



# **PUBLIC AGENCY POLICY FOR CONSTRUCTION EQUIPMENT**

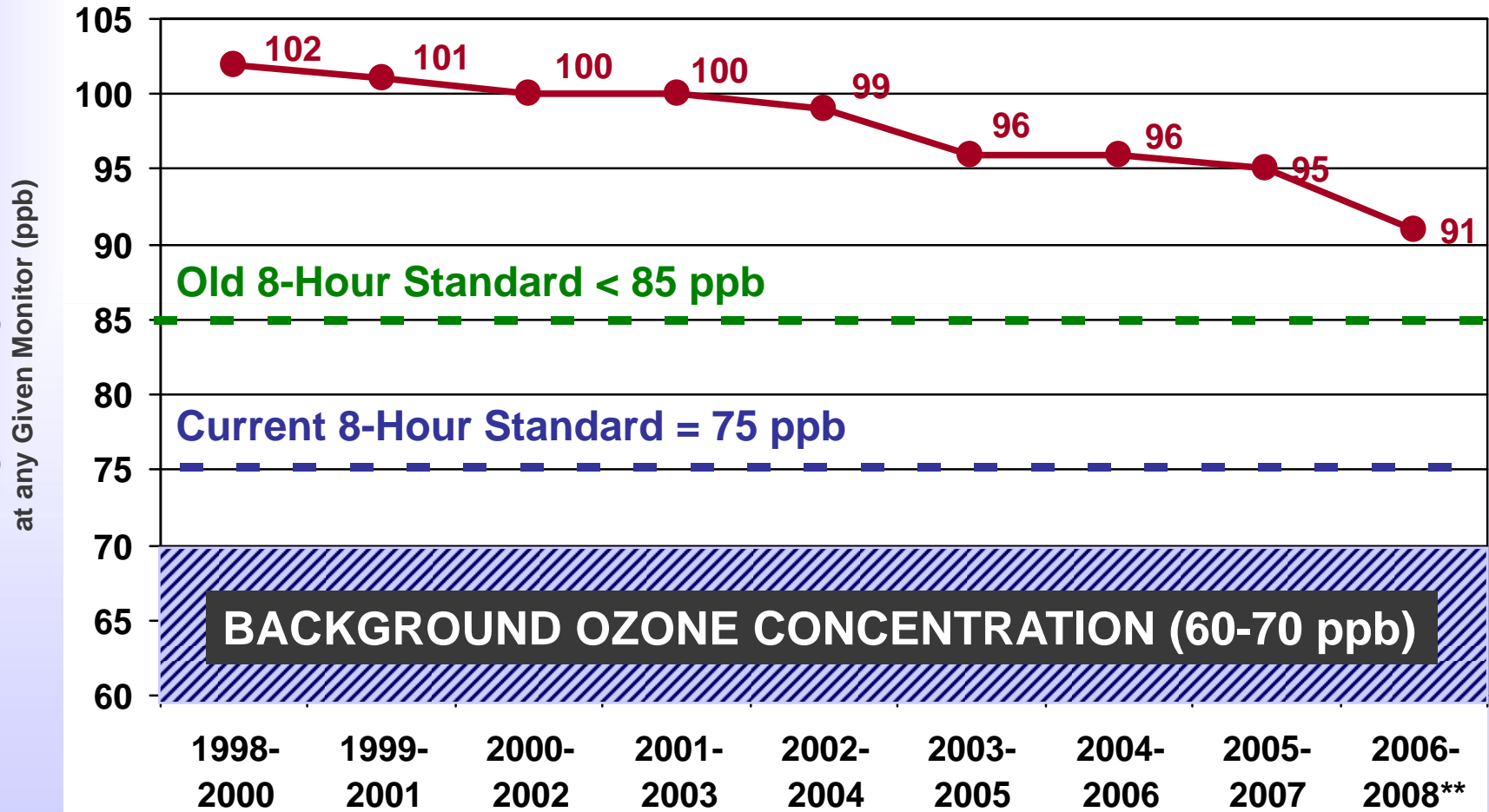
**Stakeholders' Workshop**

**June 25, 2009**

**Carrie Reese, Program Manager  
Lori Pampell, Transportation Planner  
Air Quality Policy and Program Development  
North Central Texas Council of Governments**

