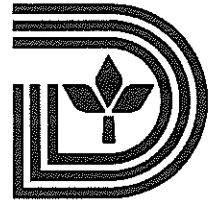


# Memorandum



CITY OF DALLAS

DATE May 7, 2010

TO Transportation and Environment Committee Members: Linda L. Koop (Chair),  
Sheffie Kadane (Vice Chair), Jerry Allen, Tennell Atkins, Carolyn R. Davis, Delia  
Jasso, Pauline Medrano, Ron Natinsky, Vonciel Jones Hill

SUBJECT Air Quality Standards and Clean Construction Pilot Program Briefing

On May 10, 2010 staff will brief the Committee with an update on air quality standards and an opportunity to participate in a clean construction pilot program. Please find attached a copy of the presentation, and feel free to contact me if you need additional information.

A handwritten signature in black ink, appearing to read 'Jeff Jordan'.

Jeff A. Jordan, P.E.  
Assistant City Manager

c: Honorable Mayor and Members of the City Council  
Mary K. Suhm, City Manager  
Deborah A. Watkins, City Secretary  
Thomas P. Perkins, Jr., City Attorney  
Craig Kinton, City Auditor  
Judge C. Victor Lander, Administrative Judge  
Ryan S. Evans, First Assistant City Manager  
A. C. Gonzalez, Assistant City Manager  
Forest Turner, Assistant City Manager  
Jeanne Chipperfield, Chief Financial Officer  
Frank Libro, Public Information Office  
Helena Stevens-Thompson, Assistant to the City Manager

# Air Quality Standards and Clean Construction Pilot Program

Presented to the  
Transportation and Environment Committee  
May 10, 2010





# Purpose of Presentation

- Provide Air Quality Standard Update
- Present Clean Construction Pilot Program Opportunity

# Federal Air Quality Standards

- **Federal Clean Air Act:** Passed in 1970;  
Amended in 1990
  
- Requires the Environmental Protection Agency (EPA) to establish health-based standards called National Ambient Air Quality Standards (NAAQS)
  
- **Six Criteria Pollutants**
  - **Ground Level Ozone/Smog (O<sub>3</sub>)**
  - Particulate Matter (PM)
  - Nitrogen Dioxide (NO<sub>2</sub>)
  - Sulfur Dioxide (SO<sub>2</sub>)
  - Carbon Dioxide (CO)
  - Lead



# **Air Quality in Dallas-Fort Worth (DFW) Region**

- DFW area currently exceeds the EPA's 8-hour ozone standard of 85 ppb but meets all other national ambient air quality criteria
- Designated as a moderate non-attainment area and has until June 2010 to meet the standard
- Based on data from NCTCOG, DFW region is at 86 ppb which is not in compliance with the standard

# Potential Consequences of Violation

- Loss of highway funds
- Loss of Community Development Block
- Grant funds
- Stricter permit limits
- Health impacts

