



# Massachusetts School Building Authority

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*Executive Director*

## MEMORANDUM

To: Board of Directors, Massachusetts School Building Authority  
From: Katherine Craven, Executive Director  
Date: September 21, 2011  
Subject: MSBA Science Lab Initiative

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At the July 27, 2011 meeting of the MSBA Board of Directors (“Board”), staff presented the MSBA’s new guidelines for science labs in high school facilities. These guidelines are the result of the work of the Science Lab Task Force, which included MSBA Board members and staff, Department of Elementary and Secondary Education staff, science educators, science and technology consultants, science lab safety consultants, local architects, and construction management consultants. The task force developed a prototype design for science lab and instruction space, including requirements and best practices. Informed by the feedback of experts, this group put forth science lab prototypes that are curriculum-driven, accommodate all science disciplines through flexibility, and provide a safe learning environment for students.

The MSBA prototype design requirements for science labs include: an allotment of 60 net square feet per student, a flexible layout that is based on the district’s science department educational plan, combined laboratory and lecture rooms, peripheral or ceiling utilities, and no fixed casework in the central floor area. Recommended best practices address issues that include: table height, type of utilities, sink width and depth, window treatments, and prep room characteristics.

In order to further recognize the importance of these educational spaces, we are proposing that the MSBA utilize the remaining allocation of Qualified School Construction Bond proceeds to establish a \$60 million Science Lab Initiative. This innovative, competitive grant program will represent a unique opportunity for districts to invest in otherwise sound high school facilities by focusing capital spending on prototype designs for science labs. This program will facilitate the delivery of a 21<sup>st</sup> century science curriculum and enhance the learning environment for high school students across the Commonwealth.

Districts will use the forthcoming Statement of Interest (“SOI”) filing period to express interest in this program. The SOI system has been modified to enable districts to provide a narrative of the deficiencies of their existing science labs and how those deficiencies inhibit the delivery of the district’s educational program. After the close of the SOI filing period MSBA staff will perform an initial assessment of the Science Lab Initiative SOIs and will forward the SOIs that warrant further review to an advisory group. The advisory group will make recommendations to the Board for potential projects that, based on need, urgency, and the overall condition of the facility, merit consideration for MSBA funding through this competitive grant initiative. The Science Lab Initiative advisory group will be comprised of MSBA Board members, MSBA staff, and industry professionals. The detailed procedures for this competitive grant program are in development and will take advantage of the lessons learned from the Green Repair Program.

The Science Lab Initiative will represent a creative use of our limited resources and serve as another example by which the MSBA maximizes the benefit of funding for school projects while enhancing the education of students.