2021DBM_State Fleet Purchases.pdf
Uploaded by: David Fraser-Hidalgo
Position: FAV

LARRY HOGAN
Governor

BOYD K. RUTHERFORD
Lieutenant Governor

Maryland
DEPARTMENT OF BUDGET AND MANAGEMENT

DAVID R. BRINKLEY
Secretary

MARC L. NICOLE
Deputy Secretary

December 1, 2021

The Honorable William Ferguson
President of the Senate
H-107 State House
Annapolis MD 21401-1991

The Honorable Adrienne Jones
Speaker of the House
H-101 State House
Annapolis MD 21401-1991

Dear President Ferguson and Speaker Jones,

In response to requests for information relating to State Operating Budget SB-190 and State Capital Budget SB-191 specifically requiring the Department of Budget and Management (DBM) to track on an ongoing basis: the number of active vehicles by fuel type (gas, diesel, and zero emission); the number of fully electric vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles; and electric vehicle purchases, information is required for FY-2021 and FY-2022 year-to-date. DBM has been and will continue to track State vehicles under the identified parameters and in accordance with the JCR with the exception of, *"The number of zero-emission fully electric vehicles, plug-in hybrid electric vehicles and fuel cell vehicles by agency in fiscal 2021 and 2022 year to date (as of November 15, 2021)."* DBM is only able to capture data as of the date it is requested as our fleet management system is not capable of providing historical information. Therefore, the data requested for FY-2021 cannot be provided. We are able to provide this data with regard to vehicle purchases as this information is derived from a different source.

Traditionally, the requested information is provided within the body of this correspondence; however, as the data requested this year is significantly more detailed than in years prior DBM has chosen to provide attachments as described below;

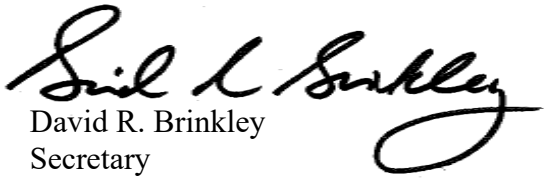
- **Attachment A** – The number of active vehicles by fuel type (including gas, diesel and zero emission) by agency in FY-2022
- **Attachment B** – The number of zero-emission fully electric vehicles, plug-in hybrid electric vehicles and fuel cell vehicles purchased by agency in FY-2021
- **Attachment C** - The number of zero-emission fully electric vehicles, plug-in hybrid electric vehicles and fuel cell vehicles purchased by agency in FY-2022

With regard to the last request addressing, "…the common reasons an electric or zero-emission vehicle was not purchased," the predominant concerns are lack of current charging infrastructure and range anxiety of employees.

As matter of responding to the concern addressed in the JCR regarding the low numbers of fully electric vehicles in the State fleet, since DBM's last report 40 fully electric vehicles were purchased in FY-2021 and DBM will purchase approximately 90 fully electric vehicles in FY-2022. This substantially increases the number of electric vehicles in the State fleet and meets or exceeds the threshold of 25% of eligible vehicles purchased each year.

If you have any questions about this report feel free to contact me, or your staff may contact Joseph C. Consoli, State Fleet Administrator, at 410-260-7195 or joseph.consoli@maryland.gov.

Sincerely,



David R. Brinkley
Secretary

cc: John West, Director, Finance and Administration
Joseph C. Consoli, Administrator, State Fleet and Travel Service

ATTACHMENT A

ACTIVE VEHICLES BY AGENCY- 11/30/2021							
Agency	**Gas Vehicles**	**Flex Fuel**	**CNG**	**Hybrid**	**PlugIn Hybrid**	**Electric**	**Diesel**
Assessments & Taxation	7	0	0	0	0	0	0
Attorney General	10	0	0	1	0	0	0
Clifton T. Perkins	11	6	0	0	0	0	0
Comptrollers Office	43	17	0	0	6	0	0
Crownsville Hospital Center	1	0	0	0	0	0	0
Department of Agriculture	64	181	0	1	4	0	0
Department of Budget Management	3	2	0	0	1	0	0
Department of Commerce	5	3	0	2	0	0	0
Department of General Services	68	10	0	4	0	0	0
Department of Information Technology	1	3	0		0	0	0
Department of Natural Resources ALL	36	220	0	6	0	0	0
Department of Veterans Affairs	19	1	0	0	0	0	0
Dept of Education	66	6	0	1	3	0	0
Dept of Housing Community Development	28	2	0	1	0	0	0
Dept of Juvenile Justice	123	94	0	0	9	0	0
Dept of Public Safety Correctional Services	533	248	2	13	1	4	0
Dept. of Human Services Headquarters	34	43	0	0	5	0	0
Dept. of Labor License & Regulation	54	12	0	6	0	0	0
DHR-Dept Social Services All	310	19	2	4	12	0	0
Eastern Shore Hospital Center	9	3	0	0	0	1	0
Energy Administration	1	0	0	0	0	0	0
Executive Department	9	1	1	2	0	0	0
Governor Office of CPYVS	0	0	0	0	0	0	0
Holly Center	15	0	0	0	0	0	0
MAAC	0	1	0	13	0	0	0
Maryland Department of Health	108	8	0	26	4	0	0
Maryland State Archives	2	1	0	0	0	0	0
Mass Transit Administration	210	65	0	0	0	0	0
MD Aviation Administration	59	39	0	4	0	0	0
MD Department of the Environment	7	92	1	0	2	0	0
MD Insurance Administration	4	1	0	0	0	0	0
MD Port Administration	12	78	0	4	0	0	0
MD School for the Deaf	10	2	0	0	0	0	0
MD State Lottery	71	7	0	0	1	0	0
MD State Retirement	2	0	0	0	0	0	0
MD Transportation Authority	91	159	0	1	0	0	0
MDH - Health Department -All	515	81	3	22	0	0	0
MDH Deer's Head Hospital Center	6	0	0	0	0	0	0
MDH Thomas B. Finan Hospital	18	1	0	0	0	0	0
MDH Western Maryland Hospital	3	1	0	0	0	0	0
MDOT Headquarters	11	5	0	5	0	2	0
MEMA	5	10	0	0	0	0	0
MIEMSS	27	3	0	0	0	0	0
Military Department	37	11	0	0	1	0	0
Motor Vehicles Administration	97	17	0	0	0	0	0
Office of Administrative Hearings	4	0	0	0		0	0
Office of Aging	3	0	0	0	0	0	0
Office of Planning	19	2	1	2	0	0	0
Potomac Center	3	4	0	0	0	0	0
Public Defender	1	2	0	0	0	0	0
Public Service Commission	14	3	0	0	0	0	0
Public Television	11	2		0	0	0	0
RICA - Rockville	7	0	0	1	0	0	0
RICA Baltimore	6	1	0	0	0	0	0
Rosewood Hospital Center	1	0	0	0	0	0	0
Spring Grove Hospital	53	2	0	1	0	0	0

