

Annual Report to the Maryland General Assembly

Regarding

**The Effect of the Use of Permits Issued to Plug-In Vehicles
on the Operation of HOV Lanes**

(Senate Bill 602/House Bill 674, Chapters 492 and 491, Acts of 2010)



by
**Motor Vehicle Administration
and
State Highway Administration
Maryland Department of Transportation**

December 2012

The Effect of the Use of Permits Issued to Plug-In Vehicles on the Operation of HOV Lanes (Senate Bill 602/House Bill 674, Chapters 492 and 491, Acts of 2010)

This is the third annual report prepared in accordance with Senate Bill 602/House Bill 674, Chapters 492 and 491, Acts of 2010, which specifically directs:

“(D) On or before January 1 of each year, the Administration and the State Highway Administration jointly shall report to the Governor and, in accordance with § 2-1246 of the State Government Article, the General Assembly on the effect of the use of the plug-in vehicle permits issued under this section on the operation of HOV lanes in the state.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect October 1, 2010. It shall remain effective for a period of 3 years and, at the end of September 30, 2013, with no further action required by the General Assembly, this Act shall be abrogated and of no further force and effect.”

Introduction

Senate Bill 602/House Bill 674, Chapters 492 and 491 of the Acts of 2010 added § 25-108 to the Transportation Article. This new section defines a plug-in vehicle (PEV); authorizes the Motor Vehicle Administration (MVA), for an annual fee not exceeding \$20, to issue permits to these PEVs to use designated High Occupancy Vehicle (HOV) lanes at any time regardless of the number of vehicle occupants; authorizes MVA, upon a recommendation from the State Highway Administration (SHA), to limit the number of permits issued to ensure HOV lane operations are not degraded to an unacceptable level; and requires MVA and SHA annually to report on the effect of the use of the PEVs on the operation of the HOV lanes. The law became effective October 1, 2010 and, without further legislative action, will sunset on September 30, 2013.

Plug In-Vehicles

A PEV, as defined in § 25-108 of the Transportation Article, must have the following characteristics and/or capabilities:

- Is made by a manufacturer;
- Is manufactured primarily for use on public streets, roads, and highways;
- Has not been modified from original manufacturer specifications;
- Is rated at not more than 8,500 pounds unloaded gross vehicle weight;
- Has a maximum speed capability of at least 65 miles per hour; and
- Is propelled to a significant extent by an electric motor that draws electricity from a battery that:
 - Has a capacity of not less than 4 kilowatt-hours for 4-wheeled motor vehicles and not less than 2.5 kilowatt-hours for 2-wheeled or 3-wheeled motor vehicles; and
 - Is capable of being recharged from an external source of electricity.

The Effect of the Use of Permits Issued to Plug-In Vehicles on the Operation of HOV Lanes (Senate Bill 602/House Bill 674, Chapters 492 and 491, Acts of 2010)

According to the non-profit organization, Plug In America, almost all major vehicle manufacturers and many smaller ones are producing or developing a type of PEV. As of the end of September 2012, its web site reported that some 128 models of cars, vans, trucks, buses, and motorcycles are being produced or are under development, including 12 small car models and 25 models of trucks, buses, and cycles currently available in the US.

Maryland HOV Lanes

The use of Maryland's HOV lanes during designated hours is restricted to motorcycles, vehicles carrying at least two occupants, and, as of October 1, 2010, PEVs displaying a permit/decal issued by MVA. In Maryland, the following highways are designated as HOV lanes:

- I-270 southbound from 0.2 miles south of West Diamond Avenue (MD 117) to the Capital Beltway (I-495), including the I-270 Spur, during the hours from 6:00 AM to 9:00 AM;
- I-270 northbound from the Capital Beltway (I-495) to Clarksburg Road (MD 121), including the I-270 Spur, during the hours from 3:30 PM to 6:30 PM; and
- US 50 eastbound and westbound from the Capital Beltway (I-495) to Crain Highway (US 301 & MD 3) at all times.

Permits Issued to PEVs

MVA is authorized to issue an HOV permit to a PEV to allow the vehicle to lawfully use an HOV lane within the state at any time and irrespective of the number of occupants in the vehicle. The permit, designed jointly by MVA, SHA, and the Maryland State Police is issued in the form of a 4" by 4" sticker to be affixed to the PEV (shown in the attachment). Although MVA is authorized to charge a fee not to exceed \$20 for the permit/sticker, currently, no fee is charged.

MVA has developed a process to provide HOV stickers to PEV dealerships for them to provide to buyers of PEVs. MVA also maintains a supply of stickers to provide to owners of qualifying vehicles that were not purchased at these dealerships. Each permit expires on September 30, 2013, when the law is scheduled to sunset.

The law allows MVA to limit the number of HOV permits issued to PEVs based on a recommendation from SHA that the use of PEVs in HOV lanes is degrading HOV lane operations to an unacceptable level.

As of October 1, 2012, 392 HOV permits have been issued for PEVs in Maryland. The following table shows the number of permits issued by calendar year and month.

**The Effect of the Use of Permits Issued to Plug-In Vehicles
on the Operation of HOV Lanes**
(Senate Bill 602/House Bill 674, Chapters 492 and 491, Acts of 2010)

Month	2010	2011	2012
January		10	37
February		11	25
March		3	25
April		11	29
May		11	34
June		10	27
July		5	0
August		4	43
September		9	51
October	1	11	
November	0	18	
December	0	17	
Total	1	120	271

Effect of Plug-In Vehicles on HOV Lanes

Without the need to conduct a formal study, but based on the fact that, as of October 1, 2012, only 392 permits had been issued for PEVs to use HOV lanes, SHA concluded that the number of vehicles permitted has no impact on HOV lane operations at this time. Essentially, even if all 392 permitted PEVs used the HOV lanes at the same time it would only marginally impact the HOV operations. Currently, there are so few PEVs that it is difficult to accurately assess their exact impact. The Administration will continue to monitor the effects of PEVs on Maryland's HOV lanes, especially considering the annual growth in production and sales of these types of vehicles.

Further Information on Permits

For further information regarding the issuance of permits for PEVs, representatives of MVA can be reached at 410-787-2978.

The Effect of the Use of Permits Issued to Plug-In Vehicles
on the Operation of HOV Lanes
(Senate Bill 602/House Bill 674, Chapters 492 and 491, Acts of 2010)

Attachment

4 x 4 in



Sample of Plug-In Vehicle HOV Plug-In Vehicle HOV Permit/Decal