



COLORADO

**Department of Personnel
& Administration**

1525 Sherman St.
Denver, CO 80203

November 1, 2014

To: Senate Transportation Committee, House Transportation and Energy Committee, and Joint Budget Committee

From: Kathy Nesbitt, Executive Director, DPA *KN*

Subject: Fiscal Year 2014 Vehicle Acquisition Report

This report is being sent to the Transportation Committee of the Senate and the Transportation and Energy Committee of the House of Representatives and the Joint Budget Committee pursuant to Section 24-30-1104(2) (c) (II), C.R.S., which states: "By January 1, 2008, the executive director shall adopt a policy to significantly increase the utilization of alternative fuels and that establishes increasing utilization objectives for each following year."

SUMMARY OF FISCAL YEAR 2014 VEHICLE ACQUISITIONS

In Fiscal Year-14, the department was able to place orders for 153 compressed natural gas (CNG) vehicles within previously approved budgeted appropriations. This represented 22.50% of all vehicle orders as of October 8, 2014, and 28.8% of all non Colorado Department of Public Safety (CDPS) Colorado State Patrol (CSP) orders.

The department's original goal was to order 214 CNG vehicles. This larger number was possible because of a new ½-ton original equipment manufacturer (OEM) CNG pickup made available in 2014. State Fleet Management (SFM) collaborates with each agency on CNG purchases to ensure the vehicle can perform adequately in the field. As a result of the agency evaluations, 61 vehicle orders were changed because the available CNG option would not meet a department's operational requirements.

The department was also able to place orders for 233 E85 Flexible Fuel Vehicles (FFV). This represented 34.26% of all vehicle orders. In addition, 58 hybrid vehicles were ordered this year. This represented 8.53% of all vehicle orders.

The department ordered 195 dedicated gasoline vehicles this year that represented 28.68% of all vehicle orders, with CDPS ordering 101 of those vehicles. Currently there are no CNG available models for patrol vehicles and no CNG options available from the OEM for the remaining orders.

The Department also ordered 41 diesel vehicles for various agencies. This represented 6.03% of all vehicle orders.



DPA PROCEDURES & POLICIES ON ORDERING NEW VEHICLES

SFM's new vehicle ordering process was dramatically changed as a result of Senate Bill 09-092 and Senate Bill 13-070 especially as they impact CNG vehicles. These laws require that the state purchase natural gas capable vehicles whenever the incremental cost for the CNG vehicle is within 10% of the life cycle cost of the regular gasoline alternative. As a result, purchasing CNG vehicles will be the first option when replacing older inefficient vehicles wherever practicable. Because nearly all of the CNG models available are dual fuel vehicles (i.e. they can utilize either CNG or gasoline), we have greater flexibility in the placement of these vehicles.

SFM collaborates closely with every agency to successfully meet statutory requirements for the most effective CNG vehicle to be purchased and put into service. If it is determined that the CNG model available will not meet a department's functional requirements, the second option is to purchase a hybrid or plug-in electric hybrid vehicle or another type of alternative fueled vehicle such as E85 FFV. The last option is to purchase a standard gasoline or diesel vehicle. If the available proposed CNG model will not work for a department then a "Non-CNG Purchase Justification Form" must be completed and signed by the respective departmental executive director to document the reason that the CNG alternative was not acceptable.

AVAILABILITY OF CNG STATEWIDE

Currently, there are 18 public access CNG fuel sites that are in operation statewide. By the end of 2014, 2 of these will be closed due to antiquated equipment. However, the Colorado Energy Office, through the ALT Fuels Colorado Grant program, gave grants to build 8 CGN fueling stations across the state. Stations are planned for Colorado Springs, Fort Collins, Commerce City, Glenwood Springs, Greeley, Loveland, Pueblo, and Trinidad. All of these are anticipated to be operational by the end of 2015. Until the state, political subdivisions and the private sector acquire more CNG vehicles, it is unlikely there would be a significant build-out of CNG fuel sites in more remote areas of the state.

There are approximately 15 private access CNG fuel sites. But the state has not been able to secure agreements to use these facilities because of liability concerns, in addition to being located in locked secured areas on private property.

INFRASTRUCTURE STRATEGY

Governor Hickenlooper and Governor Fallin of Oklahoma worked together to develop the unprecedented, bi-partisan, multi-state CNG initiative to aggregate fleet purchases to promote a vehicle technology that will move the country closer to energy independence while increasing access to a low-cost source of energy that is also better for the environment. The goal is to convince the auto industry that with increased demand for CNG vehicles, they will make available more models capable of using CNG at a reduced cost due to the increased volumes.