Springfield Hospital	42	3	1	0	0	1	0
State Board of Elections	0	1	0	0	0	0	0
State Highway Administration	421	537	29	8	0	1	0
State Prosecutor	2	2	0	0	0	0	0
State Treasurer Office	0	0	0	1	0	0	0
Worker Compensation Commission	0	1	0	0	0	0	0
TOTALS	**3332**	**2013**	**40**	**129**	**49**	**9**	**0**

ACTIVE VEHICLES BY AGENCY- 11/30/2021							
Agency	**Gas Vehicles**	**Flex Fuel**	**CNG**	**Hybrid**	**PlugIn Hybrid**	**Electric**	**Diesel**
Assessments & Taxation	7	0	0	0	0	0	0
Attorney General	10	0	0	1	0	0	0
Clifton T. Perkins	11	6	0	0	0	0	0
Comptrollers Office	43	17	0	0	6	0	0
Crownsville Hospital Center	1	0	0	0	0	0	0
Department of Agriculture	64	181	0	1	4	0	0
Department of Budget Management	3	2	0	0	1	0	0
Department of Commerce	5	3	0	2	0	0	0
Department of General Services	68	10	0	4	0	0	0
Department of Information Technology	1	3	0		0	0	0
Department of Natural Resources ALL	36	220	0	6	0	0	0
Department of Veterans Affairs	19	1	0	0	0	0	0
Dept of Education	66	6	0	1	3	0	0
Dept of Housing Community Development	28	2	0	1	0	0	0
Dept of Juvenile Justice	123	94	0	0	9	0	0
Dept of Public Safety Correctional Services	533	248	2	13	1	4	0
Dept. of Human Services Headquarters	34	43	0	0	5	0	0
Dept. of Labor License & Regulation	54	12	0	6	0	0	0
DHR-Dept Social Services All	310	19	2	4	12	0	0
Eastern Shore Hospital Center	9	3	0	0	0	1	0
Energy Administration	1	0	0	0	0	0	0
Executive Department	9	1	1	2	0	0	0
Governor Office of CPYVS	0	0	0	0	0	0	0
Holly Center	15	0	0	0	0	0	0
MAAC	0	1	0	13	0	0	0
Maryland Department of Health	108	8	0	26	4	0	0
Maryland State Archives	2	1	0	0	0	0	0
Mass Transit Administration	210	65	0	0	0	0	0
MD Aviation Administration	59	39	0	4	0	0	0
MD Department of the Environment	7	92	1	0	2	0	0
MD Insurance Administration	4	1	0	0	0	0	0
MD Port Administration	12	78	0	4	0	0	0
MD School for the Deaf	10	2	0	0	0	0	0
MD State Lottery	71	7	0	0	1	0	0
MD State Retirement	2	0	0	0	0	0	0
MD Transportation Authority	91	159	0	1	0	0	0
MDH - Health Department -All	515	81	3	22	0	0	0
MDH Deer's Head Hospital Center	6	0	0	0	0	0	0
MDH Thomas B. Finan Hospital	18	1	0	0	0	0	0
MDH Western Maryland Hospital	3	1	0	0	0	0	0
MDOT Headquarters	11	5	0	5	0	2	0
MEMA	5	10	0	0	0	0	0
MIEMSS	27	3	0	0	0	0	0
Military Department	37	11	0	0	1	0	0
Motor Vehicles Administration	97	17	0	0	0	0	0
Office of Administrative Hearings	4	0	0	0		0	0
Office of Aging	3	0	0	0	0	0	0
Office of Planning	19	2	1	2	0	0	0
Potomac Center	3	4	0	0	0	0	0

Public Defender	1	2	0	0	0	0	0
Public Service Commission	14	3	0	0	0	0	0
Public Television	11	2		0	0	0	0
RICA - Rockville	7	0	0	1	0	0	0
RICA Baltimore	6	1	0	0	0	0	0
Rosewood Hospital Center	1	0	0	0	0	0	0
Spring Grove Hospital	53	2	0	1	0	0	0
Springfield Hospital	42	3	1	0	0	1	0
State Board of Elections	0	1	0	0	0	0	0
State Highway Administration	421	537	29	8	0	1	0
State Prosecutor	2	2	0	0	0	0	0
State Treasurer Office	0	0	0	1	0	0	0
Worker Compensation Commission	0	1	0	0	0	0	0
TOTALS	**3332**	**2013**	**40**	**129**	**49**	**9**	**0**

ATTACHMENT B

FY 2021 VEHICLES PURCHASED BY AGENCY							
Agency	**Gas Vehicles**	**Flex Fuel**	**Hybrid**	**PlugIn Hybrid**	**Electric**	**Diesel**	**CNG**
Attorney General	0	0	1	0	0		
Comptroller	0	0	0	0	4		
Department of Agriculture	16	32	0	0	0		
Department of Human Services	20	0	0	0	12		
Department of Labor & License	4	0	1	0	0		
Department of Natural Resources	20	25	0	0	12		
Dept of Budget Management	0	0	0	0	1		
Dept of General Services	4	0	4	0	2		
Dept of Information Technogoy	0	0	0	0	1		
Dept of Juvenile Services	7	0	0	0	0		
Dept of Public Safety & Corrections	51	0	4	0	0		
Dept. of Education	0	0	1	0	0		
Dept. of Education/Inspector General Office	1	0	0	0	0		
Executive Office/Governor	1	0	0	0	0		
MD Aviation Administration	4	0	0	0	0		
MD Department of Health	16	0	7	0	2		
MD Environment	0	0	0	0	6	0	
MD Insurance	1	0	0	0	0		
MD Mass Transit Administration	12	0	54	9	0		
MD Public Television	1	0	0	0	0		
MD School for the Deaf	1	0	0	0	0		
MD State Archives	1	0	0	0	0		
MD State Lottery	4	0	0	0	0		
MD Transportation Administration	15	0	0	0	0		
MIEMSS	2	0	0	0	0		
Public Services Commission	1	1	0	0	0		
TOTALS	**182**	**58**	**72**	**9**	**40**	**0**	**0**

ATTACHMENT C

FY2022 VEHICLES PURCHASED BY AGENCY							
Agency	**Gas Vehicles**	**Flex Fuel**	**Hybrid**	**PlugIn Hyb**	**Electric**	**Diesel**	**CNG**
Comptroller's Office	1						
Dept . Of Natural Resources	50	26					
Dept of General Services	2						
Dept. of Agriculture	14	6					
Dept. of Labor and Licencing	1						
Dept. of Public Safety & Corrections	2		1				
Executive Office/Governor	1						
MD Department of Health			3				
MD Dept of Transporation - Headquarters					1		
MD Dept. Transportation Authority	53	2					
MD Mass Transit Administration			1				
MD Public Television	1						
MIEMSS	2						
Motor Vehicle Administration	2						
Public Services Commission			1				
TOTALS	**129**	**34**	**6**	**0**	**1**	**0**	**0**

Executive Order.pdf
Uploaded by: David Fraser-Hidalgo
Position: FAV

01.01.2015.02

EXECUTIVE ORDER 01.01.2015.02

State Fleet Goals for Zero-Emission Vehicles

A. State Leadership. The purpose of this Executive Order is to ensure that State agencies exercise leadership in the purchase and use of Zero-Emission Vehicles (ZEVs).

