LoCarb'N Local

A Sustainable Somerville Meal Guide

Prepared by: Kenzie Knox, Jen Sigler, & Madison Trepanier
6th Cohort of Somerville Climate Ambassadors
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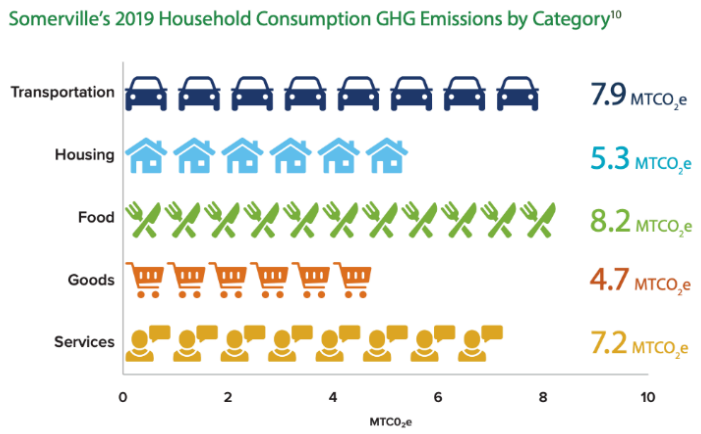
Image by Ali Trepanier

Introduction

The inspiration for “LoCarb’N Local: A Sustainable Somerville Meal Guide” came from Somerville’s Climate Forward Plan. Climate Forward is Somerville’s vision for creating a strong, healthy community in the face of climate change while simultaneously reducing climate pollution, also referred to as greenhouse gas (GHG) emissions, and our dependence on fossil fuels.[1]

The Climate Forward plan is organized into 5 distinct sections: Buildings & Energy, Community Health & Resiliency, Natural Resources & Waste, Transportation & Mobility, and Leadership. This project draws on the Natural Resources & Waste section as this guide hopes to provide its readers with tips to minimize the carbon emissions associated with shopping for, preparing, and disposing of food.

Why focus on food and food waste? Well, from a global standpoint, the UN reports that food loss and waste account for 8-10% of annual global greenhouse gas emissions – nearly five times the total emissions from the aviation sector – and contribute to substantial biodiversity loss, using up almost a third of the world’s agricultural land.[2] To put that in a national context, the EPA estimated that each year, U.S. food loss and waste embodies 170 million metric tons of carbon dioxide equivalent (million MTCO2e) GHG emissions (excluding landfill emissions) – equal to the annual CO2 emissions of 42 coal-fired power plants.[3]



Finally, to apply local context, in 2023, Somerville completed its first consumption-based inventory, which found that the average Somerville household produces 33 MTCO2e[4] every year, most of which comes from food (25%), transportation (24%), and services (21%).[5]

[1] Climate Forward, City of Somerville, 2024
[2] Food loss and waste account for 8-10% of annual global greenhouse gas emissions; cost USD 1 trillion annually, United Nations, 2024
[3] Food Waste and its Links to Greenhouse Gases and Climate Change, USDA, 2022
[4] GHG emissions are measured in terms of metric tons of carbon dioxide equivalent (MTCO2e). CO2e or carbon dioxide equivalent is a metric used to bundle and compare different types of GHG emissions (e.g., methane, nitrous oxide) by converting them to an equivalent amount of carbon dioxide, the most common GHG.
[5] Climate Forward. Page 23, City of Somerville, 2024

To combat the carbon emissions created by food waste, the City of Somerville has set goals to divert household waste from landfill or incineration. Somerville's Zero Waste Plan aims to steadily increase the amount of waste diverted to recycling and composting.[6] This high level vision is supported by the following strategic actions[7]:

		ALIGNMENT
GOAL NRW-2	Somerville practices smart resource use by minimizing consumption and maximizing efficient reuse of materials.	
STRATEGY NRW-2.1	Encourage sustainable consumption practices across Somerville. CO-BENEFITS: G L P Q S	Zero Waste Plan, SomerVision 2040
ACTION NRW-2.1.A	Require clear signage around plant-based options in restaurants and grocery stores.	
ACTION NRW-2.1.B	Develop purchasing policy requiring vendors to offer low-carbon alternatives.	
ACTION NRW-2.1.C	Pilot program to offer plant-based options at all meals served in Somerville Public Schools.	
ACTION NRW-2.1.D	Expand the City's Buy Recycled Policy to require low-carbon purchasing requirements for all products by City departments and Public Schools.	
STRATEGY NRW-2.2	Encourage sustainable reuse practices across Somerville. CO-BENEFITS: G L P Q S ER I	Zero Waste Plan, SomerVision 2040
ACTION NRW-2.2.A	Develop a City-sponsored food waste redirection program, considering services such as composting, organic waste disposal, food donation, and recovery.	
ACTION NRW-2.2.B	Research and develop a deconstruction ordinance.	
ACTION NRW-2.2.C	Implement policy recommendations from the Consumption-based Emissions Inventory (2023) and Zero Waste Plan (2023).	

METRIC	Baseline Data	Historic Data	2030 Target	2040 Target	2050 Target
Average household waste disposal rate (pounds/household/year)	1,264 (2022)[47]	1,606 (2020)[48]	803	482	161
Share of waste diverted from incineration/ landfill	28% (2022)[49]	29% (2020)[50]	50%	70%	90%

This guide highlights ways the everyday Somerville resident can take steps to produce less carbon emissions to support the City's larger climate goals. Some specific objectives of this guide are to:

- Promote sustainable shopping habits i.e. package free
- Highlight the benefits of purchasing local and seasonal food
- Educate on composting practices

Ultimately we want this guide to be an easy and accessible way to bring a sustainable mindset to preparing a low carbon meal while helping reinforce the City's climate goals.

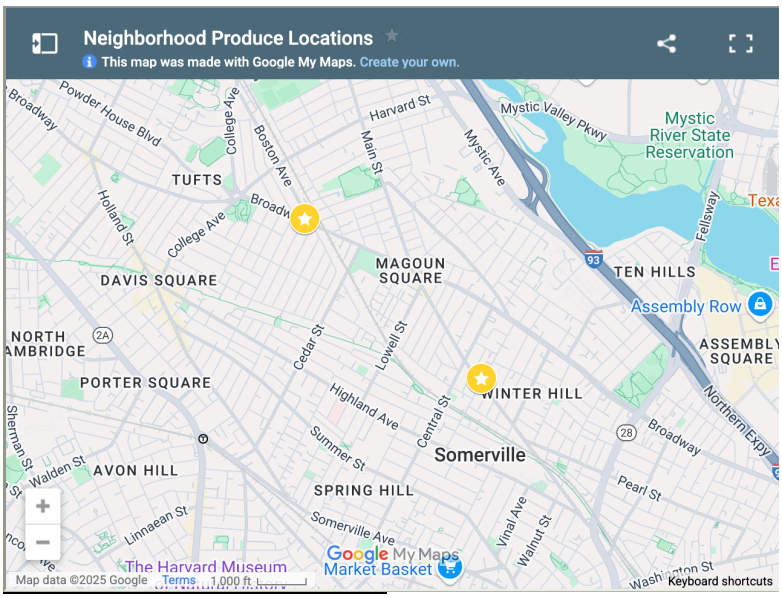
[6] Climate Forward, Page 43, City of Somerville, 2024
[7] Climate Forward, Page 47, City of Somerville, 2024

Shopping Package Free

Plastic packaging is everywhere. This is especially true for products at the grocery store. Cereal boxes with plastic bags, plastic seals on jars, those pesky plastic bags for produce, and multilayered pouches and wrappers for chips, nuts, coffee, candy, and more. Some of this packaging can be recycled but the majority will end up in a landfill. The best thing we all can do is to eliminate as much packaging as possible on the front end. This may feel like a daunting task, but follow along as we go shopping for a locally sourced, sustainable meal right here in Somerville.