# Next Ozone Standard

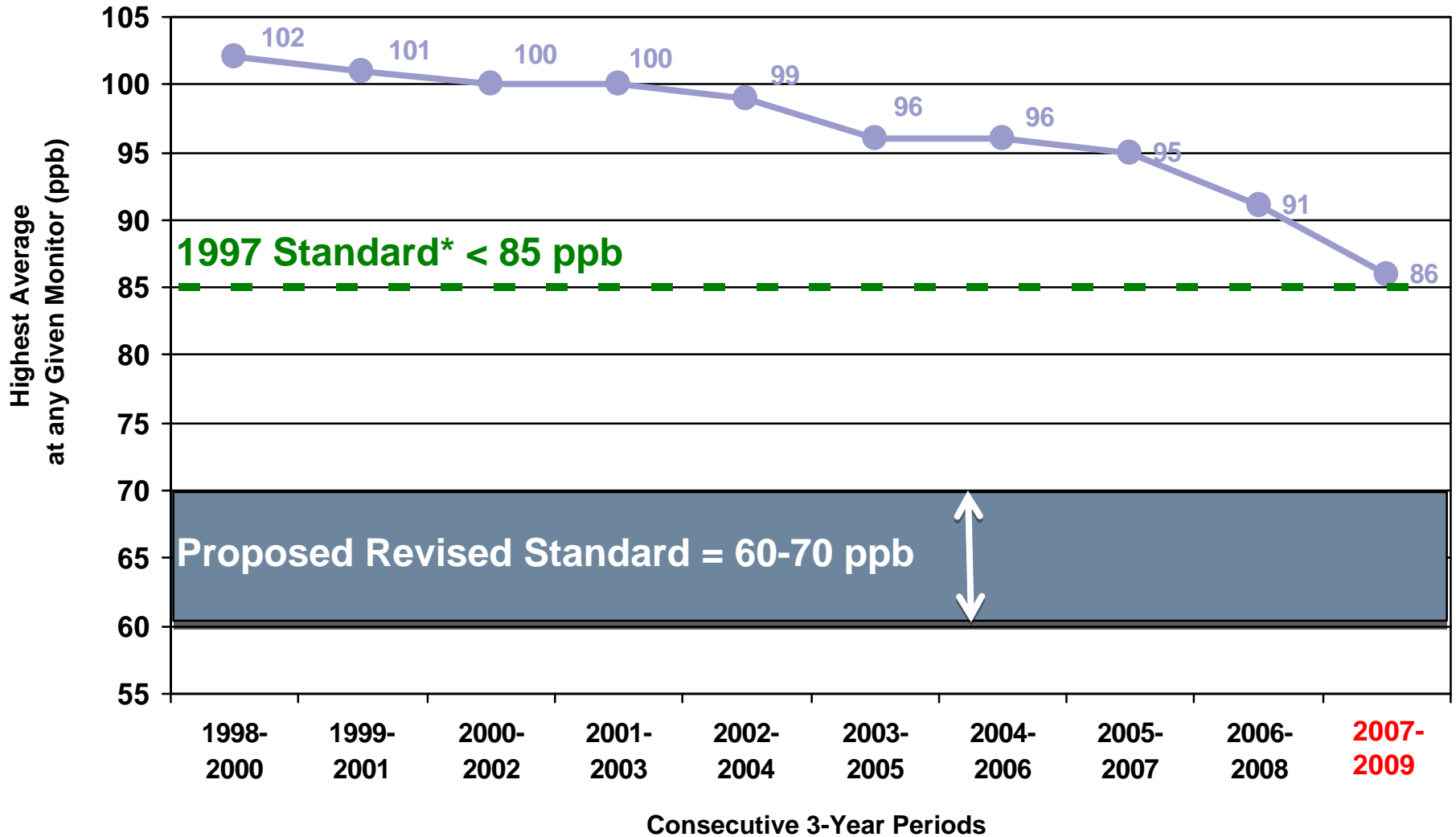
- EPA is proposing to lower the ozone standard to between 60 to 70 ppb
- New ozone standard was published on January 6, 2010, for public comment
  - City of Dallas commented on standard
- Tighter standard will force Dallas and other surrounding cities to look for additional emissions reductions

# Proposed Schedule for Ozone Standard Implementation

- **August 31, 2010**
  - EPA will issue final standards for ozone
  
- **January 2011**
  - States make recommendations for areas to be designated attainment, nonattainment or unclassifiable
  
- **July 2011**
  - EPA makes final area designations
  
- **August 2011**
  - Designations become effective
  
- **December 2013**
  - State Implementation Plans, outlining how states will reduce pollution to meet the standards, are due to EPA
  
- **2014 to 2031**
  - States are required to meet the primary standard, with deadlines depending on the severity of the problem



# North Central Texas 8-Hour Ozone Historical Trend



\* 2010 Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than 85 parts per billion (ppb).

