

Department of Legislative Services
Maryland General Assembly
2008 Session

FISCAL AND POLICY NOTE

House Bill 916 (Delegate Morhaim, *et al.*)
Health and Government Operations and Appropriations

Baltimore County - Proposed New School Buildings - High Performance Buildings

This bill requires that each new public school building built in Baltimore County be a high performance building. It also prohibits the State or any county from authorizing an appropriation for planning of a new high performance school building until a detailed description of the scope and purpose of the project is given to the Department of Budget and Management (DBM).

Fiscal Summary

State Effect: None. Total State capital expenditures would not be affected.

Local Effect: Baltimore County's share of the cost of new public school construction projects would increase by approximately 2% of total project costs for each new school built in the county. Over the lifespan of a high performance school building, operating cost savings should more than offset the upfront construction cost premium.

Small Business Effect: None.

Analysis

Current Law: *High Performance Buildings:* Chapter 459 of 2005 defined a high performance building as one that:

- achieves at least a silver rating according to the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) rating system as adopted in 2001 or subsequently by the Maryland Green Building Council; or
- achieves at least a two globe rating according to the Green Globes Program as adopted by the Green Building Initiative (GBI); or
- achieves a comparable numeric rating according to a nationally recognized, accepted, and appropriate numeric sustainable development rating system, guideline, or standard; or
- meets nationally recognized, consensus-based, and accepted green building guidelines, standards, or systems approved by the State.

For State-owned buildings, DBM must approve a proposal for preliminary planning of a capital project before it receives any planning funds. Chapter 459 also allowed State agencies that request an appropriation for preliminary planning of a proposed capital project to propose that a building be constructed as a high performance building. It required DBM to review the request to determine whether the justification for constructing a high performance building is practicable and fiscally prudent.

For State buildings, both DBM and the Department of General Services must approve the design of a capital project before it receives any funds for construction.

School Construction: 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 ability to pay. For fiscal years 2010-2012, the State share of eligible school construction costs is 50% in Baltimore County. Project planning costs are not eligible costs, and therefore are borne entirely by local school districts; they are not subject to State review. Costs associated with high performance buildings are also not eligible costs.

Subject to the final approval of the Board of Public Works, the Interagency Committee on Public 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. Subsequently, each local school system submits a capital improvement plan to IAC that includes projects for which it seeks planning approval, projects for which it seeks funding approval, and projects that the local system has forward funded.

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 determines

which projects to recommend to BPW for State funding. By December 31 of each year, IAC recommends to BPW projects comprising 75% of the total projected school construction allocation projected to be available. Local school districts may then appeal the IAC recommendations directly to BPW. By March 1 of each year, IAC recommends 90% of the school construction allocation submitted in the Governor's capital budget. Following the legislative session, IAC recommends projects comprising the remaining school construction funds in the enacted capital budget. As of the December recommendations, IAC has not approved funding for any new school construction projects in Baltimore County for fiscal 2009.

Background: Chapter 116 of 2007 codified the Maryland Green Building Council, which had been established by executive order but had been dormant for several years. The council was charged with:

- evaluating current green building technologies;
- recommending cost-effective green building technologies that the State may consider incorporating into the construction of new State facilities; and
- developing a list of building types for which green building technologies should not be applied.

In December 2007, the council released its report, which includes a recommendation that all new school buildings in the State be constructed as high performance buildings.

USGBC is a national coalition of building industry leaders formed to promote construction that is environmentally responsible, profitable, and that creates healthy places to live and work. USGBC developed LEED as a self-assessment tool that measures the extent to which a building meets green building criteria on six dimensions: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design process. Version 2.2 of the LEED system was released in October 2005. The rating scale has a maximum score of 69 points and four ratings:

- platinum (52-69 points)
- gold (39-51 points)
- silver (33-38 points)
- certified (26-32 points)

LEED standards have been adopted by 24 states and more than 90 localities. There are more than 1,000 LEED-certified buildings in the country.

GBI is a coalition representing industry, construction companies, architectural firms, and academic institutions to promote green building. Through a strategic partnership with the National Association of Home Builders, GBI developed the online Green Globes assessment tool that builders can use to measure the extent to which a building meets green building criteria on seven dimensions: project management, site, energy, water, resources and materials, emissions and effluents, and indoor environment. The rating scale has a maximum score of 1,000 points and four ratings:

- 4 globes (85-100%)
- 3 globes (70-84%)
- 2 globes (55-69%)
- 1 globe (35-54%)

To date, only three State-funded buildings have been built as high performance buildings. According to the Green Building Council, the Hammerman Beach Services building at Gunpowder Falls State Park cost about 3.4% more than a nonhigh performance building would have cost, but is expected to generate a 20% savings on energy costs and 40% reduction in water consumption over its lifespan. Goodpaster Hall on the campus of St. Mary's College of Maryland is estimated to have had a 1.6% cost premium, but is expected to generate a 30% savings on energy costs and 40% reduction in water consumption over its lifespan. The Universities of Maryland at Shady Grove building, which achieved a LEED gold rating, is estimated to have had a 2.4% cost premium, but should generate a 30% savings in energy costs and a 40% reduction in water consumption over its lifespan.

Local Fiscal Effect: As normal construction costs escalate, the gap in construction costs between high performance and nonhigh performance buildings has been narrowing. Most estimates indicate that construction costs for high performance buildings are 2-5% higher than construction costs for nonhigh performance buildings, which is consistent with Maryland's limited experience. The Green Building Council estimates that, going forward, the average cost premium for LEED silver buildings will be 2% above the cost of traditional construction. Legislative Services concurs with this estimate.

Since the costs associated with green building design and construction are not currently considered eligible costs by IAC, Baltimore County will pay the full construction cost premium associated with high performance building construction. However, as shown in the three buildings described above, Baltimore County could expect to reap significant operational savings from new high performance school buildings. Over the lifespan of a

new school, those savings should more than offset the additional upfront cost of construction.

Additional Information

Prior Introductions: SB 927 of 2005 was withdrawn before it received a hearing.

Cross File: SB 219 (Senators Brochin and Klausmeier) – Budget and Taxation.

Information Source(s): Department of General Services, Maryland State Department of Education, Baltimore County, Public School Construction Program, Department of Budget and Management, Department of Legislative Services

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