

Fiscal Note & Local Impact Statement

122nd General Assembly of Ohio

BILL: Sub. S.B. 55

DATE: June 18, 1997

STATUS: As Reported by Senate Education

SPONSOR: Sen. Watts

LOCAL IMPACT STATEMENT REQUIRED: Yes

CONTENTS: Increases the total number of units of credit necessary for graduation from 18 to 20 and increases the number of required graduation units of credit from nine to 14

State Fiscal Highlights

STATE FUND	FY 1998	FY 1999	FUTURE YEARS
General Revenue Fund and Other Funds			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Potential increase	Potential increase	Potential increase

- The state could increase costs in school construction (especially for low-wealth school districts) under the state program for additional classroom and science laboratory spaces.
- The Board of Regents would incur one-time costs for preparing a plan recommending strategies for increasing the number of science and mathematics teachers. The plan is required to be completed by December 31, 1997.

Local Fiscal Highlights

LOCAL GOVERNMENT	FY 1998	FY 1999	FUTURE YEARS
School Districts			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Varying increases	Varying increases	Varying increases
Joint Vocational Schools			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Up to \$6,594,933 increase	Up to \$6,594,933 increase	Up to \$6,594,933 increase

- School districts that currently require less than 20 units of credit for graduation would incur additional costs. School districts that currently require 20 units of credit or more for graduation, but do not meet the bill's mandatory unit requirement component, could also incur additional costs for making necessary changes to meet the bill's requirements. These school districts could lower their net costs by eliminating some existing courses and shifting these resources into newly required areas.



- The magnitude of cost increases would vary from district to district. Twenty school districts have estimated the bill's costs ranging from zero to \$480,340 per year (see attachment). The bill's costs would mainly result from hiring additional teachers (especially science and mathematics teachers), obtaining additional classroom spaces, changing curriculums, purchasing new textbooks, and establishing new science laboratories. In FY 1996, the statewide average teacher salary was \$38,121. These costs could be offset by eliminating teaching positions in elective courses.
- Of the 359 school districts responding to the Department of Education's survey, 200 (or 56%) school districts currently require 20 units of credit or more for graduation and the other 159 (or 44%) districts require less than 20 units of credit.
- Of the 359 respondents, 20 (or 5.6%) districts' current graduation standards meet all the requirements of the bill. However, many high school graduates are earning more units of credit than their districts' graduation requirements. In FY 1996, approximately 46% of high school graduates statewide had completed the college preparatory core curriculum program. These students are presumably meeting the bill's graduation requirements according to current state rules for the program. The bill would mainly affect students who are enrolled in vocational education program and students who are in the general track.
- By increasing academic standards for graduation, the bill would affect the operation of 49 joint vocational schools (JVS) in the state. JVS would incur costs for making necessary program changes to integrate the bill's academic requirements and for hiring additional teachers to offer more academic courses. The Department of Education estimated that the 49 JVS would incur costs up to \$6,594,933 per year as a result of the bill.
- The bill states that it would first apply to high school students graduating after September 15, 2001. The Class of 2002 (or students entering the ninth grade in the 1998-1999 school year) would be the first class that has to meet the bill's requirements in order to graduate from high school. However, the Classes of 2002 and 2003 would only be required to earn two units of science to graduate. Beginning in the Class of 2004, students would be required to earn three units of science in order to graduate from high school.

Detailed Fiscal Analysis

Contents of the Bill

The minimum units of credit necessary for graduation from a public high school under current Ohio Administrative Code and under the bill are summarized in the below table.

	Current	Bill
Total units of credit	18	20
Mandatory		
English language arts	3	4
Health	1/2	1/2
Mathematics	2	3
Physical education	1/2	1/2
Science**	1	3 (1 unit of biological science and 1 unit of physical science)
Social Studies	2 (1/2 unit of American history and 1/2 unit of American government)	3 (1/2 unit of American history and 1/2 unit of American government)
Elective	9	6

*One unit means a minimum of 120 hours of course instruction, except for a laboratory course, one unit means a minimum of 150 hours of course instruction. In physical education, 120 hours counts as one-half of a unit.