B. Zero-Emission Vehicles Defined. For the purpose of this Executive Order, ZEVs shall mean plug-in hybrid electric vehicles, plug-in battery electric vehicles, hydrogen fuel cell vehicles and other low- and zero-emitting vehicles that meet California's low emissions standards, as may, from time to time, be amended and incorporated by reference into Maryland regulations.

C. Zero-Emission Vehicle State Fleet Goal.

(1) 2025 Goal. Consistent with operational requirements, and the provisions and requirements of this Executive Order, State agencies shall increase the number of ZEVs in their fleets through the normal course of fleet replacement so that at least 25 percent of annual fleet purchases of light duty vehicles will be ZEVs by 2025.

(2) Milestones. To the greatest extent practicable, and consistent with operational requirements and the provisions and requirements of this Executive Order, State agencies shall increase the percentage of ZEVs in their fleets through the normal course of fleet replacement by three percent each year from FY 2016 through FY 2020 so that at least 15 percent of annual fleet purchases of light duty vehicles will be ZEVs by FY 2020.

D. Approval of Vehicle Specifications. The Department of Budget and Management shall, in consultation with the Maryland Energy Administration, the Department of the Environment, and the Department of Transportation, approve and annually update for State agencies, vehicle specifications in order to provide reasonable and practical options for the purchase of ZEVs.

E. Vehicle Procurement and Fueling Infrastructure. The Department of General Services and the Department of Transportation shall procure approved ZEVs, electric vehicle charging equipment, and other necessary fueling infrastructure for ZEVs for State agency fleets.

F. Reporting. The Department of Budget and Management and Department of Transportation shall annually submit a report to the Governor, Maryland Energy Administration, and the Department of the Environment summarizing the number and types of ZEVs purchased in the reporting fiscal year, the total number of ZEVs in the State vehicle fleet, the agencies to which the ZEVs have been assigned and the progress toward achieving the milestones and goals set forth in this Executive Order.

G. Implementation of Executive Order. The Department of Budget and Management shall, in consultation with the Maryland Energy Administration, the Department of the Environment, the Department of Transportation, and the Department of General Services, be responsible for coordinating the requirements of this Executive Order and for informing and encouraging the University System of Maryland and county and local governments to join in purchasing ZEVs under the State contract.

Effective date: January 20, 2015

HB94 Senate Sponsor Testimony.pdf
Uploaded by: David Fraser-Hidalgo
Position: FAV

David Fraser-Hidalgo
Legislative District 15
Montgomery County

Environment and Transportation Committee

Chair
Motor Vehicle and Transportation Subcommittee

The Maryland House of Delegates
6 Bladen Street, Room 223
Annapolis, Maryland 21401
410-841-3186 · 301-858-3186
800-492-7122 *Ext.* 3186
David.Fraser.Hidalgo@house.state.md.us

THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

Sponsor Testimony in Support of HB94
State Vehicle Fleet-Conversion to Zero-Emission Electric Passenger Cars and Other Light-Duty Vehicles

Testimony by Delegate David Fraser-Hidalgo
March 30, 2022- The Senate Budget and Taxation Committee

The Inventory of U.S. Greenhouse Gas Emissions and Sinks (1990-2019), shows that the transportation sector accounted for the largest portion (29%) of total U.S. greenhouse gas emissions in 2019. Light-duty vehicles, which includes passenger cars, were by far the largest category, accounting for 58% of greenhouse gas emissions.[1] In Maryland alone, the transportation sector accounted for 36% of greenhouse gas emissions in 2018.[2]

Greenhouse gas emissions have lasting, and often deadly, consequences on our population's health. According to a study[3] published in June 2021 in the journal *Environmental Research Letters*, vehicle emissions in Maryland contributed to more than $6.8 billion in health damages and caused 664 premature deaths in 2016.

According to the Maryland Department of Health, in 2018 there were 29,534 asthma-related emergency department visits in Maryland (52.4 per 10,000 residents); among children under five years old, the ER visit rate was 119.4 per 10,000 residents.[4] This cost the State $27.7 billion in healthcare costs.[5] In 2019, the Maryland Department of Health also reported that chronic lower respiratory diseases, which includes asthma, were the fifth leading cause of death in the State,

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1 Fast Facts on Transportation Greenhouse Gas Emissions | US EPA
2 State Carbon Dioxide Emissions Data - U.S. Energy Information Administration (EIA)
3 Mortality-based damages per ton due to the on-road mobile sector in the Northeastern and Mid-Atlantic U.S. by region, vehicle class and precursor - IOPscience
4 Pages - Asthma (maryland.gov)
5 Pages - Asthma (maryland.gov)

with a mortality rate of 29.2 per 100,000 residents.[6] A study from 2019 of 869 counties in the U.S. found that there is a strong correlation between ozone and fine particulate pollution and respiratory ER visits among all age groups.[7]

This data demonstrates just how deadly our continued reliance on fossil fuels is and will continue to be unless we make serious changes now.

In 2015, Maryland signed an Executive Order that defines state fleet requirements. The Executive Order sets a goal for state agencies to increase the number of ZEVs in their fleets so that at least 25% of annual fleet purchases of light duty vehicles will be ZEVs by 2025.

Currently there are 9 EVs and 178 plug-in hybrids and hybrids actively being used in the state fleet. In FY2021, 40 EVs and 81 plug-in hybrids and hybrids were purchased.[8]

We need to step up the transition and commit to a total fleet transition. HB94 will require this for passenger cars beginning in FY 2028, and for all other light-duty vehicles beginning in FY 2033.

Our transportation system is biased towards fossil-fuel vehicles. Changing this trend will require a REAL commitment from our state to lead by example and wherever feasible, transition our fleet to zero-emission vehicles. I ask you for a favorable report for HB94 to enable our state's fleet to transition to ZEVs.

