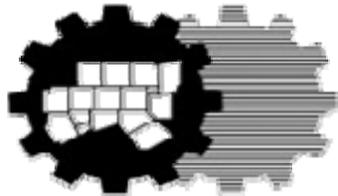


# **Trucking Environment and Changes in the Future**

**Texas Warehouse Association Annual  
Meeting**

**October 1, 2009**



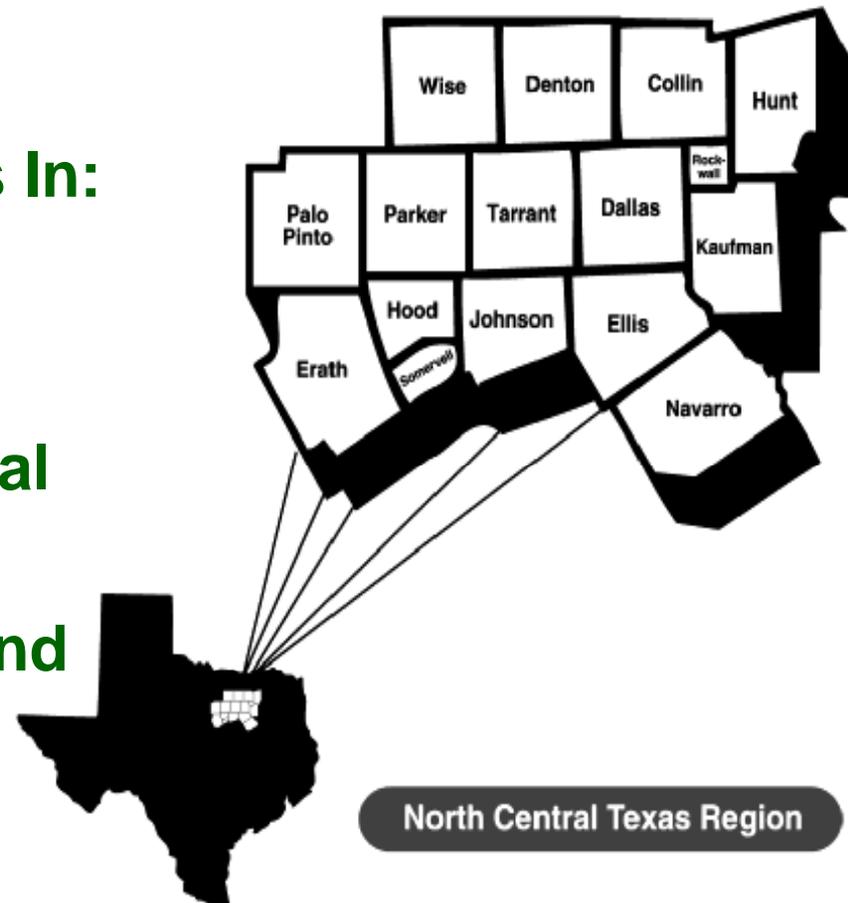
**Lori Pampell, Transportation Planner  
Air Quality Planning & Operations  
Transportation Department  
North Central Texas Council of Governments**

# Who and What is NCTCOG?

**Voluntary Association Of, By, and For Local Governments.**

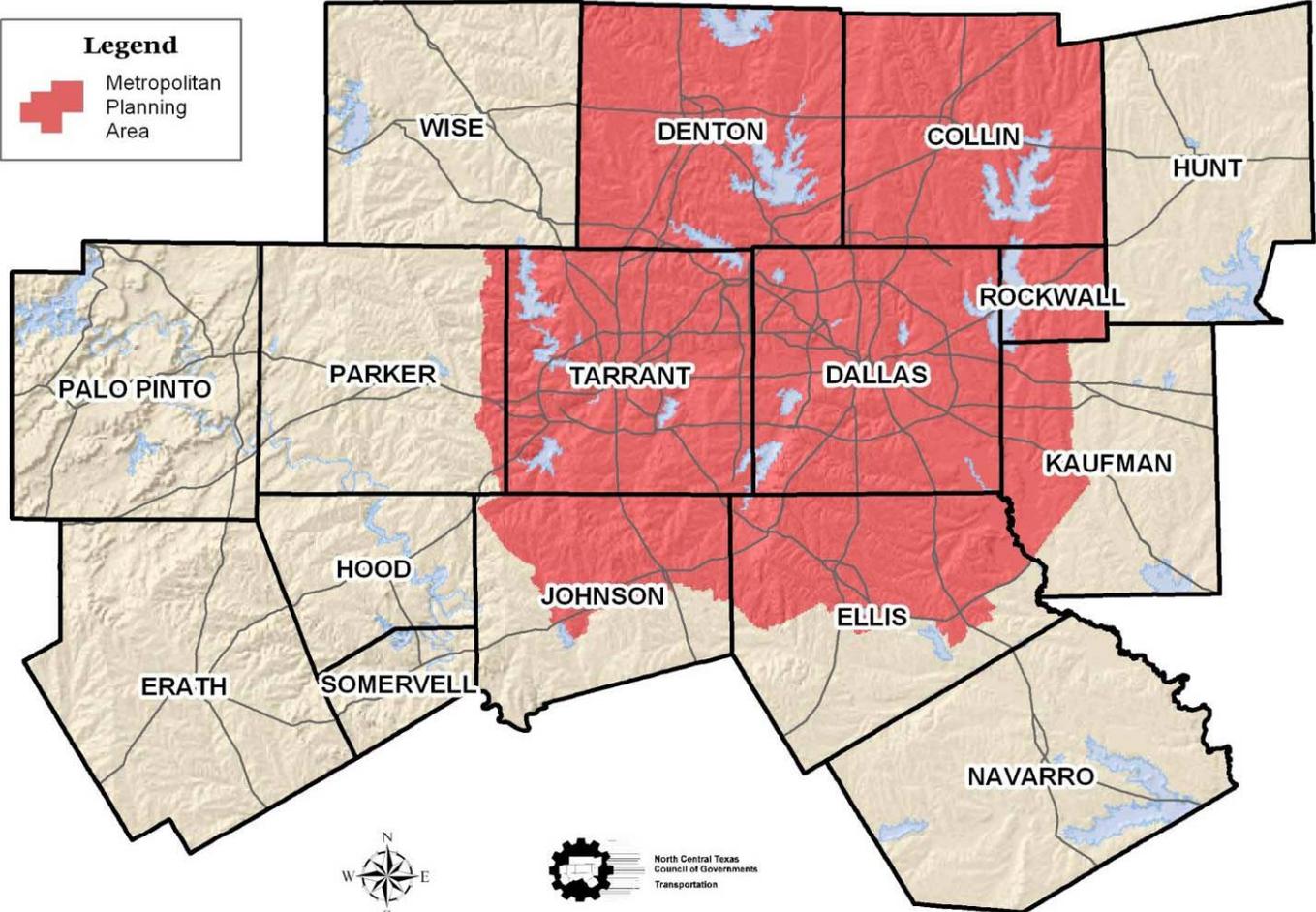
**To Assist Local Governments In:**

- **PLANNING for Common Needs**
- **COOPERATING for Mutual Benefit**
- **COORDINATING for Sound Regional Development**