** The science credit requirement would be gradually phased in (see below).

The bill allows certain advance work taken below the ninth grade to be counted toward the graduation requirements. The bill also states that it would first apply to high school students graduating after September 15, 2001. The Class of 2002 (or students entering the ninth grade in the 1998-1999 school year) would be the first class that has to meet the bill's requirements in order to graduate from high school. However, the Classes of 2002 and 2003 would only be required to earn two units of science to graduate. The Class of 2004 and thereafter would need to earn three units of science in order to graduate from high school.

Fiscal Effects on the State

The bill requires the Board of Regents, in consultation with the Superintendent of Public Instruction, to prepare a plan recommending strategies for increasing the number of science and mathematics teachers. The Board of Regents would incur one-time costs for developing such a plan. The plan is required to be completed by December 31, 1997. The state could also increase costs in school construction (especially for low-wealth school districts) under the state program for additional classroom and science laboratory spaces.

Fiscal Effects on School Districts

While current law requires a minimum of 18 units of credit for graduation from high school, local boards of education have the authority to establish higher standards in excess of this minimum requirement. The Department of Education has recently conducted a graduation requirement survey. Of the 359 respondents, 20 school districts (or 5.6%) meet all the requirements of S.B. 55 and 44 districts (12%) are in the process of increasing the number of units of credit necessary for graduation to the bill's level. The table, below, summarizes the survey result.

Total Respondents = 359		Number of School Districts
Total Number of Units of Credit		
	20 units or more	200 (56%)
	Less than 20 units	159 (44%)
English		
	4 units or more	272 (76%)
	Less than 4 units	87 (24%)
Social Studies		
	3 units or more	224 (62%)
	Less than 3 units	135 (38%)
Mathematics		
	3 units or more	77 (21%)
	Less than 3 units	282 (79%)
Science		
	3 units or more	28 (8%)
	Less than 3 units	331 (92%)

The survey result clearly indicates that many school districts' current graduation standards, especially in mathematics and science areas, do not meet the bill's proposal. To meet the bill's requirements, many school districts would likely have to hire additional mathematics and science teachers. In FY 1996, the statewide average teacher salary was \$38,121. These costs could be offset by elimination of teaching positions in elective classes. It should be noted that mathematics and science teachers are currently in short supply and a significant number of current teachers are not certified in these areas. The high demand for additional mathematics and science teachers could further compound the problem. School districts might have to compete with each other and pay high salaries in order to attract these teachers.

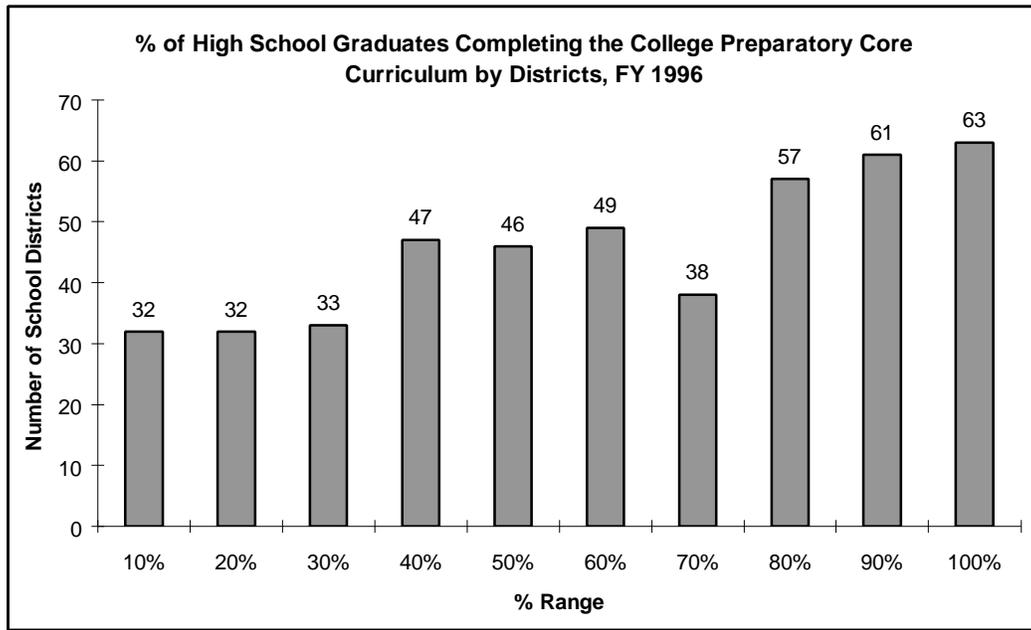
The bill increases the total number of units of credit necessary for graduation from 18 to 20. School districts that currently require less than 20 units of credit for graduation would incur additional costs. For example, the Amanda-Clearcreek Local School District (Fairfield County) currently requires 18 units of credit (4 units of English, 2 units of mathematics, 2 units of social studies, 2 units of science, 0.5 unit of health, 0.5 unit of physical education, and 7 units of elective courses). The district spokesperson states that the district would have to hire three additional teachers and buy three portable classrooms (\$20,000 per classroom) in order to meet the bill's requirements. The average teacher salary for the district in FY 1996 was \$33,327. Therefore, it is estimated that the Amanda-Clearcreek Local School District would incur costs \$187,976 per year as a result of the bill.

