

City of Somerville

Community

FOOD System

Assessment

July 2018

To improve equitable food access and opportunties for all who live, work, play, and raise families in Somerville















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READER'S GUIDE

This report is intended as a working document for use by all who want to learn more about Somerville's local food system and how to get involved. Most of us take part in the food system in multiple ways: we eat food, talk about food, worry about food, work with food, grow food, or throw away excess food. Below are some questions, sorted by role(s) in the food system, to help prompt additional thinking about what to do with the information in this report.

Eaters/Consumers

- What is your level of food security—do you have access to sufficient, healthy food?
- What factors in your life affect your access to food? What about your neighbors' access?
- If you or someone you knew was running out of food before they had money to buy more, would you know where to go or who to call for assistance? If you don't know, please see Appendix 1.
- What else do you want to learn about Somerville's food system?
- What are some ideas you have for making it easier for you and people you know to get food, particularly healthy food?
- How do you, as a community member, fit into the food system?

Service Providers

- How does the food system intersect with your work with clients, patients, or students?
- How can you use the data in this report to inform or improve your organization and service provision?
- What are some innovative ways to improve food security and strengthen the local food system you've used or seen that should be shared?

Workers in the Food Sector

- Does the information in this report reflect your working experience?
- Can you think of other information you would like to know more about, or should be included in future research and reporting?
- What is your story? Would you like to share it?

Planners and Policy Makers

- How can you incorporate findings from this report into your strategies to ensure the process of improving neighborhoods includes preservation and/ or enhancement of equitable healthy food access?
- What policies have you worked on which may impact the food system indirectly?
- Where do you see opportunities for policies to improve the food system or address other determinants of food access, security, and health for your constituents?





ere in Somerville we are systems thinkers, so it seems right to apply this model to the idea of food, so central to all our lives. A food system includes everything related to the food we eat. There are many players in a food system, including each of us at least getting and eating food. Somervillens participate on multiple levels—whether by growing their own food, eating at a community meal, shopping at a grocery store, owning a neighborhood market, or serving food at one of our many local eateries.

We did this assessment to give us a more granular idea of what the food landscape is today and to understand how people interact with it, particularly as it relates to our food assets, food security, and food economy. In particular, with this report we also seek to identify gaps in the system that need to be addressed as we strive to ensure all Somerville residents have access to healthy and sufficient food. On behalf of the City of Somerville, the Somerville Food Security Coalition coordinated by Cambridge Health Alliance and the Somerville Homeless Coalition, and the numerous individuals and community organizations who served on our workgroup, we present the Somerville Community Food System Assessment.

This report highlights that there is much more to the food system than just food. Income, type of transit, housing, medical needs, and many other aspects of our lives (known as the Social Determinants of Health) influence our access to healthy and sufficient food. While it is hard to get an accurate numerical representation of food insecurity in our city, we do know that if someone is struggling with any of the above, they are more likely to be food insecure. As cost of living increases and wages remain stagnant, we will see more individuals and families facing food access challenges.

Economic opportunity is a particularly key aspect of our food system, both for those who eat food and those who work to prepare it. Within a single year, two new grocery stores have opened their doors in Somerville. Within the last five years, the City's food economy (share of our economy that is food jobs and food sales) has grown by 14%, a faster rate than our state and country. We want to make sure everyone is benefitting from this growth, and thus we need to ask: are those new food jobs going to Somerville residents; and are they paying wages that allow workers to access the healthy foods they need?

This assessment answered some questions, and also opened up many more we have yet to consider. Our work as a community continues beyond this report. In this report, you will find some preliminary recommendations from the workgroup that need further community input before they are realized. This report and its following actions aim to serve all Somerville constituents. We won't achieve this if recommendations are not designed with input from all types of food system players. So please share this report far and wide and find us at sus@somervillema.gov to share any thoughts you have on how to strengthen Somerville's food system.



Joseph A. Curtatone Mayor City of Somerville



The Shape Up Somerville Steering Committee,
Somerville Food Security Coalition, and members
of the Somerville Food System Assessment
working group are pleased to present this report
for the benefit of all those that live, work, play,
raise families, and age in place in Somerville.











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- Groundwork Somerville
 Green Team
- Somerville Center for Adult Learning Experience
- · Somerville Council on Aging
- Somerville Family Learning Collaborative

Finally, a note of appreciation goes to all who participated in the consumer focus groups and neighborhood market survey. The names of individuals and stores are not listed to preserve their anonymity, but their valuable insights are none-the-less recognized.

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City of Somerville, unless otherwise indicated.

FOOD SYSTEM SNAPSHOT of Somerville

11 Community Gardens

130 Number of people on waitlist for community garden plots





20+Residential and Commercial Growers

Farmers Markets





11 School Gardens 1,117,500 School Meals Served Annually >40% Free or Reduced School Meal Eligibility

Food Manufacturers







Food Pantries



SNAP Gap supplemental



Residents within a 10-minute walk of a full-service grocery store

94[%] Food economy jobs represented by the **Food Service sector**

1.4 Million Pounds of food **Greater Boston Food** Bank sent to Somerville partners in 2017



Food Rescue Organizations that service Somerville

Sources include: City of Somerville Community Gardens Program; The Somerville Food Security Coalition; Groundwork Somerville; Mass Farmers' Markets; Union Square Main Streets; Arts at the Amory; Shape Up Somerville; ISD Permit List; Bootstrap Compost; Garbage to Gardens; City Composting; Somerville Public Schools; Department of Elementary and Secondary Education; Green City Growers



INTRODUCTION

his report is the culmination of a multi-stage process and the hard work of numerous individuals, organizations, agencies, and businesses. The City of Somerville, through its Shape Up Somerville initiative, and the community-based Somerville Food Security Coalition led the working group through the 18-month project with insights and contributions from core and advisory partners.

The idea of an assessment began in 2015. During a Shape Up Somerville (SUS) Steering Committee visioning session and a Somerville Food Security Coalition (SFSC) strategy session, questions about the effectiveness of recent efforts to address healthy living across the community were raised. With the pending release of The Wellbeing of Somerville Report 2017, a more well-defined picture of Somerville's food landscape was needed to supplement data in that report. Stakeholders thought information gathered could inform Somerville



By Design's neighborhood planning efforts and help ensure that food access was built into the City's neighborhood plans and conversations. The assessment was posed as a way to aggregate related information in one place and serve as a resource for people who were asking the questions—such as front line providers with constituents affected by food access (e.g. teachers, healthcare providers, leaders of community-based organizations), City staff, Tufts University students working on related projects, and residents.

Unlike food system assessments that focus heavily on agricultural production capacity of a region and commercial distribution networks, this assessment delves into the food asset landscape from a food security and consumer perspective. It also considers the quasiformal supply chain of recovered foods that are critical to a safety net of community meals and pantries. While the precise number of food insecure Somerville residents is unknown, this report provides insight to the areas which may be experiencing the highest rates of food insecurity and how structural racism may be contributing to it.

The working group constantly faced the feasibility of accessing individual-level data versus community-wide information from which to extrapolate deeper insights. Members of the working group remain committed to continuing to work together to understand the issues contributing to food insecurity among Somervillens and to bring resources to everyone in need. Organizations involved will also expand and model inclusive stakeholder participation. Likewise, the city is encouraged to consider future food policies through an equity



lens with stakeholders representative of the community at the table.

This report and its recommendations build upon other important research and planning efforts conducted in recent years and currently underway by other municipal and community partners. The working group is grateful for the resources of The Wellbeing of Somerville Report (2017), The Somerville Open Space & Recreation Plan 2016-2023 (2017), The City of Somerville Sustainable Neighborhoods Working Group Recommendations Report (2015), and SomerVision: Comprehensive 2010-2030 Plan (2012), among others cited throughout this document. Likewise, this report aims to improve the collective work of many organizations and support cross-sector activities. It is anticipated that the information gathered will inform future planning, programming, policy decisions, and assist in procurement of funding to support both municipal and community-led initiatives.

