

**Department of Legislative Services**  
Maryland General Assembly  
2014 Session

**FISCAL AND POLICY NOTE**

Senate Bill 821

(Senator Rosapepe, *et al.*)

Budget and Taxation

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**Digital Equity for All Maryland Students Act of 2014**

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This bill requires that all public school students have equal and ubiquitous access to digital technology in the classroom by the 2016-2017 school year. It establishes the Technology Infrastructure Improvement Program, administered by the Interagency Committee on School Construction (IAC), to distribute grants to local school boards in fiscal 2015 through 2017 to achieve the bill's goal. The bill also requires the Maryland State Department of Education (MSDE) to study the technological needs of each school so that Maryland students are able to fully use technological advancements in the delivery of education and teachers are able to fully incorporate the use of digital technology in the classroom. MSDE must report its findings to the General Assembly by July 1, 2014.

The bill takes effect June 1, 2014.

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**Fiscal Summary**

**State Effect:** General fund expenditures increase by between \$10.0 million and \$20.0 million annually for FY 2015 through 2017 for grant awards under the Technology Infrastructure Improvement Program; the table below reflects the midpoint of those two amounts. To the extent that general obligation (GO) bond funds are budgeted instead of general funds, general fund expenditures are less. No effect on total bond revenues and expenditures as the capital budget is determined annually through the capital budget process. To the extent that bond funds are used, fewer projects of other types receive funding. General fund expenditures by the Public School Construction Program (PSCP) increase by \$121,400 in FY 2015 to administer the program. Out-year expenditures reflect annualization and inflation. PSCP expenditures terminate after FY 2018 when the program closeout concludes. MSDE can complete the mandated study with existing resources.

(in dollars)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Revenues	\$0	\$0	\$0	\$0	\$0
GF Expenditure	15,121,400	15,139,700	15,146,200	153,000	0
Net Effect	(\$15,121,400)	(\$15,139,700)	(\$15,146,200)	(\$153,000)	\$0

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

**Local Effect:** Local revenues for technology upgrades to public school buildings increase by between \$10.0 million and \$20.0 million in each of FY 2015, 2016, and 2017. To the extent that local school boards need to upgrade public school informational technology infrastructure to meet the bill’s requirements, local expenditures increase to pay the local share of those costs. **This bill may impose a mandate on a unit of local government.**

**Small Business Effect:** Meaningful for small technology companies.

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## Analysis

**Bill Summary:** In fiscal 2015 through 2017, the program must distribute grants from an appropriation in the State budget or from general obligation (GO) bonds. The total grant amount must be apportioned between the State operating budget and GO bonds as appropriate.

In making grants to local school systems, IAC must consider the appropriate State and local cost-share proportions and the technology needs of a school. The grants may be used to:

- increase the bandwidth capacity of a school;
- install necessary wiring and equipment to provide wireless Internet connections throughout a school building;
- provide additional software;
- provide additional hardware, including desktop or laptop computers and tablets;
- hire additional technical staff to maintain technology infrastructure;
- install additional electrical capacity to support technology infrastructure in a school; and
- provide any other items necessary to provide or support technology infrastructure of a school.

**Current Law:** For a description of State support for public school construction funding, please see the **Appendix – State Funding for Public School Construction Projects.**

**Background:** Common Core State Standards (CCSS) were created through a state-level initiative coordinated by the National Governors Association and the Council of Chief State School Officers in collaboration with education stakeholders from across the country. Forty-five states have adopted CCSS, which are a set of academic standards in two subject areas, English/language arts (ELA) and mathematics, that define the knowledge and skills all students should master by the end of each grade level.

The standards require students and teachers to focus on fewer topics and concepts while emphasizing depth, detail, and critical thinking skills. Maryland adopted CCSS in June 2010 and has since worked to design a State curriculum, the Maryland College and Career Ready Standards (MCCRS), which aligns with the standards. MCCRS is being fully implemented statewide in the 2013-2014 school year.

*Partnership for Assessment of Readiness for College and Careers (PARCC)*

MCCRS requires a new assessment system that can measure the content and skills found in the curriculum. In spring 2010, Maryland joined PARCC, a consortium of 12 states working to develop a common set of assessments aligned to CCSS for ELA and mathematics. The PARCC assessments will measure student progress and track status on a trajectory toward college and career readiness. Several states, most recently Georgia and Oklahoma, have recently left the PARCC consortium over cost concerns. The PARCC assessments must be administered entirely online by the 2017-2018 school year to provide more timely feedback to educators, although MSDE has set a goal of the 2016-2017 school year for all schools systems to give PARCC online.