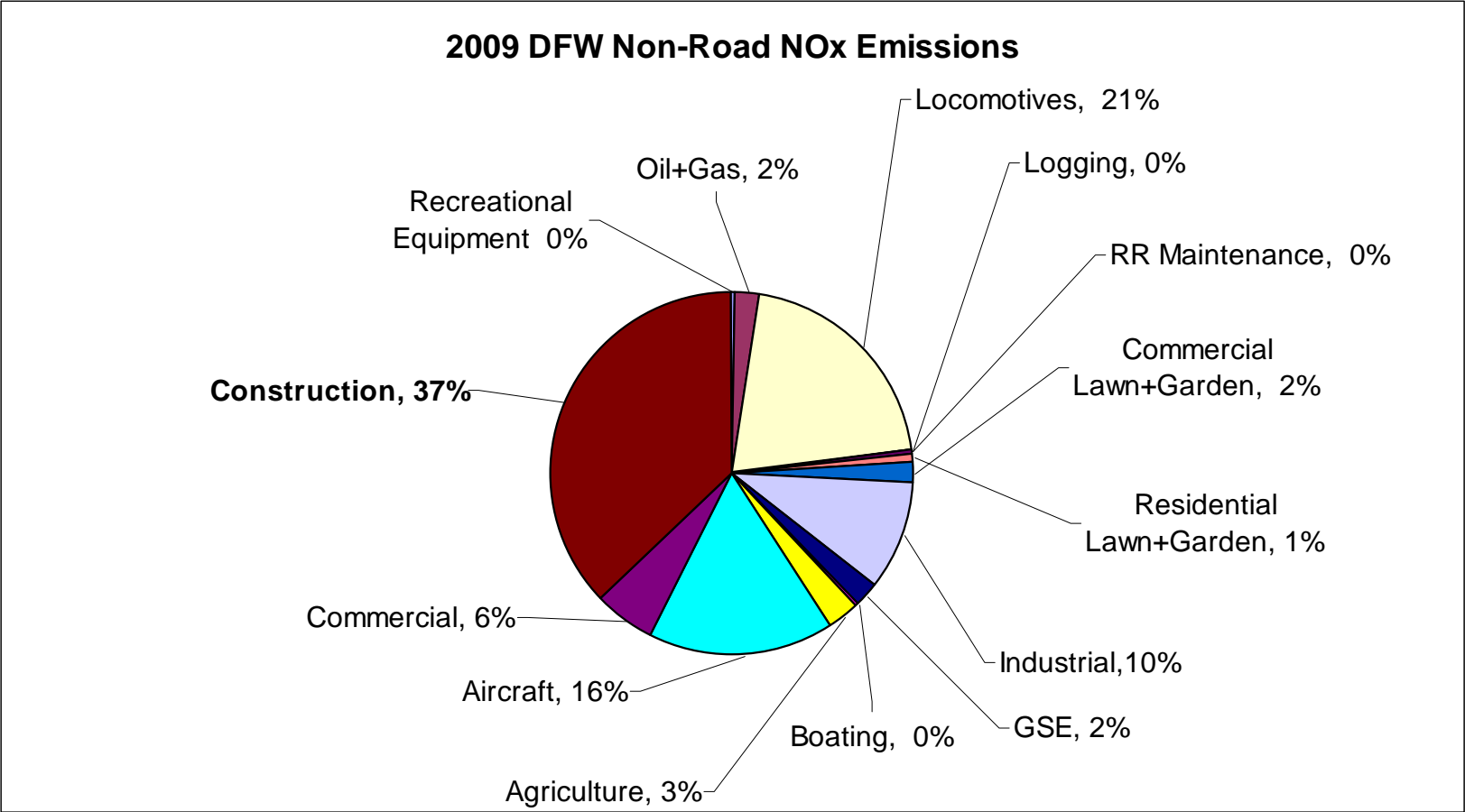
# State Implementation Plan

- Plan to reduce pollution to meet health-based standards
- Sets control strategies for reducing emissions
- Applies to areas not meeting federal air quality standards (ozone)
- Sets technical/regulatory process for demonstrating attainment