# 8-HOUR OZONE STANDARD\*

## DFW Nonattainment Area



North Central Texas Council of Governments

Highest Design Value  
at any Given Monitor (ppb)



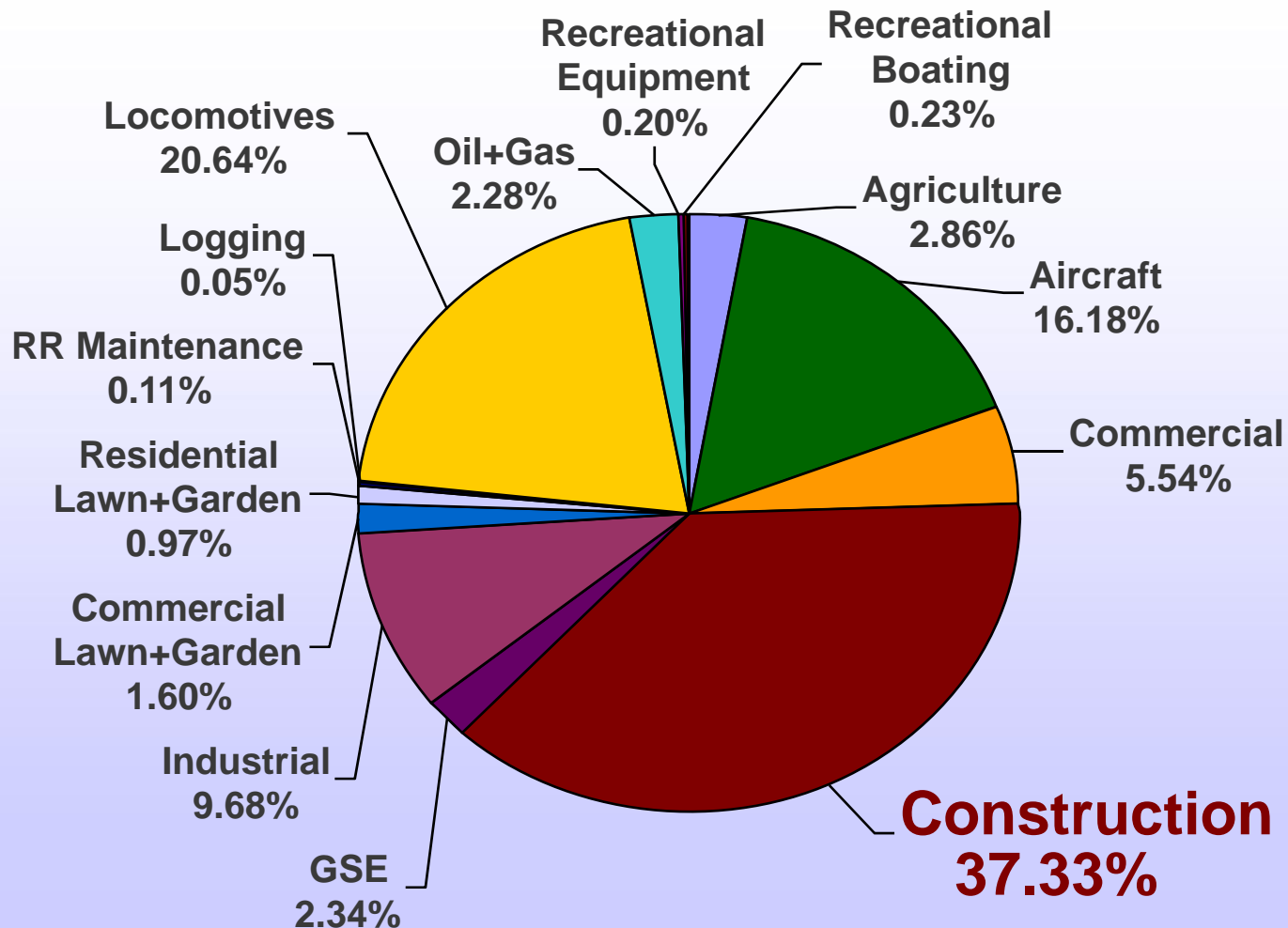
\*Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than 75 parts per billion (ppb).