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6 2019Annual.pdf (maryland.gov)

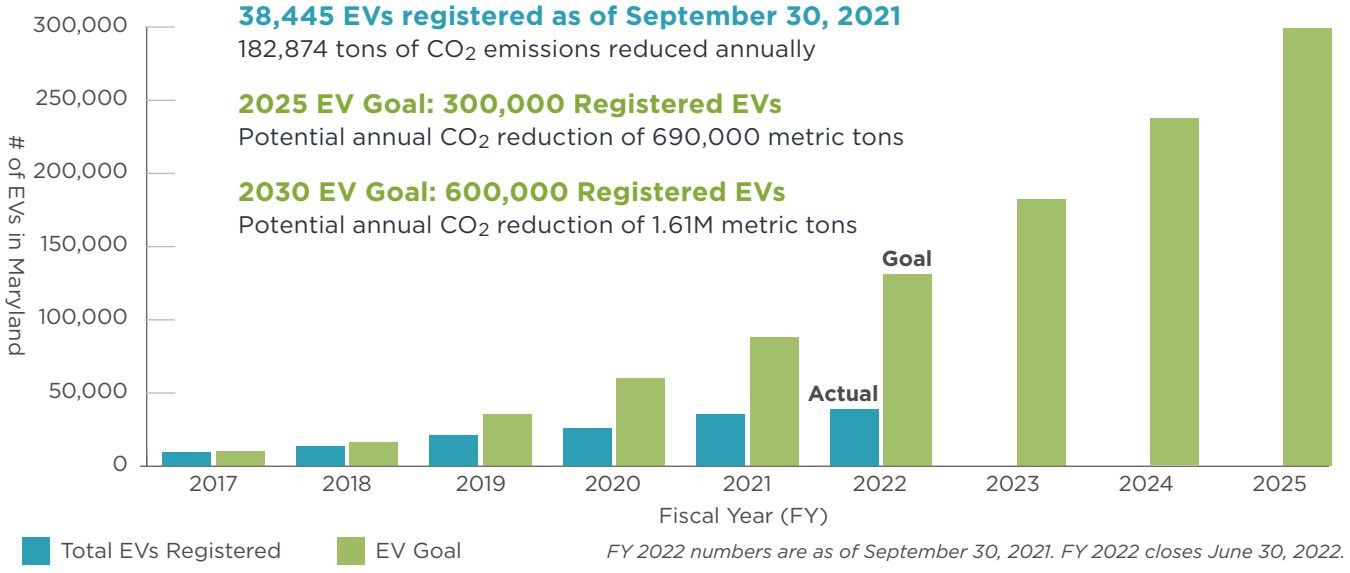
7 Age-Specific Associations of Ozone and Fine Particulate Matter with Respiratory Emergency Department Visits in the United States | American Journal of Respiratory and Critical Care Medicine (atsjournals.org)

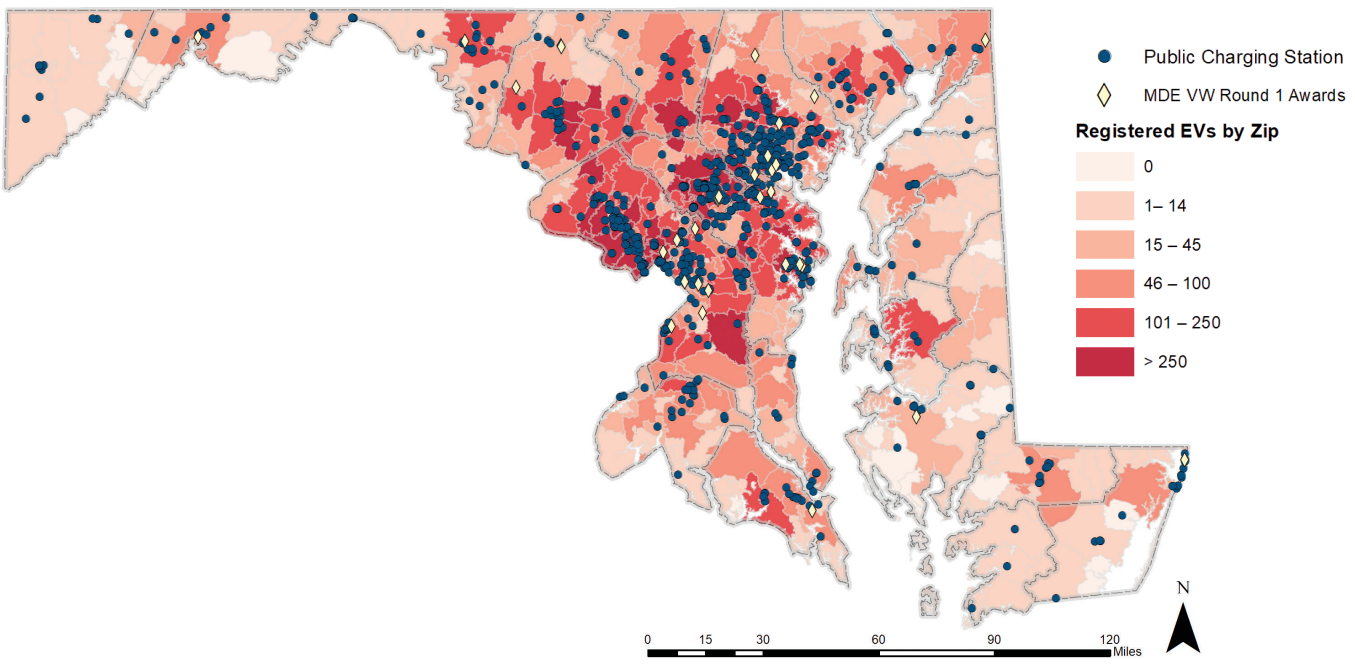
8 From the Maryland Department of Budget and Management

ZEEVIC_2022_Legislative_Flyer_Final.pdf
Uploaded by: David Fraser-Hidalgo
Position: FAV

Zero Emission Vehicles (ZEVs) in Maryland

The Maryland Greenhouse Gas Emissions Reduction Act sets a goal of 40% greenhouse gas (GHG) emissions reductions by 2030. Transportation is the single largest GHG emissions generator in Maryland, representing 36% of total GHG emissions. ZEVs play an integral role in helping Maryland meet its emission reduction goal.





MARYLAND ZERO EMISSION
Electric Vehicle Infrastructure Council

tinyurl.com/ZEEVIC2021

MDEV
MARYLAND EV

marylandev.org

Maryland ZEV Policy Scorecard

The ZEV market is rapidly advancing in part due to supportive state policy. Maryland has the opportunity to continue being a leader in ZEV market development but does not have the necessary policies in place. This scorecard outlines policy options that have been adopted across the United States to promote ZEV adoption and ZEV recharging and refueling infrastructure.

