

Department of Legislative Services  
Maryland General Assembly

FISCAL NOTE  
Revised

Senate Bill 174 (The President. *et al.*)  
(Administration)

Economic and Environmental Affairs

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**Higher Education - Maryland Science and Technology Scholarships**

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This Administration bill establishes the Maryland Science and Technology Scholarship Program for Maryland secondary school students who: (1) plan to attend a Maryland college or community college; (2) have earned a grade point average of at least 3.0 on a 4.0 scale in high school; (3) intend to pursue an eligible academic program in the field of computer science, engineering, or technology as determined by the Maryland Higher Education Commission (MHEC); and (4) agree to either work in the State after graduation for one year for each year that the scholarship was awarded or repay the funds received plus interest. Recipients must begin attending college within two years of completing high school.

The scholarship amount is \$3,000 per year for students enrolled in four-year institutions and \$1,000 per year for community college students. A student may receive the scholarship for four years at a four-year institution (five years in the case of a five-year program), or three years at a community college, if the student maintains at least a 3.0 average and continues to meet the other eligibility requirements. Funds for this program are to be provided by the Governor in MHEC's annual budget.

The bill takes effect July 1, 1998.

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**Fiscal Summary**

**State Effect:** A general fund allocation of \$145,000 is included in the FY 1999 budget for program administration, which is contingent upon enactment of the bill. General fund expenditures could increase by at least \$5.3 million in FY 2000, of which \$5.1 million represents scholarship awards. Future year expenditures increase with increasing enrollment rates, scholarship renewals, and inflation. An indeterminate amount of these expenditures could be recaptured in later years to the extent that students repay scholarship monies due to failure to fulfill the work requirements of the program.

(in millions)	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
GF Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditures	\$.15	\$5.27	\$6.87	\$8.27	\$9.69
Net Effect	(\$0.15)	(\$5.27)	(\$6.87)	(\$8.27)	(\$9.69)

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

**Local Effect:** None.

**Small Business Effect:** The Administration has determined that this bill will have meaningful impact on Maryland small businesses (attached). Legislative Services concurs with this assessment. (This assessment does not reflect any amendments to the bill).

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## Fiscal Analysis

### State Expenditures:

#### *Science and Technology Program Grants*

**Attachment 1** illustrates the estimated Maryland Science and Technology Scholarship Program expenditures from fiscal 2000 to 2003. Fiscal 2000 general fund scholarship expenditures would increase by \$5.1 million (for 2,276 students), while fiscal 2003 expenditures would increase by \$9.5 million (for 3,958 students). These estimates reflect the following assumptions:

- (1) 3,249 freshmen Maryland residents enrolled in associate and baccalaureate degree programs in computer science, engineering, and technology fields in Maryland four-year institutions and community colleges in school year 1996-97 (i.e., fiscal 1997);
- (2) The number of computer science, engineering, and technology students increases at the rate of 2% per year between fiscal 1997 and fiscal 2003;
- (3) 66% of students who enter a computer science, engineering, or technology program have a high school GPA of 3.0 or better;

- (4) 29.5% of entering freshman computer science, engineering, and technology students have at least a 3.0 GPA at the end of freshman year;
- (5) If a student has a 3.0 GPA at the end of freshman year, the student will maintain that average throughout college; and
- (6) 37.7% of freshman computer science, engineering, and technology students attend community colleges, while the remaining 62.3% attend four-year institutions.

An “incentive effect” has not been calculated into the estimates contained in **Attachment 1**, due to the difficulty of reliably predicting the magnitude of any such incentive effect, which could include the following factors:

- the proportion of students choosing to attend in-state (versus out-of-state) institutions might increase as a result of students wanting to take advantage of the program;
- more students might choose computer science and engineering majors because of the program;
- implementation of the program could cause high school teachers and college faculty to feel pressured to inflate student grades;
- the existence of the program could result in the achievement of higher grades by students who study harder due to self-imposed or parentally-imposed pressure to qualify for the program;
- the number of community college and other students who transfer to four-year institutions after freshman year is unknown; and
- recipients of these scholarships may not obtain other State financial aid that they would have otherwise received.