\*\*Data current as of 10/2/08

# DFW OZONE NONATTAINMENT AREA

## 2009 Non-Road Nitrogen Oxide (NOx) Emissions

Approximately 107 tons/day from Non-Road Sources  
(27% of Total NOx Inventory)



Source: TCEQ



# **PUBLIC AGENCY CONSTRUCTION POLICY**

## **Why Construction Equipment?**

**Later Regulation Has Led to Large Numbers of High-Emitting Engines**

**New Federal Standards Have Come Into Play in Recent Years**

**Long Life Span of Equipment Leads to Slow Fleet Turnover**

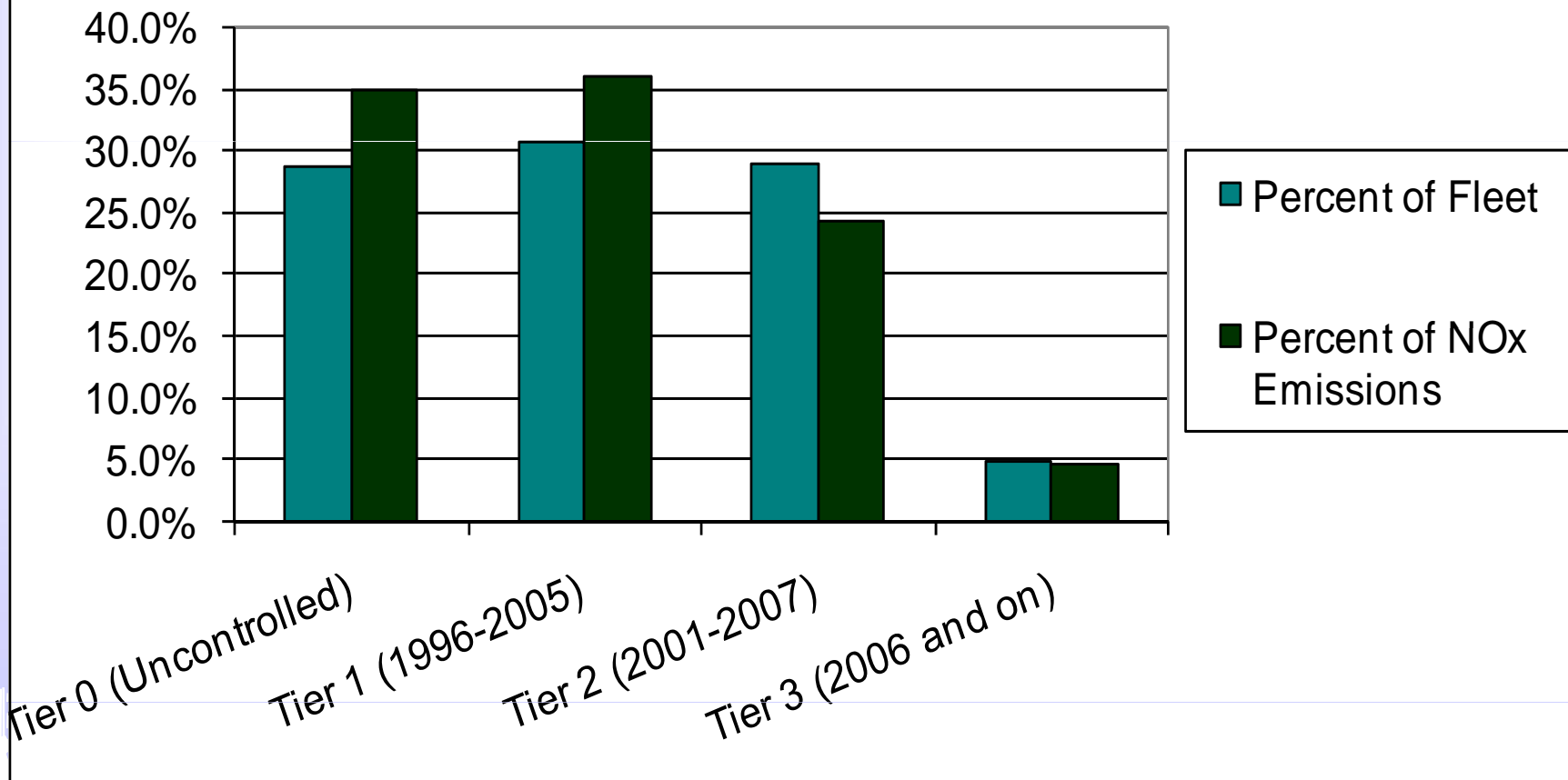
**Significant Impact of Construction Emissions on North Central Texas Air Quality**



