



City of Somerville, Massachusetts

Legislation Text

File #: 24-0682, Version: 1

Agenda Summary

On actions to promote students and community health and resilience in the era of climate change.

Official Text

Resolution On Actions to Promote Student and Community Health And Resilience in the Era of Climate Change

WHEREAS: In December 2022 the School Committee passed a Resolution Towards Becoming a Carbon Neutral District stating “that the Somerville School Committee commits to work in partnership with the city towards becoming a carbon neutral district”; and

WHEREAS: The City Council recognizes that reliably safe, healthful, and supportive learning environments are critical in achieving Somerville’s educational mission; and

WHEREAS: Extreme weather events linked to climate change have the potential to degrade the quality of life in the places where students and their families live, work, learn, and play; and

WHEREAS: The impacts of climate change will disproportionately impact today’s youth throughout their lifetimes compared to older generations, and as it is the duty of today’s adults to mitigate and help adapt to these impacts; and

WHEREAS: The adverse health and learning impacts of climate change cause disproportionate harm to students in low-wealth communities and in communities of color; and

WHEREAS: Modifications to school buildings and operations can decrease a school’s greenhouse gas emissions, enhance the school’s readiness to maintain a safe and healthful environment under variable conditions, and reduce the long-term costs of operations and maintenance; and

WHEREAS: The Somerville City Council, recognizing their responsibility as stewards of public funds and resources, acknowledge the findings of research conducted by the National Institute of Building Sciences, which reported that for every \$1 invested to allay the impacts of extreme weather events caused by climate change, governments can realize returns up to \$6 in cost-savings associated with reduced property damage, loss, and recovery; **NOW, THEREFORE, BE IT**

RESOLVED: That the Somerville City Council requests for the City, in coordination with Somerville Public Schools, to:

1. By July 1, 2025, convene an interdisciplinary team to conduct a comprehensive study of all Somerville municipal buildings used by Somerville Public Schools (excepting the current Winter Hill at Sycamore Street and Brown Schools) in order to

create a ten year comprehensive plan for decarbonization of building systems and improvement of building envelope performance (e.g., upgrading roofs, fixing energy leaks, ensuring air infiltration systems are of highest-quality, improving energy recovery ventilation and other means of providing filtered fresh air). This study will include estimations of current carbon emissions, energy use, and energy cost of operating school buildings. The team responsible for this work could include an architect, energy modeler, building envelope specialist, mechanical/electrical/plumbing specialist, structural specialist, and construction manager. The team will regularly seek input from Somerville Public Schools stakeholders, including principals, educators, parents/caregivers, and student representatives. In order to understand decarbonization and energy efficiency upgrades, this study will also include financial and technical requirements for:

- a) Replacing and/or updating any and all natural gas- or oil-powered HVAC systems with electric HVAC systems, including geothermal;
 - b) Adding solar panels (including determining battery storage needs) to available roof space;
 - c) Implementing envelope improvement options (e.g., adding insulation and repairing energy leaks in buildings);
 - d) Meeting standards for building efficiency (e.g., LEED, Passive House, EnerPHit, Phius CORE REVIVE, Living Building Challenge);
 - e) Life cycle cost analysis of maintaining and/or replacing the current HVAC systems compared to zero-carbon alternatives; and
 - f) Implementing measures to improve energy efficiency and reduce overall consumption (e.g., lighting retrofits & controls; HVAC controls; high-efficiency transformers, motors, fans, and drives).
2. By July 1, 2025, adopt appropriate measures and practices to assess, monitor, and maintain the healthfulness of each school's physical environment and its conduciveness to student learning, including such factors as indoor air quality and thermal comfort, and to assess and promote student resilience in the context of climate change.
 3. Starting with the 2024-2025 school year, report annually (by July 1) to the City Council any updates on measures and practices taken to assess, monitor, maintain, and improve the healthfulness of the schools' physical environment.