Regional and Local Food System Context

While the geographic scope of this food system assessment is decidedly narrow, it is undertaken at a time when there is coordinated and intense focus on furthering the regional food system of New England. In 2012, Food Solutions New England released the New England Food Vision to produce 50% of the region's demand of clean, fair, just, accessible food by 2060. This long-term food system vision is built upon shared values of racial equity and food justice across the entire value chain and system, public health, and ecological integrity¹. The effort has spurred statewide alignment and state specific food plans. In 2015, the Massachusetts Food Policy Council adopted the first update to the state's food plan in 30 years. Together, the New England Food Vision and Massachusetts Local Food Action Plan identify the priorities to:

- Increase production, sales, and consumption of locally grown foods.
- Create jobs and economic opportunity in food and farming, and improve the wages and skills of food system workers.
- Protect natural resources needed to produce food, maximize environmental benefits from agriculture and fishing, and ensure food safety.
- Reduce hunger and food insecurity through increased availability of healthy food to all residents, food recovery, and food waste reduction².

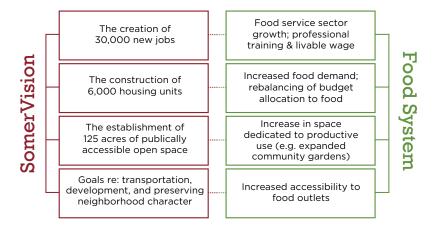
This has encouraged municipalities to also examine the food system on a more local level to understand where there may be underserved populations, underutilized or overtaxed food assets, and additional economic opportunity through food-based enterprises. The working group decided early on to focus on food access and food-related economic development, given Somerville's high population density and urban setting. While there is room for productive green space and agriculture in Somerville's unfolding city design, commercial scale food production would face considerable competition from other uses, such as housing. Meanwhile, Somerville has a growing number of craft food and beverage enterprises as well as food service establishments that anchor the city's commercial centers.

During the course of Somerville's assessment, neighboring municipalities of Everett, Medford, and Revere were also engaged in food system assessment activities, while others like Cambridge and Chelsea considered beginning their own process. In the same

¹ Food Solutions New England, New England Food Vision. http://www.foodsolutionsne.org/ new-england-food-vision

² Massachusetts Local Food Action Plan. https://mafoodsystem.org/static/plan/pdfs/MLFSP-Goals.pdf

Figure 2: Food System Relationship to SomerVision Goals



way that Somerville benefitted from the food system reports, policy reviews, and action planning of other leading communities such as Denver, Philadelphia, Seattle, and Vancouver, it is the hope and intent that the experience and learnings of the Somerville assessment serve as a resource to other groups, near and far.

At the municipal level, this report should be used to inform and assist in the planning and implementation of Somerville initiatives that address health, zoning, neighborhood planning and economic development. In 2012, the Board of Alderman adopted Somer-Vision as the city's comprehensive plan: this plan has goals for neighborhoods, squares and main streets, resources, transportation and infrastructure, and housing. Figure 2 shows food sector linkages to the SomerVision goals to create 30,000 new jobs, construct 6,000 housing units, establish 125 acres of publicly accessible open space and address transportation, development and preserving neighborhood character. SomerVision tasks the City to follow up with neighborhood planning, where findings from this report can be utilized.

Objectives

This food system assessment uses a health equity lens, focusing on the community-level determinants of how people acquire food rather than the individual practices of what people eat. The objectives in this assessment were developed to look at where there are strengths, gaps, and opportunities on a community level to optimize each person's health through better access to nourishing food. The working group began with an extensive list of research questions that were then grouped and distilled into the following key objectives to guide the assessment.

- 1. Understand what Somerville stakeholders want in their community as it directly or indirectly relates to cultural, social and economic food practices.
- 2. Determine the factors (where, what, how, why) that contribute to the daily consumption patterns of Somerville stakeholders.
- 3. Assess the existing and future food landscape that will influence consumption habits, understand gaps, and identify solutions to help all Somerville residents achieve their optimal health, while respecting cultural values (measure assets and needs in the community).
- 4. Identify opportunities to grow our local food economy and create more food related, safe and fair paying jobs and food/health ambassadors.
- 5. Investigate how all stakeholders hear about food resources and learn about nutrition to operationalize communication systems and improve multi-sector, multi-level knowledge of existing food resources and information.
- 6. Explore leverage points for food recovery and ways to reduce food waste.

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Figure 3: Food System Diagram of Somerville, MA

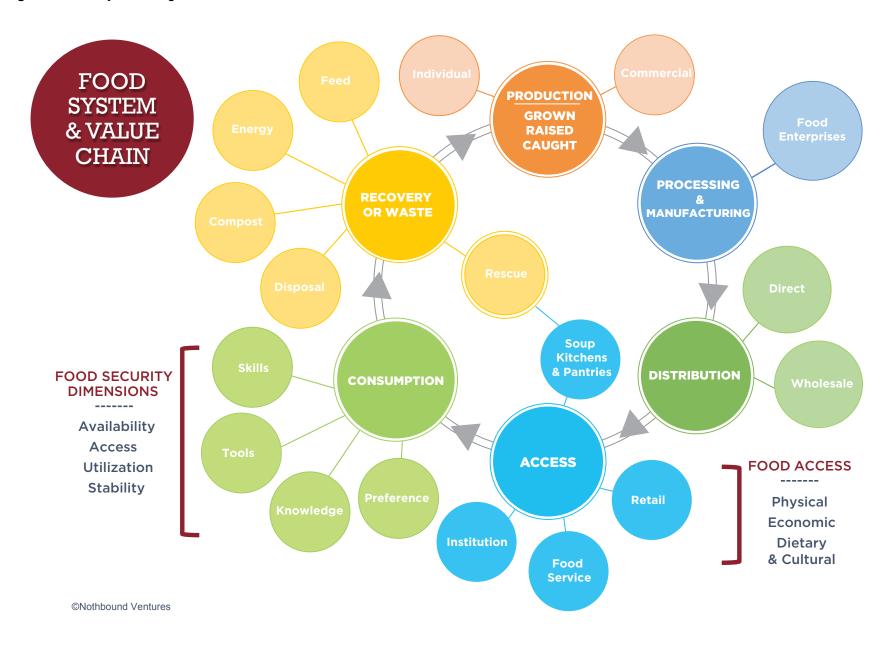




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COMMUNITY PROFILE

About Somerville, MA

Somerville strives to be a great place to live, work, play, raise a family, and age. There is a standing invitation to all to engage here, and there are myriad resources in this high-capacity city to help everyone feel welcome. Somerville is a mere 4.2 square miles with 32,229 total households³ and a population of 81,322⁴, making it the most densely populated municipality in New England. The City also has one of the largest populations of young adults in the

country, with 32.3% of the population between the ages of 25-34⁵. A three-time recipient of the All-America City Award in 1972, 2009, and 2015 by the National Civic League, it is no surprise that Somerville is a highly sought-after destination. A network of vibrant commercial squares and proximity to a major metropolitan center are certainly attractive. Many people have been drawn by a historically more affordable home and rental market relative to neighboring communities, strong presence of immigrant groups and cultural hubs, relative safety of community, array of resources,

³ U.S. Census Bureau, QuickFacts, Somerville, Massachusetts (2016)

⁴ U.S. Census Bureau, QuickFacts, Somerville, Massachusetts (2016)

⁵ American Community Survey, United States Census Bureau (2006-2015)

strength of community spirit, and the responsive public school system. However, the magnetism of Somerville is not without impacts.

Like Greater Boston, Somerville is experiencing an affordable housing crisis. Interest to live, work, play, and raise a family in Somerville's diverse neighborhoods has also resulted in greater demand and higher prices for both residential and commercial properties, a metric which the city tracks on its data dashboard as a key system indicator. With median household income at \$78,673⁶, average home sales at \$727,091 and average rent at \$2,384 (2015)⁷, housing costs place a significant burden on personal budgets. This is compounded by low vacancy rates of 0.3% for ownership and 2% for rental units. Somerville house prices are not only among the most expensive in Massachusetts but in all of America⁸.

