

#### **Memorandum**

To: Somerville School Committee
Date: June 17, 2024
Subject: Memo Update- Partnership with the City to maintain safe and healthy teaching and learning environments within school buildings and school grounds

School Committee will provide the SEU with bi-annual updates on progress on:

# Partnership with the City to maintain safe and healthy teaching and learning environments within school buildings and school grounds

The City of Somerville and Somerville Public Schools are working in partnership to maintain safe and healthy teaching and learning environments. We are deeply committed to being responsive to the building and grounds needs of all SPS schools. SPS and the City will continue to partner on the goal of eliminating non-academic barriers that negatively impact teaching and learning. Below is a non-exhaustive list of recent examples of efforts that directly impact school buildings and grounds.

### • Air quality control post-COVID:

- MERV 13 filters were added at every school. The federal Environmental Protection Agency ("EPA") has tested these filters and confirmed they capture small enough particles to address viruses and bacteria. The EPA has found that improved ventilation in classrooms leads to reduced absenteeism and improved test scores, as well as overall health and performance in both students and teachers.<sup>1</sup> Please note that all MERV-13 filters are changed quarterly.
- In addition, filter replacement protocols have been revised to shorten the service period, improving environmental conditions as well as HVAC performance.
- UV lighting has been installed in the air handling equipment wherever feasible. According to the EPA, these lights have been shown to eliminate mildew and mold, kill viruses and bacteria in the airstream, and prevent contaminant buildup on the Heating, Ventilation and Air Conditioning ("HVAC") components.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> <u>https://www.epa.gov/iaq-schools/how-does-indoor-air-quality-impact-student-health-and-academic-performance</u>

<sup>&</sup>lt;sup>2</sup> https://www.epa.gov/mold/does-ultraviolet-uv-radiation-uv-lamps-kill-mold

These efforts lead to improved airflow and system performance as well as increased energy efficiency in the HVAC systems.

 In October 2022, SPS was awarded a \$700,000 Improving Ventilation and Air Quality (IVAQ) Grant from the Massachusetts Department of Elementary and Secondary Education (DESE). The goal of this grant funding is to improve ventilation and air quality in school districts with students and communities disproportionately impacted by the COVID pandemic. SPS projects will include replacing various cooling and heating equipment at the Healey, Brown, West, and Kennedy schools. The IVAQ grant has been extended through December 2024 and DPW is working with SPS to best utilize the funding available.

### • Resiliency:

- The City recently updated its climate vulnerability assessment with new data to understand how assets will be impacted by heat and flooding. The City's Office of Sustainability and Environment hired its first-ever Resiliency Planner. This new position is tasked with leading a citywide assessment including municipal buildings.
- The position will also lead a Resiliency Task Force, joining the partnership with Somerville Public Schools to make buildings and grounds more resilient to climate stressors and their consequences.

### • Climate Forward

- This Spring, the City released Climate Forward, a community climate action plan with a roadmap for achieving interim goals, including 50% reduction in emissions in municipal and school buildings by 2030.
- At the Imagining Climate Forward 2050 event a few weeks ago, Mayor Ballantyne announced all new schools will be net-zero.
- The Administration will create interdepartmental task forces to streamline decision making and processes for decarbonization efforts. This includes SPS buildings. This summer, OSE is creating a long-term strategy for how to succeed in meeting shared goals.
- The Administration is proposing modernizing and expanding the Commission on Energy Use and Climate Change (CEUCC). For the first time, the CEUCC will include youth representation and a member of Somerville Public Schools Administration. The ordinance amendments are subject to Council approval.
- The City secured significant match from the Energy Stabilization Fund to aid an application for a Green Communities grant to create Somerville's first municipally owned, decarbonized building, which will serve as a model for future projects.
- Somerville Public Schools and OSE hosted the first-ever April Break Climate Camp, called Climate Tech Academy, at SHS for middle schoolers. The program also hired high schoolers to help run the program.
- The City was awarded technical assistance from the Massachusetts Department of Energy Resources Climate Leaders Program, available to Specialized Code

communities, to create an overview of the path to decarbonizing all municipal assets, including school buildings.

- OSE recently completed the fifth round of the popular Climate Ambassadors program, open to students aged 16 and older, with celebration at Somerville High School.
- The City is about to launch the third summer of Mayor's Climate Justice Youth Summer Jobs program.
- In April the City hosted SustainaVille Week, featuring climate change-oriented events at schools.

