OPTIMIZING TRUCKING OPERATIONS: FUNDING & EFFICIENCY TIPS

Texas Trucking Association Luncheon at Earth Day Texas

April 22, 2016

Lori Clark and Jason Brown, Air Quality Management & Operations North Central Texas Council of Governments
THE BASICS: Who We Are

North Central Texas Council of Governments (NCTCOG) is:

Council of Governments
• Regional Coordination

Metropolitan Planning Organization
• Transportation Planning
• Air Quality

Dallas-Fort Worth Clean Cities Coalition (DFWCC)
• Petroleum Reduction
• Alternative Fuels
WHO YOU NEED TO KNOW
Councils of Governments (COGs)

Coordinate Regional Planning and Problem Solving, Including Air Quality Issues Where Applicable

Texas Divided into 24 Regional Councils

www.narc.org or www.txregionalcouncil.org
WHO YOU NEED TO KNOW
Metropolitan Planning Organizations (MPOs)

Serve Urbanized Areas with Populations of 50,000 or More

Funnel Federal and State Funding to Local Entities

Oversee Transportation Planning

www.ampo.org or www.planning.dot.gov/overview.asp
WHO YOU NEED TO KNOW
Clean Cities Coalitions

US Department of Energy Program
Work to Reduce Petroleum Consumption
• Alternative Fuels
• Advanced Vehicles
Offer National Support Through Local Coalitions
• Outreach
• Education
• Technical Assistance
WHAT WE DO: Freight North Texas

Improve the Availability of Transportation Options for Goods, Services and People Movement throughout the DFW Region by:

- Seeking Freight Community Participation in the Planning Process
- Promoting Safety, Mobility and Accessibility
- Monitoring Freight Traffic
- Reviewing Freight Related Impacts on the Transportation Network
- Recommending Project Studies and Project Implementation Strategies
WHAT WE DO:
Regional Freight Advisory Committee

Established to Enhance the Regional Freight System Through Information, Knowledge and Technology Sharing Between Public and Private Interests

The Committee:
Advises NCTCOG Staff and the Regional Transportation Council
Promotes the Region’s Freight Related Capabilities
Provides Feedback on Recommended Regional Freight Strategies
Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the Design Value (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 70 ppb.

Source: NCTCOG TR Dept

*Data not certified by the Texas Commission on Environmental Quality

Not a full year of data, current as of 4/05/2016.
### Estimated 2017 Nitrogen Oxides (NO\textsubscript{x}) Emissions Inventory

<table>
<thead>
<tr>
<th>Emissions Source</th>
<th>Tons Per Day (tpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Road (Cars &amp; Trucks)</td>
<td>65.11</td>
</tr>
<tr>
<td>Non-Road (Construction, Agriculture, etc.)</td>
<td>45.54</td>
</tr>
<tr>
<td>Off-Road (Locomotives, Aircraft, etc.)</td>
<td>25.20</td>
</tr>
<tr>
<td>Point, Excluding Oil &amp; Gas (Power Plants, Cement Kilns, etc.)</td>
<td>38.30</td>
</tr>
<tr>
<td>Point - Oil &amp; Gas</td>
<td>16.50</td>
</tr>
<tr>
<td>Area (Dry Cleaners, Bakeries, etc.)</td>
<td>26.55</td>
</tr>
<tr>
<td>Oil &amp; Gas (Production &amp; Drill Rigs)</td>
<td>13.87</td>
</tr>
</tbody>
</table>

Source Category Estimates = 296.73 tons per day (tpd)

Source: Texas Commission on Environmental Quality, 2017 Dallas-Fort Worth 8-hour Ozone Attainment Demonstration State
WHAT WE DO:
Air Quality Control Strategies
WHY DOES THIS MATTER?