Despite evidence of progress with increasing median income, many residents continue to experience lower socioeconomic mobility. Thirteen percent of the population is living in poverty, with higher rates impacting children below the age of 18 (22.7%), people 65 and over (14.2%), and female householders (43.2%). According to the Somerville Housing Needs Assessment (2015), 73.8% of renters had insufficient income to meet the average rent threshold resulting in 39.1% of renter households in Somerville being rent-burdened, defined as households paying more than 30% of gross income towards housing. Just over 38% of owner households were cost-burdened¹⁰. The availability of affordable housing options for individuals and families of all sizes is critical to maintaining the cultural fabric and diversity that has made Somerville the place people love.

Pertinent to the social fabric of Somerville is its status as a sanctuary city with a long history of welcoming immigrants. This is reflected by a population that is 24.7% foreign-born versus the Massachusetts average of 7% foreign-born¹¹. While a Presidential executive order and U.S. Justice Department lawsuits threaten federal funding to sanctuary cities coast-to-coast, the positive social and economic impact of immigrant diversity in Somerville is perhaps no better represented than in the food system. Immigrant food entrepreneurs and restaurateurs contribute significantly to the city's businesses and are routinely the center of community including in the Somerville Arts Council Nibble Program, and at events such as SomerStreets, the annual Taste of Somerville, and YUM: A Taste of Immigrant City. Still, as successful as some immigrant entrepreneurs have been, the City must continue to find ways to highlight the value of established and new food businesses in our city, as well as support food access for those who are most vulnerable either due to language barriers or status to live and work in the country.

Food Access & Security in Somerville

The Food and Agriculture Organization of the United Nations defines food security as when someone has physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Populations more vulnerable to food insecurity include female-headed households, seniors, children, immigrant populations, lower-income populations, and communities of color.

As Somerville experiences a widening bifurcation of household incomes and an increased cost of living, more people experience or are likely to be at risk for food insecurity. In 2016, for the first time, the Youth Risk Behavior Survey in Somerville addressed food

⁶ U.S. Census Bureau, QuickFacts, Somerville, Massachusetts (2016)

⁷ Somerville Housing Needs Assessment (2015)

NeighborhoodScout. https://www.neighborhoodscout.com/ma/somerville/real-estate.
 Accessed March 20, 2018.

⁹ American Community Survey (2011-2015)

¹⁰ City of Somerville Housing Needs Assessment (2015)

¹¹ American Community Survey (2011-2015)

insecurity. Among all high school-aged respondents, 9.4% said that they had gone hungry at some point in the last year due to lack of money at home, and 18.2% of Haitian Creole speakers and 10.3% of Spanish speakers responded similarly. Several other social determinants can influence an individual's or family's level of food insecurity on a daily or monthly basis¹². Food access in all of its dimensions—economic, spatial/temporal, social, and personal—is an important leverage point in creating better food security for a community.

There are several state and federal programs that work to improve food security and play a significant role in Somerville, including SNAP, WIC, and the Farmer's Market Nutrition Program. Explanations of each program follow.

The Supplemental Nutrition Assistance Program (SNAP) is funded through the USDA and aims to supplement household monthly food budgets. According to The Wellbeing Report of Somerville, 9.3% of Somerville's 32,000 total households, or roughly 3,000 households, received SNAP benefits in 2015, an increase of 4.9% from 2010. Additionally, it is estimated that a full 61% of income-eligible Somerville households are not enrolled in the program¹³. This could be caused by a variety of reasons from lack of awareness of the benefit to personal preference. Further investigation is needed so appropriate interventions are designed to improve SNAP utilization.

The Healthy Incentives Program (HIP), launched in 2017, is a pilot program in the state of Massachusetts that enables SNAP recipients to earn additional benefits when they purchase locally grown fruits and vegetables at farmers markets, farm stands, mobile markets and Community Supported Agriculture (CSA) farm shares. It is a federally funded pilot administered throughout

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a federally-funded program that provides supplemental foods, referrals to local resources, and nutrition education for low income pregnant, breastfeeding and non-breastfeeding women, and infants and children up to age five who are income eligible (at or below 185% of the poverty level) and who are found to be at nutritional risk. Based on a 2017 state assessment, there were 2,052 Somerville residents eligible for WIC with only 57.8% of those eligible residents participating. A list of Somerville's WIC retailers can be found in Appendix 3.

The federally-funded and state-administrated Farmer's Market Nutrition Program distributes coupons annually every July to eligible seniors and WIC families to use at Farmer's Markets to help increase intake of fresh fruits and vegetables. The Somerville Cambridge Elder Services gives out the coupons to Seniors and the WIC coupons are given to WIC families who sign up for this benefit.

Massachusetts by the Department of Transitional Assistance, in partnership with Department of Agricultural Resources and the Department of Public Health. The HIP program is different than match programs offered at farmers markets which provides a dollar-for-dollar match after a customer spends a certain amount of money with their SNAP card. HIP acts more like a rebate program where they are reimbursed for the same amount of money spent.

¹² Food and Agriculture Organization of the United Nations (FAO) World Food Summit (1996)

¹³ City of Somerville and Cambridge Health Alliance, The Wellbeing of Somerville Report (2017)

2

RESEARCH APPROACH & METHODOLOGY

n overview of the food system assessment process followed is provided in Figure 5. Activity revolved around these core research initiatives:

- An inventory of current and planned community food system assets and resources
- A quantitative food retail assessment coupled with stakeholder interviews
- Community-based participatory research (CBPR) with six focus groups on consumer food access and preferences
- An economic analysis with a focus on production, processing, distribution, food services and food rescue

FOOD ASSET MAPPING METHODOLOGY

The working group gathered publicly available data sets and municipal records, sorted through Inspectional Services Department's (ISD) food permit database, and then categorized each food retailer in order to map several dimensions of Somerville's food landscape. Once all the food retailers in Somerville (n=82) were identified, they were divided into food retail categories according to store size and availability of variety and type of fruit and vegetables. The North American Industry Classification System (NAICS)

codes were referenced and taken into account for defining the food retailers, which are supercenters, grocery stores, convenience stores, neighborhood markets, and drug stores. To supplement these codes, every food retailer in Somerville was categorized based on in-person observation and if foods sold at the store could "make a meal". A "meal" is defined as a combination of three or more "My Plate" food categories with one of the categories consisting of a fruit or vegetable, in the form of fresh, frozen, or canned. The USDA "My Plate" food categories are: dairy, fruits, vegetables, grains, protein (beans, meats, poultry, nuts, seeds). Therefore, specialty stores, such as bakeries and chocolatiers, were not mapped since one cannot "make a meal" there.

The food retail categories are defined as follows:

Supercenters: Establishments known as warehouse clubs, superstores, or supercenters primarily engaged in retailing a general line of groceries in combination with general lines of new merchandise, such as apparel, furniture, and appliances. A proportion of store space is dedicated to non-food items. This category includes retailers such as Target, Kmart, and Costco.

Grocery stores: Supermarkets and grocery stores are primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and

Figure 5:

Comprehensive Food System Assessment Overview

GOAL

Complete a collaborative and comprehensive food system assessment for all Somerville stakeholders to use.

OBJECTIVES

- · Resource utilization
- Population health
- Equitable and just access
- Economic development opportunities

FUTURE USE

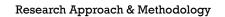
- Planning
- Programming
- Policy
- Project funding



Work with organizational partners, city divisions, and community leaders across Somerville to synthesize existing data, collect and analyze new data

APPROACH

- Asset mapping
- Consumer focus group
- Retail assessment
- Economic analysis



prepared meats, fish, and poultry. Included in this industry are delicatessen-type establishments primarily engaged in retailing a general line of food. This category is distinguished by size (square footage), number of staff and/or cash registers. This category includes retailers such as Stop & Shop, Market Basket, Shaw's, Star Market, and more.