# Transportation Department Metropolitan Planning Organization

## Metropolitan Planning Area Within the NCTCOG Region



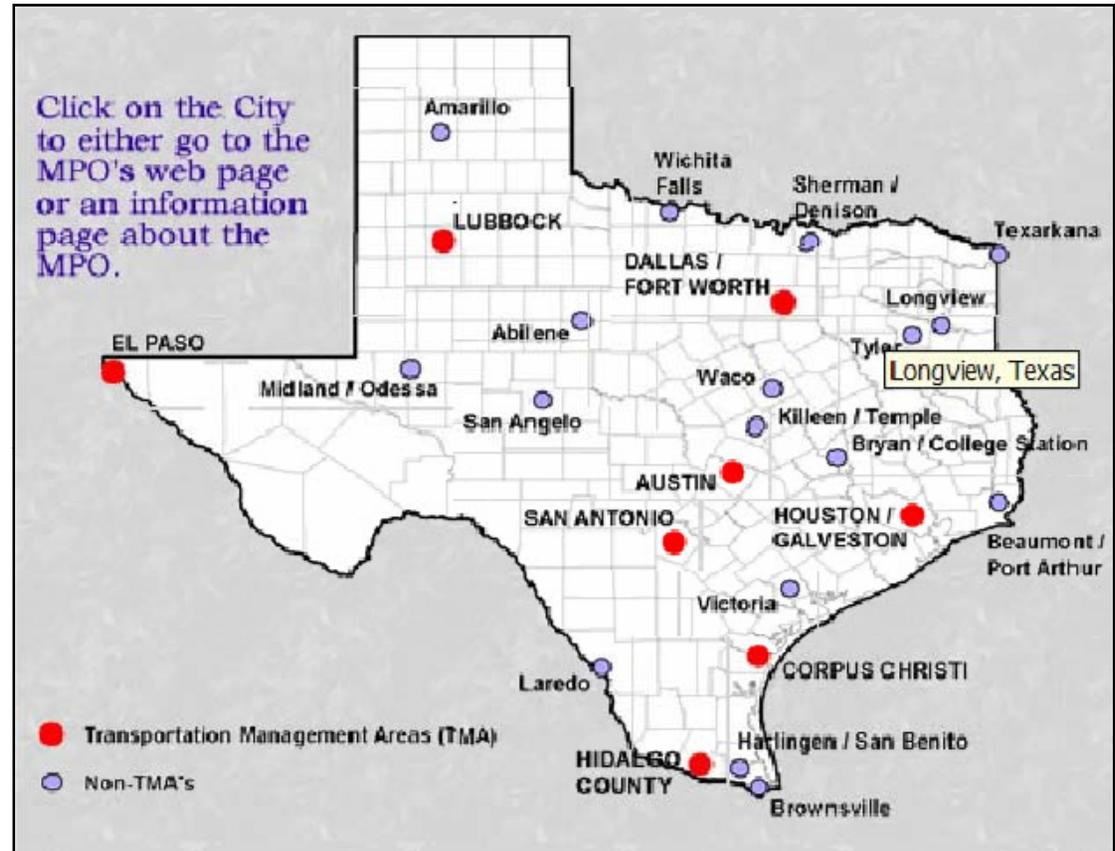
# Colleague Agencies Across the State

Capital Area MPO

Corpus Christi MPO

Hidalgo County MPO

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



Additional Key Players:

