



CITY OF SOMERVILLE, MASSACHUSETTS
OFFICE OF SUSTAINABILITY AND ENVIRONMENT
KATJANA BALLANTYNE
MAYOR

TO: Honorable Members of the Open Space, Environment and Energy Committee
FROM: Mayor's Office of Sustainability and Environment
DATE: September 19, 2024

RE: Item #24-1198: Steps being taken by administration to implement the Climate Forward Plan and Item #24-0042 That the Director of the Office of Sustainability and Environment provide this Council with any updated plans and timelines for a municipal composting program.

MEMORANDUM

The purpose of this memo is to respond to the thoughtful questions asked regarding Climate Forward 2024 (CF24) and the composting pilot program.

Part A: Climate Forward

- 1. (Referring to the CF24 implementation blueprints) Is it the intention of the city administration to pursue these ten areas as the primary short-term and medium-term activities that will be given priority?**

CF24 includes implementation blueprints for 10 of the 77 actions. The 10 actions were chosen by city staff with the intention of gaining more knowledge about initiatives that may be new, perceived to be more difficult, or are high priority for the community and administration.

- 2. Do you have an outline agenda or some kind of timetable?**

We are developing task forces to help steer this work and reach our shared goals. We are also developing a dashboard where the public will be able to see the status of each of the 77 actions in real time.



- 3. To what extent will the sequence of activities be dependent on the opportunities to get state grants, or on the pressure from outside advocacy groups trying to push their projects to the front of the line?**

Climate change impacts every aspect of our lives. As a result, response requires systemic change across multiple sectors and mediums. This is extremely expensive and will cost over \$1 billion to address in Somerville alone. As a public entity with limited resources working to mitigate and adapt to the impacts of climate change, funding is central to our efforts and will be a large determining factor of sequencing.

- 4. One of the structural changes that is underway appears to be a re-organization of the CEUCC – that is, the city’s Commission on Energy Use and Climate Change. There was a meeting last week of this committee at which the text of a new Ordinance was being prepared. What is the purpose of this reorganization? Will the role and scope of jurisdiction of the Commission be changed? How will the new Commission be related to this Council committee and to the key city agencies – OSE, OSPCD, ISD and Public Works/Sanitation and Public Health?**

The Ballantyne Administration announced this initiative at the Imagining Climate Forward 2050 event held at Greentown Labs in April launching the new plan and subsequent press release. The press release highlights the expansion of the commission, modernizing the language in the ordinance, and an inclusion of Somerville Public Schools to better address climate action. Through public meetings, the Commission and members of the public regularly discuss potential amendments. They have provided thoughtful comments which are being considered in an amended ordinance. This is being prepared by OSE for internal review before being introduced to City Council. The intention of the CEUCC amendments are to maintain the current structure and relationship between these entities.

- 5. (Regarding Fossil Fuel Free) Did we succeed in getting state designation as one of the 10 Fossil Free cities? If so, how will we implement the responsibilities?**

Somerville submitted a complete application and has participated in interviews with the Department of Energy Resources and submitted memos by request of the department. We are awaiting their decision.

- 6. Will the administration be working on a new set of zoning and building regulations that will be coming to the Council? Is there an expected schedule for this work?**

There are several zoning initiatives related to climate action.



- OSE in partnership with the Office of Strategic Planning and Community Development is proposing updates to the existing Zoning Ordinance to align with the Specialized Energy Code.
- OSE has undertaken initial research of the Zoning Ordinance to develop resilient and sustainable development requirements to align with the Specialized Energy Code. Now that the state code has caught up to Somerville, this initiative looks to determine how Somerville can lead once again.
- The City Council generously approved funding for OSE to develop recommendations for zoning incentives for fossil fuel free development and expanding accessibility to fuel switching, electrification, and renewable energy. OSE has successfully leveraged this funding to apply for grants to supplement the work.

7. (Regarding the Climate Leaders Technical Assistance Grant) Has the city put into place the cooperative agreement with the state? Is planning work underway? Is the state assistance proving helpful? What will the product of this activity be, and should the Council expect to receive a program proposal or budget requests?

This project is underway. The City has provided requested information and we are awaiting the draft roadmap for review. The roadmap will get Somerville one step closer to being eligible for the Climate Leaders Program, which is like the Green Communities program. Designation will allow Somerville to access bi-annual grant opportunities for higher sums of money to fund bigger, more comprehensive municipal decarbonization projects.

Simultaneously, the City has many ongoing efforts to decarbonize city and schools. For the first time in Somerville’s history, sustainability is a filter for the capital improvement planning process and the Office of Sustainability and Environment is involved in decisionmaking. Additionally, OSE staff, along with interdepartmental partners, are leading ongoing school renewable energy and energy efficiency projects and seeking new funding sources to expand this work, including implementing the vehicle purchase policy.

The Council should expect to receive future requests to utilize and replenish the Energy Stabilization Fund and accept grants.