Neighborhood market: A retail store meant to offer a selection of items that community members need and want. They sell at least three USDA "My Plate" food categories, including a variety of fruits and vegetables in the form of canned, fresh, or frozen. Neighborhood markets are often owned by local community members and employ less than 10 staff.

Convenience Stores: Also known as food marts or corner stores, these stores often have extended hours and can include fuel pumps. They are primarily engaged in retailing a limited line of goods, however the fresh fruit and vegetable inventory is limited to just one or two options in variety and type (distinguishing convenience from neighborhood market). These stores might only carry one brand of each food category.



Drug store: Stores primarily focusing on pharmacy transactions and personal health items, but also offering three or more USDA "My Plate" food categories. Fresh fruit and vegetable inventory is limited to just one or two options in variety and type. This category includes retailers such as CVS, Walgreens, and RiteAid.

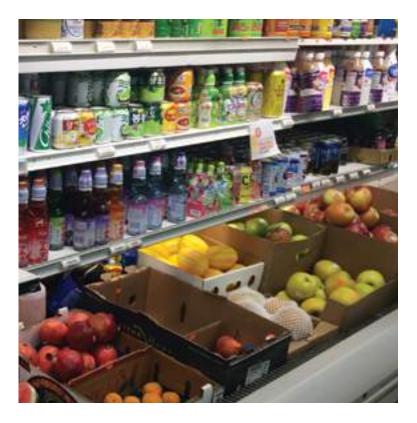
The group studied demographic information set against key food assets (e.g. grocery stores, food pantries, institutions, etc.) and multi-modal access points (e.g. walk, drive, bus). Additionally, mapping focused on the walkshed and public transportation rather than a drive shed. Looking to national models, the Economic Research Service hosts the Food Access Research Atlas (FARA) web-based mapping tool and incorporates poverty level, car ownership, and distance to a grocery store into their calculations of communities with low food access¹⁴. The Somerville Food System Assessment workgroup took these variables into account as well as availability and affordability of food on a neighborhood level to determine the varying levels of local food access across Somerville. Given the small geography of the city coupled with the existence of several grocery stores, mapping showed that 100% of the city's populations lives within a 10-minute drive of a full-service grocery. Walkshed may more accurately reflect the transit patterns of lower-income residents who cannot afford a vehicle and must rely on human-powered or public transportation. For these reasons, this assessment focuses on walkshed to food retailers rather than driveshed.

¹⁴ ERS, Low-Income and Low-Supermarket-Access Census Tracts, 2010-2015 (2017)

FOOD RETAIL ASSESSMENT METHODOLOGY

Once food retailers were mapped, FSA workgroup members engaged a Tufts student to help better understand how availability of foods and price affected food access. The student worked with Shape Up Somerville and the project consultant to synthesize a new community-specific assessment tool using a former checklist used by the city in 2009 and other leading assessment tools, namely the Nutrition Environment Measurement Survey in Stores (NEMS-S) and the Healthy Food Availability Index (HFAI). The NEMS-S gathers information on comparable items across stores and types of foods and collects a large amount of data on very few and specific types of food items (ex: baked chips, frozen dinners, hot dogs). It then assigns a score, up to 50 points, for each store, based on availability, price, and quality of foods. The Healthy Food Availability Index (HFAI) is an adaption of NEMS, which accounts for more food items than NEMS, across more food groups, and has a simpler single page format. It assigns a numeric score between 0-27, which only accounts for availability of healthy foods. The HFAI assigns point values to foods based on how they meet the USDA's recommended daily nutritional requirements. However, this can be problematic given that foods of the same general type can vary widely based on storage or brand. Additionally, the HFAI does not represent food diversity very well.

The final tool, called "Shape Up Somerville Retail Food Assessment 2017" (see Appendix 4), is therefore an adaption of existing tools from the literature and contains additional pieces that were relevant for the study. The tool is divided into 14 different measures that reflect different types of food products (e.g. milk, fruit, vegetables, chicken or meats, frozen foods, packaged foods, etc.). These measures collect information on availability of food items and pricing of these items. The tool also includes "Pre-" and "Post-" general measures on the retailer, which include questions



he distinguishing factor between convenience stores and neighborhood markets is that neighborhood markets have a variety of fruits and vegetables, whereas convenience stores may only have one or two options of fruits and vegetables. The primary guiding question of this project was: "Are neighborhood markets a viable alternative to larger grocery stores for Somerville residents?"

regarding SNAP/WIC acceptance, cultures represented, halal/kosher meat offerings, and languages spoken by staff. Markets granted permission to be surveyed with the agreement that results would be de-identified.

For each retailer, the assessment tool provides two major pieces of data, which can be broken down and further analyzed at a more specific level. The first is an "availability score", which is a simple numerical score out of 87 points: 4 points for food assistance program acceptance and general accessibility; 8 for dairy products; 9 for fruits; 12 for vegetables; 13 for meats and fish; 16 for frozen, packaged, and canned foods; and 18 for overall appearance of produce and culturally-relevant items. This represents the availability of various foods and healthy options, as well as the availability of culturally specific food items, with a higher score indicating a greater availability of healthy foods. The second major piece of data is the "grocery basket price", which compares total price of the same food items in the same size at each food store. In other words, this represents the price of a basket of food items that the average consumer might need to purchase from a food retailer. This tool can be used in all food retail environments, regardless of size. It can also be used to compare within store types (e.g. to describe variance within neighborhood markets) and among store types (e.g. to show differences between neighborhood markets and grocery stores).

Convenience stores were not assessed. The distinguishing factor between them and neighborhood markets is that neighborhood markets have a variety of fruits and vegetables, whereas convenience stores may only have one or two options of fruits and vegetables. The primary guiding question of this project was: "Are

neighborhood markets a viable alternative to larger grocery stores for Somerville residents?" For this reason, convenience stores were removed from the sampling frame, and instead focus was placed on neighborhood markets. A final list was determined based on variety of store categories, locations across Somerville, variety of cultures represented among neighborhood markets, and those retailers most frequented by residents of Somerville. The final sample (n=35) was made up of supercenters (n=2), grocery stores (n=12, with 11 unique stores assessed and one store assessed twice: both with and without loyalty card savings applied), neighborhood markets (n=17), and drug stores (n=4).

Asset mapping and focus group insights supported the assumption that neighborhood markets are key food access points, but a fall 2016 research project conducted by Tufts University students suggested use and appreciation for these stores was variable. That project collected pedestrian counts and 74 customer surveys at three stores which highlighted how neighborhood markets might be an overlooked opportunity for improving food access in some neighborhoods. Building on this idea and the initial data from the retail analysis, the workgroup realized there were questions which required more engagement with the neighborhood market owners. To address these, Shape Up Somerville staff and the project consultant developed a short survey (see Appendix 5) and reached out to all neighborhood markets with 10 out of 21 responding. The ten represent diverse markets, based on size, location, and specialty. Shape Up Somerville staff and community researchers delivered the survey to the stores and at the preference of the markets, these were either completed and then picked up or directly administered by the community researchers.

FOCUS GROUP METHODOLOGY

Mapping and researching the various food assets in Somerville provided a wealth of information, but this assessment also sought to understand how consumers, particularly those at risk for food insecurity, access these resources and to what extent they adequately fulfill community needs. In order to hear from people about their experience with these assets and within the Somerville food system, the FSA workgroup applied for and received funding from Tufts' Tisch College Community Research Center to gather constituent insight through CBPR. A full report on this research can be found on the Shape Up Somerville website. In summary, six focus groups were held between May and August 2017 to capture consumer patterns, preferences, and insights. Three community researchers fluent in multiple languages were hired and trained to facilitate the focus groups and to join the monthly workgroups. The community researchers also helped translate focus groups materials, which were available in English, Spanish, Portuguese and Haitian Creole. Given the purpose of this research and partnership with Tufts University, this portion of the food system assessment was approved by Tufts' Institutional Review Board.