2017 Levels of Congestion/Delay

Congestion Index*:
- No Congestion
- Light Congestion
- Moderate Congestion
- Severe Congestion
- Major Roads

Dallas CBD
Port Worth CBD

Cost of Congestion/Delay: $10.7 billion
*Congestion Index is based on a percent increase in travel time.
NCTCOG AIR QUALITY FUNDING HISTORY

Vehicle/Equipment/Technology Activities Awarded through Competitive Calls for Projects (2006 - 2014)

- Alternative Fuel Infrastructure: 33
- Construction: 113
- Heavy-Duty (Other): 355
- Idle Reduction: 318
- Light-Duty (Other): 247
- Locomotive: 10
- Refuse Hauler: 67
- School Bus: 211
- Taxi: 124
- SmartWay Fuel Efficiency Technologies: 431

Activities Awarded by Grant Type (1909 Total Activities)
TYPES OF ASSISTANCE

Grants

- Often Funded as Reimbursement
- Not Intended to Fund “Normal Fleet Attrition”
- Often Come with “Strings”

Tax Credits/Incentives

Financing Programs

Return on Investment
Establish Fleet Priorities

Determine Typical Fleet Turnover Cycle

Develop and Maintain a Detailed Fleet Inventory
  - Vehicle Model Year
  - Gross Vehicle Weight
  - Fuel Type
  - Annual Mileage
  - Engine Year, Make, Model
  - Emissions Standard
TIPS FOR SUCCESS

Applications
- Address Agency Priorities
- Be Specific and Complete
- Demonstrate Need
- Provide Technical Documentation
- Quantify Expected Results
- Demonstrate Partnerships and Abilities
- Demonstrate Previous Experience/Capability
- Ask Questions (Early)

Implementation
- Communicate
- Establish Clear Milestones
- Leverage Partnerships for Assistance
- Ask Questions
FEDERAL FUNDING

Federal Highway Administration: Congestion Mitigation and Air Quality Improvement Program (CMAQ)

Environmental Protection Agency: Clean Diesel Funding Assistance Program

Department of Energy: Vehicle Technologies Program

Department of Agriculture Office of Rural Development: Rural Energy for America Program (REAP)
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicles</td>
<td>Qualified Plug-In Electric Drive Motor Vehicle Tax Credit</td>
</tr>
<tr>
<td>Fuels</td>
<td>Alternative Fuel Excise Tax Credit</td>
</tr>
<tr>
<td></td>
<td>$0.50/Gallon or Gasoline Gallon Equivalent for Liquid Hydrogen, Natural Gas</td>
</tr>
<tr>
<td></td>
<td>(CNG or LNG), and Propane (LPG)</td>
</tr>
<tr>
<td></td>
<td>Biodiesel Income Tax Credit</td>
</tr>
<tr>
<td></td>
<td>$1/Gallon of Pure 100% Biodiesel Used as On-Road Fuel</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Alternative Fuel Infrastructure Tax Credit</td>
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<tr>
<td></td>
<td>30%, Up to $30,000, of Installation Costs</td>
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<tr>
<td>Other</td>
<td>Idle Reduction Equipment Excise Tax Exemption</td>
</tr>
<tr>
<td></td>
<td>Natural Gas Vehicle Weight Exemption</td>
</tr>
</tbody>
</table>
Texas Emissions Reduction Plan (TERP) Program

- Emission Reduction Incentive Grant (ERIG) Program
- Rebate Program
- Texas Clean Fleet Program
- Texas Natural Gas Vehicle Grant Program

www.terpgrants.org
Looking for Grant Funding?

Apply for 2016 Clean Diesel Call for Partners

Vehicle Funding Opportunities

Other Air Quality Funding Opportunities

Funding Opportunity Archive

Sign-Up for Email Updates

Eligible Focus Areas

- Heavy-Duty Vehicles
  - School Buses
  - Oil and Gas Vehicles/Equipment
  - Long Haul Trucks
  - Dump Trucks
  - Idle-Reduction Technology
  - Other
- Light-Duty Vehicles
  - Passenger Vehicles
  - Taxis
  - Idle-Reduction Technology

Click the links below for a program description and relevant dates and details.

- AirCheckTexas Drive a Clean Machine Program
- 2016 Clean Diesel Call for Partners NEW! Deadline: 5pm, April 15, 2016
- Clean Diesel Funding Assistance Program FY 2016 NEW! Deadline: 5pm, April 22, 2016

General Public
General Public, Private Sector
Public Sector
CLEAN CITIES IN TEXAS

Austin Area
Lone Star Clean Fuels Alliance
Stacy Neef
www.lonestarcfa.org

Dallas-Fort Worth Area
Dallas-Fort Worth Clean Cities
Pamela Burns
www.dfwcleancities.org

Houston Area
Houston-Galveston Clean Cities
Shelley Whitworth
www.houston-cleancities.org

San Antonio Area
Nicholas Jones
Alamo Area Clean Cities
www.aacog.com/cleancities
Vision Statement:
Leading the region in petroleum and emissions reduction measures to improve air quality and increase energy security.

