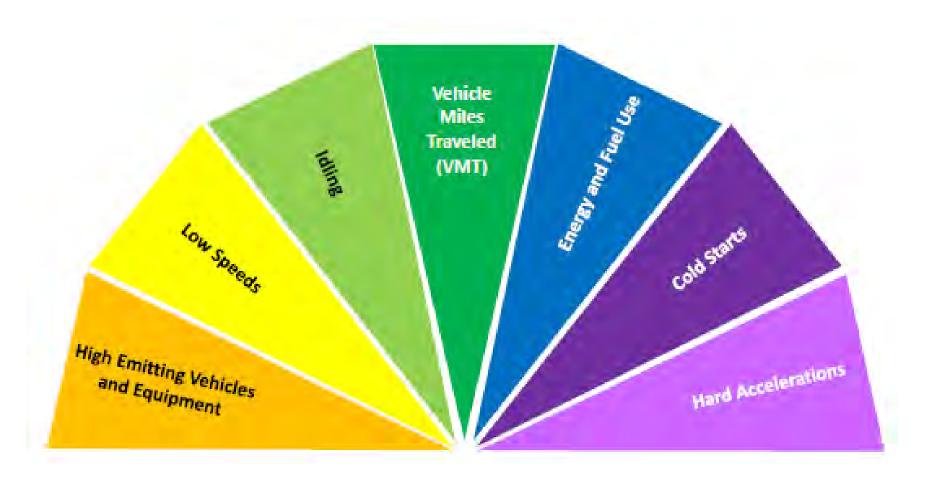
# HEAVY-DUTY DIESEL VEHICLE<sup>1</sup> AGE DISTRIBUTION

DFW 10-County Nonattainment Region (Greater than 26,000 Gross Vehicle Weight Rating)



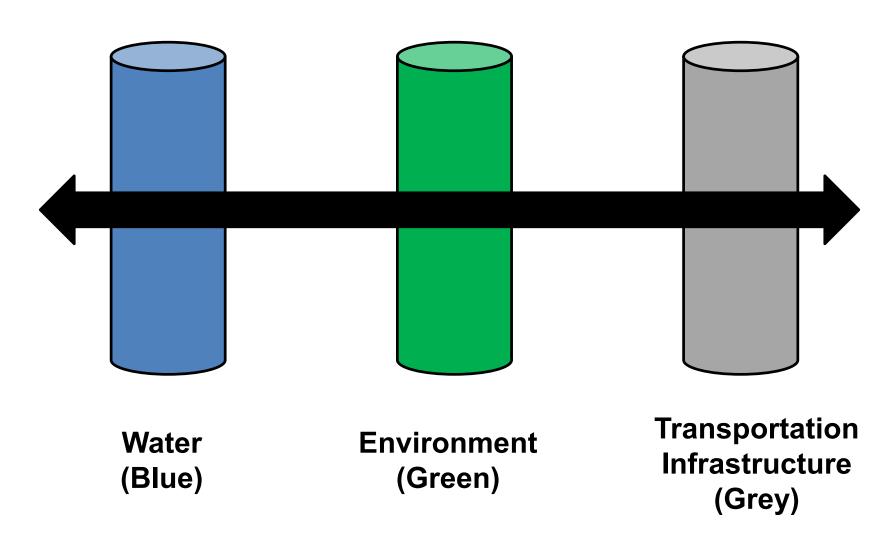
## SEVEN AIR QUALITY EMPHASIS AREAS

#### **Mobile Sources**



## **BLUE-GREEN-GREY FUNDING INITIATIVE**

#### **Silo-Busting Across Topics and Teams**



## **CONSERVE NORTH TEXAS**

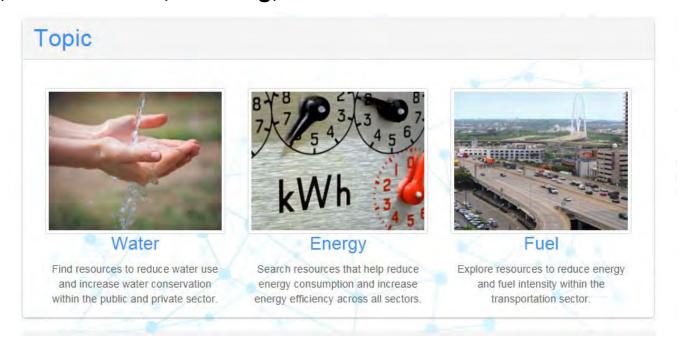
#### **Program Goals**



Regional Clearinghouse of Energy Efficiency, Water Conservation, and Transportation Resources.

#### Resources

"One-stop-shop" For a Comprehensive Inventory of Programs, Tools, Case Studies, Funding, and Other Resources



## SOLSMART

#### **Program Goals**

**Reduce Solar Soft Costs** 

**Adopt Solar-Friendly** 

**Processes and Policies** 

**Designate Communities** 

#### **NCTCOG Role**

**Hosted Trainings** 

**Shared Regional Best Practices** 

**Conducted Technical Review of** 

**Community Documents and** 

**Policies** 

6 of 10 SolSmart-Designated Communities are in North Texas!!!