State Policies to Support Electric Vehicle (EV) Deployment		Active in Maryland?		States with Active Policy
Financial Incentives				
Point-Of-Sale Rebates		No		CA, **PA**
Rebates for New EVs		No		CA, CO, CT, ME, MN, NJ, NY, OR, VT
Rebates for Used EVs		No		CA, CT, ME, MN, OR
Rebates or Grants for EV Infrastructure		Yes		42 States (including **DC**, **DE**, **PA**, and **VA**)
Grants for Emissions Reductions Technologies		No		CA, CT, **DE**, IL, IN, IA, LA, MA, ME, MI, MN, NC, NM, NV, OH, OR, SD, TX, UT, **VA**, VT, WI, WY
Tax Credit – EV Purchase		No	• Tax credits expired in 2021	CO, **DC**, LA, MT
Tax Credit – EV Infrastructure		No		**DC**, GA, LA, NY, OK, UT, WA
Tax Exemption for ZEVs and Infrastructure		No		AZ, CA, **DC**, MI, NJ, NC, OK, RI, UT, WA
ZEV Registration Fee Exemption		No		AZ, CT, OR
Goals				
State ZEV Adoption Goal		Yes	• 300,000 EVs registered by 2025 • 600,000 EVs registered by 2030	CA, CO, CT, MA, MN, NJ, NY, NC, OR, RI, VT, WA
Greenhouse Gas (GHG) Emission Reduction Target		Yes	• By 2030, 40% emissions reduction from 2006 levels • Greenhouse Gas Reduction Act	CA, CO, CT, HI, MA, ME, MN, NV, NJ, NY, OR, RI, VT, **VA**, WA
State Fleet Procurement Goal		Yes	• Maryland Green Purchasing	CA, CT, IL, MN, NC, NH, OR, TN
State Infrastructure Deployment Goal		Yes	• DGS is establishing a Statewide EV infrastructure Strategy	CA, CO, CT, ME, MA, NJ, NY, OR, RI, VT
Non-Financial Incentives and Supporting Legislation				
HOV Lane Access		Yes		AZ, CA, GA, HI, NJ, NY, NC, UT, **VA**
Reserved Parking on Public Property		Varies		CA, MA, OR, WA
ZEV Infrastructure Multi-State Collaboration		Yes	• Medium- and Heavy-Duty ZEV MOU • Light-Duty Vehicle 2014 Multi-State Action Plan • Light-Duty Vehicle 2018-2021 Multi-State ZEV Action Plan	AZ, CA, CO, CT, **DC**, **DE**, HI, ID, ME, MA, MT, NH, NJ, NM, NC, NV, NY, OK, OR, **PA**, RI, UT, **VA**, VT, WA, WY
ZEV Infrastructure Planning and Coordination		Yes	• Zero Emission Electric Vehicle Infrastructure Council	CO, **DC**, NH, RI
ZEV Sales Requirements	Light-Duty Vehicles	Yes	• Adopted Title 13 of the California Code of Regulations	CA, CO, CT, **DC**, **DE**, ME, MA, MN, NJ, NV, NY, OR, **PA**, RI, VT, **VA**, WA
	Medium- and Heavy-Duty Vehicles	No		CA
EVSE or EVSE-Wiring Building Code Requirements		Partially	• House Bill 784, 2021, requires builders to provide the option for Level 2 EVSE prewiring	CA, MA, NJ, OR, **VA**, WA
Direct-to-Public EV Sales		Yes		AK, AZ, CA, CO, **DE**, FL, HI, ID, IL, MA, ME, MN, MO, MS, NH, OR, RI, TN, UT, VT, WY
EVSE Electricity Sales Deregulated		Yes		AL, AZ, AK, CA, CO, CT, **DE**, **DC**, FL, HI, IA, IL, ID, KS, KY, ME, MA, MN, MO, MT, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, **PA**, RI, SC, TX, UT, VT, WA, WV
Utility EVSE Programs		Yes	• PC44 EV Pilot Program	AL, AK, AZ, CA, CO, CT, **DC**, **DE**, FL, GA, HI, ID, IN, IA, KS, LA, MA, ME, MI, MN, MS, MO, NE, NV, NH, NJ, NM, NY, NC, OH, OK, OR, RI, TN, TX, UT, VT, **VA**, WA, WI, WV, WY
Charging Signage Standardization		No		CA, NH, NY, ND, OH, SD, **VA**, WA
Right-Of-Way Charging		No	• Testing in Montgomery County	
Streamline ZEV Infrastructure Permitting		No		CA
Define EVSE Zoning Requirements		No		
Right-To-Charge Requirements		Yes		CA, FL, HI, NJ, NY, **VA**

MARYLAND ZERO EMISSION
Electric Vehicle Infrastructure Council

tinyurl.com/ZEEVIC2021

MDEV
MARYLAND EV

marylandev.org

HB 94_CBF SUPPORT_B&T.pdf
Uploaded by: Doug Myers
Position: FAV

CHESAPEAKE BAY FOUNDATION

Environmental Protection and Restoration
Environmental Education

House Bill 94
State Vehicle Fleet - Conversion to Zero-Emission Passenger Cars and Other Light-Duty Vehicles

Date: March 30, 2022
To: Budget and Taxation Committee

Position: Support
From: Doug Myers, Maryland Senior Scientist

Chesapeake Bay Foundation (CBF) **SUPPORTS** HB 94 which proactively phases in the electrification of the state's vehicle fleet and the development of charging infrastructure to support that fleet.

Vehicle emissions have negative consequences on the environment that Marylanders love dearly and depend upon. More than one-third of the Nitrogen pollution entering the Chesapeake Bay comes from emissions first to air. When transferred into the watershed, particles of nitrous oxides become nitrates which drive algae blooms and depress dissolved oxygen. The Bay is also greatly threatened by climate change, including warming temperatures, sea level rise, and increased precipitation all linked to other greenhouse gases from the transportation sector. By transitioning the fleet of State vehicles, Maryland is taking active steps to reduce air pollution and climate change, thus quickening the results of Bay cleanup efforts.

Harm to the Bay is also a social justice issue. Many families and businesses rely on healthy water for their livelihoods—including recreation, tourism and hospitality, and fishing—and any financial setbacks linked to pollution affect the most vulnerable populations most intensely. Electric vehicles are a reliable and cost-effective counter to these impacts. The transition can also act as a catalyst for conversations around electrification and the need to de-carbonize energy sources necessary to implement the state's *Greenhouse Gas Reduction Act Plan*.

The Chesapeake Bay Foundation has been laboring for the health of the Bay since 1967. Our members have a deep connection to the Bay, the natural environment, and the health of our beautiful state. We trust the advice that scientists give us: electrify as much as we can as quickly as we can, and power it through clean and renewable energy, like wind and solar. Electrifying the state fleet is a great step forward to create a cleaner and more resilient Maryland. We cannot have a healthy and thriving community without a healthy and thriving Bay.

CBF urges the Committee's FAVORABLE report on HB 94. For more information, please contact Robin Clark, Maryland Staff Attorney at rclark@cbf.org and 443.995.8753.

