

Department of Legislative Services
Maryland General Assembly
2013 Session

FISCAL AND POLICY NOTE

House Bill 1134 (Delegate Waldstreicher)
Environmental Matters

Task Force to Study the Impact of the Heat Island Effect on Maryland

This bill establishes the Task Force to Study the Impact of the Heat Island Effect on Maryland to (1) study the impact of the heat island effect on localized temperatures, the health of Maryland residents, air and water pollution, and energy use; (2) discover and quantify how much of the State is covered by dark surfaces that contribute to the effect; (3) study the benefits and estimate the cost of developing and implementing cool surfacing technology; and (4) make recommendations regarding strategies for reducing the impact of the heat island effect on the State. The Maryland Department of the Environment (MDE) must provide staff for the task force, which must report its findings and recommendations to the Governor and General Assembly by December 31, 2013.

The bill takes effect June 1, 2013, and terminates May 31, 2014.

Fiscal Summary

State Effect: Any expense reimbursements for task force members are assumed to be minimal and absorbable within existing budgeted resources. It is assumed that MDE can provide basic staffing with existing budgeted resources and that assistance with the required study and report can be handled with existing resources of the University System of Maryland (USM). Revenues are not affected.

Local Effect: None.

Small Business Effect: None.

Analysis

Bill Summary: Task force members may not receive compensation but are entitled to reimbursement for expenses under the standard State travel regulations, as provided in the State budget.

Current Law: There are no State laws or regulations regarding the heat island effect.

Background: The U.S. Environmental Protection Agency (EPA) describes a “heat island” as built up areas that are hotter than nearby rural areas. According to EPA, the annual average air temperature of a city with 1 million people or more can be 1.8 to 5.4 degrees warmer than its surroundings. In the evening, the difference can be as high as 22 degrees. EPA advises that heat islands can affect communities by (1) increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, and heat-related illness and mortality and (2) affecting water quality.

In February 2012, researchers from the University of Maryland Center for Environmental Science, Harvard University, and the U.S. Geological Survey published a study on the effect that urban heat islands have on the length of growing seasons surrounding and within urban areas in the Mid-Atlantic region. Among other things, the study found that in and around urban areas, spring season growth of plant life begins sooner and the effects of winter on forests and plants begin later compared to areas distant from urban centers.

State Expenditures: It is assumed that expense reimbursements are minimal and can be absorbed by MDE with existing budgeted resources. MDE advises that, while it can provide administrative support with existing resources, it does not possess the expertise to conduct a study of the heat island effect. However, USM advises that its researchers likely have the requisite experience and knowledge to assist in the preparation of the study and report. Further, it is assumed that the non-State members of the task force may also provide assistance.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland Department of the Environment, University System of Maryland, University of Maryland Center for Environmental Science, Harvard University, U.S. Geological Survey, U.S. Environmental Protection Agency, Department of Legislative Services

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