SFM works closely with the Colorado Energy Office, Clean Cities, Regional Air Quality Council (RAQC), National Renewable Energy Laboratories (NREL), political subdivisions, and representatives from CNG suppliers to discuss best practices and strategies to increase the CNG infrastructure statewide. Since CNG fuel sites are expensive to build it is imperative to the CNG industry there are adequate concentrations of CNG vehicles in place to guarantee minimum volumes of CNG purchases to justify the cost of the fuel sites. According to Clean Energy representatives, a CNG fuel site needs to dispense 15,000 gallons or (GGE) per month to justify the cost.

In order to generate more CNG fueling infrastructure it is imperative the state purchase CNG vehicles wherever possible to demonstrate to the suppliers and dispensers in Colorado that there are CNG vehicles in operation. Working closely with the departments SFM will try to place these vehicles in areas of the state where other public and private fleets with CNG vehicles operate in order to combine potential volumes.

Because nearly all of the CNG models available today are dual fuel vehicles, we have much greater flexibility in the placement of these vehicles until the CNG infrastructure catches up in those areas of the state. Dedicated CNG vehicles will only be purchased if they currently operate in areas that have adequate CNG fuel sites. This will ensure state employees can safely complete their duties each day.

EXEMPTIONS

The law requires the executive director to adopt a policy exempting some vehicles from the statutory requirement to purchase CNG vehicles. Current exemptions include:

- “Certified patrol” vehicles used by state agencies are exempt until such time CNG vehicles are available and proven reliable for this purpose. Exempt models include Chevy Police Caprice and Impalas, Ford Police Interceptors, Police Dodge Chargers, Chevy Police Tahoes, Ford Police Expedition and Interceptor Utility, and Police Dodge Durangos.
- Vehicles that have specialized equipment affixed to the vehicle making it less suitable for general transportation are exempt. These vehicles are basically a “tool on wheels” or “mobile shops” that would be difficult to accommodate CNG fuel tanks and be certified by the OEM. Examples include drilling units, water tanks, lab/research equipment, plumbing or telecommunications equipment, patient and prisoner transport, crime scene mobile labs and Haz Mat vehicles.
- Other potential exemptions are considered on a case by case basis.

FY14 ACQUISITIONS BY FUEL TYPE / HYBRID BY DEPARTMENT

The table below identifies the number of acquisitions by fuel type configuration or hybrid vehicles by department for FY14.

Fuel Type / Hybrid						
Dept	CNG	E85	Diesel	Hybrid	GAS	Total
CDPS	0	43	4	32	110	189
DOAG	0	2	0	1	3	6
DOC	8	72	2	6	4	92
DOE	0	0	0	0	0	0
DPHE	0	2	0	0	5	7
HE	0	9	1	0	4	14
DHS	6	8	1	8	17	40
DOL	0	1	0	0	0	1
DOLA	0	2	0	0	1	3
CDLE	0	3	0	0	4	7
DMVA	0	1	1	0	1	3
DNR	84	24	28	0	28	164
DOR	8	11	0	5	1	25
DORA	0	13	0	0	2	15
CDOT	44	36	3	3	8	94
GOV	2	0	1	0	0	3
DPA	1	3	0	0	0	4
JUD	0	3	0	3	7	13
Totals =	153	233	41	58	195	680
	22.50%	34.26%	6.03%	8.53%	28.68%	

CNG & AFV VEHICLE ACQUISITIONS – 2008 to 2014

From January of 2008 through 2012, only 1 CNG vehicle was purchased because only 2 OEM CNG vehicles were available from model year 2006 to 2011 and both were dedicated CNG (i.e. not dual fuel). This limited the state's ability to purchase CNG vehicles during this time.

Because of budget constraints due to the economic crash in FY08-09, the state only approved vehicles to be replaced in FY10-11 and FY11-12 if they had an impact on life, health, or safety. Most of these vehicles were for the Department of Public Safety State Patrol Division.

CNG and AFV acquisitions resumed in FY13 with the purchase of 81 CNG vehicles, and in FY14 with 153 CNG vehicles. SFM was able to purchase a total of 1,496 alternative fueled vehicles capable of using E85 and regular gasoline from 2008 to 2014. See following table for a summary of vehicle acquisitions from 2008 to 2014.

SUMMARY OF VEHICLE ACQUISITIONS – 2008 to 2014

Fiscal Year	Total Acquisitions	CNG	E85	Non Acquisitions	AFV
2008	654	0	284	370	
2009	895	0	303	592	
2010	551	0	245	306	
2011	241	0	98	143	
2012	317	1	113	203	
2013	566	81	220	265	
2014	680	153	233	294	
Totals	3,904	235	1,496	2,173	