Meanwhile, the bill increases the number of mandatory units of credit from nine to 14. School districts that currently require 20 units of credit or more for graduation, but do not meet the bill's mandatory unit requirement component, could also incur additional costs for making necessary changes to meet the bill's requirement. For instance, the Arlington Local School District (Hancock County) currently requires 22 units of credit for graduation. While the district requires four units of English it only requires two units of mathematics and two units of science. According to the district spokesperson, the district would have to hire two additional teachers. The district could incur costs by \$80,044 per year as a result of the bill. The average teacher salary for the district in FY 1996 was \$31,267. On the other hand, school districts that currently require 20 units or more for graduation (like Arlington Local) could lower their net costs by eliminating some existing courses and shifting these resources into newly required areas. These districts could have some transition costs (including facility changes) as they adjust their course and teacher mix, but should have little on-going costs with possible exception of mathematics and science teacher supplement to attract the necessary teachers and higher costs associated with operating more science laboratories.

Establishing additional science laboratories needed for teaching science courses is another area that could cost school districts. School districts are currently required to offer at least two science laboratory courses each year for 9th to 12th graders. However, the bill increases the number of required science units of credit for graduation from one to three. In order to ensure every high school student meets the bill's science requirement component, school districts might need to make more science classes available. This could result in a need for additional laboratories and/or equipment upgrade. The spokesperson from the Akron City School District indicated that the district had planned to increase the science unit requirement from one to two. However, due to high costs of needed new laboratories and additional science teachers, the plan had not been actually implemented. According to the Department of Education, the average cost for a biological laboratory is estimated at \$140,000.

It should be noted that while most of school districts' current graduation requirements do not meet the bill's standards, many high school graduates actually meet the graduation requirements proposed by the bill. Currently, Ohio high school graduates may receive either a regular diploma or a diploma with honors. To receive a diploma with honors, among other things, the student must complete a college preparatory core curriculum and meet seven out of the eight criteria prescribed by the State Board of Education. Five of those criteria are: a) earning four units of English; b) earning three units of mathematics; c) earning three units of science; d) earning three units of social studies; and e) earning three units of one foreign language or two units each of two foreign languages. Students who have completed the college preparatory core curriculum are presumably meeting the requirements of the bill. In FY 1996, 46% of high school graduates statewide had completed the college preparatory core curriculum. According to the spokesperson from the Ohio State University, 90% of its 1997 freshmen class comes from Ohio high schools; on average, these freshmen have taken 4.1 units of English, 4.3 units of mathematics, 3.7 units of sciences, 3.4 units of social studies, and 3.3 units of foreign language in high schools. These statistics confirm the assumption that high school graduates who have completed the college preparatory core curriculum are currently meeting the bill's graduation requirements.