Field testing of the PARCC assessments, which are intended to replace the Maryland School Assessments and most of the High School Assessments, will take place in spring 2014 in PARCC states. Maryland is the only state that will field test PARCC in nearly every school. The PARCC field test will include both paper-based and computer-based assessments; however, the field test will only include the midyear performance-based assessment. Full implementation of PARCC is planned for the 2014-2015 school year. PARCC will provide a pencil-and-paper assessment as well as online for the first three years of test administration.

Many schools do not have sufficient technology infrastructure to meet the requirements of full implementation of PARCC online. In the 2013 session, the budget committees requested a report on the preparedness of local school systems to implement the new computer-based assessments. MSDE has surveyed all the local school systems regarding their technology needs to be able to administer the PARCC assessments. The total costs reported by local school systems (excluding Baltimore City) are in the \$100 million range for all systems to be prepared with devices, wireless networks, and other information technology (IT) infrastructure upgrades. However, in its report to the budget committees, MSDE notes, “While some of the needs assessment items are warranted, MSDE does not

support the full list of requests as reported by individual [school districts].” It also bears noting that Baltimore City did not contribute to this estimate. MSDE has contracted with Education Superhighway to compile a technology needs assessment for all local school systems and is also updating the 2013 report, but neither report is yet complete.

The Governor’s proposed fiscal 2015 State budget includes \$3.5 million for the Digital Learning Innovation Fund, which provides funding to local school districts to accelerate their conversion to comprehensive digital learning environments. Similar funding was provided in fiscal 2014.

For this analysis, the Department of Legislative Services (DLS) obtained estimates from some local school systems regarding the costs of wiring schools for high-speed wireless service that have no current infrastructure for such service. Estimates based on actual recent wiring projects in existing buildings were provided by Charles County and Montgomery County. Charles County advises that it has budgeted \$2.2 million to upgrade 14 secondary schools, for an average cost of approximately \$150,000; although it has not yet begun wiring elementary schools, it estimates the cost per school of about \$110,000. Montgomery County’s experience yields considerably higher estimates of almost \$450,000 for a high school and roughly \$200,000 for an elementary school.

Broadband service costs also vary by region and provider. For instance, Charles County pays roughly \$50,000 per year for broadband service to approximately 35 schools (\$1,400 per school). Montgomery County advises that it uses several different vendors, including redundant service in some cases to avoid prolonged service outages. It pays \$398 per month (\$4,800 per year) for each of 80 elementary schools, but the monthly cost is scheduled to decrease to \$199 on July 1 (\$2,400 per year). Charles County has also received quotes of \$600 per station license for virtual desktop technology, which is favored by some education technology experts as an optimal test administration vehicle. The number of licenses required by a single school varies based on enrollment and usage patterns.

PSCP advises that school building wiring and increased electrical capacity, including data wiring to increase bandwidth capacity, have traditionally been eligible school construction costs. Computer hardware, including tablets, and software have not been considered eligible costs because they are not a permanent part of the building and do not have an anticipated life of at least 15 years, the term of GO bonds issued by the State.

**State Fiscal Effect:** In the absence of reliable data on the computing infrastructure needs of local school systems in Maryland, a definitive cost for the Technology Infrastructure Improvement Program established by the bill cannot be determined. The bill specifies that IAC must consider the appropriate State and local cost-share proportions in making grants under the program. As noted in the appendix, the minimum State share of eligible school construction costs is 50% (in 8 counties), but the remaining 16 counties (including

Baltimore City) have State shares that are higher than that, resulting in an approximate State share of eligible school construction costs of 60%. Therefore, whatever the total cost of ensuring that every school in the State has appropriate access to digital technology, the State is responsible for approximately 60% of that total if IAC used a similar cost-share formula. To the extent that the total cost approaches the preliminary figure of \$100.0 million in MSDE’s report, the total State share is \$60.0 million over three years, or \$20.0 million per year. Given MSDE’s reservations about the preliminary estimate, the likely cost is less than that. Therefore, DLS concludes that funding for the program ranges from \$10.0 million to \$20.0 million annually for the three-year period specified in the bill.

It is assumed that the program is funded with general funds, since most IT costs cannot be funded with bonds. To the extent that some of the costs represent capital investments, bond funds supplant general funds. However, no increase in bond expenditures is assumed because the total capital authorization is established annually by the Governor and General Assembly through the capital budget process. Instead, to the extent that bond funds are used for this purpose, fewer capital projects receive funding in a given year.