Texas Department of Transportation

Texas Motor Transportation Association

Texas Port Association

# Regional Transportation Issues

Increased Travel Time  
and Costs

Ground Level Ozone

Inadequate Transit

Land Use/Transportation  
Mismatch

Decreased Freight  
Access

Need for Increased Safety  
and Security



***The growth rate in freight truck traffic is twice the growth rate of automobile trips.***

# Why Embrace Freight?

## Freight = Regional Economic Development

**There are over 100,000 intermodal freight jobs in the DFW region.**

**\$38.4 billion dollars in international imports arrive in DFW each year.**

**\$21.3 billion dollars in international exports leave DFW each year.**

**100% of finished and unfinished goods use the transportation system.**



# Regional Freight System Planning



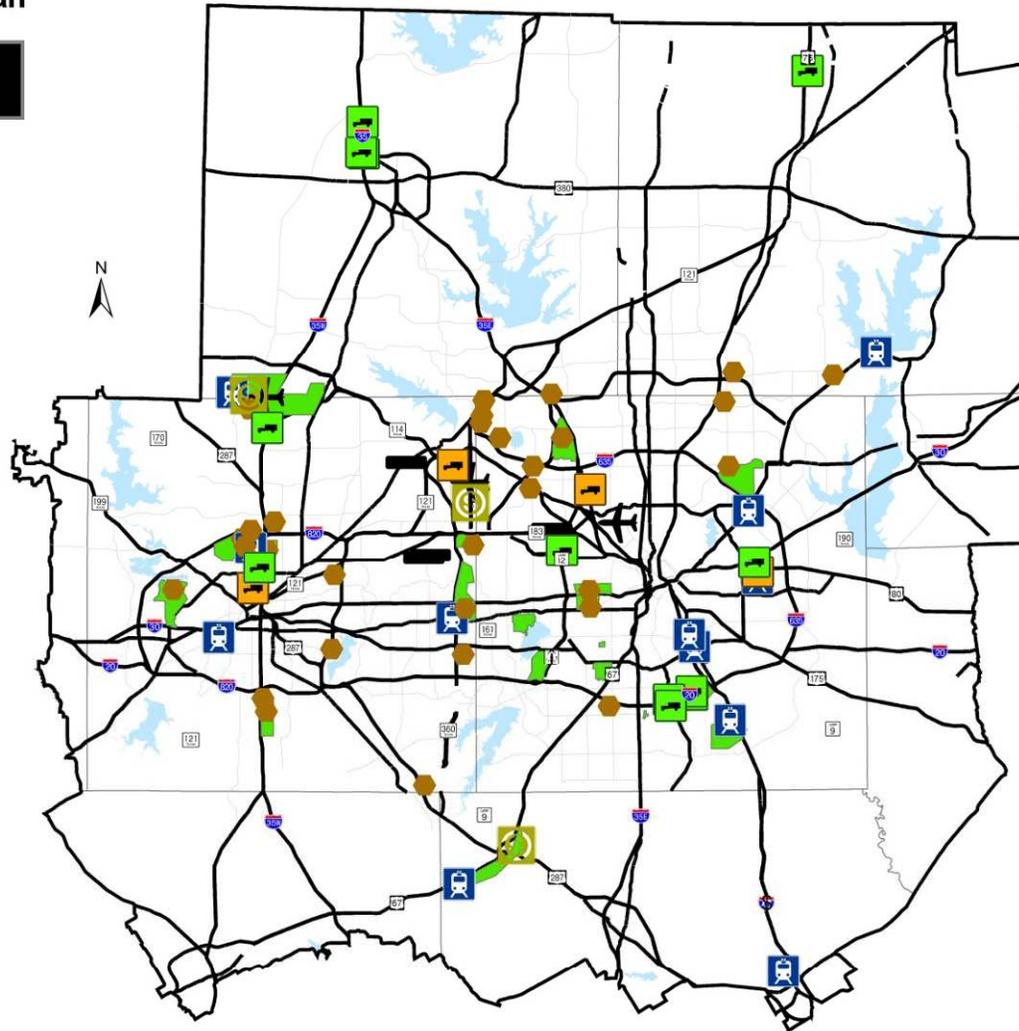
The Metropolitan  
Transportation Plan

## Existing Freight Facilities

### Legend

-  Truck Stop
-  Foreign Trade Zone
-  Industrial Parks
-  Major Airport
-  Parcel Delivery Hub
-  Pipeline Terminal
-  Rail Yard / Intermodal Facility
-  Freight Oriented Developments
-  Freeways
-  Major Roadways
-  Regional Arterials
-  County Boundaries
-  Metropolitan Planning Area Boundary
-  Major Lakes

New facility locations indicate transportation needs and do not represent specific alignments



# **Relevant NCTCOG Goods Movement Initiatives**

**Freight-Oriented Sustainable Development**

**Diesel Idling Reduction Program**

**Idle Reduction Infrastructure Network**

**Locally Enforced Idling Restrictions**

**SmartWay Transport Partnership**

**Funding Programs**

**Idle Reduction Infrastructure**

**On-Board Idle Reduction**

**Vehicle and Equipment Replacement/Repower**

# Freight Oriented Development

**Consolidates Manufacturing, Warehousing, Distribution, and Freight Forwarding Operations in a Location with Ready Access to a Multimodal Transportation Network**