The chart, below, shows the percentage of high school graduates completing the college preparatory core curriculum by districts in FY 1996. In the EMIS data, there were 153 school districts showing a zero percentage of graduates completing the college preparatory core curriculum. Since the EMIS data collection method does not distinguish between a school district who did not report the data from a district who had an actual zero percentage, this analysis excludes these 153 school districts.



Of the 458 school districts in FY 1996 with non-zero data, 190 districts had under 50% of graduates who had completed the college preparatory core curriculum and the other 268 districts had above 50% of graduates completing the college preparatory core curriculum. It is clear that school districts with a lower percentage of graduates completing the college preparatory core curriculum would incur higher costs for meeting the bill’s requirements. School districts with a higher percentage of graduates completing the college preparatory core curriculum would incur lower or no costs.

Since high school graduates completing the college preparatory core curriculum are currently meeting the bill’s requirements, the bill would mainly affect students who are enrolled in the vocational education program and students who are in the general track. Students who are enrolled in the vocational education program are required to meet minimum requirements for the vocational education program; they generally have taken less units of academic courses than students enrolled in the college preparatory education program. To meet the bill’s requirements, school districts would have to offer more academic courses and increase academic requirements for students enrolled in the vocational education program and students who are in the general track. The bill allows units earned by students in English, mathematics, science, and social studies that are delivered through integrated academic and technical instruction to be counted toward the graduation requirements. School districts could lower their on-going costs by making necessary program changes to integrate the bill’s academic requirements into their current vocational and technical education programs.

The attachment lists the bill's costs as estimated by 20 school districts. The cost estimates range from zero to \$480,340 per year. Some estimates may be high since these estimates were made based on the "As Introduced" version of the bill and school districts assumed that they would continue to offer all their existing courses. As indicated earlier, school districts that currently require 20 units of credit for graduation could lower their net costs by shifting some existing resources into newly required areas.

Fiscal Effects on Joint Vocational Schools

By increasing the academic graduation requirements, the bill would also affect the operation of 49 joint vocational schools (JVS) in the state. As indicated earlier, the bill allows units earned by JVS students in English, mathematics, science, and social studies that are delivered through integrated academic and technical instruction to be considered in calculating the 20 unit graduation requirements. JVS would incur transition costs for making necessary program changes to integrate these new academic requirements proposed by the bill. However, according to the spokesperson from the Department of Education, JVS would also incur on-going costs for hiring additional academic teachers since not all academic requirements prescribed by the bill can be met by the integration of academic and technical instruction. The department estimates that JVS would need to hire one additional teacher for every 75 FTE students. Currently, there are 13,000 FTE students enrolled in the JVS. Therefore, the 49 joint vocational schools would need to hire up to 173 additional teachers. By using the FY 1996 statewide average teacher salary of \$38,121, JVS would incur up to \$6,594,933 per year as a result of the bill.

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SB0055SR

Attachment

This attachment lists the bill's costs as estimated by certain school districts. Some estimates may be high since these estimates were made based on the "As Introduced" version of the bill and school districts assumed that they would continue to offer all their existing courses. As indicated earlier, school districts that currently require 20 units of credit or more for graduation could lower their net costs by shifting existing resources into newly required areas. Most of these respondents did not indicate the costs of hiring additional teachers. The costs of additional teachers are estimated by the Legislative Budget Office based on school districts' FY 1996 average teacher salaries plus 28% of fringe and benefits.

The following districts indicate that the bill would have no fiscal impact on them since they have already met the graduation requirements proposed by the bill:

Beechwood City (Cuyahoga County); **Bexley City** (Franklin County);
New Boston Local (Scioto County); **Dublin City** (Franklin County);
Wapakoneta City (Auglaize County); **Yellow Springs Exempted Village** (Greene County)

The bill would incur additional costs to the following school districts:

Buckeye Local (Medina County)

3 additional teachers @ \$36,547 each	\$109,641
Fringe and benefits @ 28%	\$ 30,699
3 additional classrooms @ \$70,000 each	\$210,000
1 additional laboratory @ \$100,000	\$100,000
New textbook and other @ \$30,000	<u>\$ 30,000</u>
Total costs	\$480,340