# REGIONAL EQUIPMENT INVENTORY

## Population Distribution - Emissions

### Population Distribution by Emissions Certification



# DFW State Implementation Plan (SIP)

## Voluntary Mobile Emissions Reduction Program

### NCTCOG Commitments

Program	Sector Targeted
Aviation Efficiencies	Aviation
Clean Vehicle Program	Light-Duty and Heavy-Duty On-Road Fleets
Diesel Idle Reduction Program	Trucking; Heavy-Duty On-Road Fleets
Locally Enforced Idling Restrictions	Trucking; Heavy-Duty On-Road Fleets
SmartWay Transport Demonstration Project	Trucking
Employee Trip Reduction	General Public; Light-Duty On-Road Fleets
Public Agency Policy for Construction Equipment	Construction Fleets



# PUBLIC AGENCY CONSTRUCTION POLICY

## Background

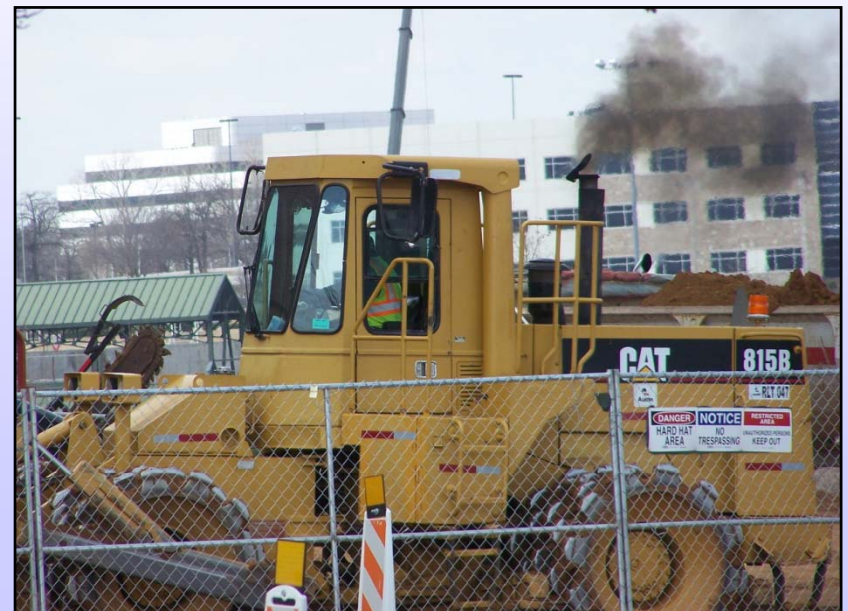
**Non-Road Equipment Owned by, Operated by or on Behalf of, or Leased by a Local Government or Public Agency**

### Policy Goals

**Encourage Use of Clean Diesel Equipment**  
**Encourage Use of Incentive Programs**  
**Gain State Implementation Plan Credit**

### Policy Types Considered

**Contract Incentive**  
**Contract Preference**  
**Contract Specification**



# PUBLIC AGENCY CONSTRUCTION POLICY

## Existing Examples

Entity	Contract Specifications	Contract Preferences	Contract Incentives
California	X		
Chicago O'Hare	X		
City of Chicago	X		
City of Dallas			X
City of Houston			X
Connecticut	X		
Illinois	X		
Maryland	X		
Massachusetts	X		
New York City	X		
Northeast Diesel Collaborative	X		
TxDOT			X



# DRAFT POLICY

## Major Elements to Date

### Contract Specification

- Increased Impact on Emissions
- Enforced as any Other Contract Provision
- Maintenance of Low-Bid Process
- Allowance for Certain Exemptions