8. (Regarding the rental building and energy disclosure ordinance) What is the status of work on this initiative? Will you be submitting a draft ordinance or set of regulations to the City Council in the near future? Are there any other actions required to move this planning and regulatory process along?



OSE received grant funding in 2023 to fund focus groups to inform a Rental Registry and Energy Disclosure Ordinance. Mayor Ballantyne announced at the Imagining Somerville Climate Forward event in April 2024 and in the subsequent [press release](#) that an ordinance would be submitted to City Council by the end of the year. Submission of the ordinance was also included as part of OSE's FY25 goals presented to City Council during budget season. The focus groups are currently underway, and we are on track to meet this goal.

Part B: Composting

1. **Composting is not highlighted as a main priority in the Climate Forward Plan but recommended as a strategy. Can you explain where this falls among other priorities? What is the status of the project?**

Piloting and eventually bringing a citywide composting program to Somerville is a top priority of the Ballantyne Administration. CF24 actions that received implementation blueprints are not necessarily a higher priority in the sense of timing nor importance than the other actions. They were chosen due to their familiarity with staff, complexity, and priority, but not solely priority. OSE and DPW in collaboration with community organizations have conducted research and developed a program work plan, of which key factors in timing are contingent on whether the additional funding is secured. We anticipate learning the status of the grant application by the end of the calendar year. In the meantime, we be working on other aspects of the program so we can move quickly once the application status is determined. It is worth noting that OSE will be coping with personnel loses of two program managers, one who was program managing this project. The department is working to reassign critical work to existing staff and post the position as soon as possible.

2. **What is the structure of the composting program?**

In designing the program, staff are creating two tracks for program design and roll out, dependent on whether the City is awarded the USDA grant. If the City is awarded the USDA grant, the program will provide free weekly curbside composting services to 2,500 low-income households residing in four designated neighborhoods identified as Environmental Justice communities in Winter Hill, East Somerville, Davis Square and Union Square, or approximately 1,080 housing units if it is not awarded. Enrollment for the first 500 housing units is expected to begin in April 2025 and will expand by up to 325 households each quarter with the USDA grant until reaching full capacity. The purpose of scaling up enrollment is to ensure quality control.



If awarded the grant, the City intends to partner with two community groups to administer the program: Mothers Out Front and the Somerville Community Growing Center. Mothers Out Front would distribute information about the program at two to three scheduled outreach events per calendar year to encourage enrollment in the program. They would distribute flyers, postcards, and other materials from the EPA's Food: Too Good to Waste Implementation Guide and Toolkit to residents in the four target neighborhoods. The Somerville Community Growing Center would implement five compost distribution events for community gardens and city residents, prioritizing community gardens in our four target neighborhoods. Two of these events will provide compost exclusively to community members, while the remaining three will provide compost to local community gardens. The Growing Center would also coordinate and participate in a composting pumpkin smash event.

3. Please explain the budget breakdown

Following the Mayor's presentation of the FY25 budget to City Council including \$350,000 in free cash for a pilot community composting program, OSE testified to Council that it is the office's intention to leverage the funding to seek additional state and federal funds to make the pilot program go further. In September 2024, OSE applied for a \$400,000 grant requiring a 20% match through the USDA's Composting and Food Waste Reduction Pilot Project. If awarded, a portion of the appropriated funds will be dedicated to the match. The project team has also identified additional sources of funding we will be considering applying for in the future.

Budget outline without the grant:

- Scope: 6-month weekly curbside pick up in neighborhood(s) with highest rates of rodent complaints
- Estimated total households enrolled: 1,080
- Total Budget: \$350,000 (no expiration date)
 - Marketing: \$5,000
 - Materials: \$29,160
 - Vendor: \$311,040

Budget outline with the grant:

- Scope: Two-year, income-eligible pilot curbside composting program targeting areas with high rates of rodent complaints within Environmental Justice neighborhoods.
- Budget submitted to USDA: \$500,000 (expires approx. January 2027)
 - Estimated total households enrolled: 2,500



- Growing Center Partnership: \$7,750
- Marketing: \$29,250
- Materials: \$67,500
- Pick up and delivery vendor(s): \$395,500
- Total Budget: \$750,000
 - USDA requested a maximum match of \$100,000. The additional \$250,000 could be dedicated to expanding the number of participating households in the target Environmental Justice neighborhoods, increasing the number of participating households by about 790, for a new total of 3,290 households.

4. Can you explain the decision for means testing? How does this relate to rodent control?

To have the biggest impact on the community with the resources available, Union Square, Davis Square, Winter Hill, and East Somerville were selected due to their overlap with Environmental Justice prioritization zones and the frequency of rodent complaints. These neighborhoods have the highest number of rodent complaints made to the city annually. By diverting food sources from easily accessible trash cans to heavy-duty curbside composting bins with locking lids, we anticipate rodent complaints and interactions will decrease.

