NORTH CENTRAL TEXAS
ALTERNATIVE FUEL AND
ADVANCED TECHNOLOGY
INVESTMENTS

Carrie Reese
North Central Texas Council of Governments
May 12, 2011

Project ID #
ARRAVT057

This presentation does not contain any proprietary, confidential, or otherwise restricted information.
OVERVIEW

Timeline
- Start January 29, 2010
- End January 28, 2014
- 39% of Activities Complete

Barriers
- 3rd Party Administration
- Timely Implementation
- Full Realization of Benefits

Budget
- Total Project $35,699,187
- DOE Funds $13,181,171
- Cost Share $22,009,580
- 37% Federal / 63% Match
- 32% Expended to Date

Subrecipient Partners
- Local Governments
- School Districts
- Private Sector Companies
- International Airport
- Non-Profit Organization
RELEVANCE: OBJECTIVES

Increase the Use, Availability, and Awareness of Alternative Fuels and Advanced Technology Vehicles

Improve Air Quality By Reducing Criteria Pollutant and Greenhouse Gas Emissions

Reduce Petroleum Consumption and Energy Use

Create/Preserve Jobs, Stimulate Economic Recovery, and Invest in Long Term Growth in Line with American Recovery and Investment Act (ARRA) Goals
APPROACH: PROJECT SELECTION

NCTCOG is the Administrator of DOE Funds ($13,181,171)

22 Project Partners Were Pre-Identified in an Open Process Prior to Submittal of an Application to DOE

Since Award, Several Projects Have Been Withdrawn and Several Projects Have Been Completed Under Budget

Unexpended Funds ($211,482) Were Reallocated on a Competitive Basis to Current Project Partners for Additional Eligible Activities

Contingency List of Projects Approved for Use as Needed
APPROACH: FUEL NEUTRAL

Vehicle/Infrastructure Projects: Percent of Funding

- Natural Gas: 51%
- Hybrid-Electric: 37%
- Electricity: 6%
- Biodiesel: 3%
- Ethanol: 3%

Legend:
- Natural Gas
- Ethanol
- Biodiesel
- Electricity
- Hybrid-Electric
Emission results quantified using the Clean Cities Area of Interest 4 Emissions Benefit Tool, estimating results of vehicle projects only. Petroleum displacement is also for vehicles only.

**APPROACH: PROJECT PACKAGE**

376 Light-, Medium-, and Heavy-Duty Vehicles: Natural Gas, Gasoline-Electric Hybrid, Diesel-Electric Hybrid, and All Electric

11 Refueling Sites: Natural Gas, Electric, Ethanol, and Biodiesel

**Project Benefits**

- 67.7 Tons Nitrogen Oxides (NO\textsubscript{x}) Reduced
- 4.5 Tons Volatile Organic Compounds (VOC) Reduced
- 0.8 Tons Particulate Matter (PM) Reduced
- 1,509 Tons Carbon Dioxide (CO\textsubscript{2}) Reduced
- 1.25 Million Gallons of Petroleum Displaced

*Emission results quantified using the Clean Cities Area of Interest 4 Emissions Benefit Tool, estimating results of vehicle projects only. Petroleum displacement is also for vehicles only.*
## APPROACH: MILESTONES

<table>
<thead>
<tr>
<th>Original Deadline</th>
<th>Revised/Actual Deadline</th>
<th>Tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2009</td>
<td>January 2010</td>
<td>Agreement Executed with DOE</td>
</tr>
<tr>
<td>February 2010</td>
<td>November 2010</td>
<td>Agreements Executed with Subgrantees</td>
</tr>
<tr>
<td>March 2010</td>
<td>October 2010</td>
<td>100% of NEPA Documentation Submitted</td>
</tr>
<tr>
<td>March 2010</td>
<td>April 2011</td>
<td>100% of NEPA Clearance Received</td>
</tr>
<tr>
<td>June 2010</td>
<td>September 2010</td>
<td>50% of Vehicle Orders Completed</td>
</tr>
<tr>
<td>September 2010</td>
<td>March 2011</td>
<td>50% of Vehicles Deployed</td>
</tr>
<tr>
<td>June 2011</td>
<td>October 2011</td>
<td>100% of Vehicle Orders Completed</td>
</tr>
<tr>
<td>December 2011</td>
<td>December 2011</td>
<td>100% of Vehicles Deployed</td>
</tr>
<tr>
<td>March 2010</td>
<td>March 2011</td>
<td>50% of Infrastructure Development Started</td>
</tr>
<tr>
<td>June 2011</td>
<td>September 2011</td>
<td>50% of Infrastructure Development Complete</td>
</tr>
<tr>
<td>December 2010</td>
<td>September 2011</td>
<td>100% of Infrastructure Development Started</td>
</tr>
<tr>
<td>March 2011</td>
<td>December 2011</td>
<td>100% of Infrastructure Development Complete</td>
</tr>
<tr>
<td>August 2012</td>
<td>August 2012</td>
<td>City of Dallas CNG/Hybrid Training Complete</td>
</tr>
<tr>
<td>Throughout</td>
<td>Throughout</td>
<td>Marketing, Outreach, and Training Campaign</td>
</tr>
</tbody>
</table>
ACCOMPLISHMENTS: ADMIN TASKS