### Equipment/Engine Requirements

- Required Engine Standard Changes Over Time
- Sample Schedule:

Effective Date	Minimum Standard
January 1, 2011	Tier 2 or Equivalent
January 1, 2013	Tier 3 or Equivalent
January 1, 2019	Tier 4 or Equivalent

Repowers/Retrofits of Older Engines Allowed



# DRAFT POLICY

## Additional Policy Elements

### Operational Requirements

#### Fuel Use

All Diesel Must be Ultra-Low Sulfur Diesel

Alternative Fuels Encouraged (i.e. Biodiesel)

#### Restriction on Idling

5 Minutes, with Exceptions

#### Staging of Equipment Away from Sensitive Receptors

Fresh Air Intakes

Hospitals, Schools, Day Care Facilities, etc.

### Reporting to Contracting Entity

Inventory of Equipment Used On-Site

Due by Onset of Construction Activity

Maintained On Site

### Enforcement

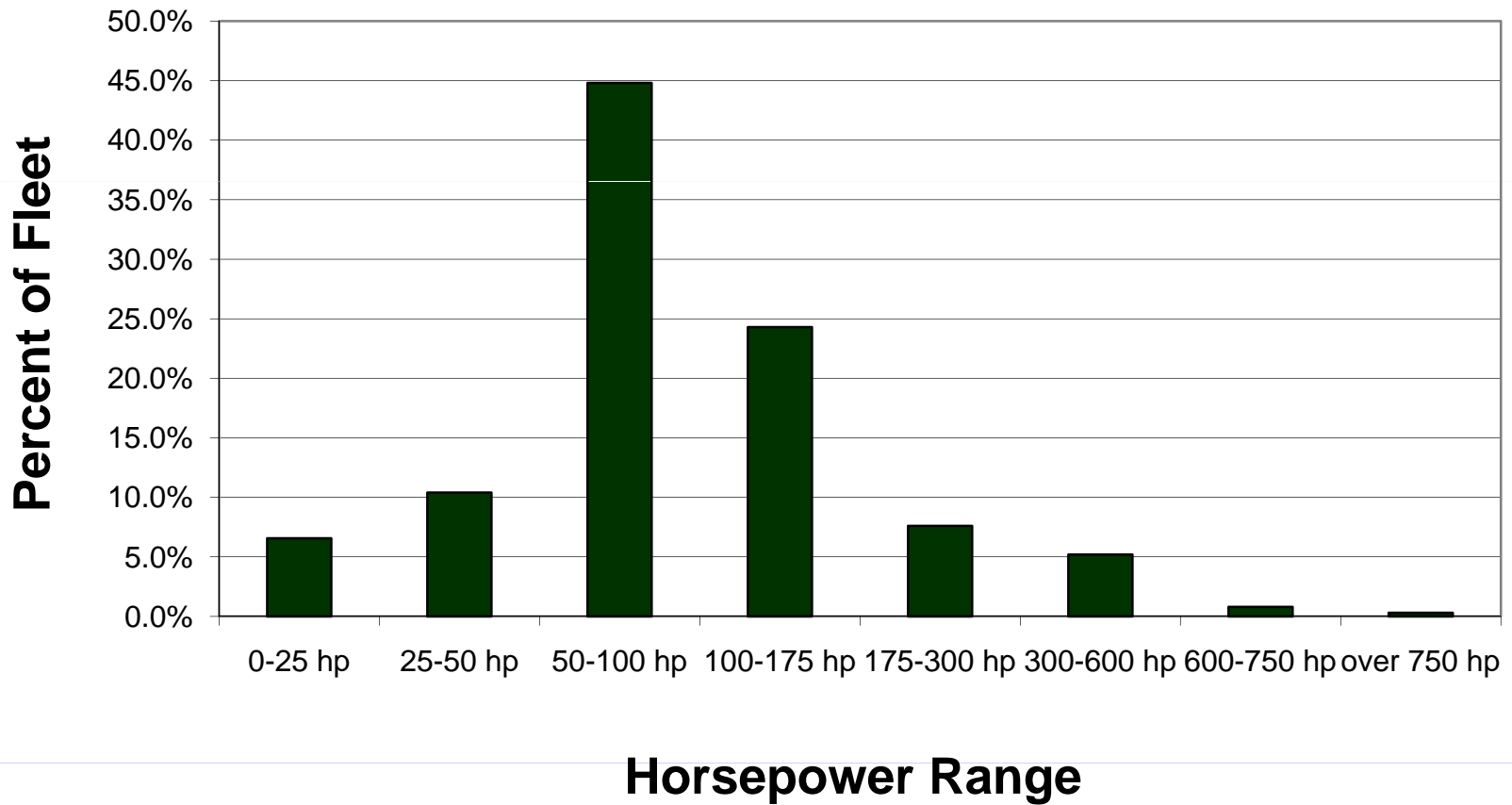
Standard Contracting Procedures



# REGIONAL EQUIPMENT INVENTORY

## Population Distribution - Horsepower

Population Distribution by Horsepower



# DRAFT POLICY

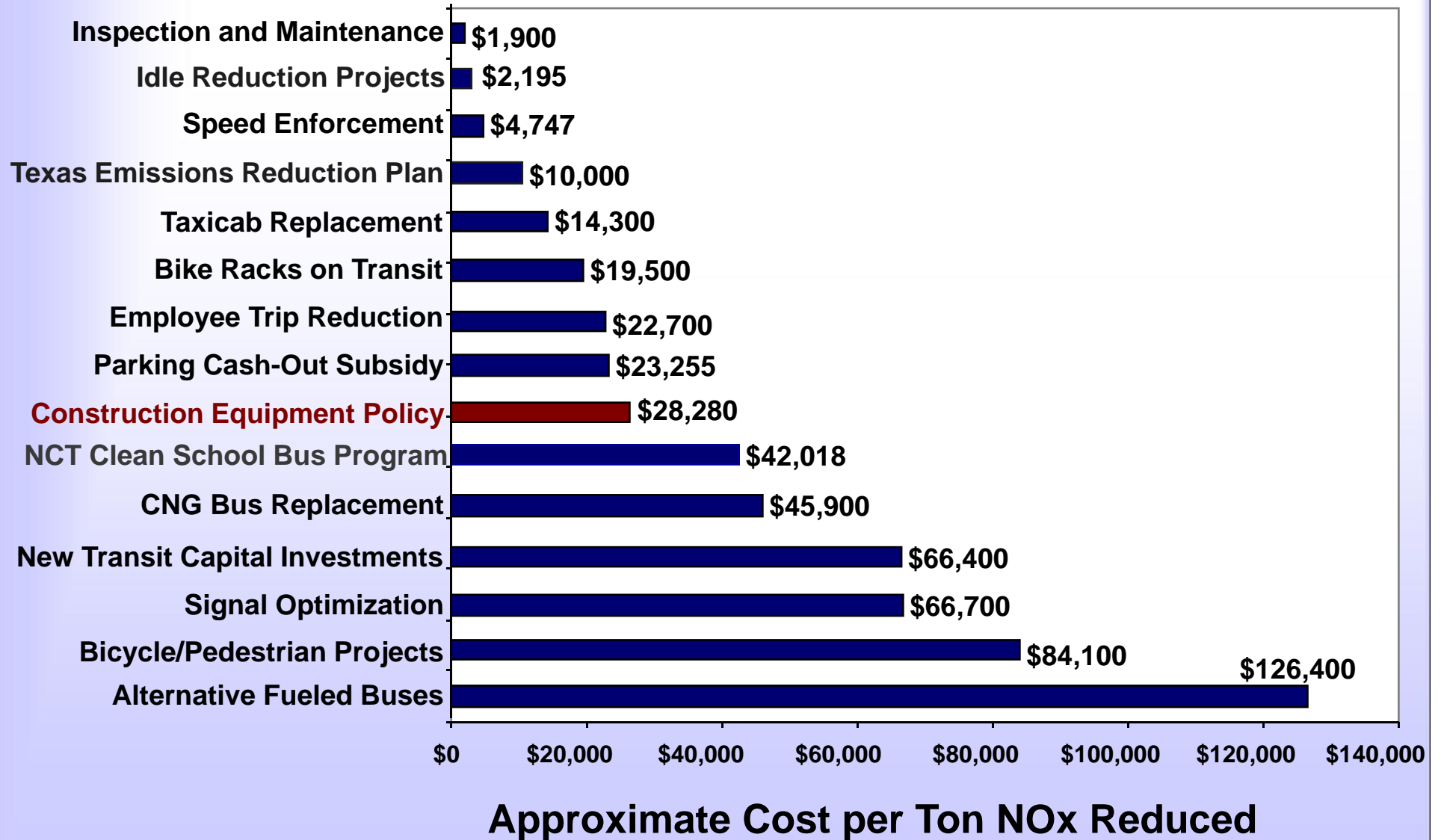
## Possible Exemptions or Allowances

Exemption Type	Staff Recommendation
Engine Horsepower	Include All Engines 25 hp and Up
Engine Age	Exempt Engines 10 Years Old and Younger
Other Grant Requirements	Exempt Equipment Used to Fulfill Use or Reporting Requirements for Grant Program or Other Clean Air Initiative (Documentation Required)
Engine Use (Time)	No Exemption
Engine Use (Portion of Total Horsepower)	No Exemption
