

SENATE BILL 185

R2

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CF 4r1666

By: **Senator Astle**

Introduced and read first time: January 15, 2014

Assigned to: Budget and Taxation

A BILL ENTITLED

1 AN ACT concerning

2 **Transportation – Capital Projects – Life–Cycle Cost Analysis**

3 FOR the purpose of requiring the Department of Transportation to adopt regulations
4 to establish a methodology for applying life–cycle cost analysis to the evaluation
5 of certain pavement projects; requiring that the life–cycle cost analysis
6 methodology address certain matters; requiring the Department to utilize the
7 results of the life–cycle cost analysis for certain projects for certain purposes;
8 defining a certain term; and generally relating to life–cycle cost analysis of
9 certain pavement projects of the Department of Transportation.

10 BY repealing and reenacting, with amendments,
11 Article – Transportation
12 Section 2–103.1(c)
13 Annotated Code of Maryland
14 (2008 Replacement Volume and 2013 Supplement)

15 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF
16 MARYLAND, That the Laws of Maryland read as follows:

17 **Article – Transportation**

18 2–103.1.

19 (c) (1) The Consolidated Transportation Program shall:

20 (i) Be revised annually; and

21 (ii) Include:

22 1. A list of:

EXPLANATION: CAPITALS INDICATE MATTER ADDED TO EXISTING LAW.

[Brackets] indicate matter deleted from existing law.



- 1 A. The current State transportation goals;
- 2 B. Program priorities; and
- 3 C. For projects in the construction phase, the criteria
4 used to select major capital projects for inclusion in the capital program, as
5 determined by the Department;
- 6 2. A statement of the Department's projected annual
7 operating costs, set forth separately for the Office of the Secretary and for each modal
8 administration;
- 9 3. Expanded descriptions of major capital projects;
- 10 4. A list of major capital projects for the current year,
11 the budget request year, and the 4 successive planning years;
- 12 5. A list of anticipated minor capital projects, including a
13 specific list of anticipated special projects for the current year and the budget request
14 year and an estimate of the Program level for each of the 4 successive planning years;
- 15 6. A list of major bridge work projects;
- 16 7. A summary of the capital and operating programs, as
17 defined by the Secretary, for the Maryland Transportation Authority;
- 18 8. For each listed major capital project, an indication
19 whether the revenue source anticipated to support that project consists of federal,
20 special, general, or other funds;
- 21 9. The Department's estimates of the levels and sources
22 of revenues to be used to fund the projects in the Program;
- 23 10. A glossary of terms; and
- 24 11. A cross-reference table for the information contained
25 in the various parts of the State Report on Transportation.

26 (2) In addition to the items listed in paragraph (1) of this subsection,
27 the Consolidated Transportation Program shall include:

28 (i) A summary of current efforts and future plans, prepared
29 after consultation with the Director of Bicycle and Pedestrian Access and the Bicycle
30 and Pedestrian Advisory Committee established under § 2-606 of this title:

31 1. To develop and promote bicycle and pedestrian
32 transportation; and

1 2. Working together with local jurisdictions, to
2 accommodate in a safe and effective manner pedestrians and bicycles within a
3 reasonable distance for walking and bicycling to rail stops, light rail stops, and subway
4 stations;

5 (ii) A listing of all bicycle and pedestrian transportation projects
6 expected to use State or federal highway funds; and

7 (iii) Reflected under the Office of the Secretary, any
8 technology-related project to be funded from the account established under § 2-111 of
9 this subtitle, along with a description and projected cost of each.