Shopping package-free in Somerville is easy at Neighborhood Produce!

Neighborhood Produce is a local grocery store whose mission “is to provide fresh, affordable food to neighborhoods that need it, and our items are priced to compete with other mid-level grocery stores.”[8]



The shop has two locations:

Medford Street located at 415 Medford St., Somerville, MA 02145.

Ball Square located at 691 Broadway, Somerville, MA 02145

[8] Neighborhood Produce

Neighborhood Produce (NP) makes it easy to shop package free as they mostly offer fresh, locally sourced produce with limited packaging. The Ball Square location offers many options for package free dry goods, such as spices, oils, grains, pasta, as well as household items such as dish soap and shampoo.

Preparing for a trip to Neighborhood Produce

- **Gather reusable bags** - if you don't have any, NP offers paper bags or you can bring your groceries home in a cardboard box!
- **Prepare some jars or containers** - NP allows customers to bring their containers to fill up. We had glass jars to bring, but if you don't have any, NP often has some extras lying around. Fun Fact: Teddies Peanut Butter jars are some of the best to use.
- **Tare your containers** - if you bring containers to NP, you must tare them before filling them up. Hop in the line for the register and someone will help you out.
- **Fill them up!** - pick your favorite goods and fill those jars up! NP provides masking tape and a writing utensil to label your items. Helpful tip: remember to include the sku number #.

Our list included the following:

- Spinach
- Beets
- Asparagus
- Scallions
- Mushrooms
- Lemon
- Oil
- Rhubarb
- Strawberries
- Granola

All of which we were able to purchase at NP!

Meal Plan

Our group chose a meal that highlights seasonal vegetables and ingredients we knew we could source locally.

Main Course: Warm Beet, Asparagus & Mushroom Salad with Garlic Scape Yogurt Dressing

Ingredients:

- 2 medium beets, roasted and sliced
- 1 bunch asparagus, trimmed and roasted or sautéed
- 1 cup mushrooms, sautéed
- 1 handful spinach
- 1 handful lettuce
- ½ cup feta cheese
- 1–2 garlic scapes, finely minced (alt chives)
- ½ cup Greek yogurt
- 1 tbsp lemon juice or vinegar
- Olive oil, salt, pepper to taste

Instructions:

- Roast the beets: Wrap them in foil and bake at 400°F for 45–60 minutes. Once cooled, peel and slice.
- Prepare the asparagus and mushrooms: Toss them in olive oil, salt, and pepper. Roast or sauté until tender.
- Make the dressing: Combine Greek yogurt with minced garlic scapes, lemon juice, olive oil, salt, and pepper.
- Assemble the salad: Toss spinach and lettuce with the roasted vegetables. Drizzle with the garlic scape yogurt dressing.

Dessert: Roasted Rhubarb & Strawberry Yogurt Parfait

Ingredients:

- 1 cup strawberries, hulled and sliced
- 1 cup rhubarb, chopped
- 1–2 tbsp honey or maple syrup
- ½ tsp vanilla extract (optional)
- ¾ cup Greek yogurt
- Granola or crushed nuts for topping

Instructions:

- Roast the fruit: Preheat oven to 350°F. Toss strawberries and rhubarb with honey and vanilla extract. Spread on a baking sheet and roast for 20–25 minutes until tender.
- Assemble the parfaits: Layer Greek yogurt with the roasted fruit mixture in serving glasses. Top with granola or crushed nuts.

Rhubarb Garnish

- Strips of rhubarb
- Sugar

Instructions

- Coat strips in sugar
- Cook strips at 200 degrees for 20 minutes
- Coat cooked strips in sugar

Cooking

Our group was able to purchase all of the necessary ingredients and turn them into a wonderful low carbon meal.