Given the volume of grant requests and awards likely to result from the bill, IAC, through its staffing agency PSCP, requires additional staff to administer the program. Specifically, it requires an assistant program manager and a technology specialist to assist in evaluating the merits of grant requests. Given the nature and extent of the work involved, contractual staffing is not appropriate in this instance. PSCP likely would have trouble filling contractual positions for this function. Even though the bill takes effect June 1, 2014, there are no expenditures in fiscal 2014. Instead, general fund expenditures increase by \$121,392 in fiscal 2015, which accounts for a 90-day start-up delay from the bill’s June 1, 2014 effective date. This estimate reflects the cost of hiring the assistant program manager and technology specialist to administer the program. It includes salaries, fringe benefits, one-time start-up costs, and ongoing operating expenses.

Positions	2
Salaries and Fringe Benefits	\$109,697
Operating Expenses	<u>11,695</u>
<b>Total FY 2015 State Expenditures</b>	<b>\$121,392</b>

Future year expenditures reflect full salaries with annual increases and employee turnover as well as annual increases in ongoing operating expenses. Staffing needs end when the program concludes in fiscal 2018, with funding provided in fiscal 2018 for program closeout.

It is assumed that MSDE can fulfill the bill's reporting requirement with the submission of the planned reports by Education Superhighway and MSDE. To the extent additional research is required, MSDE can complete the required report with existing resources.

**Local Fiscal Effect:** Preliminary research by MSDE has found that access to digital technology in the State's public schools is uneven. To satisfy the bill's requirement that access to such technology be "equal and ubiquitous," some local school systems will have to invest considerably in technology infrastructure for their schools. Under the bill, they have the option of applying for grants from the program and paying a portion of the cost (with the cost share yet to be determined) to bring all of their schools up to the expectations established in the bill. If they do not receive a grant, they will have to pay the full cost. Other local school systems may already meet the bill's requirements and not have to spend any additional funds. Costs for local school systems, in total, correspond to the costs for the State. If total costs are \$100.0 million and the State covers 60%, then local school systems are responsible for the other 40%, or \$40.0 million, over three years. The local share could be greater if total costs are greater or the State covers a smaller proportion of costs. Conversely, the local share could be lower if total costs are lower or the State covers a greater proportion of costs.

**Small Business Effect:** Small businesses that sell computing devices, installation, and related services likely benefit from a dramatic increase in available funding for public school technology upgrades.

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### Additional Information

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Maryland State Department of Education, Montgomery and Charles counties, Public School Construction Program, Department of Legislative Services

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## Appendix – State Funding for Public School Construction Projects

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Subject to the final approval of the Board of Public Works (BPW), the Interagency Committee on School Construction (IAC) manages State review and approval of local school construction projects. Each year, local systems develop and submit to IAC a facilities master plan that includes an analysis of future school facility needs based on the current condition of school buildings and projected enrollment. The master plan must be approved by the local school board. Subsequently, each local school system submits a capital improvement plan to IAC that includes projects for which it seeks planning and/or funding approval for the upcoming fiscal year, which may include projects that the local system has forward funded. In addition to approval from the local school board, the request for the upcoming fiscal year must be approved by the county's governing body. Typically, the submission letter to IAC contains signatures of both the school board president and either the county executive and county council president or chair of the board of county commissioners.

Based on its assessment of the relative merit of all the project proposals it receives, and subject to the projected level of school construction funds available, IAC makes recommendations for which projects to fund to BPW. By December 31 of each year, IAC must recommend to BPW projects comprising 75% of the preliminary school construction allocation projected to be available by the Governor for the upcoming fiscal year. Local school boards may then appeal the IAC recommendations directly to BPW. By March 1 of each year, IAC must recommend to BPW and the General Assembly projects comprising 90% of the allocation for school construction submitted in the Governor's capital budget. Following the legislative session, IAC recommends projects comprising the remaining school construction funds included in the enacted capital budget for BPW approval, no earlier than May 1.

The State pays at least 50% of eligible costs of school construction and renovation projects, based on a funding formula that takes into account numerous factors including each local school system's wealth and ability to pay. The Public School Facilities Act (Chapters 306 and 307 of 2004) requires that the cost-share formula be recalculated every three years. The first recalculation occurred in 2007, and the second recalculation occurred in 2010. **Exhibit 1** shows the State share of eligible school construction costs for all Maryland jurisdictions for fiscal 2012, which was determined by the 2007 recalculation, and for fiscal 2013 through 2015, as determined by the 2010 recalculation. The 2013 recalculation is currently in process and will be completed by spring 2014 for implementation beginning in fiscal 2016.

Chapters 306 and 307 also established the State's intent to provide \$2.0 billion of funding for school construction by fiscal 2013, an average of \$250.0 million each year for eight years. As a result, Public School Construction Program (PSCP) funding increased

from \$125.9 million in fiscal 2005 to \$253.8 in fiscal 2006, and has remained above the \$250.0 million target each year since, which resulted in significant increases in school construction assistance to local school boards. As a result, the State achieved the \$2.0 billion goal ahead of schedule. **Exhibit 2** shows annual State public school construction funding from fiscal 2006 through 2014, by county.

