HB 69

Department of Legislative Services

Maryland General Assembly
2014 Session

FISCAL AND POLICY NOTE

House Bill 69 (Delegate Carr)
Health and Government Operations

Procurement - State Funds - Energy Efficient Outdoor Lighting Fixtures

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This bill prohibits the use of State funds to install or replace a permanent outdoor luminaire on the grounds of non-State buildings unless the fixture meets specified criteria regarding energy efficiency and light emission, subject to waivers. It also changes the energy efficiency and light emission standards for permanent outdoor lighting on buildings owned or leased by the State, and applies those criteria to the replacement of roadway and parking lot lighting as well. The Board of Public Works (BPW) must adopt regulations for a waiver program.

Fiscal Summary

State Effect: Minimal increase in general fund expenditures for the Department of General Services (DGS) to contract with a lighting engineer to review and provide guidance on funding requests for outdoor lighting from nonprofit State grant recipients; a significant number of project reviews may make it more cost effective to hire a contractual lighting engineer to conduct the reviews. Transportation Trust Fund expenditures increase modestly to replace some existing roadway lights with fully shielded luminaires; any increase in cost may be partially or fully offset by reduced operating expenses from the use of more efficient lighting. BPW can develop regulations and manage a waiver program with existing resources. No effect on revenues.

Local Effect: Local capital projects that receive State funds and are not exempt under the bill are barred from using those funds for outdoor lighting that does not meet the criteria specified in the bill. There is no restriction on the use of local funds, however. **This bill may impose a mandate on a unit of local government.**

Small Business Effect: Potential meaningful for small nonprofit firms that receive State grants for capital improvement or construction projects.

Analysis

Bill Summary: The bill does not apply to any public works contract (1) valued at less than $500,000 or (2) for which 50% or less of the funds used for the project are State funds. It also does not apply to lighting for:

- athletic fields;
- emergency procedures or nighttime work;
- navigational systems for aviation and nautical safety; or
- tunnels and roadway underpasses.

The bill repeals existing criteria for permanent outdoor luminaires that are installed or replaced with State funds and instead specifies that each luminaire that is installed or replaced must comply with recommended practices:

- adopted by the Illuminating Engineering Society (IES);
- established by the Model Outdoor Lighting Ordinance adopted jointly by IES and the Dark Sky Association; or
- otherwise recognized as national standards in the field of lighting.

In addition, luminaires for roadway or parking lot lighting must be a fully shielded luminaire, as defined in the bill. Luminaires for façade lighting must be shielded to reduce glare, sky glow, and light trespass, as defined in the bill.

The bill makes additional clarifying changes to existing law.

Current Law: Chapter 353 of 2011 requires that luminaires installed or replaced with State funds on the grounds of buildings owned or leased by the State must:

- maximize energy conservation and minimize light pollution, glare, and light trespass;
- provide the minimum illumination necessary for the intended purpose of the lighting; and
- be a restricted uplight luminaire if it has an output of more than 1,800 lumens.

The latter two requirements are repealed by the bill and replaced with alternative requirements specified above.

A "luminaire" is the complete lighting unit including the lamp, other components that produce light, and the assembly that holds the lamp.

A “restricted uplight luminaire” is a lighting fixture that (1) allows no direct light emission above a horizontal plane through the fixture’s lowest light-emitting part, except for a 0.5% maximum incidental uplight from reflection off mounting hardware and (2) emits no more than 10% of the total direct light emission at or above a vertical angle of 80 degrees.

Chapter 353 does not apply to luminaires that are:

- located on the grounds of a correctional facility;
- required by federal regulation;
- required for storm operation activities performed by the Maryland Department of Transportation;
- required to illuminate the Maryland or United States flag;
- used for sign illumination; or
- in a lighting plan where fewer than 25% of the luminaires are to be replaced.

BPW or its designee may waive the requirement that high-output luminaires be restricted uplight luminaires if the waiver is necessary for the lighting application. BPW must establish requirements for the waiver. In awarding a waiver, BPW or its designee must consider design safety, costs, and any other factors it deems appropriate.

Background: Each year, the State’s capital budget includes allocations for direct grants or grant programs to local governments and nonprofit entities for capital construction or improvement projects. These projects are typically required to include local and/or private matching funds. However, under the bill, they would be barred from using any of the State funds they receive to install or replace outdoor luminaires that do not meet the criteria in the bill, unless the projects meet any of the criteria that exempt them from the bill’s requirements. **Exhibit 1** includes a partial list of direct grants and grant programs in the fiscal 2014 capital budget, as enacted, that would most likely have been affected had this bill been in effect at the time, totaling almost $557.0 million; data on the fiscal 2015 capital budget is not available for this fiscal and policy note because the Governor had not released his proposed fiscal 2015 capital budget at the time of publication. Grants to local governments for waterway and clean water projects are not included because they typically do not involve building construction, and several grant programs for housing and neighborhood revitalization administered by the Department of Housing and Community Development are not included because State funding for those projects is usually a small component of overall funding and, therefore, would not likely reach the 50% threshold established by the bill. The Department of Legislative Services notes that many of the local projects that receive grants through the capital budget do not reach the $500,000 contract value threshold established by the bill, but some do.