Community organizations assisting with focus group activities were the Somerville Center for Adult Learning Experience (SCALE), Head Start (HS), Council on Aging (COA), Groundwork Somerville (GWS), East Somerville Community School (ESCS), and Freedom School at Connexion (CX). These six were prioritized from a longer list in hopes of gaining the broadest representation from the city's most vulnerable populations.

In addition to a facilitated discussion with each group, participants were asked to complete a brief survey to capture demographic information and insights about food insecurity that might be easier to share in writing than with the entire group. The full survey and focus group guide may be found in Appendix 2.

Participants in the focus groups totaled 74, 19% male and 81% female, ranging in age from 18-102 years. The average age was 44 years. Representation across the city's three zip code and beyond Somerville borders was 26% (02143), 19% (02144), 51% (02145) and 4% (other) with 58% having lived in the city more than eight years. The survey included the Children's Health Watch validated Hunger Vital Signs screening tool. This tool asks two questions: "Within the past 12 months we worried whether our food would run out before we got money to buy more" and "Within the past 12 months the food we bought just didn't last and we didn't have money to get more." Respondents who answer that either or both of the following two statements is 'often true' or 'sometimes true' (vs. never true) are identified as at risk for food insecurity. From the survey, 41% of all survey respondents answered 'often true' to question one and 42% answered 'often true' to question two. The highest reported food insecurity was among focus group participants at Connexion Church (73%) and lowest at the Council on Aging (40%). Table 1 provides a summary of focus group participants' demographics and Appendix 2B shares the full results of the survey.

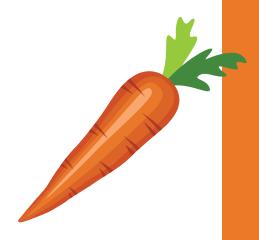


Table 1:

Characteristics of focus group participants			
	men	women	Total
	n(%)	n(%)	n(%)
	15(19)	59(81)	74(100)
Age (mean)		<u> </u>	44
Age (range)			16-99yo
	T1 1 7T (0.00
	or Alaska Native		2(3)
Asian			13(18)
Black of African	American		11(15)
White			27(36)
Heritage			
African			14(19)
Caribbean			5(7)
Central American			19(26)
South American			5(7)
North American			4(5)
European			9(13)
Eastern Asian			3(4)
South Central Asian			4(6)
South Eastern Asian			4(6)
Other			5(7)
Within the past 12 months we worried whether our food would run out before we got money to buy more. Select one.			
Often true		7(10)	
Sometimes true			29(41)
Never true			35(49)

Within the past 12 months, the food we	
bought just didn't last and we didn't have money to get more. Select one.	
Often true	4(6)
Sometimes true	30(42)
Never true	38(53)
Length of residency in Somerville	
>1 year	9(12)
1–3 years	10(14)
4–8 years	12(16)
8 or more years	43(58)
What is the number of adults over 18 living in your household?	
l adult	15(20)
2 adults	37(51)
3 adults	10(14)
4 adults	2(3)
5+ adults	9(12)
What is the number of children 18 and younger living in your household?	
0 children	21(28)
1 child	13(17)
2 children	31(42)
3 children	6(8)
4 children	3(4)
5+ children	0(0)

FOOD ECONOMY METHODOLOGY

The majority of the data for the food economy analysis were obtained from public datasets such as the ES-202 database from the Massachusetts state government. A private database, called Emsi, which aggregates local level data on the economy and labor market, was briefly available during the project and used to supplement data from other sources. Emsi derives its data from three primary sources: labor market data from government sources (e.g. US Census Bureau, Department of Labor); job advertisements made by employers; and resumés and profiles from students and jobseekers who create profiles and resumés online. In general, since publicly available data on the food economy at the city level is quite sparse and had to be synthesized from a variety of sources, the general process is described below for future reference.

• Estimates of the **size of the Somerville food economy** can reasonably be based on the number of businesses and employees. Public data can be found for the Processing, Distribution, and Food Services sectors, which represent nearly all of the food economy in Somerville. These three sectors have enough data to track trends over time, and there is limited information available on specific industries within the food sectors. The Food Services sector has the most detailed information, because it is the largest.

- **Employment opportunities** can roughly be evaluated based on wages and education requirements. Again, the "Big Three" food sectors are the only sectors with public data available. Emsi has additional information on work experience and training requirements.
- At this point in time, **demographic information** available on the food economy in Somerville is limited to specific food service occupations in the American Community Survey.
- The only **economic contribution information** available is the total income (or wages) paid in a given industry or sector. Annual sales are not available except for very specific industries.
- If food economy data are available at the city level for Somerville, they are almost certainly available on larger geographical scales to make **regional comparisons**. Emsi can do these comparisons easily and produce Location Quotients as well, which are one way to measure regional competitiveness.

FOOD ASSET LANDSCAPE

BRICK-AND-MORTAR RETAIL

Grocery Stores

Somerville has eight full-service grocery stores. Over the course of the food system assessment, two grocery stores opened in Somerville: a Trader Joe's at Assembly Row and bfresh in the heart of Davis Square. Those living in Somerville also rely on grocery stores located just over the city border such as the Star Market in Porter Square (Cambridge), the Whole Foods on Alewife Brook Parkway (Medford), and now the Wegman's on Mystic Valley Parkway (Medford) which opened in November 2017. Mapping Somerville's grocery stores showed that most of the stores are located on or near city borders, particularly the western Cambridge-Somerville border which includes Porter and Davis Squares.

The focus groups conducted as part of this assessment largely informed the following narrative on how people use Somerville's food retailers. According to participants, there is relatively good access to affordable foods in Somerville, with one grocery store in particular (Market Basket) being universally perceived as the most affordable that most participants shop at regularly. Participants value affordable and high-quality products, but it is unclear how nutritional quality fits into those values. There is some evidence that healthy foods from either the grocery store or farmers market are considered more expensive by participants.

Table 2: Grocery Stores in or on the border of Somerville as of 5-29-2018

Grocery Store	Neighborhood
ALDI	Fellsway, Medford
Bfresh	Davis Square, Somerville
Market Basket	Union Square, Somerville
Star Market (open 24 hours)	Porter Square, Cambridge
Star Market	Beacon Street, Somerville
Star Market	Twin City Plaza, Somerville
Stop & Shop	Alewife Brook Parkway, Somerville
Stop & Shop	McGrath Highway, Somerville
Trader Joe's	Alewife Brook Parkway, Cambridge
Trader Joe's	Assembly Square, Somerville
Wegman's	Mystic Valley Parkway, Medford
Whole Foods	Beacon Street, Somerville
Whole Foods	Mystic Valley Parkway, Medford
Whole Foods	Alewife Brook Parkway, Cambridge
Whole Foods	Central Square, Cambridge



The retail assessment created price scores for a sample grocery basket that included meat and a vegetarian grocery basket. The assessment process revealed three distinct tiers of grocery stores by price of grocery basket. While the total prices of both baskets and the order of stores from least to most expensive were different, the stores in each tier did not change when meat was excluded for the vegetarian basket. For the meat-inclusive basket, the basket prices of four stores fell between \$13.60 and \$14.99; four fell between \$15.69 and \$16.31; the most expensive tier had four stores with basket prices between \$19.98 and \$22.86. As mentioned in the methodology, one grocery store was assessed twice to discern the difference in pricing when the customer loyalty card is applied. While the store's basket price with loyalty card applied totaled \$14.99, bracketing the least expensive tier, the basket price for the same store without loyalty card applied came to \$16.99 and could be added as the most expensive store in the second price tier. Loyalty cards can offer lower prices for customers but may have drawbacks: the loyalty card in question requires some personal information, including address and more. Somervillens with immigration status or personal safety concerns may be wary of offering such information and thereby pay more for their groceries.

For the vegetarian basket, the basket prices for the four lowest-priced stores fell between \$9.18 and \$9.83; the second tier of three stores ranged from \$10.45 to \$11.23; the highest-priced tier had total prices ranging from \$14.33 to \$16.90. The difference in price from loyalty card, as discussed above, for the vegetarian basket was \$1.80.

