

Department of Legislative Services
 Maryland General Assembly
 2007 Session

FISCAL AND POLICY NOTE

House Bill 863 (Delegate Bronrott, *et al.*)
 Health and Government Operations and Appropriations

Proposed Capital Projects - Planning - High Performance Buildings

This bill requires new State buildings that are at least 7,500 square feet in size to be high performance buildings, unless they receive a waiver from the Department of Budget and Management (DBM).

Fiscal Summary

State Effect: Total State funding for capital projects would not be affected in the short term, but the increased costs associated with high performance buildings could decrease the number of capital projects funded resulting in deferral of projects planned in the *Capital Improvement Program*. Over time, however, high performance buildings could generate sufficient operational savings or cost avoidance to recover the construction cost premium. General fund expenditures by DBM increase by at least \$25,000 beginning in FY 2008 to develop and administer the waiver process.

(in dollars)	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
GF/SF/FF Rev.	-	-	-	-	-
GF Expenditure	25,000	25,300	25,500	25,800	26,000
Net Effect	(\$25,000)	(\$25,300)	(\$25,500)	(\$25,800)	(\$26,000)

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

Local Effect: None.

Small Business Effect: Potentially meaningful, to the extent that contractors and subcontractors are small businesses, and submit bids to build high performance buildings.

Analysis

Bill Summary: If a proposed capital project includes construction of a building of at least 7,500 square feet, the building must be a high performance building, unless it receives a waiver from DBM. Warehouses and garages are exempt from this requirement.

By December 1, 2007, DBM must establish a waiver process that includes:

- a list of building types that are exempt from the requirement;
- a standard of review to determine whether the use of a high performance building is practicable and fiscally prudent; and
- a limit on the number of waivers that a State agency may obtain within a five-year period.

Current Law: Chapter 459 of 2005 defines 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;
- achieves at least a two globe rating according to the Green Globes Program as adopted by the Green Building Initiative (GBI);
- 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.

DBM has to approve a proposal for preliminary planning of a capital project before it receives any planning funds. Chapter 459 also allows 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 requires DBM to review the request to determine whether the justification for constructing a high performance building is practicable and fiscally prudent.

Both DBM and the Department of General Services (DGS) have to approve the design of a capital project before it receives any funds for construction.

Chapter 519 of 2004 provides a property tax credit for buildings having at least a Silver LEED rating.

Background: The 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. It claims more than 7,500 members and 75 regional chapters. 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); and
- certified (26-32 points).

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%); and
- 1 globe (35-54%).

To date, three State-funded buildings have been built as high performance buildings, although none of them are scheduled to be completed until summer 2007. According to DGS, the Hammerman Beach Services building at Gunpowder Falls State Park cost about 5.5% more than a nonhigh performance building would have cost. Two larger projects on the campus of St. Mary's College of Maryland are estimated to carry a 3.5% cost premium. The Maryland Aviation Administration provided data on two LEED certified airport terminals, one in Salt Lake City and one in Boston. It estimated the initial cost premium of these two projects to be between 5% and 10%. DGS estimates a 10% cost premium for all high performance building plans.

Chapter 610 of 2006 established a Task Force on Green Building to evaluate and make recommendations regarding methods of facilitating public demand for environmentally sensitive communities and improving low-impact sustainable communities. A preliminary report was due to the Governor and the General Assembly by January 1, 2007, but appointments to the task have not been completed. A final report is due October 1, 2007.

A 2005 report prepared for the Massachusetts Executive Office of Environmental Affairs indicates that statutes in four states (Washington, Nevada, Minnesota, and Arkansas) require or promote green buildings in public construction programs. Similarly, executive orders in 10 other states also require or promote green buildings in public construction. At least four states require LEED Silver certification for new public buildings, and one (California) requires LEED Silver certification in all new buildings as well as significant renovations to public buildings.

The Capital Debt Affordability Committee, established by Chapter 43 of 1978 to recommend prudent debt limits to the Governor and the General Assembly, uses two criteria to evaluate State debt. First, total debt outstanding should be limited to 3.2% of State personal income. Second, total State debt service should be limited to 8.0% of State revenues supporting debt service.

State Fiscal Effect: Based on debt affordability criteria, total outstanding State debt in fiscal 2008 is at 94% of capacity, meaning that there is virtually no room for expanded debt authorization beyond current levels. Therefore, it is assumed that any increased costs generated by the requirement to build high performance buildings would result in fewer capital projects receiving funding rather than increased bond debt being issued to cover the costs.

Assuming that almost all State-funded building projects are larger than 7,500 square feet, the amount of State funding available for capital construction projects would decrease by \$15 to \$26 million annually after adjusting for the cost premium for high performance buildings. The proposed fiscal 2008 capital budget is \$829 million, of which \$386 million for school construction is not covered by this bill, leaving up to \$443 million in capital construction projects that could be affected by this bill. In addition, the Governor's proposed fiscal 2008 operating budget includes \$75 million in general fund PAYGO-funded projects that could be affected by this bill.

As normal construction costs escalate, the construction cost gap between high performance and nonhigh performance buildings has been narrowing. Most estimates indicate that construction costs for high performance buildings are 3% to 5% higher than construction costs for nonhigh performance buildings, consistent with Maryland's limited experience. Applying that cost premium to the fiscal 2008 capital and general fund

PAYGO funds results in between \$15.5 and \$25.9 million in additional costs for capital planning and construction. Depending on the extent to which the capital budget also includes garage and warehouse construction, which are exempt from the bill, the total cost could be less. Also, to the extent that DBM grants waivers, costs could be considerably less.

Over time, however, high performance buildings could generate sufficient operational savings or cost avoidance to recover the construction cost premium. For example, the two high performance airport terminals in Salt Lake City and Boston are estimated to reduce water usage by 20% and increase energy efficiency by as much as 30%. At these rates, they would recover the additional cost of construction within 10 years. Cost savings or cost avoidance generated by State-funded projects cannot be reliably estimated because there are no State-funded high performance buildings currently operating in the State.

In order to establish and operate a waiver process, DBM estimates that it will need \$25,000 to hire an engineering consultant to help analyze building life cycle costs and the fiscal prudence of high performance buildings. However, it notes that the actual cost of the waiver process is not fully known until it learns how many waivers are likely to be submitted annually, so the cost could increase.

Additional Comments: Local school systems, not the State, procure school construction contracts. However, if the bill were interpreted to apply to school construction projects, the total increase in capital planning and construction costs would be between \$27.1 and \$45.2 million.

Additional Information

Prior Introductions: None.

Cross File: SB 300 (Senator Brochin, *et al.* – Budget and Taxation) is identified as a cross file, although it is different.

Information Source(s): Department of General Services, Board of Public Works, University System of Maryland, Maryland Department of Transportation, Department of Budget and Management, Department of Legislative Services

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nas/rhh

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