### • Efficient Systems and Work Order Processes

- SPS leadership continue to partner with the City to improve the current work order process for addressing and tracking facility needs.
- The Assistant Superintendent of Operations met with SPS Principals to identify a central point person for all 311 submissions. Moving forward, requests will also copy Assistant Superintendent Chad Mazza.
- Since October 2023, SPS Administration has met with Lammis J. Vargas, Chief Administrative Officer, and Steve Craig, Director of Constituent Services to create a draft dashboard of SPS related 311 work orders.
- To discuss, prioritize and plan for the SPS building needs, separately of the 311 work orders, the SPS Chief of Staff, Amara Anosike, the City Chief Administrative Officer, and the Commissioner of the Department of Public Works have been meeting monthly and most recently have included the Director of Infrastructure and Asset Management.

### • Asbestos Hazard Emergency Response Act (AHERA)

- The Asbestos Hazard Emergency Response Act (AHERA) has specific requirements for the way school districts identify, manage, document, and inspect asbestos-containing materials (ACM).
- While AHERA is a reporting requirement for school districts, within Somerville, DPW is the designated department for the AHERA management plan and compliance.
- DPW staff completed the AHERA Awareness Training on December 28, 2023.
- An electronic copy of the Asbestos Management Plan and 3-year inspection plan for each school building has been shared with SPS Administration.

### • Snow removal

- During the winter months, SPS and the City share a high priority of keeping students and families safe on their way to and from school. The Department of Public Works and other relevant departments prioritize the following during any snow event:
  - 1st priority: school entrances, drop-off areas, staircases and walkways
  - 2nd priority: school crossings

- Staff use several methods of de-icing and removal depending on the surface. These include pretreating with plant-safe ice melt or salt, and removing snow with shovels, snow blowers, brooms and squeegees.
- In addition, the City continues its pilot of Sidewalk Snow Clearing on Broadway and School Streets. On these two routes, Inspectional Services staff ticket property owners who do not remove snow from their sidewalks after an allotted amount of time. City workers then clear snow to promote pedestrian safety.
- To improve safe passage for WHCIS students, DPW works proactively with DCR, advocating that the Otis street bridge is clear of ice and snow.

## Partnership with the City to become carbon neutral

As various building systems require replacement, the City will be identifying and installing new technologies that reduce each building's carbon load, improve resiliency and energy efficiency. Active projects advancing those goals include:

- **Kennedy School** The specified modular chiller and project have several important roles to reduce energy use, including to:
  - better match the load of the building, without excessive energy consumption
  - be compatible with future heat recovery add-ons like pool heating and/or solar hot water
  - enable chillers to also provide the heating, thereby reducing reliance on the existing natural gas boiler.
- West Somerville Neighborhood School & Healey School Both schools have gone through a conceptual design process. The next steps involve design and construction. Both schools will have the same modular chiller system (as described above for the Kennedy School), new roofs with added insulation, and will be solar ready. In addition, downstream heating and cooling units will also be replaced to accept modern sustainable design strategies which will maximize efficiency.
- **Somerville High School:** The City is advancing its efforts to implement rooftop solar at the Somerville High School. This installation will generate 12% of the electricity the school uses every year, eliminating the equivalent of approximately 30 household's worth of carbon dioxide. The City and Schools look forward to planning a Flip the Switch celebration when the work is complete.
- East Somerville Community School: The City recently installed a rooftop solar array at the East Somerville Community School. A Flip the Switch celebration was held to mark the moment. This installation will generate 55% of the electricity the school uses every year, eliminating as much carbon dioxide emissions every year as burning 33,850 gallons of gasoline.
- Albert F. Argenziano School: The City been awarded \$132,000 grant from the US Department of Energy for upgrading LED lighting in Argenziano.
- **City-wide:** The City is methodically investigating the mechanical systems in school buildings, starting with retro-commissioning or "stress-testing" of Heating, Ventilation and Air Conditioning (HVAC) systems and their controls. Through that effort, the City is

identifying systems that are not functioning or are nearing the end of their useful life and developing proactive system replacement projects to replace that equipment. One primary design objective in the evaluation and selection of alternatives to address those issues is advancing the City's climate goals.

### Partnership with the City to increase parking availability for staff around school buildings particularly those without a dedicated lot and a large staff and to reduce parking demand by incentivizing alternate modes of transportation.

Mobility is a priority across both the City and SPS administrations. The City's Parking Department issues free on-street parking passes to SPS staff. The City has implemented SPS priority street parking regulations at Somerville High School as a pilot program due to the unique challenges of major construction in the neighborhood. To improve travel choices and advance Somerville's commitment to climate-friendly transportation, Mayor Ballantyne also approved the use of American Rescue Plan Act (ARPA) funds and operating budget funds to provide free universal MBTA transit passes to both SPS and City employees. These programs are in a pilot phase, which includes a robust program evaluation component to document lessons learned on how to best administer an employee transit benefit program. In addition, the City provides free Blue Bikes bikeshare passes to City and SPS staff, which includes a reduced-cost benefit for use of the system's new electric assist Blue Bike program. MBTA transit passes for both SPS and City employees will continue into Fiscal Year 2025.