Contractor Fleet Size	2 Additional Years for Small Contractors to Comply (Fleet of 2 Units or Less)
Contract Length	No Exemption
Contract Value	No Exemption
Emergency Situations	Exempt Equipment Used to Address Critical or Emergency Public Works Need



# POLICY COST-EFFECTIVENESS

## Comparisons to Various Air Quality Programs



# **POLICY ADOPTION**

## **Incentives and Assistance**

### **Financial**

**Texas Emissions Reduction Plan Grants  
NCTCOG Funding (Policy as Criterion/Credit  
for Roadway Funding)**

### **Non-Monetary**

**Education and Guidance  
Recognition for Environmental Excellence**



# DEMONSTRATION PROJECT

## Anticipated Next Step

### Goals/Information Gained

Evaluate Impact on Contractor Response

Estimate Impact on Cost

Estimate Impact on Schedule

Evaluate Impact of Operational Requirements

Evaluate Availability and Use of ULSD

Evaluate Effort Needed for Reporting Requirements

**Contractor**

**Contracting Authority**

Quantify Amount of Equipment Affected

Quantify Emissions Impact

Solicit Feedback on Process

**Contractor**

**Contracting Authority**



# DEMONSTRATION PROJECT

## Project Criteria

### Timeliness

Construction Phase Commencing by Year-End  
Duration of 6 Months or Less

### Project Type

RTR or Local Funds Only  
Preference for Transportation-Related  
No Parks Projects

### Subcontracted to Private Company

Ensures Competitive Process to Secure Contractor

