

Department of Legislative Services  
 Maryland General Assembly  
 2013 Session

FISCAL AND POLICY NOTE  
 Revised

House Bill 1325  
 Ways and Means

(Delegate Wood)

Rules

Transportation - Capital Projects - Life Cycle Cost Analysis

This bill requires the Maryland Department of Transportation (MDOT) to adopt regulations establishing a methodology for applying “life cycle cost analysis” to its evaluation of each pavement construction, reconstruction, rehabilitation, or resurfacing project that costs more than \$1.0 million. The methodology must apply life cycle cost analysis to all aspects of a project under consideration, including specified items, and specify the criteria to be considered in evaluating the project and the weight to be given to each criterion. Upon completing a life cycle cost analysis, MDOT must utilize the results in its consideration of any contracts associated with the project. A “life cycle cost analysis” is an engineering economic analysis tool that evaluates alternative infrastructure investment options by comparing all costs associated with a project over its expected life span, including (1) construction, maintenance, and operating costs; (2) costs to project users; and (3) costs to MDOT and other government agencies.

Fiscal Summary

**State Effect:** Transportation Trust Fund (TTF) expenditures increase by \$1.5 million in FY 2014 and by \$2.0 million annually thereafter, and nonbudgeted expenditures increase by \$20,000 annually beginning in FY 2014 to develop and utilize life cycle cost analyses. Revenues are not affected.

(\$ in millions)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Revenues	\$0	\$0	\$0	\$0	\$0
SF Expenditure	1.50	2.00	2.00	2.00	2.00
NonBud Exp.	.02	.02	.02	.02	.02
Net Effect	(\$1.52)	(\$2.02)	(\$2.02)	(\$2.02)	(\$2.02)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate effect

**Local Effect:** The bill is not expected to materially affect local finances.

**Small Business Effect:** Potential meaningful.

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## Analysis

**Current Law:** The *Consolidated Transportation Program* (CTP) is MDOT's six-year budget for the construction, development, and evaluation of transportation capital projects. It is revised annually to reflect updated information and changing priorities. It contains a list of current and anticipated major and minor capital projects for the fiscal year it is issued and for the next five fiscal years, including:

- an expanded description of major capital projects;
- a detailed breakdown of the costs of a project, project expenditures to date, expected expenditures for the current fiscal year, projected annual expenditures for the next five years, and total project costs; and
- MDOT's estimates of the source (*i.e.*, federal funds, special funds, etc.) and amount of revenues required to fund projects in the CTP.

**Background:** Generally, life cycle costs are the total costs that can be reasonably anticipated for an infrastructure investment during the entire life of the project. Life cycle costs may include initial construction, operation, maintenance, environmental, safety, and other costs reasonably anticipated during the life of the project, such as recovery after disruption from natural or manmade hazards. According to the National Conference of State Legislatures (NCSL), considering total costs ensures that the focus is not only on the upfront delivery of infrastructure, but also on how cost-efficient the investment will be over time. By accounting for total life cycle costs, NCSL notes that states can build longer lasting and more affordable projects.

Some states are taking life cycle costs into account during transportation decisionmaking. For example, in Illinois, a life cycle cost analysis must be completed for each state road project with total pavement costs exceeding \$500,000.

**State Fiscal Effect:** TTF expenditures increase by approximately \$1.5 million in fiscal 2014 and by approximately \$2.0 million annually thereafter for contractual costs associated with conducting life cycle cost analyses for pavement projects. This estimate assumes that a life cycle cost analysis must be completed for approximately 120 pavement projects annually (90 in fiscal 2014 due to the bill's October 1, 2013 effective date).

Maryland Transportation Authority nonbudgeted expenditures increase by up to \$20,000 annually beginning in fiscal 2014 to conduct life cycle cost analyses. This estimate assumes only two projects require such analyses annually.

MDOT advises that the bill's requirements may result in project delays.

**Small Business Effect:** The bill has a meaningful impact to the extent MDOT contracts with small businesses to complete life cycle cost analyses for pavement projects.

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### **Additional Information**

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Board of Public Works, Department of Budget and Management, Maryland Department of Transportation, Illinois Office of the Auditor General, National Conference of State Legislators, Department of Legislative Services

**Fiscal Note History:** First Reader - March 11, 2013  
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Analysis by: Amanda Mock

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