These estimates include students who do not enter college within two years after completion of high school (not eligible for the scholarships under the bill). This number of students is unknown, but is believed to be minimal.

*Science and Technology Program Administrative Expenses*

The MHEC fiscal 1999 budget includes \$144,995 for the Maryland Science and Technology Scholarship Program which is contingent upon enactment of this bill or House Bill 249. The funds will be used to hire two employees for program administration (one Program Specialist and one contractual Program Assistant who would work six months out of the year). These employees would evaluate applicants, administer the program, and follow up with recipients to ensure compliance with the service requirement. The \$144,995 budget includes salaries, fringe benefits, start-up costs (computer system enhancements, office equipment), supplies and consumer information and marketing. The salary estimate for the Program Specialist position reflects a 90-day start-up delay, while the other expenditure estimates reflect the July 1 effective date.

Two new Staff Specialists would be needed in fiscal 2000, for a combined salary and fringe benefit expense of \$69,281. Total fiscal 2000 administrative expenditures would equal \$158,357 for the four positions and associated operating expenses. Future year expenditures reflect (1) full salaries with 3.5% annual increases and 3% employee turnover; and (2) 2% annual increases in ongoing operating expenses.

	<u>FY 1999</u> <u>(Budgeted)</u>	<u>FY 2000</u>
Salaries and Fringe Benefits	\$37,075	\$113,046
Computer system enhancement	60,000	0
Office equipment and supplies	4,920	9,961
Consumer information/marketing	<u>43,000</u>	<u>35,350</u>
<b>Total</b>	<b>\$144,995</b>	<b>\$158,357</b>

An indeterminate amount of program expenditures could be recaptured in later years to the extent that students repay scholarship monies due to failure to fulfill the work requirements of the program.

**Small Business Effect:** Small science and technology businesses would benefit to the extent that this bill increases Maryland's supply of skilled workers in the fields of computer science, engineering, and technology.

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**Information Source(s):** Maryland Higher Education Commission, Department of Legislative Services

**Fiscal Note History:**

Incs

First Reader - February 9, 1998

Revised - Small Business Impact Statement Received  
- February 13, 1998

Revised - Senate Third Reader - March 19, 1998

Revised - Updated Information - April 2, 1998

Revised - Enrolled Bill - May 4, 1998

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Analysis by: Claire E. Rooney

Reviewed by: Sue Friedlander

Direct Inquiries to:

John Rixey, Coordinating Analyst

(410) 841-3710

(301) 858-3710

**Attachment 1**  
**SB 174**  
**MARYLAND SCIENCE AND TECHNOLOGY PROGRAM GRANTS**

	FY 2000	FY 2001	FY 2002	FY 2003
<b>Four-year Institutions</b>				
Estimated number of new awards to freshmen	1,418	1,446	1,475	1,505
Estimated number of freshman renewal awards	-	418	845	1,280
Subtotal number of students	1,418	1,864	2,320	2,785
Grant amount	\$3,000	\$3,000	\$3,000	\$3,000
Subtotal Estimated Cost	\$4,254,000	\$5,592,000	\$6,960,000	\$8,355,000
<b>Community Colleges</b>				
Estimated number of new awards to freshmen	858	875	893	910
Estimated number of freshmen renewal awards	-	253	258	263
Subtotal number of students	858	1,128	1,151	1,173
Grant amount	\$1,000	\$1,000	\$1,000	\$1,000
Subtotal Estimated Cost	\$858,000	\$1,128,000	\$1,151,000	\$1,173,000
<b>TOTAL ESTIMATED COST</b>	<b>\$5,112,000</b>	<b>\$6,720,000</b>	<b>\$8,111,000</b>	<b>\$9,528,000</b>
Total number of awards	2,276	2,992	3,471	3,958

*Prepared by: Department of Legislative Services, April 1998*