In addition to low prices, focus group participants prioritized shopping for good quality food products. According to participants, there is relatively good access to good quality food in Somerville, with two-thirds of participants describing themselves as extremely or somewhat satisfied with the quality of food in Somerville. At one grocery store in particular (Market Basket), participants are satisfied

Table 3: Lowest - Highest Priced Grocery Baskets

\$ Tier	# Stores	Price Range		
		Omnivore Basket	Vegetarian Basket	
1	4	\$13.60-14.99	\$9.18–9.83	
Loyalty Card Difference		\$14.99 +\$2.00	\$9.83 +\$1.80	
2	3	\$15.69-16.31	\$10.45-11.23	
3	4	\$19.98-22.86	\$14.33–16.90	

with both the price and quality of foods available, although this is more variable at other grocery stores in Somerville. Focus group participants at the Council on Aging noted that mobility and food access go beyond walkability and extend to abilities preparing food at home. People expressed a desire for affordable pre-cut fruits and vegetables to be sold at stores, as some produce is too hard for the elderly to safely cut themselves (e.g. winter squashes, watermelon). Another participant mentioned that having senior citizen discounts at grocery stores would be helpful.

Mapping revealed that approximately 50% of Somerville residents live within a 10-minute walk to a full-service grocery store (see Map 1). Somerville neighborhoods that are not within a 10-minute walk of a full-service grocery store are Winter Hill (which includes the Mystic Housing Development, one of Somerville's densest and lowest-income neighborhoods), Spring Hill, Powder House, East Somerville, and pockets of West Somerville—much of which are categorized as Environmental Justice (EJ) communities by the Massachusetts Executive Office of Energy and Environmental Affairs (EEA)¹⁵ (see Map 2). The EEA's Environmental Justice Policy, which offers resources to ameliorate the inequitable environmental burdens on low-income communities and communities of color, categorizes EJ communities when: the

¹⁵ http://maps.massgis.state.ma.us/map_ol/ej.php

block group's annual median household income is equal to or less than 65% of the statewide median (\$62,072 in 2010); 25% or more of the residents identify as a race other than white; or 25% or more of households have no one over the age of 14 who speaks English only or very well, leading to English isolation. Residents in EJ neighborhoods are not only at higher risk of poor health outcomes due to environmental exposures, but given the above factors, are more likely to experience limited healthy food access and other systemic barriers as well.

Winter Hill and East Somerville, whose residents experience multiple risk factors according to the EJ map and also have lower median household income and car ownership rates according to Census data, are primarily served by the Stop and Shop on McGrath Highway. The City's Winter Hill Neighborhood Plan describes the area as largely car-oriented, cut off from other parts of the city, and with traffic signals too short to allow for complete pedestrian crossing – walkability to this grocery store is severely limited. In late 2017, a new neighborhood market opened on Medford Street that sells fresh fruits and vegetables in the Winter Hill neighborhood¹⁶, supplementing grocery store access there. Many hope that it will prove successful in its mission to make items which were previously hard to get more accessible to the neighborhood.

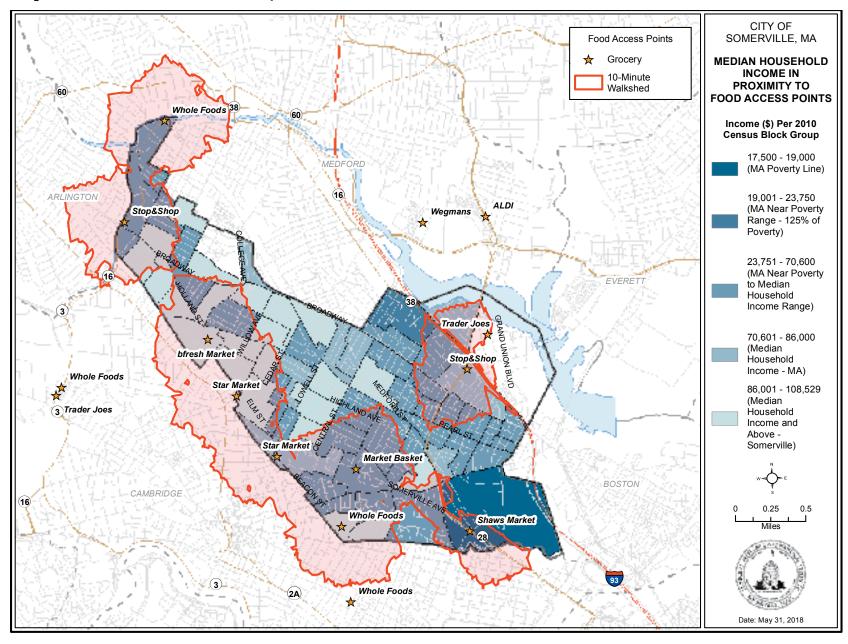
Top right: Access to the Stop and Shop on McGrath Highway is car oriented. Bottom right: A cut-through hole has been created in the fence surrounding Foss Park in order to access the Stop and Shop on foot.



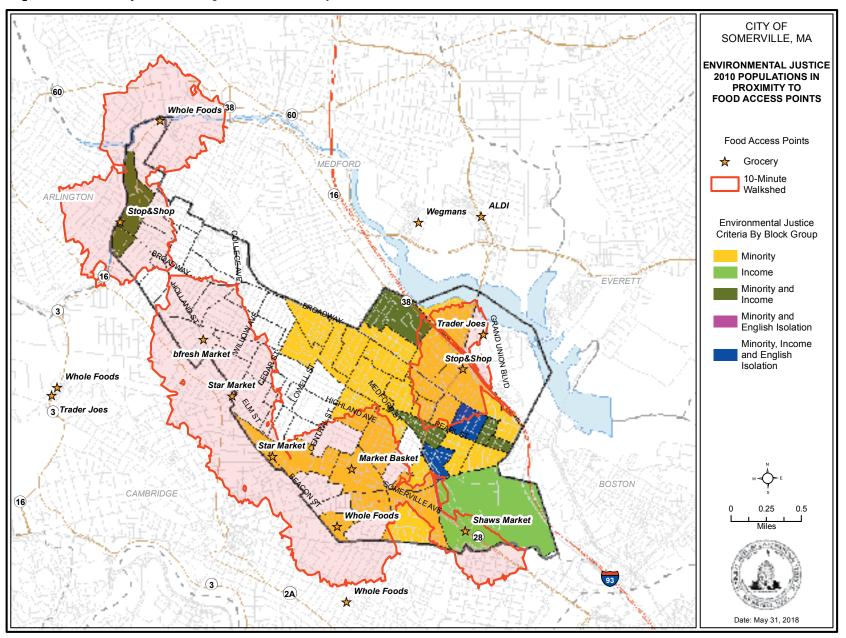


¹⁶ Scout Somerville: Bringing Fresh Food Home. http://scoutsomerville.com/bringing-fresh-food-home. November 21, 2017.

Map 1: Median Household Income in Proximity to Food Access Points



Map 2: Environmental Justice 2010 Populations in Proximity to Food Access Points



Neighborhood Markets

There are 21 neighborhood markets in Somerville, making them an important tier of the food system. Neighborhood markets are different than corner stores or convenience stores in Somerville. They are defined from other food retailers by the profile of product they offer. These markets represent stores which are often independently owned and offer a selection of items that community members need and want across several food categories, including a variety of fruits and vegetables and sometimes meat. Of the 21 neighborhood markets, 16 of them accept SNAP but none of them accept WIC, a feature that can improve food access for more people. Neighborhood markets are often owned by local community members, and just as important as selling food, they contribute to the local economy by employing other local community members.