**Allows for the Movement of Goods in a More Timely Manner and at a Lower Cost**



# **Ground Freight Impact on Air Quality**

## **By the Numbers**

### **Energy Consumption**

**20% of Transportation Energy Use**

**35 Billion Gallons Fuel Consumed/Year**

### **Emissions**

**40% of Transportation-Related Nitrogen Oxides**

**30% of Transportation-Related Particulate Matter**

**350 Million Metric Tons Carbon Dioxide (CO<sub>2</sub>)**

# **Freight Impact on Air Quality**

## **Diesel Exhaust**

**Contains Pollutants Which Lead to the Formation of Ozone, Which Contributes to Smog**

**Prolonged Exposure to Ozone Can Lead to Adverse Health Effects Including:**

**Irritation of the Airways**

**Reduced Lung Function**

**Coughing**

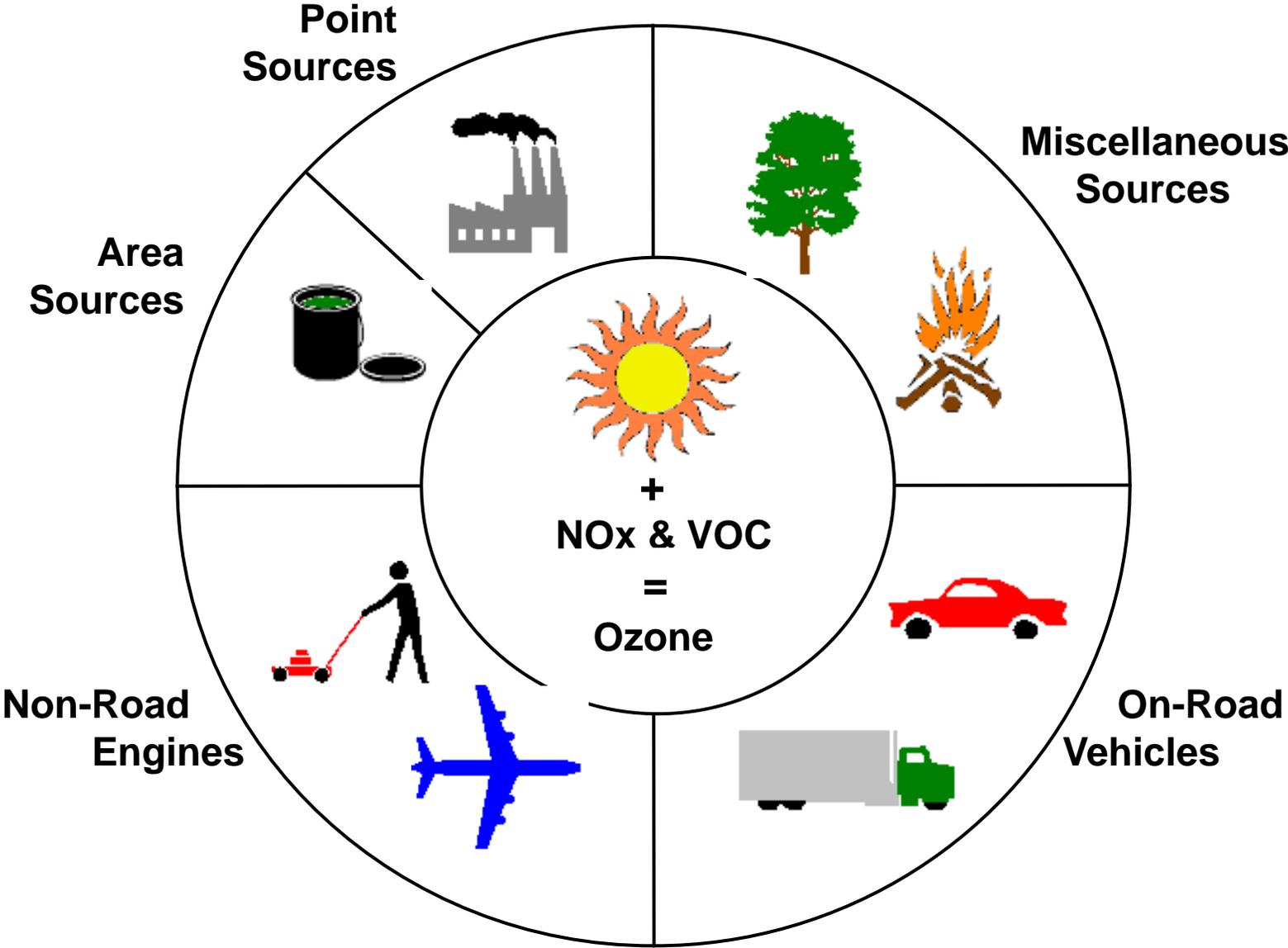
**Irritation of the Throat and Chest**

**Inability to Breathe as Vigorously as Normal**

**Contains Particulate Matter and Many Air Toxins Which are Harmful to Human Health**

**Contributes to Climate Change**

# Air Quality Background – Ozone Formation





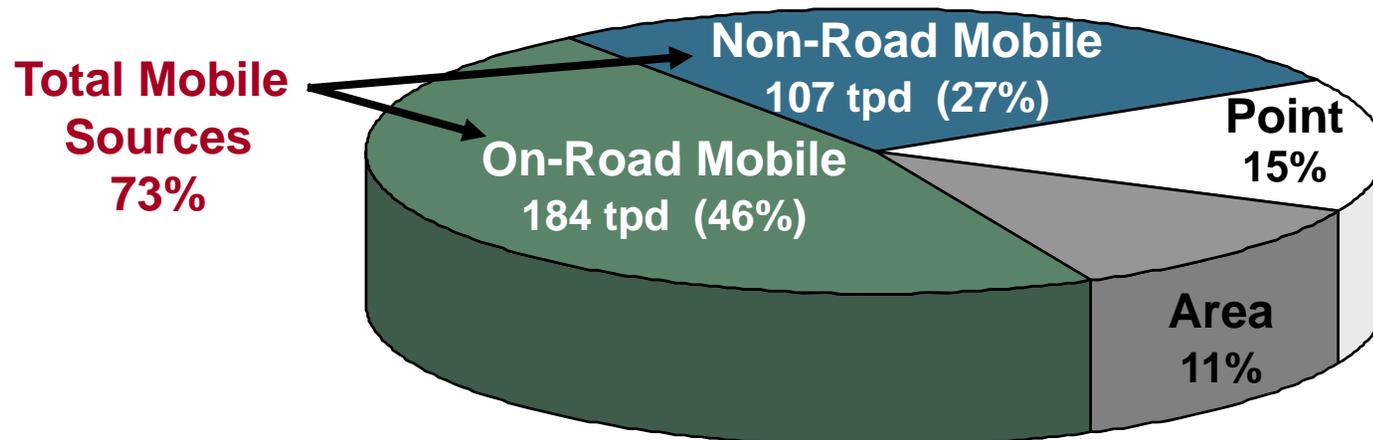
# MPO Requirements and Responsibilities in Nonattainment Areas

Incorporate Air Quality Planning into Transportation Plans

Assist State in Developing State Implementation Plan (SIP)

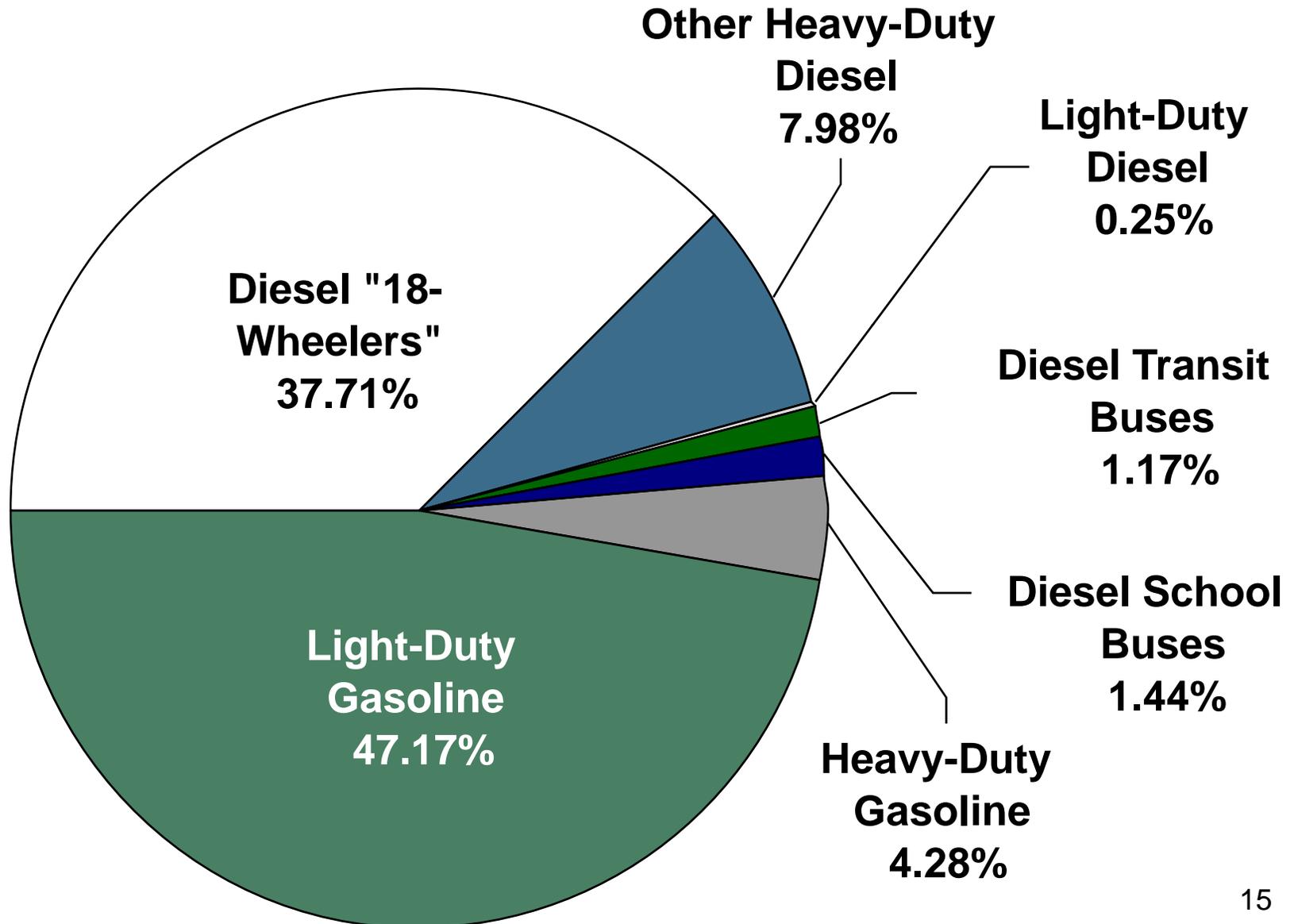
Implement Local Control Strategies

DFW Nonattainment Area 2009 NOx Emissions Inventory  
Emission Source Category Estimates



