HB 376

Department of Legislative Services

Maryland General Assembly
2008 Session

FISCAL AND POLICY NOTE

House Bill 376 (The Speaker, *et al.*) (By Request – Administration)
Health and Government Operations and Appropriations Budget and Taxation

High Performance Buildings Act

This Administration bill requires new or renovated State buildings and new school buildings to be constructed as high performance buildings under specified circumstances. The Departments of Budget and Management (DBM) and General Services (DGS) and the Board of Public Works (BPW) must establish processes for granting waivers from this requirement. The State will fund 50% of the local share of increased school construction costs associated with high performance buildings in fiscal 2010 through 2014.

The bill takes effect July 1, 2008.

Fiscal Summary

State Effect: Total State expenditures for capital construction, including public school construction, would not be affected. However, the increased costs associated with high performance buildings could reduce the number of projects funded in any year. High performance buildings should generate future operational cost savings or avoidance, but those savings would be generated beyond the five-year timeframe of this analysis.

Local Effect: From FY 2010 to 2014, local expenditures could increase up to 0.5% of total eligible project cost for the design and construction of high performance school buildings. After FY 2014, local expenditures could increase up to 1%. Rather than increase local capital expenditures to fund the increase in local costs for new school buildings, some local school systems may opt to fund fewer school construction and renovation projects. Over time, high performance school buildings could generate sufficient operational cost savings or avoidance that would more than offset the construction premium.

Small Business Effect: A small business impact statement was not provided by the Administration in time for inclusion in this fiscal note. A revised fiscal note will be issued when the Administration's assessment becomes available.

Analysis

Bill Summary: The bill repeals the current statutory definition of a high performance building and replaces it with the following definition:

- the building meets or exceeds the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) criteria for a silver rating; or

- the building achieves a comparable numeric rating according to a nationally recognized, accepted, and appropriate standard approved by DBM and DGS.

State Buildings: The bill applies only to new or renovated State buildings that are at least 7,500 square feet and are built or renovated entirely with State funds. Additionally, building renovations subject to the bill must include the replacement of heating, ventilation, air conditioning, electrical, and plumbing systems and must retain the building shell.

Unoccupied buildings are exempt from the bill's provisions, including warehouses, garages, maintenance facilities, transmitter buildings, and pumping stations. For State buildings, the bill applies to capital projects that have not initiated a Request for Proposals (RFP) for the selection of an architectural and engineering (A&E) consultant on or before July 1, 2008. However, it is the General Assembly's intent that, to the extent practicable, the State employ green building strategies in all new and renovated buildings, even if they are exempt from the provisions of the bill.

For State buildings, the waiver process must include a review by the Maryland Green Building Council and approval by DGS, DBM, and the Maryland Department of Transportation.

Public School Buildings: For new schools, the bill applies only to projects that have not initiated an RFP for the selection of an A&E consultant on or before July 1, 2009. The waiver process established by the Board of Public Works must include review and approval by the Interagency Committee on School Construction (IAC).

From fiscal 2010 to 2014 only, the State must pay half of the local share of extra costs stemming from the use of green building design features in the construction of new school buildings.

Current Law: Chapter 459 of 2005 defined a high performance building as one that:

- achieves at least a LEED silver rating; 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.

State Capital Projects: 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. Both DBM and DGS must approve the design of a capital project before it receives any funds for construction.

Chapter 519 of 2004 provided a property tax credit for buildings having at least a silver LEED rating; those tax credits have been fully allocated.

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 wealth and ability to pay. **Exhibit 1** shows the State share of eligible school construction costs for all Maryland jurisdictions beginning in fiscal 2010, the first year the bill would impact school construction projects. New rates are being phased in over two or three years for Calvert, Dorchester, Garrett, Harford, Queen Anne's, and Somerset counties because, when the rates were recalculated in 2007 based on the same factors, they experienced a reduction of 5% or more in the State share of school construction costs compared with the fiscal 2006-09 levels.

Local school systems have sole responsibility for procuring school construction contracts once the State has approved a school construction project. Since local school systems are not considered units of the State, State procurement law and regulations do not directly

apply to them, although State regulations require competitive bidding and other procurement and construction guidelines.

