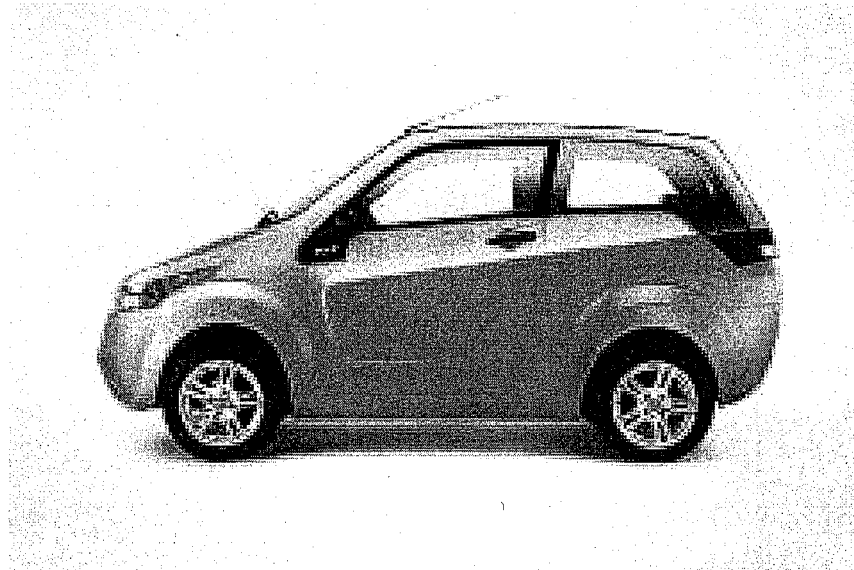


**Annual Report to the Maryland General Assembly**

**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 2010

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This is the first 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 a new § 25-108 to the Transportation Article. This new section defines a plug-in electric vehicle (PEV), authorizes the Motor Vehicle Administration (MVA) to issue permits to these vehicles and to limit the number of permits issued, allows these vehicles to use designated High Occupancy Vehicle (HOV) lanes regardless of the number of occupants, and requires MVA and the State Highway Administration (SHA) annually to report on the effect of the use of the PEVs on the operation of HOV lanes. The law became effective October 1, 2010 and, without further legislative action, the law will sunset on September 30, 2013.

## **Plug-In Vehicles**

A PEV, as defined in TR § 25-108, 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

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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 October 2010, its web site reported that some 110 models of cars, vans, trucks, buses, and motorcycles are being produced or are under development, with 24 models – mostly trucks, buses, cycles, and very small cars – currently available.

## **Maryland HOV Lanes**

The use of Maryland's High Occupancy Vehicle 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 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) during the hours from 6:00 am to 9:00 am, including the I-270 Spur;
- I-270 northbound from the Capital Beltway (I-495) to Clarksburg Road (MD 121) during the hours from 3:30 pm to 6:30 pm, including the I-270 Spur; 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 Plug-In Vehicles**

MVA is authorized to issue an HOV permit, designed jointly by the MVA, the SHA, and the Maryland State Police, to a PEV for a fee not to exceed \$20. Currently, no fee is charged. 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 on HOV lanes is degrading HOV lane operations to an unacceptable level.

MVA has developed a process to provide HOV decals to PEV dealerships for distribution to buyers of qualifying vehicles. The MVA also will maintain a supply of decals to distribute for qualifying vehicles that may not have been purchased at these dealerships.

Each permit expires on September 30, 2013, when the law sunsets. The permit is to be affixed to the vehicle such that police can ascertain that it lawfully may use an HOV lane within the state at any time and irrespective of the number of occupants in the vehicle.

As of October 31, 2010, only one HOV permit had been issued to a PEV since such permits were made available on October 1, 2010. That permit was issued to an owner in Howard County for a Tesla Motors Roadster.

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**Effect of Plug-In Vehicles on HOV Lanes**

There is no need to conduct a formal study on the effect of PEVs based on the fact that the permit program for PEVs has only been in effect for two months and that within one month of the program's start, only one permit was issued. Therefore, SHA concludes that the issuance of this permit has had no impact on HOV lane operations.

**Further Information**

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