Total NOx = 396 Tons Per Day (tpd)

# Dallas-Fort Worth Ozone Nonattainment Area 2009 On-Road NO<sub>x</sub> Emissions Inventory



# 8-Hour Ozone State Implementation Plan

## Dallas-Fort Worth Nonattainment Area

NORTH CENTRAL TEXAS STATE IMPLEMENTATION PLAN VOLUNTARY MOBILE EMISSION REDUCTION PROGRAM (VMEP) EMISSION BENEFITS BY PROGRAM TYPE				
PROGRAM TYPE	2009 NO <sub>x</sub> BENEFITS (tons per day)		2009 VOC BENEFITS (tons per day)	
	Modeled	Post- Processed	Modeled	Post- Processed
Clean Vehicle Program	0.00	0.24	0.00	0.05
Employee Trip Reduction	0.43	0.00	0.28	0.00
Locally Enforced Idling Restriction	0.00	0.62	0.00	0.02
Diesel Freight Idling Reduction Program	0.00	0.33	0.00	0.01
SmartWay Transport Demonstration Project	0.00	0.00	0.00	0.00
Public Agency Policy for Construction Equipment	0.00	0.06	0.00	0.01
Aviation Efficiencies	0.00	0.95	0.00	0.24
<b>TOTAL BENEFITS (tons per day)</b>	<b>0.43</b>	<b>2.20</b>	<b>0.28</b>	<b>0.33</b>

(1) NO<sub>x</sub> = Nitrogen Oxides, VOC = Volatile Organic Compounds

# Locally Enforced Idling Restrictions

## Control Requirements (TAC Title 30 Ch 114)

**No Gasoline or Diesel Powered Motor Vehicle Over 14,000 Pounds (GVWR) May Idle the Main Engine for More Than 5 Minutes When the Vehicle is Not in Motion**

**Applicable From April 1 Through October 31**

**\*NOTE:** As of September 1, 2009, all vehicles, including those with a sleeper berth on a government-mandated rest period, are required to comply with this rule within adopting jurisdictions.

# Locally Enforced Idling Restrictions

## Exemptions (TAC Title 30)

### Vehicle Type

- Military, Emergency, and Law Enforcement Vehicles
- Airport Ground Support Equipment
- Owner of a Vehicle Rented or Leased to a Person Not Employed By Owner

### Operations

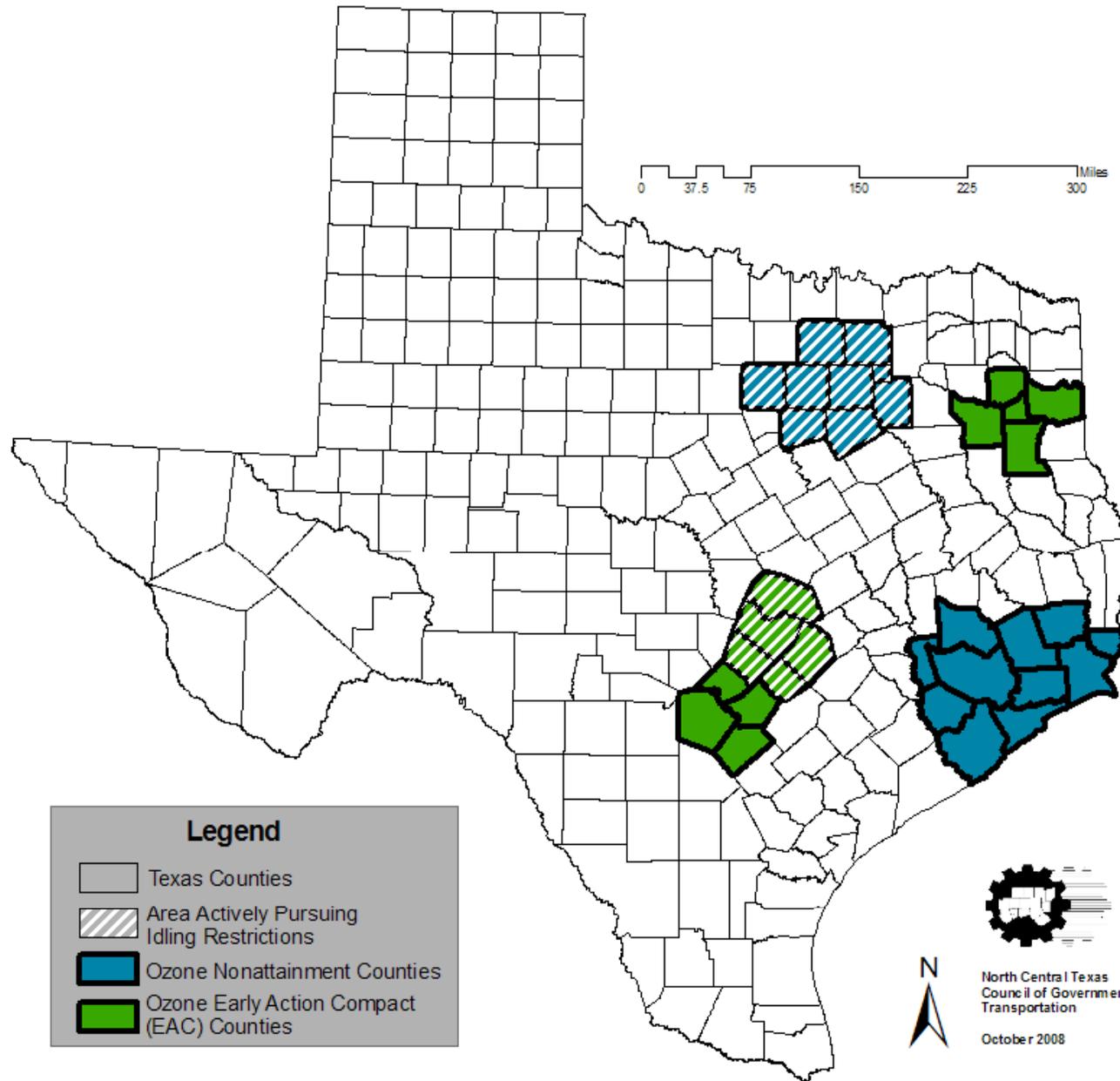
- Idling Due to Traffic Congestion
- Motors Run as Power Source for Mechanical Operations
- Idling During Operation for Maintenance/Diagnostic Purposes
- Operation of Engine Solely to Defrost a Windshield