Sustainable tips and tricks in the kitchen:

- When a recipe calls for tinfoil like ours did, you can often cook in a pan with a lid for the same effect.
- Instead of plastic wrap or tinfoil for storage, use something like beeswax wrap.
- Swap the sponge for a dish brush, they last much longer!
- Say no to paper towels and use reusable cloths instead.
- Recycle what you can from the packaging that you can't avoid. You can use Somerville's Waste Wizard tool to help know what goes where.

Composting

Not only did our group prioritize a locally sourced meal, but we also made sure to divert our food waste from a landfill, by composting our food scraps.

What is composting?

Composting is a process of transforming food scraps, leaves, and other organic matter, into a dark, crumbly, nutrient-packed substance (“compost”) that can enrich soil and improve the health of plants.

Farmers call compost “black gold”! The EPA defines it as “a biologically-stable soil amendment produced by the aerobic decomposition of organic materials.” Compost contains three primary nutrients needed by plants: nitrogen, phosphorus, and potassium. It also includes traces of other essential elements like calcium, magnesium, iron, and zinc.

Illustration courtesy Institute for Local Self Reliance (www.ilsr.org), a national nonprofit organization working to strengthen local economies, and redirect waste into local recycling, composting, and reuse industries. Reprinted with permission.

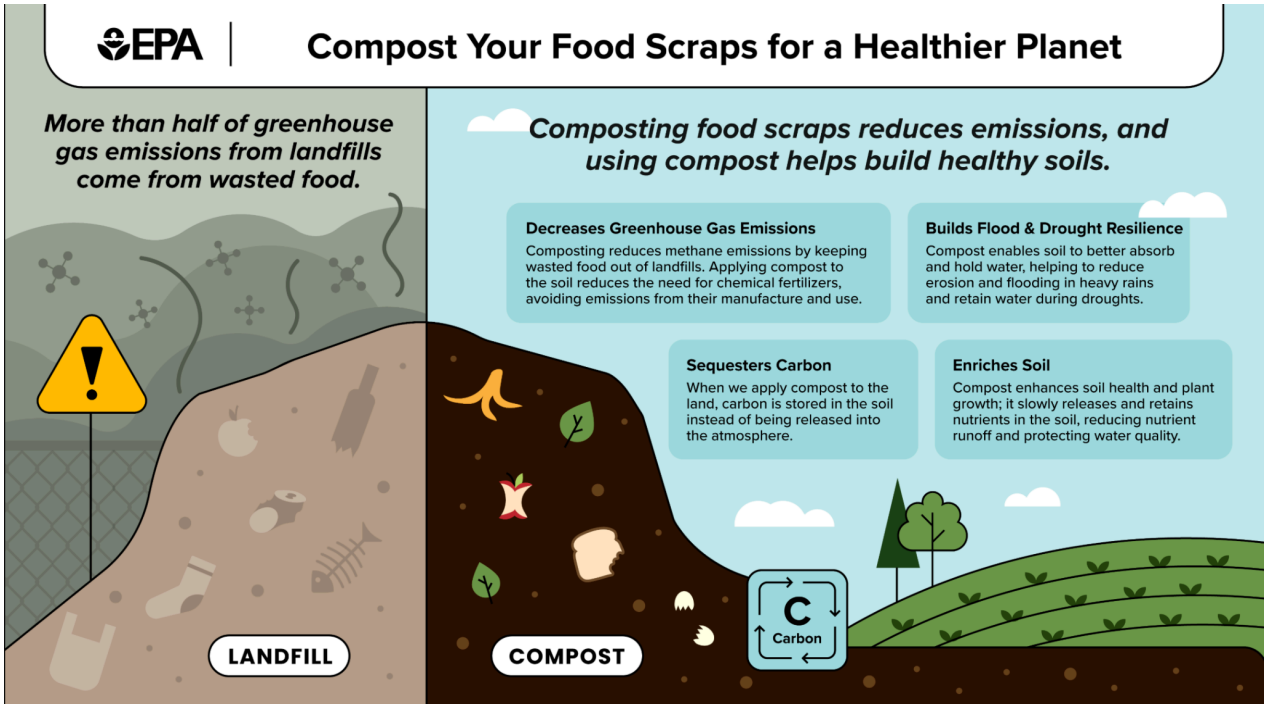
All food and plants eventually rot on their own, but composting accelerates their decomposition by providing optimal conditions. The creation of compost requires oxygen, moisture, temperature control, and the proper ratio of nitrogen-rich “green” (food scraps) to carbon-rich “brown” (leaves, paper, etc.) material. During the composting process, bacteria, fungi, and other organisms feed on these materials. They use the carbon and nitrogen to grow and reproduce, water to digest, and oxygen to breathe.

