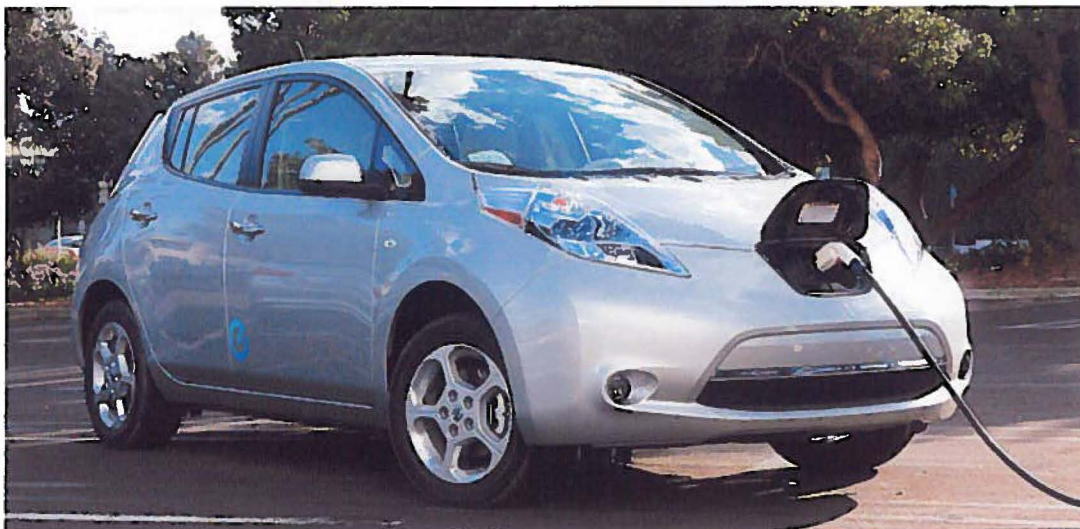


Annual Report to the Maryland General Assembly

Regarding

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

(Senate Bill 600/House Bill 836, Chapters 64 and 65, Acts of 2013)



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

December 2013

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

Senate Bill 600 and House Bill 836, Chapters 64 and 65, Acts of 2013

This report is prepared in accordance with Senate Bill 600 and House Bill 836, Chapters 64 and 65, Acts of 2013, which reenacted Chapters 492 and 491, Acts of 2010, which specifically directs:

“(E) 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 electric drive 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 7 years and, at the end of September 30, 2017, with no further action required by the General Assembly, this Act shall be abrogated and of no further force and effect.”

Introduction

Senate Bill 600 and House Bill 836, Chapters 64 and 65, Acts of 2013 extends the sunset provision of Chapters 492 and 491, Acts of 2010, which authorized a Plug-in electric vehicle (PIV) to use be operated in a High Occupancy Vehicle (HOV) lanes without the requisite number of passengers if the vehicle had obtained a permit from the Motor Vehicle Administration (MVA), until September 30, 2017. The annual permit fee may not exceed \$20 and the MVA, upon recommendation from the State Highway Administration (SHA) may limit the number of permits issued so as to ensure HOV lane operations are not degraded to an unacceptable level. The MVA and SHA must annually report on the effect of the use of PIVs on the operation of the HOV lanes.

Plug-In Vehicles

A PIV, as defined in the Transportation Article, § 11-145.1, must have the following characteristics and/or capabilities:

- Is made by a manufacturer;
- Is manufactured primarily for use on public streets, roads, and highways;
- Is rated at not more than 8,500 pounds unloaded gross vehicle weight;
- Has a maximum speed capability of at least 55 miles per hour;
- 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; and

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- “Plug-in electric drive vehicle” includes a qualifying vehicle that has been modified from the original manufacturer specifications.

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 PIV. By the end of September 2013, Plug In America’s website reported that some 82 models of cars, vans, trucks, buses, and motorcycles are being produced or are under development and are 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, PIVs displaying a permit/decal issued by MVA (see attachment). 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 and MD 3), at all times.

Permits Issued to Plug-In Vehicles

MVA is authorized to issue an HOV permit to a PIV 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 PIV. 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 PIV dealerships for distribution to PIV buyers. MVA also maintains a supply of stickers for owners with qualifying vehicles that were not purchased at these dealerships. Each permit expires on September 30, 2017 when the law is scheduled to sunset.

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

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As of September 1, 2013, HOV permits have been issued for 988 out of the 1,764 PIVs in Maryland. The following table shows the number of permits by calendar year and month.

Month	2010	2011	2012	2013	
January		10	37	66	
February		11	25	44	
March		3	25	56	
April		11	29	34	
May		11	34	37	
June		10	27	0	
July		5	0	46	
August		4	43	0	
September		9	51	124	
October	1	11	39		
November	0	18	76		
December	0	17	74		
Total	1	120	460	407	988

Effect of Plug-In Vehicles on HOV Lanes

Without the need to conduct a formal study, but based on the fact that, as of September 1, 2013, only 988 permits had been issued for PIVs to use HOV lanes, SHA has concluded that the number of vehicles permitted has no impact on HOV lane operations at this time. Essentially, if all 988 permitted PIVs used the HOV lanes at the same time, it would only marginally impact the HOV operations. The SHA will continue to monitor the effects of PIVs on Maryland's HOV lanes, especially considering the annual growth in the production and sales of these types of vehicles.

Further Information on Permits

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

Attachment

4 x 4 in



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