Agreements Executed:
• 19 of 19 Subrecipients

NEPA Submitted:
• 11 of 11 Sites
• Vehicle Purchase and Conversion

NEPA Reviewed:
• 10 of 11 Sites
• Vehicle Purchase and Conversion

(As of March 10, 2011)
ACCOMPLISHMENTS: VEHICLES

376 Vehicle Projects Funded:
• CNG, Electric, Hybrid

Vehicles Deployed:
• 48 of 178 Light-Duty
• 111 of 198 Med-/Heavy-Duty

Additional Vehicles Ordered to Date:
• 64 of 130 Light-Duty
• 76 of 87 Med-/Heavy-Duty

(As of March 10, 2011)
11 Refueling Sites Funded:
• CNG, Electric, Ethanol, Biodiesel

Site Work Started:
• 3 of 11 Refueling Stations

(5 Additional Sites currently in Design, Engineering, Permitting and Contracting Phases)

(As of March 10, 2011)
ACCOMPLISHMENTS: OUTREACH

Highlights:
• Advancing the Choice Event
• EV Showcase at State Fair

NCTCOG:
• 34 Total Events
• 1,670 Total Attendees

Partners:
• Presentations
• Press Releases and Articles
• Training and Education
• Decals on Projects

(As of March 10, 2011)
COLLABORATION AND PARTNERS

Private/Non-Profit (46% of DOE Funds)
- Canteen Vending
- Coca-Cola Enterprises
- Frito-Lay North America, Inc.
- Highway of Hope
- Irving Holdings/Yellow Cab
- New Bern Transport Corp.
- PAM Transport, Inc.
- Splash Transport, Inc.
- Sysco Corporation

Public (52% of DOE Funds)
- City of Dallas
- City of Denton
- City of Fort Worth
- City of Garland
- City of Lake Dallas
- City of Richardson
- City of Southlake
- DFW International Airport
- Fort Worth ISD
- Mansfield ISD
FUTURE WORK (FY2011-2012)

- Continue Administration and Oversight of Project
- Complete NEPA Review of Funded Projects
- Complete Construction of All Infrastructure Projects
- Deploy Remaining 58% of Vehicle Projects
- Access “Contingency” List of Approved Projects as Needed
- Continue Development of CNG/Hybrid-Electric Training
- Continue Marketing, Outreach, and Training Campaign
SUMMARY

Project Enhances Air Quality, Reduces Petroleum Use, and Preserves/Creates Jobs

Project is Fuel Neutral and Facilitates Use of a Variety of Alternative Fuels and Advanced Technologies

Project Engages a Number of Public, Private, and Non-Profit Interests and Partnerships Remain Strong

Overall Project Currently Slightly Behind Schedule
• Vehicle Lead Times and Infrastructure NEPA Clearance
• Subrecipient Internal Procurement/Approval Processes
• Reallocation of Funds
## SUMMARY TABLE

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Total # Activities</th>
<th>FY 09-10</th>
<th>FY 10-11*</th>
<th>Percent Increase</th>
<th>Percent Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreements Executed</td>
<td>19</td>
<td>4</td>
<td>19</td>
<td>78%</td>
<td>0%</td>
</tr>
<tr>
<td>NEPA Submitted</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>9%</td>
<td>0%</td>
</tr>
<tr>
<td>NEPA Reviewed</td>
<td>11</td>
<td>6</td>
<td>10</td>
<td>67%</td>
<td>9%</td>
</tr>
<tr>
<td>Vehicles Ordered</td>
<td>376</td>
<td>123</td>
<td>291</td>
<td>137%</td>
<td>20%</td>
</tr>
<tr>
<td>Vehicles Deployed</td>
<td>376</td>
<td>30</td>
<td>156</td>
<td>420%</td>
<td>58%</td>
</tr>
<tr>
<td>Site Work Started</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>200%</td>
<td>73%</td>
</tr>
<tr>
<td>Site Work Complete</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>City of Dallas CNG and Hybrid Training</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Marketing, Outreach, Training Campaign</td>
<td>NA</td>
<td>4</td>
<td>36</td>
<td>800%</td>
<td>NA</td>
</tr>
</tbody>
</table>

*Cumulative Total