Photo of “greens” and “browns” from a composting workshop at the Somerville Community Growing Center on May 3, 2025.

The process is considered complete when the substance becomes biologically stable. Then it can be put to good use, as fertilizer. But returning those nutrients and carbon to the soil does more than help plants grow—it also diverts organic waste from landfills (where they generate methane), helps build resilience in our local ecosystems, and supports our communities and local economies.

Why Compost?

In the US, 30 percent of all food is wasted, and only about 6 percent of food waste gets composted. The rest gets buried under other trash in landfills. Without oxygen, organic waste decomposes anaerobically and releases harmful biogas into the atmosphere. According to the EPA, landfills are the third-largest source of human-generated methane emissions in the United States.



A few reasons to compost:

- Helps counteract food waste
- Conserves water
- Reduces methane emissions from landfills
- Creates valuable fertilizer
- Returns organic nutrients to local soil
- Helps soil retain moisture
- Helps prevent soil erosion
- Curbs reliance on chemical fertilizers and pesticides
- Sequesters carbon in the soil
- Creates green jobs
- Engages and empowers community
- Contributes to a resilient local food system

Composting in Somerville

In recent years, the City of Somerville has taken steps toward establishing a residential composting program. The Climate Forward Dashboard outlines “14 Natural Resources and Waste actions,” including NRW 2.2a: “Develop a city-sponsored food waste redirection program, considering services such as composting, organic waste disposal, food donation, and recovery.”

While Somerville does offer yard waste pickup on selected days, and yard waste dropoff at the DPW, the city does not yet provide composting pick-up or drop-off services.

But the city and the community are working together to change that!

In the 2023 “Zero Waste Program Plan,” the authors, consultants from Tetra Tech, urged the city to “develop city-wide opportunities for organics diversion” as soon as possible, and to make it a high priority: “Lack of these services in Somerville is holding the City back from being a leader in forward thinking initiatives.” They noted that “successful implementation of this Action can result in as much as 40% reduction of the 2023 waste tonnage values over time, or reduction of approximately 6,650 tons of waste.” (p. 42)

On May 7, 2025, Mayor Katjana Ballantyne announced the winning projects for Somerville’s Second Cycle of Participatory Budgeting. In the fall of 2024, the community submitted over 700 ideas for how to spend $1 million. Early this year, volunteers selected 20 of these proposals for public vote, and residents then voted for their favorite projects. Six were selected, including the Public Community Composting project, which proposed to “install, contract, and maintain community composting drop-off bins at high-impact, public locations.” The team emphasized that “free, accessible, and rodent safe composting solutions are key for Somerville’s food system, rodent reduction, and climate resiliency.” With a budget of $125,000, the project also includes plans to collaborate with community food rescue applications and community gardens.

Left: Several composting drop-off bins like this one will be installed in Somerville as part of the Public Community Composting Project. Right: In Boston, Project Oscar maintains roughly 20 bins for community composting. This is one of two drop-off locations in Jamaica Plain.

