

**Department of Legislative Services**  
 Maryland General Assembly  
 2003 Session

**FISCAL AND POLICY NOTE**

Senate Bill 720 (Senator Teitelbaum)  
 Education, Health, and Environmental Affairs

**Procurement - Alternative Fuel and Electric-Hybrid Vehicles**

This bill requires the State and local jurisdictions to ensure that at least 50% of their new passenger cars, light trucks, and buses use alternative fuels or are electric-hybrid vehicles, beginning in fiscal 2005. The Department of Budget and Management (DBM) and each political subdivision are required to report on the implementation and compliance with this bill on or before June 30, 2005.

The bill is effective July 1, 2003.

**Fiscal Summary**

**State Effect:** General fund expenditures would increase \$1.9 million annually beginning in FY 2005. Additional general fund expenditures to build refueling stations throughout the State would be required. No impact on revenues.

(\$ in millions)	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	0	1.9	1.9	1.9	1.9
Net Effect	\$0	(\$1.9)	(\$1.9)	(\$1.9)	(\$1.9)

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect*

**Local Effect:** Significant increase in expenditures.

**Small Business Effect:** Minimal.

## Analysis

**Background:** The U.S. Department of Energy (DOE) currently recognizes the following as alternative fuels: (1) methanol and denatured ethanol as alcohol fuels (alcohol mixtures that contain no less than 70% of the alcohol fuel); (2) natural gas (compressed or liquefied); (3) liquefied petroleum gas; (4) hydrogen; (5) coal-derived liquid fuels; (6) fuels derived from biological materials; and (7) electricity (including solar energy).

Under the federal Energy Policy Act (EPA) of 1992, many fleets of vehicles, including the State's fleet, are subject to alternative fuel vehicle acquisition requirements. For example, for light-duty vehicles that are model year 2001 and later, 75% of the covered vehicle acquisitions must be for alternative fuel vehicles (AFVs). Several classes of vehicles are exempt, including police vehicles, EMT vehicles, and take-home vehicles. In addition, the regulations apply only to State vehicles in operation in given geographic areas, primarily metropolitan areas.

A hybrid electric vehicle combines the internal combustion engine of a conventional vehicle with an electric motor and can achieve about twice the fuel economy of a conventional vehicle. An energy storage system, such as batteries, stores the power to run the electric motor. According to DOE, commercially available hybrid electric vehicles do not meet the requirements of an alternative fuel vehicle for the fleet acquisition requirements because they are not primarily powered by an electric motor.

For State procurement purposes, a Type 1 vehicle is a standard four-door vehicle providing transportation for up to four people. The commercially available hybrid electric vehicles would qualify as Type 1 vehicles for State procurement purchases but would not meet the requirement for purchases of alternative fuel vehicles. Failure to meet the federal requirement for the percentage of vehicle purchases that are alternative fuel vehicle purchases could result in federal penalties.

During the last procurement cycle, DBM purchased 142 Type 1 vehicles, a mix of standard and alternative fuel vehicles, at an average cost of \$11,000 per vehicle.

California announced on March 3, 2003, that it was beginning regulatory hearings to amend its zero-emission vehicles regulations to purchase all-electric vehicles and was shifting to hybrid-electric cars instead. The California Air Resources Board will meet to discuss the proposed rule changes in March 27, 2003. Press accounts indicate the state was unable to find electric vehicles that cost under \$35,000 or that could travel more than 100 miles without a recharge.

**State Expenditures:** DBM estimates that AFVs or hybrid-electric vehicles will cost the State approximately \$7,000 more than gasoline-powered vehicles. The State purchases approximately 800 new vehicles annually, 130 of which are AFVs and already meet the requirements established in this bill. The State would need to purchase an additional 270 AFVs or hybrid-electric vehicles. The aggregate expenditure increase would be \$1,890,000 annually.

The Department of General Services indicates that additional costs will be incurred to purchase fueling equipment and build fueling stations throughout the State. Reliable estimates are not available.

The Maryland Energy Administration did not respond to a request for information about this bill.

**Local Fiscal Effect:** Local jurisdictions will incur significant expenditures for purchase costs and for additional maintenance needs. Montgomery County indicates that expenditures will increase \$6.2 million in fiscal 2005 for purchasing vehicles, E-85 and compressed natural gas (CNG) fuel pumping stations, and fuel. Frederick County estimates an initial expenditure increase of \$130,000 for the purchase of vehicles, fuel tanks, fuel pumps, training, pump repairs, and liability insurance for the fuel tanks. The county estimates \$17,500 in ongoing expenditure increases.

Baltimore City did not provide a cost estimate for this bill, but indicates that it purchases approximately 350 new vehicles annually. The city also indicates that implementation of the provisions of this bill with a CNG system requires the construction of at least one quick-fill fueling station and several overnight fueling stations. Applying the \$7,000 average cost increase for CNG vehicles to the data provided by the city, Baltimore would incur annual expenditure increases for vehicles only of \$1,225,000.

Baltimore, Charles, Prince George's, and Somerset counties did not respond to requests for fiscal estimates of this bill on county expenditures.

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### **Additional Information**

**Prior Introductions:** In 2002, a bill that would have required DBM to purchase 250 hybrid-electric vehicles in fiscal 2003, received an unfavorable report in Commerce and Government Matters.

**Cross File:** None.

**Information Source(s):** Montgomery County, Department of General Services, Department of Budget and Management, Frederick County, Baltimore City, Department of Legislative Services

**Fiscal Note History:** First Reader - March 7, 2003  
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Analysis by: Daniel P. Tompkins

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510