As has been reported elsewhere in the country, local data from the retail assessment show that grocery stores are still the best source for the most variety of healthy foods at the best prices. Additionally, there is a trend of perishable items (e.g. fresh fruits and vegetables, meats, dairy, eggs) being cheapest at grocery stores, with neighborhood markets being 36% more expensive than full-service grocery stores on average, according to the retail assessment. The vegetarian basket is used for this comparison because only 4 of the 17 assessed neighborhood markets sold unprocessed fresh or frozen meat and could make a full meat-inclusive market basket. On the other hand, 9 of the 17 assessed neighborhood markets sold a full vegetarian market basket.

Left: Neighborhood markets sometimes stock beverage slots with fresh fruits and vegetables. Middle: WIC qualifying product is prominently marked for shoppers at a grocery store. Right: A significant portion of sugar sweetened beverage space is allotted at one grocery store to brands such as Goya. *Photo credit: Nisha Mohamed*

Table 4: Neighborhood Markets in Somerville as of 3-7-2018

Market	Neighborhood
3 Americas Meat Market	East Somerville
Amigos Grocery Store	East Somerville
AMR Neighborhood Food	Teele Sq. / West Somerville
Centro Americana Market	Union Square
Dave's Fresh Pasta	Davis Square
El Valle De La Sultana	Winter Hill
L.A. Market	Teele Sq. / West Somerville
La Internacional Foods	Union Square
Latino Americas Market	Magoun Square
Little India	Union Square
McKinnon's Meat Market	Davis Square
Mineirao One Stop Mart Pao de Acucar	Union Square
Modelo Market Café	Magoun Square
Natural Grocery	Magoun Square
Neighborhood Produce	Winter Hill
New Reliable Market	Union Square
P & K Deli	Porter Sq. / Beacon Street
Shivalic Food & Spice	Winter Hill
Shree Bombay Market	Union Square
Taj Mahal Desi Bazaar	Winter Hill
True Love Caribbean Store	Winter Hill



Map 3: SNAP Households Proximal to Food Retailers Accepting SNAP or WIC

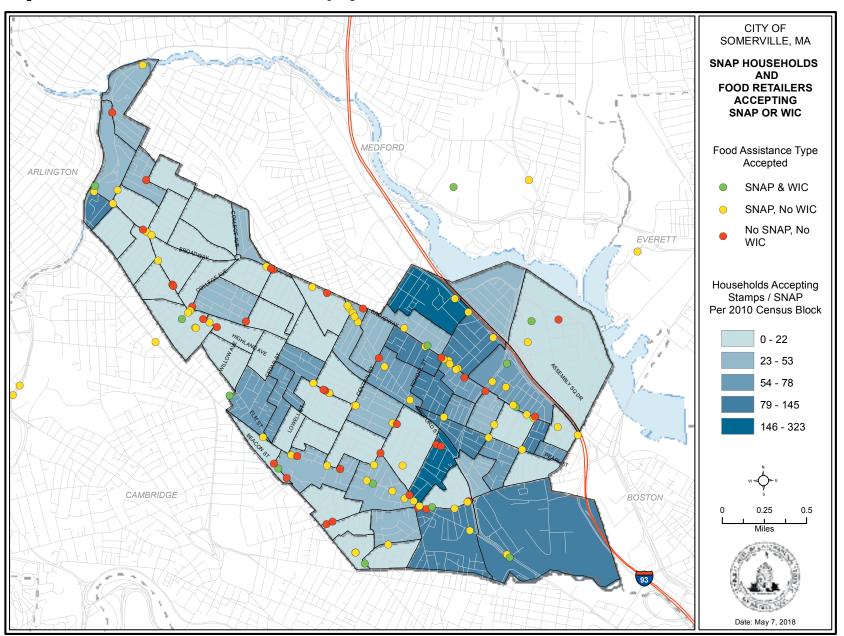
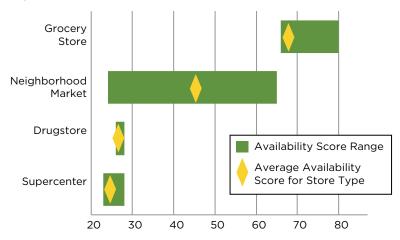


Figure 6: Retail Assessment Availability Score by Store Type



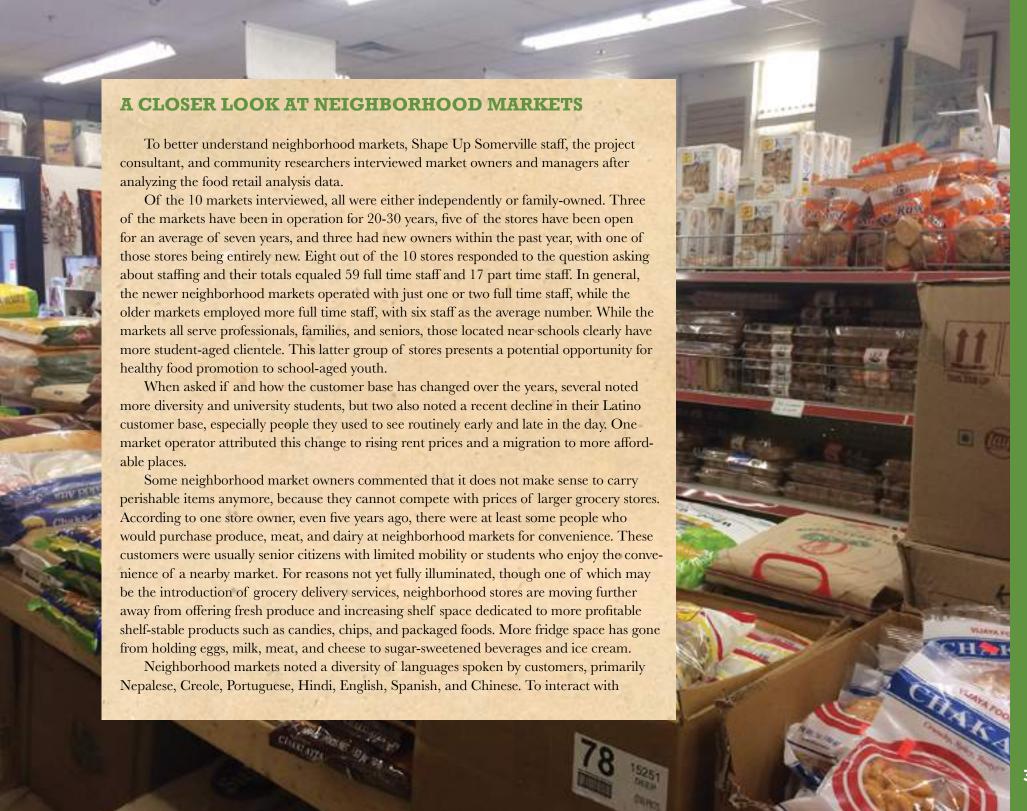
As seen in Figure 6, the large range of availability scores for neighborhood markets can be explained by the diversity of neighborhood markets in the sample. While the majority of food shopping happens at full-service grocery stores, neighborhood markets provide a convenient, albeit more expensive, resource for singular and specialty items. Field observation reveals neighborhood markets can be divided into two categories. The first category consists of larger markets with a variety of culturally specific produce, meat, and other perishable items. The other category of neighborhood market is increasingly reflective of a convenience store, in which there is a very limited variety of fresh fruits and vegetables. However, they do provide culturally specific items in the form of non-perishables like rice, spices, packaged goods, etc. The function of these neighborhood markets has changed and was reflected in conversations with store owners, as summarized at right in "A Closer Look at Neighborhood Markets".

There are a variety of cultures represented in Somerville seeking food products that may not be commonly available in American food retailers. According to focus group participants, a common behavior is to shop at a primary grocery store for most food items and pick up culturally specific items at an alternative retailer. Some grocery stores may carry ethnic foods, particularly Latino products, but that's not always the case. There are a variety of culturally specific retailers available in Somerville, including Brazilian, Latino, Indian, and Asian. Even so, there are still limitations for participants seeking these products to easily find them in Somerville. For some participants, they are willing to travel outside of Somerville to culturally specific retailers as far as Revere, Chelsea, East Boston, and Chinatown. For others, there is nowhere in the immediate area to find these food products, such as some Haitian products. One major finding is that the full-service grocery retailers do not regularly have halal meat available, which was noted by participants in multiple groups. Focus group participants cook regularly at home, rather than purchase prepared or packaged foods, so finding the right ingredients matters to them.

