

**Department of Legislative Services**  
Maryland General Assembly  
2018 Session

**FISCAL AND POLICY NOTE**  
**First Reader**

House Bill 1742 (Delegate Beidle, *et al.*)  
Environment and Transportation

---

**Railroad Companies - Magnetic Levitation (MAGLEV) Projects - County Approval**

---

This bill prohibits a railroad company from constructing, building, or locating any railroad facility for a railroad powered by a magnetic levitation (Maglev) propulsion system in any county without the consent of the county governing body.

---

**Fiscal Summary**

**State Effect:** No immediate effect; however, the bill could have an effect on any future Maglev project, such as the proposed Baltimore-Washington Superconducting Magnetic Levitation (SCMAGLEV) Project, which may affect State finances, as discussed below.

**Local Effect:** No immediate effect, as discussed below. Regardless, local governments can handle the bill's requirements with existing budgeted resources. Revenues are not directly affected.

**Small Business Effect:** None.

---

**Analysis**

**Current Law/Background:**

*Magnetic Levitation Transportation Systems*

For information on the status of magnetic levitation train systems in the State, please see **Appendix – Background on Magnetic Levitation Systems in Maryland.**

## *Federal and State Regulation of Railroads*

In general, state regulatory authority over railroads is preempted by federal regulatory authority, because most remaining railroads in the United States are inherently a form of interstate transportation. Federal law requires that laws, regulations, and orders related to railroad safety or security must be nationally uniform to the extent practicable. However, a state may adopt or continue in force a law, regulation, or order related to railroad safety or security until the U.S. Secretary of Transportation (with respect to railroad safety matters) or the U.S. Secretary of Homeland Security (with respect to railroad security matters) prescribes a regulation or issues an order covering the subject matter of the state requirement.

A state may adopt or continue in force an additional or more stringent law, regulation, or order related to railroad safety or security when the law, regulation, or order (1) is necessary to eliminate or reduce an essentially local safety or security hazard; (2) is not incompatible with a law, regulation, or order of the federal government; and (3) does not unreasonably burden interstate commerce. For example, State law prohibits a railroad company from passing through the densely populated Baltimore City unless the company receives consent from the mayor and city council.

The U.S. Secretary of Transportation may prescribe investigative and surveillance activities necessary to enforce the safety regulations prescribed and orders issued by the Secretary that apply to railroad equipment, facilities, rolling stock, and operations in a state. The state may participate in those activities when the safety practices for railroad equipment, facilities, rolling stock, and operations in the state are regulated by a state authority and the authority submits an annual certification to the Secretary.

**State/Local Fiscal Effect:** The bill establishes a restriction on future Maglev projects, including the proposed SCMAGLEV Project, which may prohibit their construction. Therefore, State and local finances are affected in future years to the extent that one or more Maglev projects would have been constructed in the absence of the bill. Regardless, local governments can approve proposed Maglev projects within existing processes and with existing resources.

---

### **Additional Information**

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Public Service Commission; Baltimore and Montgomery counties; Maryland Department of Transportation; U.S. Department of Energy; U.S. Department of Transportation; Department of Legislative Services

**Fiscal Note History:** First Reader - March 13, 2018  
mm/lgc

---

Analysis by: Stephen M. Ross

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510

## **Appendix – Background on Magnetic Levitation Systems in Maryland**

---

### *Magnetic Levitation Trains – Generally*

Unlike traditional steel wheel trains that travel along rails, magnetic levitation (Maglev) trains use superconducting magnets to levitate train cars. Magnets attached to the train interact with magnets along rails within a concrete guideway to propel the train. The [U.S. Department of Energy](#) (DOE) reports that a Maglev train can travel at speeds of up to 375 miles per hour with very little turbulence compared to steel wheel trains. DOE also notes that Maglev trains are safer than traditional trains; for example, traditional train derailments that result from cornering too quickly are nearly impossible. Several countries have implemented Maglev train systems, including Germany, Japan, and South Korea, and many others have explored the prospects of doing so.

### *History of Maglev in Maryland*

The federal Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), which was signed into law in 1998, authorized federal funding to implement a Maglev system in the United States. Funding through TEA-21 lapsed in 2003, and although the Act did not result in the implementation of a Maglev system, several states explored the costs and benefits of doing so. Maryland was particularly interested because a Maglev system could significantly reduce the travel time between Baltimore City and the District of Columbia.

The Maryland Department of Transportation (MDOT) began to devote funding to the development and evaluation of a Maglev system in fiscal 2001. At that time, the Federal Railroad Administration (FRA) and MDOT commenced the Environmental Impact Study (EIS) for the project, which is required by the National Environmental Policy Act (NEPA).

The final EIS was never published, however, because State legislation enacted in 2003 and 2004 prohibited the funding of a Maglev project following the final report of the Task Force to Evaluate the Development and Construction of a Magnetic Levitation Transportation System. In its final report, which was issued in 2003, the task force noted that, among other challenges, a significant amount of funding would be required to implement a Maglev system in Maryland. As a result, during the 2003 session, the General Assembly prohibited spending any State funds to study, develop, or construct a Maglev system and required the enactment of legislation prior to any agreement to construct or operate such a system. During the 2004 session, these provisions were modified to prohibit any State or federal funding for any phase of a Maglev project after

July 1, 2005. The Budget Reconciliation and Financing Act of 2011, however, repealed these prohibitions.

*Current Status of Maglev in Maryland*

The Baltimore-Washington Superconducting Magnetic Levitation (SCMAGLEV) Project, which has been proposed by a private company, is a proposed Maglev train system between Baltimore City and the District of Columbia, with an intermediate stop at the Baltimore Washington International Thurgood Marshall Airport. In 2016, MDOT was awarded \$27.8 million by FRA to conduct the required EIS, and that analysis is currently underway. Additional information about the project can be found on the [Baltimore-Washington SCMAGLEV Project website](#).