Mohawk Local (Wyandot County)

3 additional teachers @ \$31,615 each	\$ 94,845
Fringe and benefits @ 28%	\$ 26,557
1 additional laboratory @ \$150,000	<u>\$150,000</u>
Total costs	\$271,402

Ridgewood Local (Coshocton County)

2 additional teachers @ \$32,651 each	\$ 65,302
Fringe and benefits @ 28%	\$ 18,285
2 portable classrooms @ \$125,000	\$125,000
1 additional laboratory @ \$150,000	\$150,000
New textbooks and other @ \$40,000	<u>\$ 40,000</u>
Total costs	\$398,587

East Guernsey Local (Guernsey County)

3 additional teachers @ \$29,727 each	\$ 89,181
Fringe and benefits @ 28%	\$ 24,971
New textbooks and other @20,000	<u>\$ 20,000</u>
Total costs	\$134,182

Massillon City (Stark County)

2 additional teachers @ \$36,121 each	\$ 72,242
Fringe and benefits @ 28%	\$ 20,228
New textbooks and other @50,000	<u>\$ 50,000</u>
Total costs	\$142,460

Wolf Creek Local (Washington County)

2 additional teachers @ \$30,912 each	\$ 61,824
Fringe and benefits @ 28%	\$ 17,311
3 portable classrooms @ \$53,000 each	\$159,000
1 additional laboratory @175,000	\$175,000
New textbooks and other @ \$2,100	<u>\$ 2,100</u>
Total costs	\$415,235

Coldwater Exempted Village (Mercer County)

3.5 additional teachers @ \$34,612 each	\$121,142
Fringe and benefits @ 28%	\$ 33,920
New textbooks and other @ \$20,000	<u>\$ 20,000</u>
Total costs	\$175,062

Milford Exempted Village (Clermont County)

3 additional teachers @ \$36,956 each	\$110,868
Fringe and benefits @ 28%	\$ 31,043
Converting existing space @ \$20,000	\$ 20,000
Converting existing laboratories @ \$45,000	\$ 45,000
New textbooks and other @ \$12,500	<u>\$ 12,500</u>
Total costs	\$219,411

Marion City (Marion County)

3 additional teachers @ \$37,318 each	\$111,954
Fringe and benefits @ 28%	\$ 31,347
4 additional classrooms @ \$35,000 each	\$105,000
2 additional laboratories @ \$35,000 each	\$105,000
New textbooks and other @ \$100,000	<u>\$100,000</u>

Total costs \$453,301

Chargin Falls Exempted Village (Cuyahoga County)

1 additional teacher @ \$45,824	\$45,824
Fringe and benefits @ 28%	\$12,831
New textbooks and other @ \$15,000	<u>\$15,000</u>
Total costs	\$73,655

Lakeview Local (Trumbull County)

3 additional teachers @ \$36,833	\$110,499
Fringe and benefits @ 28%	\$ 30,940
1 additional laboratory @ \$100,000	\$100,000
New textbook and other @ \$3,500	<u>\$ 35,000</u>
Total costs	\$276,439

West Branch Local (Mahoning County)

4 additional teachers @ \$35,629 each	\$106,887
Fringe and benefits @ 28%	\$ 29,928
3 additional classrooms @ \$30,000 each	\$ 90,000
Laboratory renovation @ \$50,000	\$ 50,000
New textbooks and other @ \$50,000	<u>\$ 50,000</u>
Total costs	\$326,815

Amanda-Clearcreek Local (Fairfield County)

3 additional teachers @ \$33,327 each	\$ 99,981
Fringe and benefits @ 28%	\$ 27,995
3 portable classrooms @ \$20,000 each	<u>\$ 60,000</u>
Total costs	\$187,976

Arlington Local (Hancock County)

2 additional teachers @ \$31,267 each	\$62,534
Fringe and benefits @ 28%	<u>\$17,510</u>
Total costs	\$80,044