Texas' SolSmart-Designated Communities		
<u>BRONZE</u>	SILVER	<u>GOLD</u>
Denton	Brownsville	Austin
Lewisville	Corinth	Cedar Hill
Plano	Kennedale	El Paso
	San Antonio	

#### www.solsmart.org

## **ELECTRIC VEHICLES NORTH TEXAS**

#### **Program Goals**

Promote Adoption & Use of Electric Vehicles (EVs)

**Encourage Strategic Infrastructure Development** 



#### **NCTCOG** Resources

**EV Fact Sheets & Regional Data** 

**EV** Incentive Information

**Presentations at Community Meetings** 

**Annual National Drive Electric Week Event** 

**NEXT: Template Code/Ordinance Recommendations** 





www.dfwcleancities.org/evnt

## **AIR NORTH TEXAS**

#### **Program Goals**

Provide a Comprehensive Air Quality Resource and Regional Message Leverage Resources and Collaborate with Regional Partners Increase Public Awareness about Air Quality and Clean Air Choices

#### **NCTCOG** Resources

**Comprehensive Website including Current Ozone Conditions** 

**Clean Air Corner Blog and Ozone Action Day Alerts** 

**Template Outreach/Education Materials** 



## SAMPLE OF AIR QUALITY INITIATIVES







































Be Car Care Aware®

















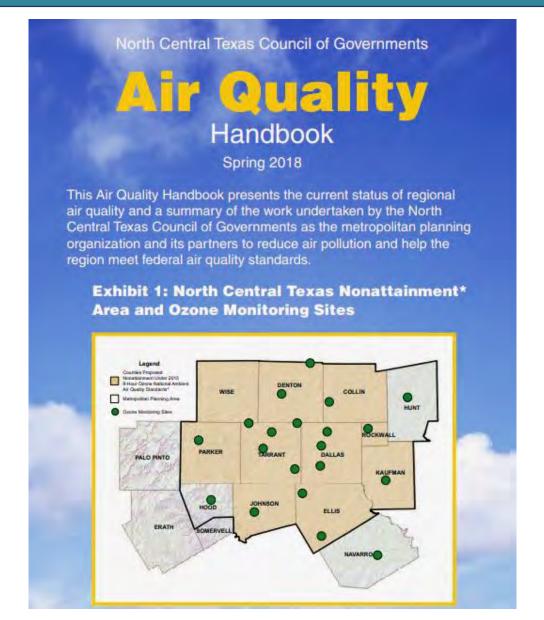








## AIR QUALITY HANDBOOK



https://www.nctcog.org/trans/air/documents/AQHandbook2018.pdf

## **LOOKING FORWARD**

**Base Technical Decisions on Sound Analysis** 

**Future Is Uncertain** 

High Risk = High Reward

**Maintain Transparency** 

Monitor (Real World) vs. Model (Simulation)

**Plan Long Term** 

**Prepare for Unintended Consequences** 

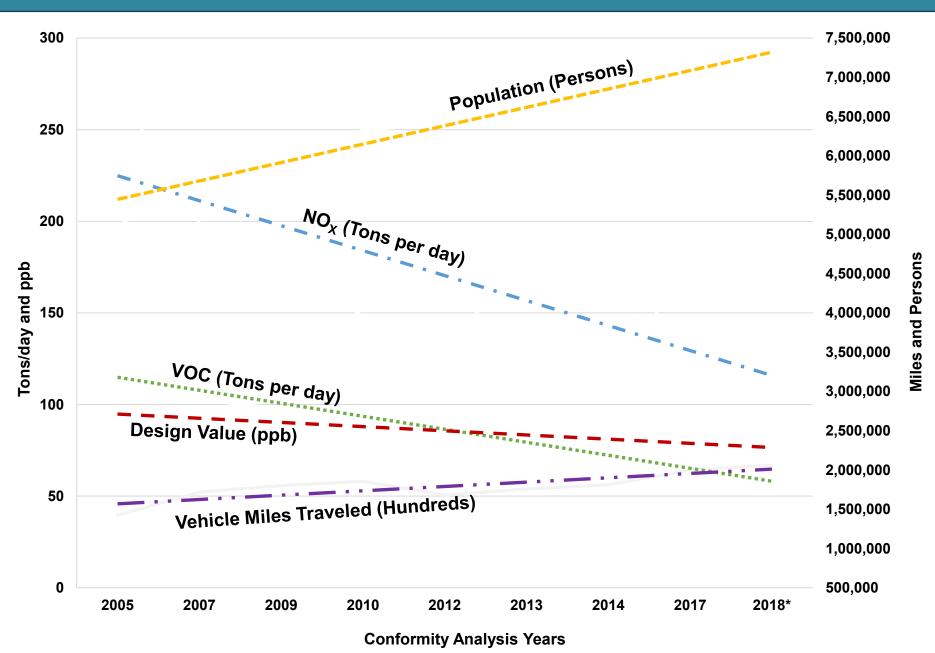
Proactive vs. Reactive

**Support Consistency** 

Technical vs. Policy Support

**Utilize Surrounding Resources** 

## **MEASURES OF SUCCESS**



## FOR MORE INFORMATION

## Chris Klaus Senior Program Manager

817-695-9286 <a href="mailto:cklaus@nctcog.org">cklaus@nctcog.org</a>

www.nctcog.org/airquality