

Department of Legislative Services  
Maryland General Assembly  
2018 Session

FISCAL AND POLICY NOTE  
First Reader

House Bill 638 (Delegate Valentino-Smith, *et al.*)  
Environment and Transportation

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Counties and Municipalities - Asset Transfer for High-Speed Transportation  
System - Agreements

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This bill requires a county, before it transfers a county asset located in a municipality as part of the development of a magnetic levitation (Maglev) transportation system or a high-speed tunnel system, to negotiate a written agreement with the municipality. The negotiated agreement must address (1) the municipality's approval of the transfer and (2) the sharing of any financial remuneration the county receives through the transfer with the municipality.

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Fiscal Summary

**State Effect:** The bill does not directly affect State operations or finances.

**Local Effect:** Counties and municipalities can likely negotiate agreements using existing resources. Local revenues may be affected depending on the agreements negotiated as a result of the bill; however, any such impact cannot be predicted.

**Small Business Effect:** None.

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Analysis

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

In October 2017, the Boring Company was granted a conditional utility permit to let it begin digging a 10.3-mile tunnel beneath the State-owned portion of the

Baltimore-Washington Parkway. The project is reported by the *Baltimore Sun* to be part of the initial steps needed for the establishment of an underground hyperloop system in the State. The hyperloop system is described as low-pressure, underground tubes with capsules that are transported at both low and high speeds throughout the length of the tubes to transport people and objects. The capsules are supported on a cushion of air and are accelerated using magnetic accelerators placed at various stations within the tubes.

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### **Additional Information**

**Prior Introductions:** None.

**Cross File:** SB 1005 (Senators Pinsky and Peters) - Education, Health, and Environmental Affairs.

**Information Source(s):** Anne Arundel, Baltimore, Montgomery, and Prince George's counties; Maryland Department of Transportation; *Baltimore Sun*; The Boring Company; Tesla; Department of Legislative Services

**Fiscal Note History:** First Reader - February 13, 2018  
mag/lgc

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# Appendix – Background on Magnetic Levitation Systems in Maryland

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## *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](#).