

CITY OF SOMERVILLE, MASSACHUSETTS KATJANA BALLANTYNE MAYOR

Memorandum

To: Somerville School Committee

From: Neha Singh, Director of Intergovernmental Affairs

CC: Jill Lathan, Commissioner of Department of Public Works

Rich Raiche, Director of Infrastructure and Asset Management

Christine Blais, Director of the Office of Sustainability and Environment

Brad Rawson, Director of Mobility

Date: January 31, 2025

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:

The text in red indicates new information since the last memo provided in June 2024.

A. 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.

a. Air quality control post-COVID:

- i. 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. Please note that all MERV-13 filters are changed quarterly.
- ii. In addition, filter replacement protocols have been revised to shorten the service period, improving environmental conditions as well as HVAC performance.

¹ https://www.epa.gov/iaq-schools/how-does-indoor-air-quality-impact-student-health-and-academic-performance

- iii. 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 build-up on the Heating, Ventilation and Air Conditioning ("HVAC") components.² These efforts lead to improved airflow and system performance as well as increased energy efficiency in the HVAC systems.
- iv. 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 was extended through December 2024 and DPW is working with SPS to best utilize the funding available. Below is a list of projects completed or pending before DESE for IVAQ funds.

ESCS multiple door replacements in food service area:	\$7,406
Argenziano food service exterior door replacement:	\$5,045
WSNS Pneumatic control repairs:	\$7,904.87
East Somerville AHU cooling pipe insulation:	\$4,646.00
Argenziano Exhaust Fan Repair:	\$5,504.26
SHS Chiller Leak repairs:	\$16,859.65
ESCS Chiller Repairs:	\$8,550.70
SHS Accu leak repairs:	\$6,427.69
Argenziano Boiler burner fan motor:	\$5,481.34
Argenziano AHU compressor:	\$5,469.23
West Somerville EF motor:	\$2,404.13
West Somerville smoke evac fan:	\$8,945.86
Healey SF1 and SF2 5:	\$2,233.44
Healy AHU exhaust 5:	\$5,469.23
WHCS Air Separator (FY24):	\$24,470
ESCS Air Handler (FY24):	\$20,605.02
Kennedy School Compressors (FY24):	\$44,198.07
Brown school burners (FY24):	\$46,170.60
Subtotal:	\$227,791

Additionally, IVAQ funds have been allocated for qualifying capital projects at the following schools

	Subtotal:	\$140,425
East		\$68,155
Capuano		\$37,113
Argenziano		\$35,157

\$368,216

Total:

² https://www.epa.gov/mold/does-ultraviolet-uv-radiation-uv-lamps-kill-mold

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b. Resiliency

- i. The City updated its climate vulnerability assessment in 2023 with new data to understand how assets will be impacted by heat and flooding.
- ii. The City's Office of Sustainability and Environment hired its first-ever Resiliency Planner in early 2024. The position will lead a Resiliency Task Force, joining in partnership with Somerville Public Schools to make buildings and grounds more resilient to climate stressors and their consequences.
- iii. A Director of Emergency Management was hired to lead the City's emergency management planning and preparation. This role will collaborate with city departments to increase preparedness and response for city-wide emergencies, including climate related incidents.

c. Climate Forward

- i. In spring 2024, the City updated Climate Forward, a community climate action plan with a roadmap for achieving interim goals. For the first time, Climate Forward proposes a 50% reduction in emissions in municipal and school buildings by 2030.
- ii. At the Imagining Climate Forward 2050 event held in April 2024, Mayor Ballantyne announced that all new schools will be net-zero.
- iii. 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.
- iv. In spring 2024, 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 is working with SPS to determine whether Climate Tech Academy can be held again during April Vacation 2025.
- v. The City is working with SPS to pilot afterschool Climate Change Clubs at three schools Argenziano, East Somerville, and Winter Hill Schools. This Climate Change Club pilot program was developed in coordination with the SEU representatives working to develop the district-wide climate change curriculum. The afterschool program will be offered to students in grades 6-8 at Argenziano, East Somerville, and Winter Hill Schools. The clubs will run from the end of February early May 2025. The Climate Change Clubs have also hired nine SHS students to help facilitate the program and provide workforce exposure to the high school students.
- vi. 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.
- vii. OSE completed the fifth round of the popular Climate Ambassadors program, open to students aged 16 and older, with celebration at Somerville High School.
- viii. The City facilitated the third summer of Mayor's Climate Justice Youth Summer Jobs program.

ix. The City will host SustainaVille Week, the annual climate change week, from May 3-9, 2025. The City is coordinating with the Libraries, SPS, and community organizations to create an engaging and educational schedule of events.

d. Efficient Systems and Work Order Processes

- i. SPS leadership continues to partner with the City to improve the current work order process for addressing and tracking facility needs.
- ii. Since October 2023, SPS Administration has met with Lammis J. Vargas, Chief Administrative Officer, and Steve Craig, Director of Constituent Services to create and share a draft dashboard of SPS related 311 work orders. Since Summer 2024, the SPS Chief of Staff has been a participant of the meeting.
- iii. Separately of the 311 work orders, the SPS Chief of Staff, Amara Anosike, the City Chief Administrative Officer, the Director of Infrastructure and Asset Management. and the Commissioner of the Department of Public Works meet monthly to discuss, prioritize and plan for the SPS building needs.

e. Asbestos Hazard Emergency Response Act (AHERA)

- i. 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.
- ii. DPW staff completed the AHERA Awareness Training on December 28, 2023.
- iii. An electronic copy of the Asbestos Management Plan and 3-year inspection plan for each school building has been shared with SPS Administration.

f. Snow removal

- i. 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
- ii. 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.
- iii. 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.
- iv. To improve safe passage for WHCIS students, DPW works proactively with DCR, advocating that the Otis street bridge is clear of ice and snow.
- v. Snow removal on granular rubberized surface (i.e. poured-in-place) is not performed due to potential damage caused when removing snow. Manufacturers and installers of this product all recommend against snow removal or any activities other than foot traffic on these surfaces due to damage digging, abrasion, and

friction can cause to the rubber resulting in exposure of the underlayment. The poured-in-place is designed with ground rubber granules and glue as a binder. This material forms a flexible surface providing give under foot or fall protection in parks and playgrounds. If a shovel or plow were to be used on this surface, the rubber granules can be dislodged. DPW observed this damage on the bike path in past years and has since ceased snow removal on these surfaces.

B. 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:

- a. **Kennedy School** The specified modular chiller and project have several important roles to reduce energy use, including to:
 - i. better match the load of the building, without excessive energy consumption
 - ii. be compatible with future heat recovery add-ons like pool heating and/or solar hot water
 - iii. enable chillers to also provide the heating, thereby reducing reliance on the existing natural gas boiler.
- b. 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.
- c. **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.
- d. **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.
- e. **Albert F. Argenziano School:** The City has been awarded a \$132,000 grant from the US Department of Energy for upgrading LED lighting in Argenziano.
- f. **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.

C. 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.

The City continues to prioritize our schools in its transportation policy, projects and programs, particularly around traffic safety. In 2024, the City completed a major accessibility, safety and transit priority project on Washington Street around the Argenziano School, delivering the project in coordination with a major MBTA bus service frequency upgrade on Washington Street. Smaller-scale safety upgrades were completed adjacent to the Capuano, the Healey, the East Somerville, the Winter Hill at Edgerley, the Kennedy and the High School. The City continues to provide free parking passes, free transit passes and free bikeshare memberships to SPS staff. The City also continues to provide free transit passes to SPS students in grades 7-12, and to many SPS parents and guardians to improve travel choice and reduce traffic and parking demand.