In addition, the Somerville City Council allocated $350,000 in 2024 for a composting home pick-up pilot program. The program is now in the contracting phase, and is scheduled to run until 2027. Stay tuned for more info on how it will work, and which neighborhoods will take part.

With these two exciting initiatives soon to get off the ground, more and more Somerville residents will have access to convenient, free composting resources. But there's no need to wait; with a little extra effort, collaboration, and investment, we can all get started now!

Here are a few options:

Curbside Pick Up

If you want to help create compost, but you're not ready to manage the whole process at home, consider using a curbside pickup service. It's easy. Rather than throwing your food scraps in the trash or down the disposal, you collect them in a bucket. Every week or two, the composting service stops by to empty your bucket, and they do the rest at their facilities. If you have a garden, you can also arrange for them to bring you finished compost to use as fertilizer. If your household is small, you might consider sharing a bucket with a neighbor.

Garbage to Garden provides curbside pickup in Massachusetts and Maine. They'll provide a bucket, and swing by weekly to empty it. They'll also reline it with a fresh, compostable liner. For weekly residential service, Garbage to Garden charges $19 per month, or $228 per year.

Bootstrap Compost serves homes, offices, schools, restaurants, and more in Massachusetts and Rhode Island. Residential service costs $11.50 per week, or $16 per pickup every two weeks. They'll take your bin and leave you with a clean one.

City Compost offers pickup and finished compost delivery throughout New England. For service in Somerville, they charge $10 per week, $11 per pickup every two weeks, or $12 per pickup monthly.

Each of the companies provides detail on their website what they do or do not accept.

Backyard Composting

If you want to try compost at home and have access to outdoor space, you can create a compost pile directly on the ground (a 3 x 3-foot plot is recommended) or build a compost bin. You can also purchase a tumbler, which allows you to turn and aerate the compost. If you don't have outdoor space, read more about indoor vermicomposting below.

What to add.

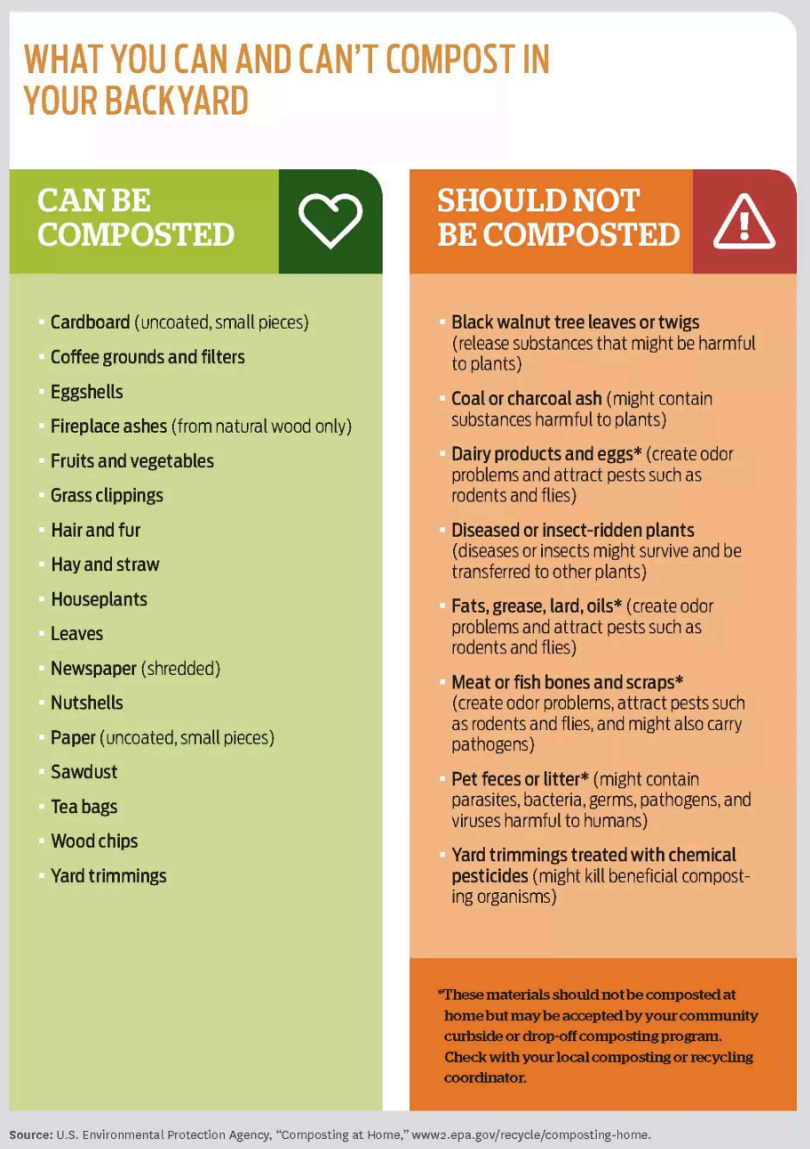
The four key ingredients for composting are *air, water, greens* (nitrogen), and *browns* (carbon).