10 (3) Annually, the Consolidated Transportation Program shall include
11 a report that:

12 (i) Identifies each major capital project for which the budget
13 bill or a supplemental budget amendment first requests funds for the project
14 development phase or for the construction phase;

15 (ii) With respect to each major capital project for which funds
16 are requested in the budget request year, states:

17 1. The amount of the funds requested; and

18 2. The total estimated cost of the project;

19 (iii) Identifies significant changes in the cost, scope, design, or
20 scheduling of major capital projects for each completed fiscal year;

21 (iv) When there is a significant change in cost, states the
22 amount by which the expenditures that have been authorized exceed the original
23 project estimate;

24 (v) When there is a significant change, states:

25 1. The amount by which costs exceed projected costs
26 during each completed fiscal year; and

27 2. The total amount that has been expended for a major
28 capital project;

29 (vi) Provides a purpose and need summary statement that
30 includes:

31 1. A general description and summary that describes
32 why the project is necessary and satisfies State goals, including current State

1 transportation goals and Climate Action Plan goals required by the Greenhouse Gas
2 Emissions Reduction Act of 2009 under § 2–1205(b) of the Environment Article;

3 2. The location of the project, including a map of the
4 project limits, project area, or transportation corridor; and

5 3. A summary of how the project meets the selection
6 criteria for inclusion in the capital program; and

7 (vii) Includes any other information that the Secretary believes
8 would be useful to the members of the General Assembly, the general public, or other
9 recipients of the Consolidated Transportation Program.

10 (4) The total operating and capital expenditures for the Department or
11 for the Office of the Secretary or any modal administration projected in the
12 Consolidated Transportation Program for the budget request year may not exceed the
13 budget request for the Department, Office, or modal administration for that year.

14 (5) For a major capital project to be considered for inclusion in the
15 construction program of the Consolidated Transportation Program, a request must be
16 submitted to the Secretary by the proposing entity along with a purpose and need
17 summary statement justifying the project that includes:

18 (i) The location of the project, including a map of the project
19 limits, project area, or transportation corridor;

20 (ii) The need for the project; and

21 (iii) A discussion of how the project:

22 1. Addresses State transportation goals; and

23 2. Supports local government land use plans and goals.

24 (6) (i) The Department shall evaluate requests for major capital
25 projects based on the State's goals and, as appropriate, criteria as determined by the
26 information submitted by the proposing entity and the availability of funding.

27 (ii) As part of the evaluation under this paragraph, the
28 Department shall acknowledge the difference between urban and rural transportation
29 needs.

30 (7) (i) The Department, in developing a construction or
31 improvement project involving a bridge or other transportation facility that is adjacent
32 to or crosses a waterway for inclusion in the Consolidated Transportation Program,
33 shall consider any reasonable and appropriate measures to provide or improve in the

1 vicinity of the bridge or other transportation facility water access for fishing, canoeing,
2 kayaking, or any other nonmotorized water dependent recreational activity.

3 (ii) The Department, in consultation with the Department of
4 Natural Resources and interested stakeholders, shall establish:

5 1. Standards and guidelines for identifying appropriate
6 bridges and other transportation facilities to be considered for the provision or
7 improvement of water access under this paragraph; and

8 2. Best practices and cost effective strategies for
9 accommodating water access under this paragraph.

10 (8) (I) IN THIS PARAGRAPH, "LIFE-CYCLE COST ANALYSIS"
11 MEANS AN ENGINEERING ECONOMIC ANALYSIS TOOL USED TO EVALUATE
12 ALTERNATIVE INFRASTRUCTURE INVESTMENT OPTIONS THROUGH THE
13 COMPARISON OF ALL COSTS ASSOCIATED WITH A PROJECT OVER THE EXPECTED
14 LIFE SPAN OF THE PROJECT, INCLUDING:

15 1. CONSTRUCTION, MAINTENANCE, RECONSTRUCTION,
16 REHABILITATION, RESTORING, RESURFACING, AND LIGHTING COSTS;

17 2. COSTS TO USERS OF THE PROJECT, INCLUDING
18 FUEL AND VEHICLE OPERATING COSTS; AND

19 3. ENGINEERING, DESIGN, INSPECTION, AND OTHER
20 COSTS EXPECTED TO BE INCURRED BY THE DEPARTMENT AND OTHER
21 GOVERNMENTAL AGENCIES IN ORDER TO MAINTAIN THE PROJECT
22 THROUGHOUT THE ANALYSIS PERIOD.