### Air Conditioning and Heating Provision

- For Passenger Comfort and Safety in Vehicles Intended for Commercial/Public Passenger Transportation or Passenger Transit Operations (**30 Minutes Maximum**)
- For Employee Health or Safety While Employee is Using Vehicle to Perform an Essential Job Function Related to Roadway Construction or Maintenance

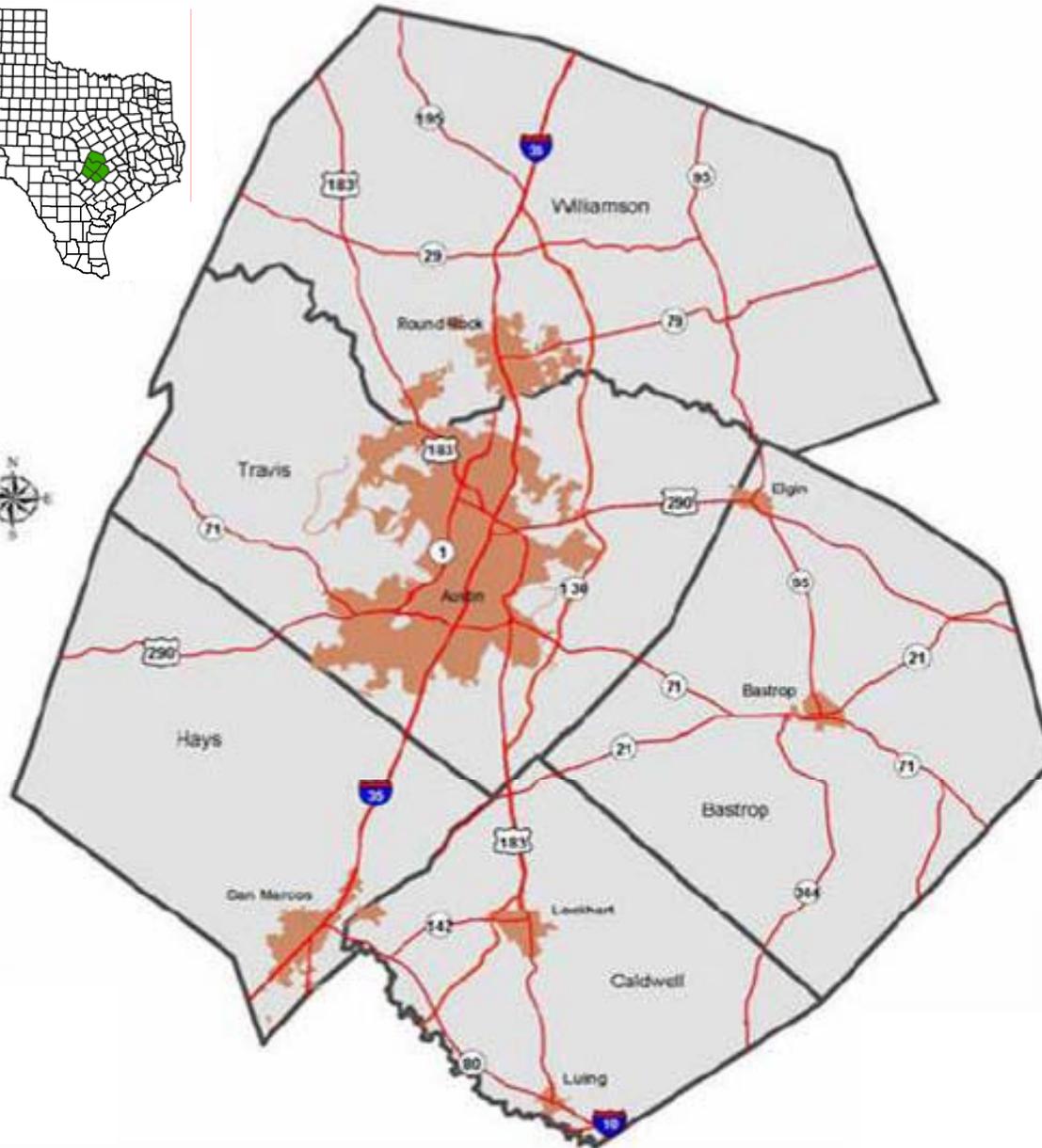
# Locally Enforced Idling Restrictions

## Regions Actively Pursuing Adoption and Enforcement



# Locally Enforced Idling Restrictions

## Central Texas Area



### Adopting Entities

Counties:

- Bastrop
- Caldwell
- Hays
- Travis
- Williamson

Cities:

- Austin
- Bastrop
- Lockhart
- Luling
- Round Rock
- San Marcos

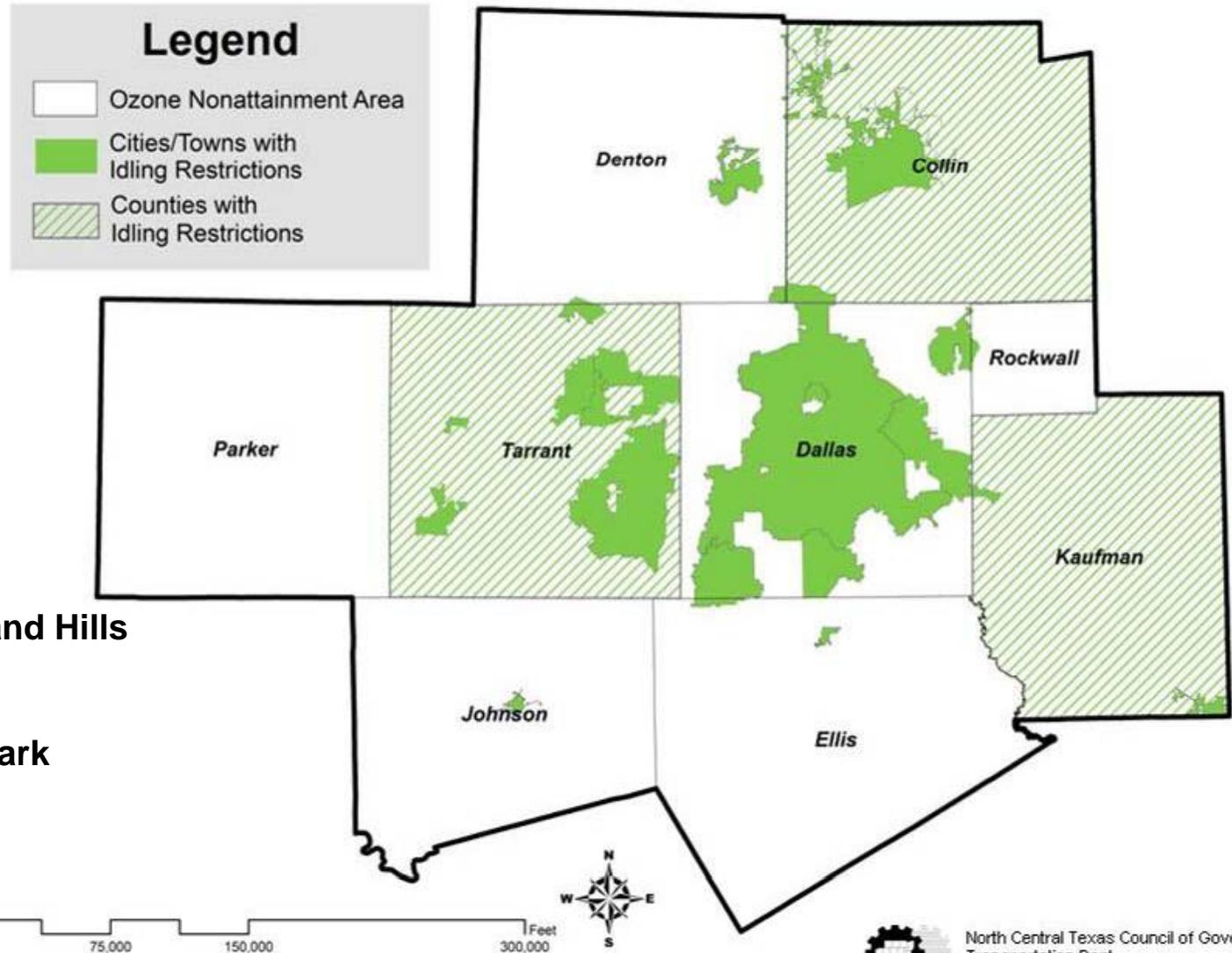
# Locally Enforced Idling Restrictions

## North Central Texas Area

### Adopting Entities

- City of Arlington
- City of Benbrook
- City of Cedar Hill\*
- City of Celina
- City of Colleyville
- City of Dallas
- City of Euless
- City of Hurst
- City of Keene
- City of Lake Worth
- City of Lancaster
- City of Mabank
- City of McKinney
- City of Mesquite
- City of North Richland Hills
- City of Pecan Hill
- City of Rowlett
- City of University Park
- City of Venus
- Town of Little Elm
- Town of Westlake
- Collin County
- Kaufman County
- Tarrant County

\* Pending Execution of MOA with TCEQ



# Locally Enforced Idling Restrictions

## Applicability to Warehousing

Violations Punishable by Fines of up to \$500

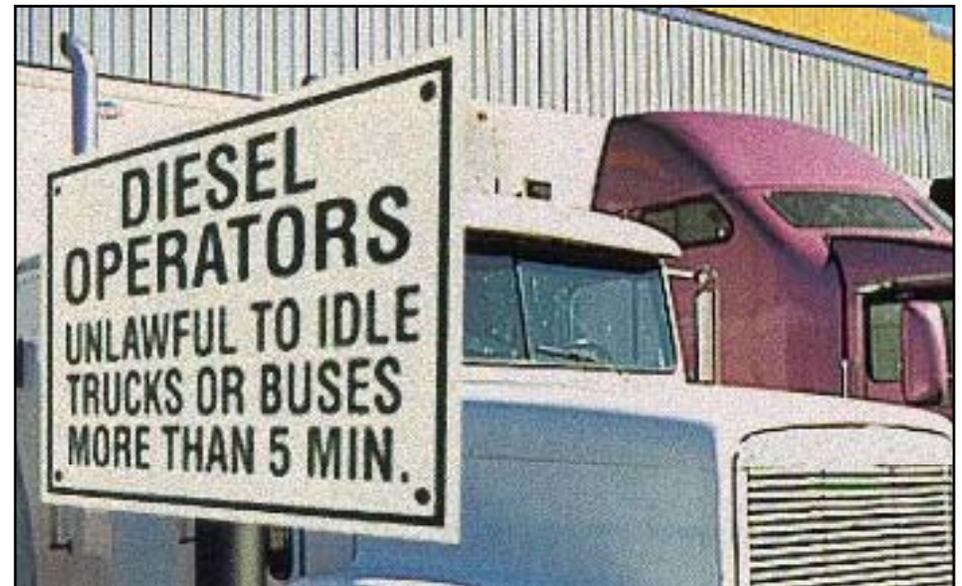
Property Owners Potentially Held Liable

What Can You Do?

Establish No-Idle Policies

Post Anti-Idling Signs

Offer Driver Comfort Stations



# Locally Enforced Idling Restrictions

## NCTCOG Outreach



**Anti-Idling Signs**

**Informational Brochures**

**Complaint Hotline and Web site:**

**1-877-NTX-IDLE (689-4353)**

**[www.EngineOffNorthTexas.org](http://www.EngineOffNorthTexas.org)**

# **EPA SmartWay Program**

## **Smart Business for Everyone**

**Represents Environmentally Cleaner, More Fuel-Efficient Transportation Options**

**Identified Products and Services Which Reduce Transportation-Related Emissions**

**Signifies Partnership Among Government, Business, and Consumers**

**SmartWay Vehicles**

**Fuel Options**

**SmartWay Transport Partnership**

**SmartWay Tractors and Trailers**

**SmartWay Financing Options**



# EPA SmartWay Transport Partnership

## Potential Warehouse Strategies

### Promote Efficiencies Among Business Partners

SmartWay Carriers  
Intermodal Shipping  
Preferential Docking  
Pickup/Delivery Scheduling  
Anti-Idling Policies  
Driver Comfort Stations