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**Exhibit 1**  
**State Share of Eligible School Construction Costs**  
**Fiscal 2012-2015**

<u>County</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>FY 2015</u>
Allegany	91%	93%	93%	93%
Anne Arundel	50%	50%	50%	50%
Baltimore City	94%	93%	93%	93%
Baltimore	50%	50%	50%	50%
Calvert	61%	56%	56%	56%
Caroline	86%	81%	78%	78%
Carroll	61%	58%	58%	58%
Cecil	75%	70%	69%	69%
Charles	77%	72%	67%	63%
Dorchester	71%	69%	69%	69%
Frederick	72%	67%	62%	60%
Garrett	59%	54%	50%	50%
Harford	59%	63%	63%	63%
Howard	61%	60%	60%	60%
Kent	50%	50%	50%	50%
Montgomery	50%	50%	50%	50%
Prince George's	73%	68%	63%	62%
Queen Anne's	55%	50%	50%	50%
St. Mary's	75%	70%	65%	64%
Somerset	88%	83%	82%	82%
Talbot	50%	50%	50%	50%
Washington	73%	71%	71%	71%
Wicomico	87%	96%	96%	96%
Worcester	50%	50%	50%	50%

Source: Public School Construction Program

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**Exhibit 2**  
**State Funding for Public School Construction**  
(\$ in Thousands)

<u>County</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>
Allegany	\$12,000	\$18,650	\$412	\$0	\$0	842	727	1,999	2,496
Anne Arundel	19,457	22,675	27,827	27,420	25,020	26,200	32,400	33,349	34,870
Baltimore City	21,523	39,436	52,665	41,000	27,733	28,559	41,000	46,102	39,478
Baltimore	25,218	35,053	52,250	40,985	28,000	29,000	39,000	47,394	52,068
Calvert	3,437	2,723	12,644	7,824	8,181	8,450	7,317	7,129	5,577
Caroline	4,699	2,935	2,426	8,100	6,000	3,767	235	756	7,788
Carroll	7,434	8,282	8,219	11,741	10,520	8,444	9,079	15,211	4,874
Cecil	8,656	8,271	9,533	2,674	1,538	1,744	2,830	1,915	1,268
Charles	8,267	10,200	13,170	11,704	8,898	8,335	9,180	12,480	9,426
Dorchester	656	872	6,137	10,400	6,469	5,436	3,639	979	1,590
Frederick	11,910	17,942	18,728	14,759	16,226	14,000	16,532	19,254	20,163
Garrett	1,507	1,235	6,243	3,020	666	0	382	319	134
Harford	8,287	11,096	16,238	14,751	16,253	13,835	17,040	16,573	13,214
Howard	15,273	17,808	23,206	18,265	18,262	18,290	26,936	32,811	25,931
Kent	2,000	3,479	1,335	0	388	0	104	123	95
Montgomery	30,431	40,040	52,297	53,312	28,350	30,183	42,000	43,794	38,592
Prince George's	29,833	37,425	52,250	41,000	28,200	29,500	40,348	42,192	39,371
Queen Anne's	6,897	3,000	3,925	4,951	3,947	5,750	5,374	649	4,371
St. Mary's	3,271	5,495	9,806	7,266	4,028	6,600	3,354	3,172	7,472
Somerset	14,300	12,022	5,153	0	6,000	6,000	3,371	289	3,811
Talbot	2,422	2,405	2,038	0	436	344	135	35	634
Washington	6,431	4,478	8,970	9,368	7,965	7,970	8,571	9,117	8,494
Wicomico	7,616	4,178	8,143	12,960	13,170	9,975	1,864	11,290	13,327
Worcester	2,241	6,872	8,213	5,483	403	0	165	166	4,882
MD School for the Blind								2,800	6,063
Bond Premium		6,100							
Statewide						500		100	1,288
<b>Total</b>	<b>\$253,766</b>	<b>\$322,672</b>	<b>\$401,828</b>	<b>\$346,983</b>	<b>\$266,653</b>	<b>\$263,724</b>	<b>\$311,583</b>	<b>\$349,997</b>	<b>\$347,277</b>
<b>Over \$250M</b>	<b>\$3,766</b>	<b>\$72,672</b>	<b>\$151,828</b>	<b>\$96,983</b>	<b>\$16,653</b>	<b>\$13,724</b>	<b>\$61,583</b>	<b>\$99,997</b>	<b>\$97,277</b>