Maryland Office ▪ Philip Merrill Environmental Center ▪ 6 Herndon Avenue ▪ Annapolis ▪ Maryland ▪ 21403
Phone (410) 268-8816 ▪ Fax (410) 280-3513

HB94_MDSierraClub_fav - 30March2022.pdf
Uploaded by: Josh Tulkin
Position: FAV

P.O. Box 278
Riverdale, MD 20738

Committee: **Budget and Taxation**
Testimony on: **HB 94 - "State Vehicle Fleet – Conversion to Zero-Emission Passenger Cars and Other Light-Duty Vehicles"**
Position: **Favorable**
Hearing Date: **March 30, 2022**

The Maryland Chapter of the Sierra Club strongly supports HB 94 to require the State to purchase a specified minimum percentage of zero-emission passenger cars and other light-duty vehicles for its vehicle fleet in certain fiscal years, subject to the availability of funding. The end goal is to have 100% of the passenger cars in the state vehicle fleet to be zero-emission vehicles by 2031, and 100% of other light-duty vehicles in the state vehicle fleet to be zero-emission by 2036. However, the requirement to purchase zero-emission vehicles for the state fleet does not apply to vehicles used for paratransit service or vehicles that have special performance requirements necessary for the protection and welfare of the public.

HB 94 also requires the Department of General Services to ensure the development of charging infrastructure to support the operation of zero-emissions vehicles in the state fleet.

The transportation sector is Maryland's number one generator of climate-damaging greenhouse gas emissions. Our state's Greenhouse Gas Inventory indicates that gasoline and diesel-powered vehicles account for 89% of this sector's pollution. Tailpipe emissions from these vehicles are also hazardous to human health and contribute to cancers, heart disease, asthma, emphysema, and other respiratory diseases. More than 80% of Marylanders live in counties that do not meet federal clean air standards for ozone, due in significant part to tailpipe emissions.

In 2013, Maryland joined seven other states in signing a memorandum of understanding committing to have 300,000 zero-emission vehicles (including plug-ins) on the road by 2025, and 600,000 EVs on the road by 2030. The state also has a goal it set for itself in the Greenhouse Gas Reduction Act to reduce state greenhouse gas emissions 40% by 2030 (compared to the 2006 level). This bill would significantly increase the likelihood the state will be able to meet those goals.

In summary, converting the State's fleet of passenger cars and other light-duty vehicles to zero-emission electric vehicles is necessary to meet our climate targets and protect public health. This bill would also generate savings for the state over time because zero-emission electric vehicles have much lower fuel and maintenance costs than gas and diesel-powered vehicles. We urge the committee to issue a favorable report on this bill.

Brian Ditzler
Transportation Committee Chair
Brian.Ditzler@MDSierra.org

Josh Tulkin
Chapter Director
Josh.Tulkin@MDSierra.org

HB 94_mgoldstein_fav 2022.pdf
Uploaded by: Mathew Goldstein
Position: FAV

Secular Maryland secularmaryland@tutanota.com

March 30, 2022

HB 94 - SUPPORT

State Vehicle Fleet - Conversion to Zero-Emission Passenger Cars and Other Light-Duty Vehicles

Dear Chair Guzzone, Vice-Chair Rosapepe, and Members of the Budget and Taxation Committee,

Secular Maryland appeals to our lawmakers to enact new laws to tackle climate change now. Being rational requires following the empirical evidence wherever it takes us. Climate warming denialism is an attack against rationality that needs to be unequivocally opposed. Transportation currently accounts for about 40% of Maryland's greenhouse gas emissions. Air pollution is also a health problem. People who live and work in areas with high levels of air pollution are significantly more likely to die from COVID-19 and suffer from various other ailments such as asthma and dementia. This bill responsibly confronts these problems by setting a zero emissions policy for state government vehicles.

Although the production for an EV generates higher emissions than the manufacturing of a comparable non electric vehicle, those initial higher environmental costs are more than offset by EVs' superior energy efficiency over time. A recent MIT study concluded electric vehicles in the U.S., on average, emit about 200 grams of CO2 per mile. After cleaning up the grid it is estimated we can reduce emissions from electric vehicles by 75% to about 50 grams of CO2 per mile in 2050. A complete lifecycle study concluded that electric vehicles are less emissions intensive in 53 out of 59 world regions [Knobloch, F., Hanssen, S., Lam, A. et al. Net emission reductions from electric cars and heat pumps in 59 world regions over time. Nat Sustain 3, 437–447 (2020). https://doi.org/10.1038/s41893-020-0488-7]. A recent Yale University study found that if "electricity continues to decarbonize" as anticipated then "the simultaneous reduction of both direct and indirect emissions indicates a win–win situation for climate change

mitigation, meaning that climate policy with very high shares of BEVs represents a no–regrets strategy in terms of emissions" [Wolfram, P., Weber, S., Gillingham, K. et al. Pricing indirect emissions accelerates low—carbon transition of US light vehicle sector. Nat Commun 12, 7121 (2021). https://doi.org/10.1038/s41467-021-27247-y]. Electricity can be generated by renewable resources such as solar panels and wind turbines (the vehicles can themselves be outfitted with solar panels).

An electric vehicle has no need for oil changes, air filters, transmission service, or spark plugs. Battery technology keeps improving. The reliability problems with many, but not all, of the first generation of EV will likely diminish as manufacturers compete to satisfy a consumer preference for cars that fail infrequently and are inexpensive and quick to fix when they do fail.

Respectfully,
Mathew Goldstein
3838 Early Glow Ln
Bowie, MD

HB0094-FAV-DTMG-3-30-22.pdf
Uploaded by: Olivia Bartlett
Position: FAV

First and Last Name, DoTheMostGood

Committee: Budget and Taxation

Testimony on: HB0094 - State Vehicle Fleet – Conversion to Zero–Emission Passenger Cars and Other Light–Duty Vehicles

Position: Favorable

Hearing Date: March 30, 2022

Bill Contact: Delegate David Frasier-Hidalgo

DoTheMostGood (DTMG) is a progressive grass-roots organization with more than 3000 members across all districts in Montgomery County as well as a number of nearby jurisdictions. DTMG supports legislation and activities that keep its members healthy and safe in a clean environment and which promote equity across all our diverse communities. DTMG strongly supports HB0094 because converting the state's passenger cars and light-duty vehicles to zero-emission vehicles is a necessary step in Maryland's fight against global warming and will increase healthy air for all Marylanders.

Emission of greenhouse gases (GHG) from burning fossil fuels is driving global warming and climate change. Climate scientists have issued increasingly urgent warnings over the past few years about the need to switch to non-emission technologies as quickly as possible to avoid the worst consequences of global warming. 70% of GHG pollution in Maryland comes from the transportation sector. The state must take active measures to reduce GHG emissions from transportation to meet our GHG reduction targets. The state's passenger car and light-duty vehicle fleet is sizable. Phasing in zero-emission vehicles as proposed in HB0094 will move Maryland toward significant reduction in GHG emissions from state vehicles and facilitate meeting the state's GHG reduction targets.

In 2013, Maryland joined seven other states in signing a memorandum of understanding committing to have 300,000 zero-emission vehicles (including plug-ins) on the road by 2025, and 600,000 EVs on the road by 2030. The state also has a goal it set for itself in the Greenhouse Gas Reduction Act to reduce state GHG emissions 40% (compared to the 2006 level by 2030. Passage of HB0094 will significantly increase the likelihood the state will be able to meet these goals.

