



**2017 Clean Cities Meeting  
NCTCOG  
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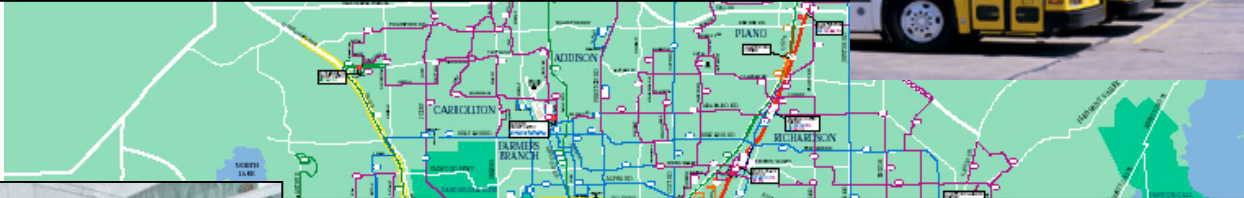
**DART Clean Fleet (AFVs)**



**660 buses**



**Fleet**



**163 LRVs**



**208 miles and 64 stations**



**Infrastructure**



**39,031,000 miles/year**

**Operating Profile**

**Assets (\$5.5B)**





# DART Bus Fleet Summary

## DART Bus Fleet Summary Report By Fuel Type

Fuel Type	Total Qty	Total %
26' CNG	123	19%
30'-40'CNG	476	72%
40' Diesel	15	2%
Suburban CNG	46	7%
Total (ALL)	<b>660</b>	<b>100%</b>
Total (CNG)	<b>645</b>	<b>98%</b>



# DART Fleet Overview

2016 Suburban Express



2012 Innovative & On-Call Passenger Vehicle



2013 Urban Transit





# AFV Service Deployment & Capital Investment



**CNG Fleet  
Deployment, In-  
Service : Oct. 2012**



**CNG Bus Fleet Miles  
Logged: 973,050 miles**



**CNG Bus Fleet Capital  
Investment: \$291  
Million**



# Why DART Chose CNG & The Fuel Transition Program....

## Board Resolution 090148 - October 27, 2009

Compressed Natural Gas (CNG) for all replacement buses within the FY2010 Twenty-Year Financial Plan

### Six program elements:

- Predictable future pricing and supply of CNG
- Potential continuation of Federal tax rebates
- CNG fueled fixed route buses
- CNG fueled Innovative Services buses
- CNG fueled Mobility Management Services buses
- Design & Construction of infrastructure

# Fuel Transition Program....

Program Element	Board Action
CNG Long Term Supply	December 2009
CNG Federal Tax Rebates in Legislative Agenda	December 2010
CNG Fixed Route Buses	January 2011
CNG Infrastructure Design / Build	April 2011
CNG Innovative Services Buses	September 2012
CNG Mobility Management Services	November 2012



Elsa Riedel

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NATURAL GAS WELL

# CNG Fuel Costs

April, 2017

## Supply Cost of CNG

□ Contract Term:

Apr., 2010 to Sept., 2020

□ Awardee:

Texas General Land Office (GLO)

□ Contract Value: \$86.3M

□ Fuel Cost: \$7.36/MMBtu

□ Fuel Cost(2): \$1.02/DGE

- CNG National Average: **\$2.11**
- Texas CNG Average: **\$2.06**
- Spot Price (Southwest): **\$2.71**

*Price Sources: CNG Now/US Energy Information Administration (eia) –  
Conversion Factor: 7.21/DGE = 1MMBTU*



# CNG Infrastructure

## Infrastructure Design / Build

- 4 facilities
  - Compressors (6) / Dispensers (3)
  - Methane Detection/Alarms
- Transtar Energy [*Clean Energy*] Company, LP - ~\$40.4M
- Design & construction of CNG fuel stations & facility modifications & NG Pipelines
- Startup – 10/2012



# Facility Construction Costs

High Pressure Gas Line	\$1 Million/Mile (19.5 Miles)
Station (3 Lanes)	\$4.25 Million/Each
Facility Modifications	\$3.9 Million
+ <i>Electrical Power Upgrades</i>	

## Includes:

- Alarms
- Ventilation
- Methane Detectors
- Integrated Fire/Methane Reporting Panels for:
  - Running Repair
  - Paint
  - Brake & Overhaul Shop



## DART Natural Gas Facilities



# DART Principles which Sets Us Apart From Others...



## Board Governance

DART Board Strategic Goals serves as our cornerstone commitment to operating a Clean Vehicle Fleet within the DFW Area and North Texas Region. DART has made a commitment to the Environment.



## Technology Optimization

We continue to push the envelope for optimizing vehicle reliability and leveraging OEM continuous improvements within CNG fuel systems. We have one of the most modern fleets in the industry.



## Maintenance & Operators National Recognitions

National & International skills performance competition achievements.