As part of the USDA grant application, Somerville incorporated an income eligibility component for participating households. This decision was made considering several factors, including impact on rodent control, cost-effectiveness, and grant priorities. While we recognize the need and desire to create a city-wide program, it is a best practice to run an initial pilot program to ensure smooth program rollout and scale the program effectively. Rats act as a vector for diseases such as E. coli, salmonella, hantavirus, and leptospirosis. In providing services to most vulnerable community members, we hope to address and improve overall community health. Investing in Environmental Justice communities is a priority of the Ballantyne Administration and this grant.

Additionally, OSE and DPW spoke with Mother Out Front and longtime advocates for composting about piloting the program for income eligible households. No concern or objections were raised. If the USDA grant is not awarded, the program design may be reevaluated.

5. How many companies (and who) do this. How many people are participating? Do we know how much tonnage is collected annually?

- There are currently four companies that provide services throughout Somerville to residents who pay on a monthly basis. A breakdown of the data available can be found below:



Vendor Name	Number of Households Served in Somerville	Commercial accounts	Annual Weight (Tons, T or Pounds, lbs.)
Bootstrap Compost	416		120.07 T
Black Earth Compost	231	17	308 T
City Compost	19		2.85 T
Garbage to Garden	2479	~12	670 T
Total	3145		1,100.92 T
			2,201,804 lbs.

6. What metrics will be using for program evaluation to help us better understand the needs of program participants and scale the program?

The USDA grant requires certain deliverables and outcomes will be evaluated against USDA indicators, detailed in the table below. If we do not receive the grant, staff would be assessing these metrics along with board of health data to understand the impact on rodent complaints.

Evaluation metric	Indicator
Number of households reached	Number of individuals educated on food waste reduction (6.2), Number of views/impressions for education materials (online) (6.8), and Number of education materials distributed (6.10)
Engagement rate in targeted census tracts	Number of historically underserved individuals benefitting from food waste reduction initiatives (1.5.1), Number of new individuals participating in composting as a household practice (4.7), and Number of community surveys completed (3.6)
Number of new households enrolled	Number of residential participants in municipal collection of food scraps (curbside) (4.16), Number of historically underserved individuals benefitting from food waste reduction initiatives (1.5.1),



	Number of new individuals that have adopted composting as a household practice (4.7)
Efficacy and reliability of composting service	Amount of food waste diverted from landfills (lbs.) (4.1) Amount of compost produced (lbs.) (4.9)
Participant satisfaction	2 satisfaction surveys per year delivered to participants
Completeness and accuracy of data collected	Amount of food waste diverted from landfills (4.1) Number of waste surveys completed (3.5) Estimated total GHG emissions reduced from project activities (metric tons of CO2e) (5.8)
Distribution reach and impact	Amount of compost distributed (lbs.) (4.18) Number of producers receiving compost (4.11)

7. How do we anticipate this program reducing food waste?

The program is estimated to reduce food waste by providing accessible, equitable curbside composting services for participating households between 20% and 25% and divert up to 310 tons of food waste annually.

8. What is the anticipated timeline for the program?

The estimated timeline for the program spans from April 2025 to January 2027 regardless of whether the USDA grant is received. Enrollment is anticipated to begin in April 2025, with an initial 500 slots available, expanding each quarter until reaching full capacity. Program enrollment will close in December 2026. Weekly curbside collection services will commence in June 2025, and data collection will start shortly thereafter to monitor the program's effectiveness.

9. Do we have an idea of how this may help the City save money over time?

If the City’s composting program continues and expands, it may result in cost savings in Somerville’s trash tipping fee. This is because significant amounts of heavy food waste could be diverted from the municipal solid waste (MSW) stream. As of 2022, the MSW tip fee was \$72.64



per ton while recycling tip fees were approximately \$47 per ton. It is anticipated that trash tipping fees will continue to rise due to increases in fuel, maintenance, and labor costs. Assuming composting can divert 30% of the average waste incinerated, the same study concludes that a saving of \$60 can be achieved per one ton of composted waste.¹ Assuming a composting cost of \$280 per ton, another study argues that composting can cut waste hauling fees by an average \$700 per ton.²

10. What research has the City done to inform the program?

OSE and DPW met with representatives of 10 nearby communities that offer an organics collection program (a.k.a., composting). These communities include Arlington, Beverly, Boston, Brookline, Cambridge, Hamilton, Medford, Newton, Salem, and Watertown. The purpose of these meetings was to learn more about each community's approach, successes and challenges, and how communities gained support of city leadership and residents to offer an organics collection program. In addition to the conversations with local municipalities, OSE and DPW also met with local community groups, including Mothers Out Front, to discuss the range of options and determine what would be the most successful for the city. Market research was also conducted by staff who reached out to local businesses to inform program budget.

¹ Platt B, Lombardi E, Cipler D. *Stop trashing the climate*. Full Report; 2008. Institute for Local Self-Reliance.

² Beattie A. *Cost-benefit analysis of food-waste composting program at UMM*, Scholarly Horizons: University of Minnesota, Morris Undergraduate Journal, 2014

