



Commonwealth of Virginia

Alternative Fuel Vehicle PPEA

Michael Bisogno, CAFM
Director, Office of Fleet Management Services



Background

- Legislation

- HB 2282 introduced by Delegate Danny Marshall, III
- Enacted April 6, 2011, Virginia Code §2.2-1176(B)

“Notwithstanding other provisions of law, on or before January 1, 2012, the Director [Department of General Services], in conjunction with the Secretary of Administration and the Secretary of Natural Resources, shall establish a plan providing for the replacement of state-owned or operated vehicles with vehicles that operate using natural gas, electricity, or other alternative fuels, to the greatest extent practicable, considering available infrastructure, the location and use of vehicles, capital and operating costs, and potential for fuel savings. The plan shall be submitted to the Governor for his review and approval. Once the plan is approved by the Governor, the Director shall implement the plan for the centralized fleet. All state agencies and institutions shall cooperate with the Director in developing and implementing the plan.”



Background

- April 2011, Governor Directed DGS and DMME to:
 - Collect state-owned vehicle data
 - Work with VML/VaCO to collect local government vehicle data
 - Investigate fuel infrastructure availability
 - Determine interest from private sector in investing in alternative fuel solutions



Executive Order 36

- Executive Order 36: “Moving Toward Alternative Fuel Solutions for State-Owned Vehicles”
 - “All” fuels approach: Ethanol, Hydrogen, Natural Gas, Propane, Electric
 - Directs the release of a Public-Private Partnership solicitation pursuant to the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA)
 - ✓ Asking private sector to develop 2 year, 2 – 5 year, and 5 – 10 year implementation plan
 - ✓ Plan must be: practicable; financially viable; consider available infrastructure; location and use of vehicles; capital and operating costs; and, potential for fuel savings



Alternative Fuel PPEA

- General Assembly - 2011 Session
 - House passed HB2282
 - Commonwealth to develop a plan to move to alternative fuel vehicles
- July 12, 2011
 - Governor signs Executive Order 36
 - Instructs DGS and DMME to conduct Public-Private Solicitation (PPEA) for an alternative fuel solution
- July 22, 2011
 - Commonwealth Alternative Fuel PPEA Released
- October 21, 2011
 - 15 Proposals received through PPEA Process
 - 2 Selected to move forward
- October 2, 2012
 - Contracts Awarded
 - Compressed Natural Gas Solution – Clean Energy
 - Propane/Autogas Solution – Alliance Autogas



Compressed Natural Gas (CNG)

Fueling Sites

- Maury St. Richmond, VA
- Old Ox Rd. Dulles, VA

Vehicles

- Ford F150, F250 E150, E250

Fuel Consumption

- 15,255 Gasoline Gallon Equivalent



Propane (Autogas)

Fueling Sites

- OFMS Fleet, Richmond VA (December 2013)

Vehicles

- Ford F250, F150, Ford V10

Fuel Consumption

- ~ 500Gallons



E85 (85% Ethanol)

Fueling Sites

- OFMS Fleet, Richmond, VA

Vehicles

- Numerous OEM vehicles

Fuel Consumption

- 60,234 Gallons



Next Steps

OFMS Vehicle Justification Calculator V2.1 [Compatibility Mode] - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Livelink

T3

Commonwealth of Virginia Vehicle Calculator

A Vehicle Lifecycle Cost Comparison Tool

Instructions

Vehicle Acquisition / Usage Data

Enter Acquisition Cost	\$13,228
Enter Annual Finance Percentage (if applicable)	
Enter Fuel Price per Gallon	\$1.00
Maintenance Costs (from Maint. Est.)	\$6,593
Enter the Estimated MPG	25
Enter Expected Monthly Mileage	1076
Standard State Vehicle Cost Per Mile	\$0.324

Alternative Fuel Vehicle Summary

Accumulated Mileage	90,384		
Life Cycle Max Months	84		
Years in Service	7.0		
Operational Cost	#####	\$549.44	Per Month
Fixed Cost	\$11,640.64	\$0.13	Per Mile
Fuel Cost	\$10,208.61	\$0.11	Per Mile
Total Lifetime cost	#####	\$3,121.32	Per Year
Monthly Cost	\$260.11	\$13.01	Daily Rate
Total Cost Per Mile	\$0.24		

Cost per Mile

Mileage	Standard Vehicle Cost	Alternative Fuel Vehicle Cost
0	\$0.00	\$0.00
1000	\$324.00	\$240.00
2000	\$648.00	\$480.00
3000	\$972.00	\$720.00
4000	\$1296.00	\$960.00
5000	\$1620.00	\$1200.00
6000	\$1944.00	\$1440.00
7000	\$2268.00	\$1680.00
8000	\$2592.00	\$1920.00
9000	\$2916.00	\$2160.00
10000	\$3240.00	\$2400.00

An Alternative Fueled Vehicle is More Economical

Summary Maintenance Estimate Life Cycle Cost Analysis

Ready 60%



Michael Bisogno, CAFM
Director
Office of Fleet Management Services
(804) 367-6526
michael.bisogno@dgs.virginia.gov