### Establish In-House Initiatives

Electric Forklifts  
Light Fleet Improvements  
Warehouse Improvements

# EPA SmartWay Transport Partnership

## Benefits of Participation

### Cost Savings

**\$10 Billion in Operating Costs Saved Annually**

### Business-to-Business Advantage

### Environmental Achievement

**3.3-6.6 Billion Gallons Diesel Saved Annually**

### Public and Peer Recognition

**SmartWay Logo**

**SmartWay Excellence Awards**



# **Building Efficiencies**

## **Sources of Potential Improvements**

**Energy Audits**

**Lighting**

**Windows**

**Roofs**

**Heating and Air Conditioning**

**Renewable Power**

**Sustainable Development (New Locations)**

# How to Get Involved

## Potential Grant Opportunities

### Congestion Mitigation and Air Quality Program (CMAQ)

Awarded through MPOs

Authorization of Federal Transportation Bill

Infrastructure Improvements

Reduce Diesel Emissions

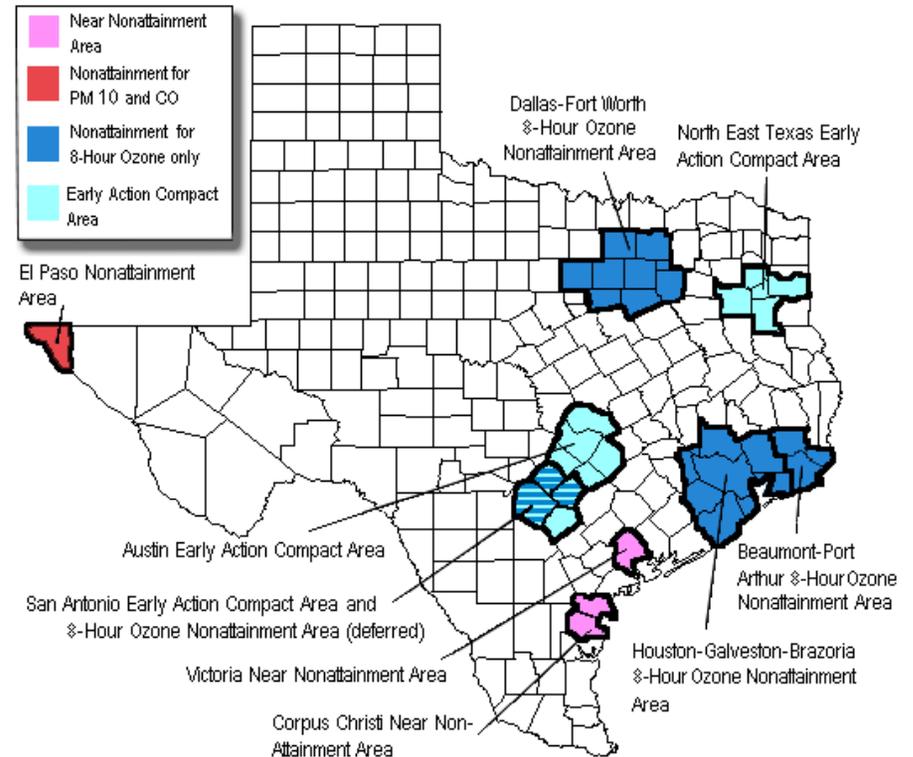
### Heavy-Duty Vehicle and Equipment Grant Program

DFW Nonattainment Area

Currently Accepting Applications

On-Site Idle Reduction

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



# **How to Get Involved**

## **Potential Grant Opportunities**

### **National Clean Diesel Funding Assistance Program**

**Environmental Protection Agency**

**Early October 2009**

**On-Site Idle Reduction**

**Existing Diesel Vehicles/Equipment**

**[www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)**

### **Texas Emissions Reduction Plan (TERP)**

**Texas Commission on Environmental Quality**

**March 2010**

**On-Site Idle Reduction**

**Existing Heavy-Duty Vehicles/Equipment**

**[www.terpgrants.org](http://www.terpgrants.org)**

# **How to Get Involved**

## **Financial Incentives – Energy Efficiency**

### **Renewable Energy Systems Property Tax Exemption**

### **Rebates and Incentive Payments for Eligible Energy Efficiency and Renewable Energy (Solar) Projects**

**American Electric Power**

**Bryan Texas Utilities**

**CPS Energy**

**Entergy Texas**

**Guadalupe Valley Electric Coop.**

**Oncor Electric Delivery**

**Southwestern Electric Power Co.**

**Tri-County Electric Coop.**

**Austin Energy**

**Centerpoint Energy**

**Denton Municipal Electric**

**Garland Power & Light**

**New Braunfels Utilities**

**Pedernales Electric Coop.**

**Texas-New Mexico Power Co.**

**Xcel Energy**

# How to Get Involved

## Future State Implementation Plans

### Control Strategy Development

Improve Efficiency

Reduce Emissions

Need Stakeholder Input

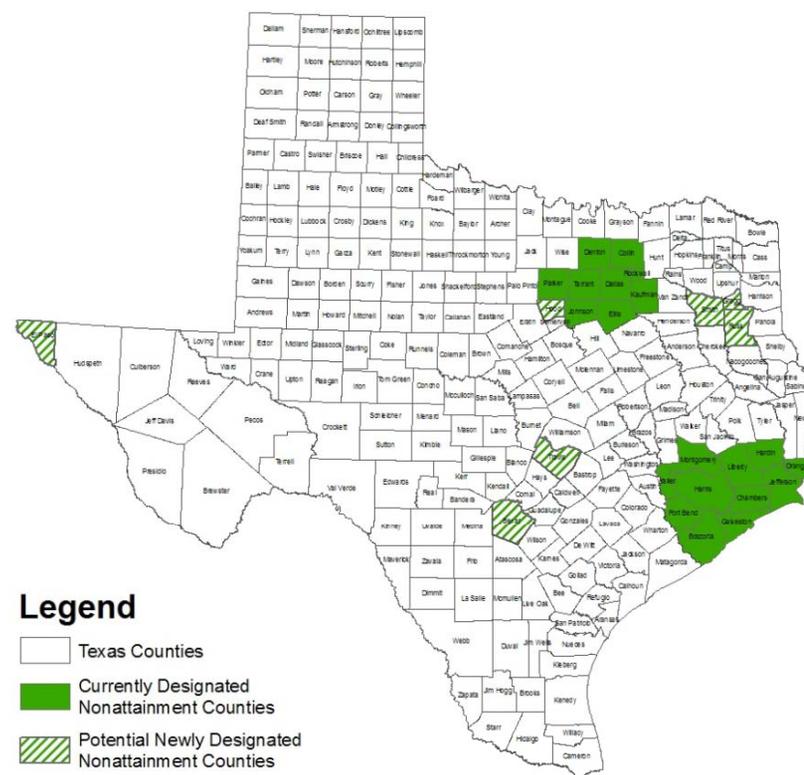
### Data Needs

Major Freight Activity Centers

Origin/Destination Data

Commodity Flows

Travel Times/Patterns



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

[www.tceq.state.tx.us](http://www.tceq.state.tx.us)

# Questions?



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North Central Texas Council of Governments  
Air Quality Planning and Operations  
817-695-9232**

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