Funds May be Available to Offset Costs of Compliance

### Questions Remaining:

What Size of Project?



# **PUBLIC AGENCY CONSTRUCTION POLICY**

## **Benchmarks in Implementation Process**

### **Collaboration with Statewide Representatives**

#### **Development of Model Specification**

#### **Host Stakeholders' Meeting – June 25, 2009**

**Industry Representatives**

**Local Governments**

#### **Phase 1- Implementation of Demonstration Project Request for Interest**

#### **Solicit Comment from Regional Partners**

#### **Phase 2 - Adoption and Recommendation by RTC**

#### **Phase 3 - Voluntary Adoption by Local Governments**

**Incorporation into Standard Contracting Procedures**

**Estimate of Affected Inventory in Region: 7,911 Units**

#### **Potential for Similar Policies Across State**



# **CONSTRUCTION EQUIPMENT UPGRADES**

## **Funding Opportunities**

### **NCTCOG Heavy-Duty Vehicle and Equipment Grant Program**

**July 2009**

**\$10.7 Million**

**Three Focus Areas**

**Local Government Projects**

**Construction Equipment Projects**

**Idle Reduction Projects**

### **Diesel Emissions Reduction Act**

**September/October 2009**

**\$50-60 Million Nationwide**

**Construction Equipment Eligible**

### **Texas Emissions Reduction Plan**

**Fall 2009 Funding Round?**



# **PUBLIC AGENCY CONSTRUCTION POLICY**

## **Contact Information**

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