Exhibit 1
State Funding for Non-State Capital Projects
Fiscal 2014

Health/Social	
Community Health Facilities Grant Program	$5,250,000
Federally Qualified Health Centers Grant Program	660,000
Private Hospital Grant Program	5,764,000
UMMS Ambulatory Care Pavilion	10,000,000
Trauma and Emergency Medicine Services Expansion Project	5,000,000
Kennedy Krieger Institute (2 grants)	2,500,000
Prince George's Hospital (2 grants)	30,000,000
Johns Hopkins Bayview	975,000
Chester River Hospital Emergency Room	900,000
Holy Cross Germantown Hospital	1,300,000
Saint Agnes Hospital	674,000
Shore Health System	540,000
Subtotal	*$63,563,000*
K-12 Education	
Public School Construction Program	$325,000,000
Qualified Zone Academy Bond Program	4,549,000
Aging Schools Program	8,109,000
Non-Public Schools Aging Schools Program	3,500,000
Maryland School for the Blind	5,000,000
Subtotal	*$346,158,000*
Postsecondary Education	
Community College Facilities Grant Program	$52,035,000
Johns Hopkins University	12,000,000
Private Higher Education Grant Program	10,500,000
Subtotal	*$74,535,000*
Housing/Community Development	
Shelter and Transitional Housing Facilities Grant Program	$1,500,000
African American Heritage Preservation Program	1,000,000
Subtotal	*$2,500,000*
Local Projects	$70,228,000
Total	**$556,984,000**

Source: Department of Legislative Services

State Fiscal Effect:

Administrative Costs

DGS is responsible for managing and monitoring State payments to nonprofit entities that receive grant money from the State through legislative initiatives approved in the annual capital budget. At any given time, DGS monitors about 500 such projects. The bill does not explicitly give DGS authority to enforce the prohibition against using State funds contained in the bill, but it is likely that such responsibility would fall on DGS given its current role.

Currently, DGS's monitoring role includes reviewing and approving requests for project funds received from grantees to ensure that they are consistent with the scope of each project as described in the annual bond bill that authorizes their funding. This bill could add another layer of review and enforcement to DGS's oversight responsibility, and DGS advises that it has no particular expertise in determining whether expenses for outdoor lighting meet the criteria in the bill. Some of the funded projects likely do not involve outdoor lighting, or they may use matching funds for outdoor lighting and, therefore, not submit funding requests for related expenses. Thus, the Department of Legislative Services believes that DGS can contract with a lighting engineer to provide as-needed guidance in reviewing requests for funding for outdoor lighting from grantees and determine their eligibility for State funds for those requests. Expenditures for contracted services will vary depending on the number of projects that submit funding requests for outdoor lighting. If the number of funding requests requiring external review reaches a critical level, it may be more cost effective for DGS to hire a lighting engineer on a contractual basis to carry out the necessary reviews and oversight of funding requests.

Procurement Costs

Chapter 353 applied only to lighting on the grounds of State buildings; this bill extends its application to State payment for roadway and parking lot lighting as well, requiring only the use of fully shielded luminaires to reduce sky glow and light trespass. However, the bill's requirements only apply to the installation of new lighting or the replacement of existing lighting, and then only to lighting plans in which at least 25% of existing lights are to be replaced. As noted above, it also exempts tunnel and underpass lighting as well as navigational lighting for aviation and nautical safety.

Based on these restrictions, the State Highway Administration does not anticipate any significant fiscal effect from the new requirements. It advises that its current standard design practices comply with the bill's requirements, so any project that involves the replacement of a significant number of roadway lights will not incur any additional costs.

The Maryland Transit Administration and Maryland Aviation Administration similarly advise that they do not anticipate any fiscal effect from the bill because their current practices already conform to its requirements. By contrast, the Maryland Transportation Authority (MDTA) anticipates that the bill's requirements to use fully shielded luminaires may increase the cost of replacement lighting by between 10% and 20%. MDTA has roughly 40 groups of highway lights for which it is responsible. It further notes that use of more efficient lights may reduce operating costs and thereby offset some or all of the additional cost of the more expensive luminaires. However, a precise estimate of the overall fiscal effect is not possible in the absence of a clear timeline for the replacement of existing lights. Most roadway lights require replacement only about every 30 years.

Small Business Effect: Nonprofit firms that are small businesses and receive State grants for capital improvement or construction projects would be barred from using those funds for outdoor lighting that does not meet the criteria in the bill.

Additional Information

Prior Introductions: HB 1295 of 2013, a similar bill, was heard by the House Health and Government Operations Committee and then withdrawn.

Cross File: None.

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

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