Mission Statement:
DFW Clean Cities is a locally-based, public/private partnership that seeks to advance energy security, protect environmental and public health, and stimulate economic development by promoting practices and decisions to reduce petroleum consumption and improve air quality, primarily in the transportation sector.

Goals:
Facilitate Use of Alternative Fuel Vehicles and Supporting Infrastructure
Accelerate Sales of Electric and Hybrid Electric Vehicles
Promote Informed Consumer Choice on Fuel Economy
Encourage Use of Idle Reduction Strategies
Free Stakeholder Membership
- Fuel-Specific Subcommittees
- Monthly E-Newsletter and other Communications
- Vehicle/Station Decals
- Access to Stakeholder Directory, Vendor Directory, Downloadable Resources
- Discounted Event Registration
- Presentations and Recognition
- Local Staff Support and Funding Assistance

Stakeholder Expectations
- Attend at Least 1 Meeting and 1 Event per Year
- Completed Annual Report
- Adopt Clean Fleet Policy
Texas Cities and Counties with Idling Restrictions

www.EngineOffNorthTexas.org
SMARTE PROGRAM

SMARTE

Saving Money and Reducing Truck Emissions
SMARTE PROGRAM

SMA
Regional “One-Stop Shop”
Education, Outreach/Promotion Assistance

A “Win-Win” for the Industry and Region
# SmartWay Technology Strategies

## SmartWay Verified Technologies
- Aerodynamics
- Low Rolling Resistance Tires
- Idling Reduction
- Retrofits
- SmartWay Tractors
- SmartWay Trailers

## Other Fuel Saving Strategies
- Alternative Fuels
- Engine Repower
- Speed Management Policies
- Trailer Strategies
- Weight Reduction Strategies
GET INVOLVED: Vendors

Participate in SMARTE Vendor Directory Qualifications:
• Sell SmartWay-Verified Technologies
• Complete Information Form
• Provide Voluntary Information on SMARTE Assisted Sales

Benefits
• Listing Provided During Outreach
• Integration into DFW Clean Cities as Stakeholder & on Vendor Directory

NOTE: Participation Does Not Represent, nor Imply Endorsement or Recommendation By NCTCOG

Encourage Customers to Join Local Initiatives
Consider a SMARTE/DFW Clean Cities Sponsorship
Cantwell Power Solutions - Aerodynamic Devices, Idling Control Strategies
Centramatic - Idling Control Strategies, Tire Technology
Convoy Servicing Company - Idling Control Strategies, Retrofits, Trailer Strategies
IdleAir - Idling Control Strategies
MHC Kenworth - Aerodynamic Devices, Advanced Lubricants, Emission Control
Devices, Fuel Options, Idling Control Strategies, Retrofits, Tire Technology, Trailer
Strategies
Rush Truck Centers - Dallas, Fort Worth - Aerodynamic Devices, Emission Control
Devices, Fuel Options, Idling Control Strategies, Retrofits, Tire Technology, Trailer
Strategies
Shorepower Technologies - Idling Control Strategies
Utility Trailer of Dallas, Inc. - Aerodynamic Devices, Advanced Lubricants, Trailer
Strategies

Proud Supporter of SmartWay®

SMARTE
Saving Money and Reducing Truck Emissions
EPA SMARTWAY PROGRAM
Smart Business for Everyone

Represents Environmentally Cleaner, More Fuel-Efficient Transportation Options

Identifies Products and Services Which Reduce Transportation-Related Emissions

Signifies Partnership Among Government, Business, and Consumers

Offers Solutions for Any Fleet
  Technology Strategies
  Operational Practices
  Business Partnerships
  Intermodal Shipping
EPA SMARTWAY PROGRAM
Why Get Involved?

Reduce Operating Costs
Enhance Public Image
Improve Environmental Quality
Protect Public Health
Increase Partnership Opportunities
Utilize Voluntary Strategies
Ensure Economic Vitality
Lori Clark
Principal Air Quality Planner
817.695.9232

Jason Brown
Air Quality Operations Manager
817.704.2514

Websites
www.nctcog.org/aqfunding
www.nctcog.org/smarte
www dfwcleancities.org

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CleanCities@nctcog.org