Exhibit 1
State Share of Eligible School Construction Costs
Fiscal 2010-2012

County	FY 2010	FY 2011	FY 2012
Allegany	91%	91%	91%
Anne Arundel	50%	50%	50%
Baltimore City	94%	94%	94%
Baltimore	50%	50%	50%
Calvert	64%	61%	61%
Caroline	86%	86%	86%
Carroll	61%	61%	61%
Cecil	75%	75%	75%
Charles	77%	77%	77%
Dorchester	72%	71%	71%
Frederick	72%	72%	72%
Garrett	65%	60%	59%
Harford	60%	59%	59%
Howard	61%	61%	61%
Kent	50%	50%	50%
Montgomery	50%	50%	50%
Prince George's	73%	73%	73%
Queen Anne's	65%	60%	55%
St. Mary's	75%	75%	75%
Somerset	92%	88%	88%
Talbot	50%	50%	50%
Washington	73%	73%	73%
Wicomico	87%	87%	87%
Worcester	50%	50%	50%

Source: Public School Construction Program

Subject to the final approval of BPW, 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 preliminary 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, beginning in 2008, IAC recommends 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.

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, whose recommendations comprise the major provisions of the bill.

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 local governments. There are more than 1,000 LEED-certified buildings in the country.

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 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 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 30% savings in energy costs and a 40% reduction in water consumption over its lifespan.

State Fiscal Effect: Based on capital debt affordability criteria, total outstanding debt is nearing capacity by fiscal 2011, meaning there is no room for expanded debt authorization beyond current planned levels. Therefore, it is assumed that any increased State costs generated by the bill would result in fewer capital projects receiving funding rather than increased bond debt being issued to cover the costs.

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.

Any buildings constructed as high performance buildings should generate substantial operational savings over their lifespan, more than covering the additional cost. However, most buildings currently in the Capital Improvement Program (CIP) will not be operational until at least fiscal 2011, so the bulk of those savings will not register during the five-year time period covered by this analysis. Review of high performance building

design and construction can be integrated into the normal design and construction process with no additional expenditures by affected State agencies.

State Buildings: Pursuant to the provisions of the bill, the cost of new and substantially renovated State buildings will increase by approximately 2%. DBM advises that 27 projects in the current fiscal 2009-2013 CIP meet the thresholds established by the bill and would have to achieve a LEED silver rating. The total cost premium for the 27 projects is approximately $22.7 million over five years. **Exhibit 2** lists those projects and the estimated cost premiums. The premium cost is assumed to be incurred in the first year of construction.

Exhibit 2
High Performance Cost Premiums for Affected CIP Projects
($ in Millions)

Agency	Project Description	Green Building Cost Premium ($ in Millions)
FY 2009		
University of Maryland, Baltimore	Pharmacy Hall Addition and Renovation*	$1.122
FY 2009 Subtotal		**$1.122**
FY 2010		
Public Safety and Correctional Services	WCI Vocational Education Building	0.235
General Services	Lowe House of Delegates Building – Alts./Renovations	0.146
Public Safety and Correctional Services	NBCI MCE Upholstery and Textiles Plant	0.143
Planning	Jefferson Patterson Park Center Renovations	0.065
Coppin State University	Data Centers Expansion	0.029
FY 2010 Subtotal		**$0.618**
FY 2011		
Public Safety and Correctional Services	New Youth Detention Facility	1.755
University of Baltimore	New Law School	1.670
University of Maryland, College Park	Physical Sciences Complex – Phase I – North Campus	1.524
Baltimore City Community College	Main Building Renovation – Liberty Campus	0.728
General Services	State Archaeological Equipment Facility	0.069
FY 2011 Subtotal		**$5.746**
FY 2012		
Health and Mental Hygiene	New Public Health Laboratory	3.536