To create a proper, odor-free outdoor compost pile, aim for a ratio of 2-3 parts “browns” to 1 part “greens.” The browns include materials like dry leaves, twigs, shredded paper, brown bags, or cardboard. Avoid paper products with coatings, tape, or glue. It’s best to layer greens and browns, starting with a bed of browns to absorb extra moisture.

Do not add meat, fish, dairy products, seeds, or greasy substances to home compost piles—they’ll attract animals and insects and leave pathogens in the final product. They’ll also cause your compost to smell. However, many commercial composting services do accept these materials.

Temperature: As the materials begin to decompose, the temperature of the pile will rise up to to 140° F. High temperatures help reduce the presence of pathogens and weed seeds.

Make sure to aerate the pile regularly, by turning or mixing the materials.This speeds up the decomposition process.



For a detailed guide to composting basics, check out the ILSR’s webinar, “Composting at Home: An Introduction to the Basics.”

The EPA’s list (to the left) specifies what you should or should not compost in your backyard. Their website also outlines the process.

Resources

We mentioned a lot throughout this guide. Here are some resources to help you plan your next low carbon, locally sourced meal!

Shopping

- Neighborhood Produce
- Dave's Fresh Pasta
- Davis Square Farmers Market
- The Somerville Mobile Farmers Market
- Union Square Farmers Market
- Highland Butcher Shop
- New Deal Fish Market,
- The Mushroom Shop
- Sophia's Greek Pantry
- CSAs
    - Red Fire Farm
    - Crimson and Clover
    - Farmer Daves
    - Brookford Farm
    - Three Rivers Farm Alliance
    - Siena Farms
    - Hannan AGro Farms
    - Farmers to You
    - Ferment Bakery (bread CSA)
    - Freedom Food
    - Stone Soup Farm coop (Cambridge pickup)

Cooking

- FLOOP-Sustainable Recipes
- ZERO Waste Kitchen
- Seasonal Food Guide
- MA Grown Produce Availability Calendar

Composting

- Bootstrap Compost
- City Compost
- Garbage to Garden

Learning

- City of Somerville's Climate Forward Plan
- The EPA Guide to Composting at Home
- ILSR Webinar - Composting at Home: An Intro to the Basics
- Neighborhood Soil Rebuilders - Composting Training Program
- The Somerville Community Growing Center
- Groundwork Somerville

Acknowledgements

We would like to thank the City of Somerville for sponsoring the Climate Ambassador program. We have all learned so much from the program and from each other. We are very thankful the City of Somerville prioritizes community and climate action at the grassroots level. We especially want to thank our program staff for guiding and educating us over the past 6 months. Thank you Naomi, Emily, Ona, and Abby for going above and beyond each week and bringing us together around the important topics of climate change, sustainability, and collective action.