In addition to the threat of climate change, air pollution from fossil fuel vehicles is a significant problem, particularly in metropolitan areas of the state. Tailpipe emissions from fossil fuel vehicles are hazardous to human health and contribute to cancers, heart disease, asthma, emphysema, and other respiratory diseases. More than 80% of Marylanders live in counties that do not meet

federal clean air standards for ozone, due in significant part to tailpipe emissions. Changing state passenger and light-duty vehicles over to non-polluting zero emitters will help reduce the ozone, sulfur dioxide, nitrous oxide, and particulate matter pollution that cause these respiratory illnesses.

Furthermore, phasing in zero-emission electric passenger and light-duty vehicles will also generate savings for the state over time since zero-emission electric vehicles have much lower fuel and maintenance costs than gas and diesel-powered vehicles.

Adoption of HB0094 will serve as a powerful example of Maryland's commitment to a greener future and cleaner air for all Marylanders. DTMG therefore strongly supports HB0094 and urges a **FAVORABLE** report on this bill.

Respectfully submitted,

Olivia Bartlett
Co-Lead, DoTheMostGood Maryland Team
oliviabartlett@verizon.net
240-751-5599

2022.03.29 IHC testimony on HB94 Senate BAT Commit

Uploaded by: Timothy Lattimer

Position: FAV

HB94 – State Vehicle Fleet – Conversion to Zero–Emission Passenger Cars and Other Light–Duty Vehicles

Testimony before

Senate Budget and Taxation Committee

March 30, 2022

Position: Favorable

Mr. Chair, Mr. Vice Chair and members of the committee, my name is Tim Lattimer and I represent the 750+ members of Indivisible Howard County. IndivisibleHoCo is an active member of the Maryland Legislative Coalition (with 30,000+ members). We are providing written testimony today in ***support of HB94*** as passed by the House on February 17, 2022.

This bill requires the State to ensure that a certain minimum percentage of passenger cars and other light–duty vehicles purchased for the State vehicle fleet in certain fiscal years are zero–emission vehicles (ZEVs). This bill also requires the Department of General Services to ensure development of charging infrastructure to support operation of the State's ZEVs. It further requires annual reporting by the Chief Procurement Officer on the ZEV purchase data as well as operational savings associated with ZEVs and an evaluation of charging infrastructure supporting State-owned ZEVs.

Humanity now faces a "code red" climate emergency. The combustion of fossil fuels is the primary cause of the climate crisis which already imperils the health, safety, prosperity, and well-being of Marylanders. Our state has already experienced severe impacts resulting from overall global warming of about 1.9F. To avoid catastrophic consequences, the scientific community warns that we must make dramatic cuts in greenhouse gas (GHG) emissions to reach "net zero" emissions by mid-century. To get there, we have to cut GHG emissions in half by 2030. This means broad and rapid electrification of our economy, including the replacement of fossil fuel-based vehicles with electric ones as soon as possible. HB94 is an important step In that direction, as it will help to transform Maryland's unsustainable fossilized economy into one that is cleaner, more competitive, and sustainable. We therefore strongly support HB94.

Thank you for your consideration of this vital legislation.

We respectfully urge a favorable report.

Timothy P. Lattimer
Columbia, MD 21045

HB 94 St Vehicle Fleet-Conversion to ZEV (Fraser-H

Uploaded by: Barbara Wilkins

Position: INFO

LARRY HOGAN
Governor

BOYD K. RUTHERFORD
Lieutenant Governor

Maryland
DEPARTMENT OF BUDGET AND MANAGEMENT

DAVID R. BRINKLEY
Secretary

MARC L. NICOLE
Deputy Secretary

HOUSE BILL 94 State Vehicle Fleet - Conversion to Zero-Emission Passenger Cars and Other Light Duty Vehicles (Fraser-Hidalgo)

STATEMENT OF INFORMATION

DATE: March 30, 2022

COMMITTEE: Senate Budget & Taxation

SUMMARY OF BILL:. HB 94 establishes the intent of the General Assembly that 100% of the State passenger vehicles are zero-emission vehicles (ZEV) by 2031 and State light-duty vehicles by 2036. Subject to the availability of funding: (1) in FY 2023-2025, at least 25% of passenger vehicles purchased for the State vehicle fleet are ZEV; in FY 2026-2027, at least 50%; and in FY 2028, 100%; and (2) in FY 2028-2030, at least 25% of light-duty vehicles purchased are ZEV; in FY 2031-2032, at least 50%; and in FY 2033, 100%. DGS shall ensure the development of charging infrastructure to support the operation of ZEVs in the State vehicle fleet. An annual report is required of the Chief Procurement Officer on Dec 1 that details the purchases of ZEVs.

EXPLANATION: The State is integrating ZEVs into the fleet as replacements for internal combustion engine (ICE) vehicles where ZEV equivalents to ICE vehicles exist. Our approach to the inclusion of these vehicles is more robust than best practices of State Fleet Administrators throughout the country . As of this writing, we have 45 Zero-Emission vehicles in our fleet with an additional 88 on order.

The Department of Budget and Management (DBM) and Department of General Services (DGS) have worked collaboratively to develop a strategic plan to address the integration of ZEVs into the State fleet and are implementing the plan. The plan requires that charge station infrastructure may be installed at a site receiving an ZEV in advance of, or contemporaneous with, the arrival of the ZEV. Additionally, some funding for charge station infrastructure has been identified. This plan greatly increases the likelihood of a successful roll-out of ZEVs into the State's fleet. DBM has achieved purchase percentages of ZEVs of 8%, 29% and 46% over the last three fiscal years, respectively.

There are a number of factors that impede a more robust implementation of Zero-Emission vehicles:

- Availability of these vehicles is significantly ahead of the charge station infrastructure necessary to support their use. Level 2 charge station installations generally cost $10,000-$15,000 per station/unit;
- Limited availability of mid-size sedans, or larger, ZEVs. Currently, only foreign and luxury vehicle manufacturers offer these ZEVs. Due to their increased costs, these vehicles are

generally not successful in the vehicle contract bid process and therefore do not appear on the statewide vehicle contract list; and,

- ZEVs have an upfront cost of ownership approximately $5,000-$8,000 higher than their combustion engine counterparts, thereby making it difficult for agencies to purchase in significant numbers.

While our goal is to reduce the environmental impact of the State's vehicle fleet, any requirement for full inclusion of ZEVs must also take into consideration fiscal sustainability and potential job performance disruption of State employees. For the foreseeable future, ZEVs will play an increasing role in reducing the environmental impact of our fleet as we work through the intricacies and challenges of a total fleet conversion.

Please note that the State Vehicle Administrator is currently required to submit an annual report each December 15 that details State fleet vehicle purchases by agency and fuel type.

