

Department of Legislative Services
2010 Session

FISCAL AND POLICY NOTE

Senate Bill 649
Finance

(Senator Pipkin)

Chesapeake Bay Bridge - Inspection by Independent Entity Required

This emergency bill requires the Maryland Transportation Authority (MDTA) to retain an independent entity to inspect all elements of the superstructure and substructure of the twin spans of the William Preston Lane, Jr. Memorial Bridge (Chesapeake Bay Bridge) using the most exacting and state-of-the-art technology.

Fiscal Summary

State Effect: As the bill primarily codifies current practice, no fiscal impact is anticipated. However, to the extent the bill requires MDTA to use more expensive inspection technology than already would be done, such as ground-penetrating radar, nonbudgeted expenditures increase, potentially significantly.

Local Effect: None.

Small Business Effect: None.

Analysis

Current Law: MDTA has general supervision over all transportation facilities projects (including the Chesapeake Bay Bridge) and may do anything necessary and convenient to carry out its powers.

Background: The Chesapeake Bay Bridge connects Maryland's Eastern Shore recreational regions with the metropolitan areas of Baltimore, Annapolis, and the District of Columbia. The original two-lane bridge was constructed in 1952, and the second three-lane bridge was constructed in 1973. The existing bridge is the only roadway crossing of the Chesapeake Bay in Maryland; approximately 27 million vehicles

crossed the bridge in 2007. Traffic congestion on the bridge can be particularly severe, due in part to factors such as a lack of shoulder room to perform maintenance.

The 2004 *Bay Bridge Transportation Needs Report* estimates that, by 2025, traffic will increase on the bridge by at least 41% over 2001 levels on both weekdays (61,000 vehicles in 2001, increasing to 86,000 in 2025) and summer Saturdays (95,000 on an August Saturday in 2001, set to increase to 135,000 in 2025).

On August 10, 2008, a three-vehicle crash occurred on the Chesapeake Bay Bridge resulting in a tractor-trailer going through a concrete jersey wall and into the water below, killing the truck driver. The accident closed down the older, two-lane eastbound span of the bridge and prompted questions about the bridge's safety. An investigation after the accident revealed corrosion in some of the bolts that anchor the concrete jersey walls. Portions of the bridge were closed for weeks while inspectors assessed the problem and repairs were made.

State Fiscal Effect: Since MDTA is required to have an independent inspection of the Chesapeake Bay Bridge done annually in accordance with its trust agreement with the Bank of New York, the bill codifies current practice. Section 6.16 of this trust agreement says “(t)he Authority covenants that it will cause independent engineers or engineering firms or corporations having a nationwide and favorable reputation of skill and experience in such work to make an inspection of the Transportation Facilities Projects periodically in accordance with industry standards (but at least annually), to submit to the Authority a report or reports setting forth their findings as to whether the Transportation Facilities Projects have been maintained in good repair, working order and condition.”

In 2009, a hands-on inspection of the Chesapeake Bay Bridge was completed by an independent entity at a cost of \$3.5 million. The 2010 Chesapeake Bay Bridge inspection is currently underway by an independent entity and involves visual inspection and nondestructive testing on previously identified findings. Inspectors look for anything that may indicate a structural concern such as cracks, concrete or steel deterioration from salt or corrosion, vehicle damage, settlement, or erosion. The bridge inspection procedures used in 2009 and 2010 are consistent with industry standards.

In September 2008, Governor Martin O'Malley announced the establishment of a peer review panel, composed of nationally recognized experts, to examine MDTA's bridge and tunnel inspection program and identify and evaluate best practices used throughout the United States. In June 2009, the panel completed its review and concluded that, with the annual inspections of its facilities, the MDTA inspection program is in compliance with National Bridge Inspection Standards that require inspections every two years. The panel also stated that current MDTA tunnel inspection practices are comparable to the

practices of other agencies. The panel recommended that MDTA's inspection program, among other things:

- hire additional in-house staff to manage the inspection program, oversee follow-up actions on findings, and perform quality assurance inspections of consulting teams;
- use nondestructive evaluation techniques (*i.e.*, ground-penetrating radar and ultrasonic testing) where appropriate to address specific inspection concerns;
- prepare and maintain a systemwide bridge inspection manual;
- provide more detailed, quantitative data in inspection reports along with additional photographs; and
- strive for more transparency to strengthen public confidence.

Additional Information

Prior Introductions: SB 483 of 2009 received a hearing in the Senate Finance Committee, but no further action was taken. Its cross file, HB 881, received an unfavorable report from the House Environmental Matters Committee.

Cross File: None.

Information Source(s): Maryland Transportation Authority, Department of Legislative Services

Fiscal Note History: First Reader - March 1, 2010
ncs/lgc

Analysis by: Amanda Mock

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