

Compressed Natural Gas Program Update and Policy Discussion



June 2012

Ultimate Objectives KCATA CNG Conversion

- Reduce Annual Fuel Costs
- Promote Sustainability
- Support Domestic Fuel Usage



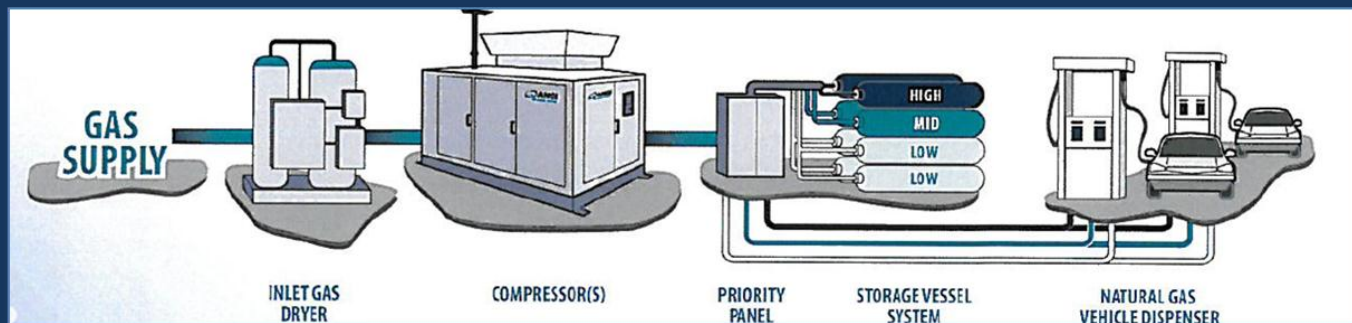
KCATA – Fuel Usage

- 2.4 Million Gallons Annually
- 2012 Budget
 - \$7.2 Million Diesel
 - \$400,000 Gasoline



Recent Activities

- Diesel vs. CNG Analyses
- Technical: NREL, MGE, KCMO, Peers, etc.
- Engineering and Design Work Scope
- CNG Bus Specifications
- Funding Requests



Funding CNG Capital Grant Opportunities

- FTA Formula Funds (Sect. 5307)
 - \$6+ Million 2012 -2014 Facility Improvements
- FTA Clean Fuels – Application Submitted
- CMAQ Funding : Application Submitted
- STP Funding: Application Submitted



Ongoing Financial Analysis

- Financial Analysis is Continuing Process
- Comparison of Costs vs. Benefits (Savings)
- Range of Possible Financial Scenarios

Across This Range – confirm that...

Conversion to CNG is Justified

Financial Model

Financial Model Assumptions:

- CNG / Diesel Price Difference (Current)

Diesel Price = \$3.00/ Gallon

CNG Price = \$1.51/ DGE (Diesel Gallon Equivalent)

- CNG Bus Cost Premium = \$50,000 per bus

Financial Model

Financial Model Assumptions:

- CNG / Diesel Price Escalations in Future Years

Base Line Scenario ~ DOE Escalation Factors

| | | |
|-------------|--------------|-------------|
| 1. High | (CNG/Diesel) | 2.2% / 4.8% |
| 2. Baseline | “ | 2.2% / 3.5% |
| 3. Low | “ | 2.2% / 2.2% |

Financial Model

Financial Model Assumptions:

- Bus Replacement Schedule
 1. 12 Yrs to Replace Fleet (~ 20 buses per yr)
 2. 16 Yrs to Replace Fleet (~ 15 buses per yr)

(10 buses purchased in first year of model)
- 80% Fed Match on Facility Improvements

| | 12 Year 2025 | | 16 Year 2029 | |
|---|-----------------|--------|-----------------|--------|
| Fuel Escalation Rate Difference | CNG | Diesel | CNG | Diesel |
| High (Hypothetical Projection) | | | | |
| Escalation Rates: | 2.2% | 4.8% | 2.2% | 4.8% |
| Payback Period: | 6 Years | | 6 Years | |
| | \$1.04 M | | \$0.24 M | |
| Baseline (EIA Projection – 2012) | | | | |
| Escalation Rates: | 2.2% | 3.5% | 2.2% | 3.5% |
| Payback Period: | 6 Years | | 7 Years | |
| | \$0.60 M | | \$0.93 M | |
| Low (Consistent Escalation) | | | | |
| Escalation Rates: | 2.2% | 2.2% | 2.2% | 2.2% |
| Payback Period: | 6 Years | | 7 Years | |
| | \$0.17 M | | \$0.42 M | |
| CNG Buses in Fleet at Year 6 | 110 | | 82 | |

Financial Model

What does the Model Tell Us?

- **Federal Assistance Essential.**
- **Accelerated Implementation Preferred.**
- **Sensitivity to Initial Fuel Costs.**
- **Sensitivity to Fuel Escalation.**
- **Payback Across Range of Scenarios.**



Next Steps

- CNG Policy Decision – July 2012
- Design and Construction
 - Design: 2012
 - Const. Building & Infrastructure: 2013
 - CNG Fuel Station: 2013/2014
- CNG Bus Procurement – Bid This Fall
- CNG Fuel Contract – Bid Next Year
- Operations Target – Spring 2014



DRAFT CNG Policy

- CNG Conversion Costly, But Net Savings
- All New Buses to be CNG
- Facility Modifications for CNG
- Pursue Funding

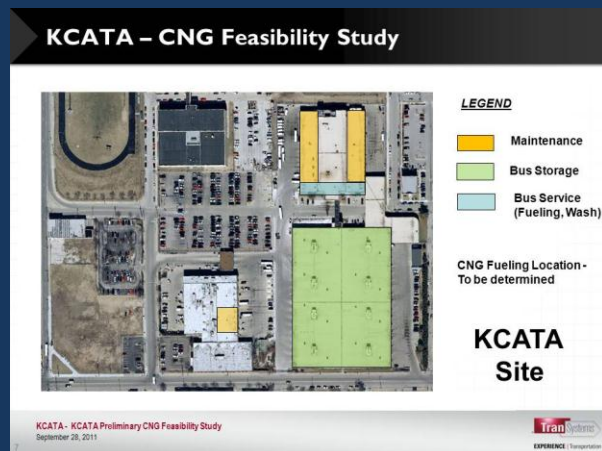


Maximize Benefits from CNG Conversion

- Expedite Phased Implementation
- Use Existing Infrastructure
- Maximize Federal Funding
 - CNG Bus Acquisitions
 - Facility Modifications
 - CNG Fueling Infrastructure
- Financial Partnerships

ATA Phased Implementation

- Replace Buses w/ CNG at End of Life
- Modify Buildings in Phases
- Expandable CNG Fueling Facility
- Phase One Ready – Spring 2014



 **The Metro**