23 (II) THE DEPARTMENT SHALL ADOPT REGULATIONS TO
24 ESTABLISH A METHODOLOGY FOR APPLYING LIFE-CYCLE COST ANALYSIS TO
25 THE DEPARTMENT'S EVALUATION OF EACH PAVEMENT CONSTRUCTION,
26 RECONSTRUCTION, REHABILITATION, OR RESURFACING PROJECT INVOLVING
27 EXPENDITURE OF MORE THAN \$1,000,000.

28 (III) THE METHODOLOGY ESTABLISHED UNDER
29 SUBPARAGRAPH (II) OF THIS PARAGRAPH SHALL:

30 1. PROVIDE FOR THE APPLICATION OF LIFE-CYCLE
31 COST ANALYSIS TO ALL ASPECTS OF A PROJECT UNDER CONSIDERATION,
32 INCLUDING:

33 A. DESIGN EQUIVALENT ALTERNATIVES FOR THE
34 PROJECT;

1 **B. THE TIMING OF ACTIVITIES REQUIRED TO**
2 **COMPLETE THE PROJECT;**

3 **C. THE TIMING OF MAINTENANCE AND**
4 **REHABILITATION ACTIVITIES OF THE COMPLETED PROJECT; AND**

5 **D. THE UTILIZATION OF BEST PRACTICE COST**
6 **ESTIMATION PROCEDURES THAT TO THE EXTENT PRACTICABLE ACCURATELY**
7 **REPRESENT THE AGENCY'S EXPECTED EXPENDITURES OVER THE ANALYSIS**
8 **PERIOD;**

9 **2. SPECIFY THE CRITERIA TO BE USED IN**
10 **EVALUATING THE PROJECT AND THE WEIGHT TO BE GIVEN TO EACH CRITERION;**
11 **AND**

12 **3. INCLUDE HISTORIC DATA, PROBABLE MATERIAL**
13 **COST ESCALATION, AND RELATED EXTERNAL FACTORS.**

14 **(IV) ON COMPLETION OF THE LIFE-CYCLE COST ANALYSIS**
15 **OF A PROJECT UNDER THIS PARAGRAPH, THE DEPARTMENT SHALL:**

16 **1. UTILIZE THE RESULTS OF THE ANALYSIS IN ITS**
17 **CONSIDERATION OF ANY CONTRACTS ASSOCIATED WITH THE PROJECT;**

18 **2. IF THE ANALYSIS REFLECTS AN ESTIMATED COST**
19 **DIFFERENCE BETWEEN THE VARIOUS DESIGNS OF 20% OR LESS, PROCEED TO**
20 **DESIGN AND BID THE PROJECT USING THOSE DESIGNS AND SPECIFY THAT A**
21 **MATERIALS PRICE ADJUSTMENT MAY NOT BE INCLUDED IN THE BID PROCESS**
22 **OR CONTRACT;**

23 **3. PROVIDE A WRITTEN STATEMENT TO THE**
24 **SECRETARY TO EXPLAIN THE REASON FOR AN AWARD USING A SOLUTION THAT**
25 **WAS NOT THE HIGHEST RATED SOLUTION UNDER THE LIFE-CYCLE COST**
26 **ANALYSIS;**

27 **4. COMPILE AND MAKE AVAILABLE TO THE PUBLIC**
28 **IN A SEMIANNUAL REPORT THE INFORMATION SUBMITTED TO THE SECRETARY**
29 **UNDER ITEM 3 OF THIS SUBPARAGRAPH; AND**

30 **5. IF THERE IS A POSTCONTRACT ADJUSTMENT ON**
31 **ACCOUNT OF AN INCREASE IN THE COST OF MATERIAL, INCLUDE THAT**

1 INFORMATION IN THE SEMIANNUAL REPORT TO THE PUBLIC REQUIRED UNDER
2 ITEM 4 OF THIS SUBPARAGRAPH.

3 SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect
4 October 1, 2014.