Agency	Project Description	Green Building Cost Premium ($ in Millions)
Public Safety and Correctional Services	New Women's Detention Facility (Year 1)	1.733
Coppin State University	New Science and Technology Center (Year 1)	1.013
Morgan State University	New School of Business Complex	1.243
Frostburg State University	New Center for Communications and IT	1.039
Public Safety and Correctional Services	MCTC Housing Unit Windows and Heating Systems Phase II	0.217
Public Safety and Correctional Services	Baltimore Site Utilities Upgrade Phase I	0.173
State Police	New Cumberland Barrack and Garage	0.169
UM-Center for Environmental Science	New Information and Communications Services Building – CBL	0.155
University of Maryland, College Park	New Remote Library Storage Facility	0.151
Public Safety and Correctional Services	Public Safety Training Center Rifle Range	0.030
FY 2012 Subtotal		**$9.459**
FY 2013		
Public Safety and Correctional Services	New Women's Detention Facility (Year 2)	1.732
University of Maryland Eastern Shore	UMES – New Engineering and Aviation Science Building	1.471
Coppin State University	New Science and Technology Center (Year 2)	1.013
University of Maryland, College Park	UMCP – Chemistry Building Phase I	0.595
St. Mary's College of Maryland	Anne Arundel Hall Reconstruction	0.461
Historic St. Mary's City	Maryland Heritage Interpretive Center	0.281
State Police	New Tactical Services Facility – Operations Facility	0.154
FY 2013 Subtotal		**$5.707**
Total		**$22.652**

*UM-Baltimore awarded an A&E services contract in April 2007 for initial design.

School Construction: From fiscal 2010 to 2014, the State share of construction costs for a new school building will increase between 1.5% and 1.94%, depending on the location of the building. It is difficult to estimate how many new school buildings will be built each year. In fiscal 2008, the State gave planning approval for 13 new or replacement school buildings. In fiscal 2009, IAC has recommended BPW approval of six new or replacement school buildings so far. (BPW meets January 30, 2008 to approve initial IAC recommendations.) Planning approval has been requested for another 33 new school buildings in fiscal 2009. Some of these schools will receive planning approval in 2009, but most of them will reapply for planning approval in fiscal 2010; some counties may go

forward with the projects in advance of planning approval, but the majority of the projects will likely receive planning approval in fiscal 2010 or beyond. Those projects that have not issued RFPs for A&E services before July 1, 2009 will be subject to the bill's provisions.

For the sake of illustration, **Exhibit 3** provides the increased State and local costs that would result from the construction of a hypothetical $10 million school building in each county. For the purposes of this exhibit, it is assumed that the regulations governing the Public School Construction Program would be amended to include high performance building costs in the definition of eligible costs for State funding.

Exhibit 3
Estimated State and Local Cost Increases for a $10 Million New School

County	Local Share of Eligible Cost	Local Share Increase	State Share Increase
Allegany	9%	$9,000	$191,000
Anne Arundel	50%	$50,000	$150,000
Baltimore	50%	$50,000	$150,000
Baltimore City	6%	$6,000	$194,000
Calvert	39%	$39,000	$161,000
Caroline	14%	$14,000	$186,000
Carroll	39%	$39,000	$161,000
Cecil	25%	$25,000	$175,000
Charles	23%	$23,000	$177,000
Dorchester	29%	$29,000	$171,000
Frederick	28%	$28,000	$172,000
Garrett	41%	$41,000	$159,000
Harford	41%	$41,000	$159,000
Howard	39%	$39,000	$161,000
Kent	50%	$50,000	$150,000
Montgomery	50%	$50,000	$150,000
Prince George's	27%	$27,000	$173,000
Queen Anne's	45%	$45,000	$155,000
St. Mary's	25%	$25,000	$175,000
Somerset	12%	$12,000	$188,000
Talbot	50%	$50,000	$150,000
Washington	27%	$27,000	$173,000
Wicomico	13%	$13,000	$187,000
Worcester	50%	$50,000	$150,000

Local Fiscal Effect: From fiscal 2010 to 2014, local costs for new school construction will increase between 0.06% and 0.5% of eligible construction costs allowed by IAC, depending on the school's location. Over the lifespan of a new school, all operational cost savings generated by green building technologies will be realized by the local school districts, not the State.

Additional Information

Prior Introductions: None.

Cross File: SB 208 (The President, *et al.*) (By Request – Administration) – Budget and Taxation.

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