For additional information, contact Barbara Wilkins at
(410) 260-6371 or barbara.wilkins1@maryland.gov

HB0094 - LOI - Zero-emission vehicles.docx.pdf
Uploaded by: Jennifer Beskid
Position: INFO

Department of Public Safety and Correctional Services
Office of the Secretary

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(410) 339-5000 – TOLL FREE 877-379-8636 • www.dpscs.maryland.gov

BILL: **HOUSE BILL 94**

POSITION: **LETTER OF INFORMATION**

EXPLANATION: This bill requires the Department to convert its passenger vehicles to zero-emission vehicles by 2031 and light truck vehicles by 2036. Beginning in fiscal years 2023 – 2025 at least 25% of the vehicles are to be replaced; FY 2026 – 2027, 50% of vehicles are to be replaced and by 2028, 100% of State passenger vehicles are required to have been replaced with zero emission vehicles. Further, the bill will require that the Department of General Services (DGS) ensure the development of charging infrastructure to support the operation of zero emission vehicles in the State vehicle fleet.

COMMENTS:

- The Department recognizes the value and overall benefits of zero emission vehicles; however, the requirements of the bill would be difficult to implement under the proposed timeline and will have a significant fiscal and operational impact.

- HB 94 will impact the Department's Division of Correction, the Division of Parole and Probation, Maryland Correctional Enterprises, and its other units as the Department will be required to replace over 1,000 vehicles, many of which are not available as ZEV.

- The Department's Division of Correction (DOC) operates 13 State correctional facilities that house offenders sentenced to incarceration for 18 months and longer. The Department also runs the Baltimore City Pretrial Complex which houses pretrial detainees and inmates sentenced to incarceration for 18 months and less.

- The Department oversees the Division of Parole & Probation (DPP), which supervises individuals within the community who are either awaiting trial, placed on supervised probation, have been paroled by the Maryland Parole Commission, or placed on Mandatory

Supervision upon release under the authority of the Maryland Parole Commission. DPP also supervises Marylanders who have been court-ordered into the Drinking Driver Monitor Program.

- Maryland Correctional Enterprises (MCE) operates businesses within the prison system, including the manufacturing of goods for government entities and non-profits. Main aspects of the mission of MCE include providing structured training and employment activities for offenders in order to improve employability upon release, enhancing safety and security, and reducing prison idleness.

- The Department of Public Safety and Correctional Services currently has 364 gas powered sedans. The cost for a 2021 Chevy Bolt is $28,883 each; it currently costs $17,498 for a 2021 gas powered sedan. Requiring the Department to replace the 364 gas powered sedans for an electric powered vehicle, would result in an increase of **$4,144,140** in the budget to replace. Without additional funding, the Department's fleet would be reduced from 364 gas powered vehicles to roughly 225 electric vehicles.

- The Department does not currently have charging stations, and would need to work with DGS to purchase them to accommodate the electric powered vehicles. As charging typically happens overnight, vehicles cannot share charging stations. In 2020, the cost for a charging station was $5,000 each. This would cost **$1,820,000** to purchase charging stations for each vehicle. The potential impact if HB 94 was to pass is **$5,964,140.**

    - The Department is currently scheduled to receive electric vehicles and the Department of General Services has agreed to fund the costs related to the charging stations to be located in Jessup and the Eastern Correctional Institution.

- The cost to purchase and install charging stations does not include the required continuous maintenance, which was estimated in 2021 to be approximately $191,250.00 on an annual basis.

- Maintenance technicians servicing the fleet will be required to receive new training and will most likely require new tools, equipment and parts. A quantifiable estimate is not available for these costs.

- Many of the vehicles in the Department's fleet of 1,068 are specialized vehicles and procured on specific-based specifications and not on standard specifications. More than half the vehicles in the Department's fleet are not currently available in a ZEV model;

therefore, for projected replacement cost cannot be determined for the following vehicles: dump trucks, truck tractors, ADA vehicles, buses, cargo vans, minivans, box trucks, and box trailers.

CONCLUSION: For these reasons, the Department of Public Safety and Correctional Services respectfully requests the Committee consider this information as it deliberates House Bill 94.

HB0094 - OPCP - Conversion to ZEVs - Crossover - L

Uploaded by: Patricia Westervelt

Position: INFO

March 30, 2022

The Honorable Guy Guzzone
Chairman, Senate Budget and Taxation Committee
3 West Miller Senate Office Building
Annapolis, MD 21401

Re: Letter of Information – House Bill 94 – State Vehicle Fleet – Conversion to Zero–Emission Passenger Cars and Other Light–Duty Vehicles

Dear Chairman Guzzone and Committee Members:

The Maryland Department of Transportation (MDOT) takes no position on House Bill 94 but offers the following information for the Committee's consideration.

House Bill 94 would require that passenger cars and other light–duty vehicles purchased for the State vehicle fleet be zero-emission vehicles (ZEV), subject to the availability of funding, with 100 percent of passenger vehicles being ZEV by 2031 and 100 percent of light-duty vehicles being ZEV by 2036.

The MDOT supports the goal of replacing the State's light-duty vehicle (LDV) fleet with ZEVs but the timeline proposed in House Bill 94 may be difficult to achieve. Approximately 1,500 vehicles in the MDOT's fleet may be affected by the purchase requirements and schedule outlined in this bill. The MDOT owns approximately 390 Passenger cars (sedans) that would be candidates for replacement with a ZEV model starting in FY2023. Approximately 680 SUVs and light-duty pickups, and over 400 vans and mini-vans could also be classified as light duty vehicles as defined in House Bill 94, and could be candidates for replacement with ZEV models starting in FY2028. Currently, light-duty ZEVs are more expensive than conventional fuel vehicles. The conversion of the passenger and light-duty fleet to electric will depend on the availability of ZEVs on State contracts, which is dependant on the supply of these vehicles by manufacturers and other aspects of the State's procurement process. This, along with the nationwide competition of other governments, is expected to stress the supply chain and delivery schedules further. Due to the limited operating budgets of State agencies and the limited ZEV model options, it may be difficult to achieve the legislation's stated goal of full 100 percent ZEV conversion for passenger and light-duty vehicles in the timeline specified in House Bill 94.

The deployment of ZEV infrastructure for the State's fleet is another factor to consider in the proposed transition outlined in House Bill 94. While MDOT is in the process of developing a Maryland ZEV Infrastructure Plan in response to the considerable opportunities and resources for Electric Vehicle Infrastructure made available through the Infrastructure Investment and Jobs Act (IIJA), the timeline set out in House Bill 94 may not be realistic given the complexities and challenges involved. The MDOT is committed to investing in electric vehicle supply equipement (EVSE) to ensure the proper charging of the State fleet as it transitions to ZEV vehicles.

The Maryland Department of Transportation respectfully requests the Committee consider this information when deliberating House Bill 94.

Respectfully submitted,

Pilar Helm
Director of Government Affairs
Maryland Department of Transportation
410-865-1090