


Robert Cennamo

FROM	NAME & TITLE	Robert Cennamo, Budget Director	CITY of BALTIMORE MEMO	
	AGENCY NAME & ADDRESS	Bureau of the Budget and Management Research Room 432, City Hall (410) 396-4774		
	SUBJECT	City Council Bill 21-0159 – Procurement – Zero-Emission Vehicles		

DATE:

TO

The Honorable President and
Members of the City Council
City Hall, Room 400

January 14, 2022

Position: Oppose

The Department of Finance is herein reporting on City Council Bill 21-0159, Procurement- Zero-Emission Vehicles, the purpose of which is to convert City fleet vehicles to zero-emission vehicles by 2040.

Background

The City’s fleet is made up of approximately 4,321 vehicles, serving 25 agencies and 7 quasi-agencies City-wide, and is comprised of automobiles, ambulances, fire trucks, and other vehicles necessary to City operations. The City began a fleet modernization plan in Fiscal 2014, funded by a master lease program. Under this lease financing approach, the purchase of every vehicle and piece of equipment is financed over its useful life. Repayments are budgeted annually in Service 189: Fleet Management.

In Fiscal 2022, the City budget anticipates the purchase of 229 vehicles at a total cost of approximately \$25 million. The debt service associated with the City’s Fleet was budgeted at \$20.3 million in Fiscal 2022.

	Fiscal 2019	Fiscal 2020	Fiscal 2021	Fiscal 2022
Total Vehicles Authorized	218	293	202	229
Total Purchase Authority	\$23,490,563	\$23,970,000	\$24,450,000	\$25,000,106

This legislation would require City agencies to incrementally increase the purchase of zero-emission vehicles (ZEV) and codifies targets of the 50% and 100% of the fleet be zero-emission vehicles by 2030 and 2040, respectively. The legislation provides exemptions for vehicles that may not have a zero-emission equivalent or may not be produced in the quantity needed to meet the City’s needs. In addition, it requires the City Purchasing Agent and agencies to include a statement on the City’s ZEVs on all bids and requests for bids, as well as an annual report on the number and amount of contracts and subcontracts that included the purchase of ZEVs.

Fiscal Impact

The Department of Finance anticipates a significant fiscal impact for the City based on the increased cost ZEVs. The table below provides examples of the cost of specific vehicles and the additional cost of a zero-emissions purchase.

Vehicle Type	Current Cost**	ZEV Cost**	Cost Increase
Ford F150 Pick-Up Truck	\$29,290	\$46,474	59%
Ford Transit Van	\$35,925	\$43,295	21%
Fire Engine	\$639,523	\$1,800,000*	181%
Load Packer	\$161,490	\$400,000	148%

*Estimate: The current technology still requires a diesel engine to drive the Fire Pump

**Estimates provided by the Department of General Services.

The table below estimates the increased costs for ZEV vehicles based on the number of pick-up trucks, vans, fire engines, and load packers the City is anticipating purchasing in Fiscal 2022.

Vehicle Type	No. Purchased	Cost for Conventional Vehicles	Cost of ZEVs	Additional Cost
Pick-Up Truck	19	\$ 556,510	\$ 883,006	\$ 326,496
Van	15	\$ 538,875	\$ 649,425	\$ 110,550
Fire Engine	4	\$ 2,558,092	\$ 7,200,000	\$ 4,641,908
Load Packer	34	\$ 5,490,660	\$ 13,600,000	\$ 8,109,340
TOTAL	72	\$ 9,144,137	\$ 22,332,431	\$ 13,188,294

As stated previously, the Fiscal 2022 budget includes \$25 million to purchase 229 vehicles. Under this legislation, the purchase of these 72 vehicles, 31% of the anticipated purchase amount, would equate to 89% of the annual financing.

In addition, there are additional infrastructure and supply costs. DGS estimates a cost of at least \$3,000 per vehicle for charging infrastructure, which would cost approximately \$6.5 million for all vehicles, assuming two vehicles per charger. In addition, vehicle battery replacement would be required every 4 to 5 years and current batteries cost \$3,500 to \$5,000. Finally, there will likely be costs for new supplies that will be needed by the fleet management as ZEVs are integrated into the fleet.

Finance does anticipate a potential offset to the additional cost in the form of savings on fuel and maintenance costs. Fuel costs for conventional vehicles are estimated at \$0.15 per mile, while electricity costs for ZEVs is estimated at \$0.04 per mile. In addition, DGS estimates annual maintenance savings of \$500 for light duty vehicles with a shift to ZEVs. However, these savings will be realized over the long term and likely will not offset the initial increased investment needed to purchase ZEVs.

Other Considerations

Financing Impacts

Finance is supportive of the goal to transition the fleet to ZEVs, but codifying targets for transition the City's fleet to ZEV significantly restricts the ability of the City to respond to fiscal challenges that may arise. Considering the City's financing structure for fleet replacement, it is important that any goals set to transition to the fleet to ZEVs is carefully considered in regards to upfront financing needs and debt service payments. The City is set to increase funding for Baltimore City Public Schools by an additional \$883.6 million through Fiscal 2030. As such, this mandate could result in further limiting the City's ability to respond to fiscal challenges, as noted before, due to the increased financing costs and limited revenue to support those costs. In addition, it could result in some vehicles not being replaced in attempts to meet these goals and timeline due to limited availability or City needs, leading to depreciation of the City's fleet.

Personnel Costs

DGS currently has over 171 staffers that are responsible for fleet maintenance. As the fleet shifts to ZEVs, the City will need to train current staff on these vehicles, as well as increased salaries in order to retain employees and continued training as technology advances. Electric vehicle technician training is estimated to cost approximately \$87,500. In addition, the compensation for technicians will likely need to increase to reflect the different skill level required and to reflect the market value of these skills.

Reporting Requirement

Currently, the legislation states that the City Purchasing Agent will certify if ZEVs are not available to meet the City's need and provide an annual report, with the support of City agencies. DGS is the subject matter expert on the City's fleet and the availability of ZEVs to meet the City's need. In addition, all fleet information is maintained by DGS. As such, Finance supports DGS's proposed amendment to work in collaboration with the City's Purchasing Agent on determining product availability. In addition, Finance will work closely with DGS to gather the appropriate fleet data available to include in the annual report.

Sustainability

This legislation aligns with the City's 2019 Sustainability Plan, which includes the stated goal shifting the City's fleet to alternative fuel vehicles. Finance defers to the Office of Sustainability and DGS on what has been done by agencies thus far to address this goal and whether or not this legislation aligns with those goals and plans.

Conclusion

City Council Bill 21-0159, Procurement- Zero-Emission Vehicles, mandates the conversion of City fleet vehicles to 100% zero-emission vehicles by 2040. Finance supports the intent of this legislation, but does not support codifying these goals as written because it will limit the City's ability to respond to other fiscal challenges and presents several implementation challenges due to the current financing and replacement schedule.

For the reasons stated above, the Department of Finance opposes City Council Bill 21-0159.

cc: Henry Raymond
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