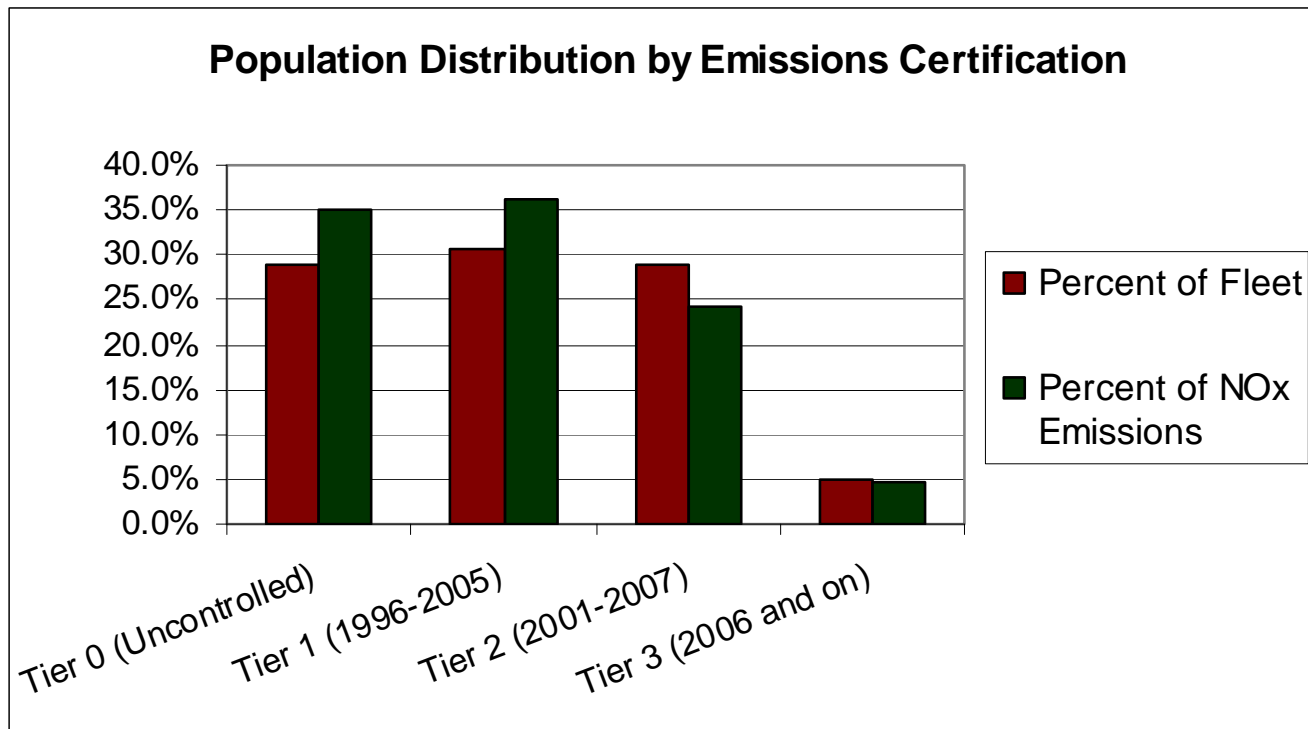
# State Implementation Plan: Voluntary Control Strategies in Tons Per Day

Aviation Efficiencies	0.95 tpd
HOV/Managed Lane Projects	0.79 tpd
Locally Enforced Idling Restriction	0.62 tpd
Employee Trip Reduction	0.43 tpd
Diesel Freight Idling Reduction	0.33 tpd
Rail Transit Projects	0.28 tpd
Clean Vehicle	0.24 tpd
Grade Separation Projects	0.18 tpd
Intersection Improvement Projects	0.15 tpd
Vanpool Projects	0.08 tpd
Policy for Construction Equipment	0.06 tpd
Park and Ride Improvement Projects	0.04 tpd
Bicycle/Pedestrian Projects	0.01 tpd
SmartWay Transport Demonstration Project	0.002 tpd

# Construction Contribution to NOx in DFW Area



# Existing Fleet Composition of Diesel Construction Equipment in DFW



1. Source: NCTCOG
2. Construction equipment means all machinery of 25 horsepower or more which is powered by an internal combustion engine
3. Both public and privately owned equipment is included in data

# Public Agency Policy for Construction Equipment Demonstration Project

- On March 11, the Regional Transportation Council of the North Central Texas Council of Governments (NCTCOG) approved a one-year demonstration project to evaluate potential cost impacts of a Clean Construction Specification
- For public works projects that are going out to bid, Clean Construction Specification for the equipment to be used will be provided to City contractors
  - Contractors will estimate the bid price that they would have submitted for the project if they were required to comply with the standards
- Award of contract will not be tied to pilot program or the submitted estimated bid price if clean construction specifications are in effect
- Goals of demonstration project
  - Collect information on changes of bid costs which could financially impact City
  - Findings will be presented to determine feasibility of the implementation of a permanent policy
- City of Dallas would voluntarily participate in the NCTCOG's demonstration project
- Time Frame: One year for collection of data

# Clean Construction Specifications – Include:

## 1) Engine Requirements

- Tier 2 or Equivalent

- Exemptions

- Engine age less than or equal to 10 years old
- Equipment subject to grant requirements
- Low-use equipment
- Emergency situations

# Clean Construction Specifications – Include: (continued)

## 2) Operational Requirements

- Fuel Usage: Ultra-Low Sulfur Diesel (ULSD) or TxLED-compliant Biodiesel blends
- Limits idling to no more than five minutes unless exceptions occur:
  - Emergency response purposes
  - Necessary component of operation, maintenance, or diagnostic purposes
  - Health or Safety of operator
- Staging/Minimizing use of equipment

## 3) Reporting Requirements

- Inventory of equipment used on-site



# Next Step

- Participate in NCTCOG demonstration project for one year to evaluate cost impacts of a Clean Construction Specification