Table 5: Neighborhood Market Engagement Survey (Response n = 10)

Metric	Response Range	Response Median
Customers (#)	8 – 500 per day	50
Daily gross sales (\$\$)	\$750 – \$12,000 per day	\$1,175
Employees: Full Time (#)	0 – 30	2.5
Employees: Part Time (#)	0-5	2
Deliveries per week (#)	4 – 10 per week	6
Local suppliers (#)	0 – 25 different vendors	3

As the retail environment is changing, it is critical to reflect on what this means in terms of interventions going forward. Does it make sense to encourage these retailers to carry more fresh, healthy food items? If the guarantee is not there for consumers to buy these items, it may not be responsible to encourage small neighborhood markets to carry them.









customers in a different language, they sometimes have an employee or family member who can assist with translation.

The markets vary in size and products sold. Notable products in many of the stores were beer, lottery, money gram or prepared specialty foods or meats. Market owners and managers reported top food items sold include rice, meat, and tortillas, while non-food top sellers are beer, paper products, pain relief, and cleaning supplies. Items customers request that not all stores carry include tobacco, beer, lottery tickets, toiletries, and culturally specific foods, notably of Jamaican, Peruvian, and Indian origin. Some markets pick up their food themselves, but most receive weekly deliveries. They rely on a variety of distributors for different categories of food products, but those mentioned more than others include Restaurant Depot, the New England Produce Center (also known as the Chelsea Market or Terminal Market), Roberto's in Medford, Panamerican Foods, Goya Foods, and B&B Foods. Dairies range from large regional aggregators like Hood to small operations across Massachusetts like Thatcher Farm (Milton), Shaw Farm (Lexington), and High Lawn Farm (Lee). Other regional and local value-added products carried include Somerville Bread Company, Taza Chocolate, Q's Nuts, Bread Obsession, Iggy's Bread, and cheese from Vermont and New Hampshire.

Eight out of the ten stores interviewed accept SNAP with owners/managers having different experiences doing so. A few markets stated that accepting SNAP was "good for business". One person reported he did not accept SNAP due to missing the enrollment period and then being too busy to follow up. Others shared that their SNAP license had been suspended due to clerks charging items to customers' SNAP cards that were not approved. None of the markets interviewed accept WIC, and further exploration on barriers to doing so are needed.

Business challenges listed were high rent, operating costs, reliability of distributors, product quality consistency, and labor. Parking and or bike racks, building improvements, and dynamic pricing were ways owners suggested their businesses could be more viable and effective in serving the community. They expressed interest in the following potential interventions: support with marketing and signage in multiple languages, being a pilot with the City for a "Healthy Neighborhood Market" program, having the ability to offer more fresh items and promote fresh items on the sidewalk, hosting a community bulletin board, support with posting nutritional information and pricing, and connections for donating or composting unsold food.

Drugstores and Supercenters

Many stakeholders report that drugstores and supercenters fill a grocery gap, particularly for neighborhoods that are not within a 10-minute walk to a full-service grocery store.

These stores are the most limited type of brick-and-mortar food retailers in Somerville and based on the food retail analysis have the lowest availability of food items. None of the six stores surveyed had all the products necessary to complete a grocery basket, however most carried staple items such as milk, eggs and rice.

Grocery Access & Public Transportation

Transportation mode consistently came up in focus groups as a key factor affecting food access. There are tradeoffs between modes of transit such as time, cost, and ease of travel with groceries. Some participants stated they routinely pay a higher price for their food when they shop at other grocery stores that are more conveniently located to their home. In addition to price, location of residence and access to a car are major drivers of where participants shop for groceries in Somerville. Cars, often shared among family or friends, are the preferred mode of transportation, allowing participants to choose a store location based on the desired characteristics, primarily price and quality. For residents without access to a car, the tradeoffs with the available transportation options may lead to purchasing fewer groceries per trip and/or shopping at a more conveniently located food retailer even though it is considered more expensive or lower quality. For example, several focus group participants choose to walk to a food retailer, sometimes up to 30 minutes, but rely on public transportation or taxi service on the return trip with grocery bags. These options can be costly and time consuming and are often inadequately equipped for traveling with grocery bags. Seasonal changes and weather also impact ability to access food retail via public transit.

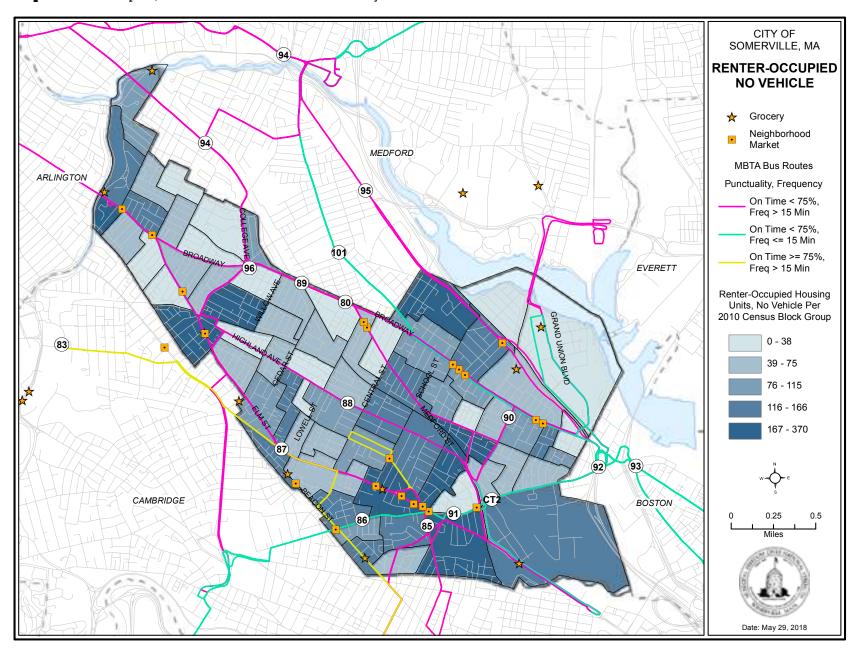
Data from the MBTA data dashboard accessed on February

ransportation mode consistently came up in focus groups as a key factor affecting someone's degree of food access. Some participants stated they routinely pay a higher price for their food when they shop at other grocery stores that are more conveniently located to their home.

1, 2017 showed that, over the past seven days, no buses running through Somerville were both frequent and reliable. Frequent means a bus runs at least every 15 minutes during peak hours and reliable means that the bus is on time for at least 75% of trips during peak hours using a seven day average. According to the MBTA, "if a bus is supposed to come every 15 minutes or less, reliability is measured as a bus departing no more than three minutes later the expected interval between buses. For buses scheduled less frequently than every 15 minutes, a bus must depart no more than one minute earlier nor six minutes later than the scheduled time of day". Bus route frequency and reliability is shown in Map 4.

Adding bus routes running north to south, particularly with a terminus in the vicinity of Market Basket in Union Square, was frequently mentioned in the focus groups and other informal settings as a key solution to an individual's food access issues. The City of Somerville's Department of Transportation and Infrastructure recognizes this gap in the bus service and cites the challenges to achieving north-south connectivity are exacerbated by narrow streets, on-street parking, steep hills and tight turning radii. The City is currently working on potential solutions as bus mobility is a key priority for the Mayor, staff, constituents, advocates and state agency partners.

Map 4: Renter-Occupied, No Vehicle MBTA Bus Service Reliability



MBTA SERVICE

The City of Somerville has been prioritizing working with the MBTA to improve bus efficiency throughout the city, with particular attention to transit equity. Informed by facts from the 2015-2017 MBTA System-wide Passenger Survey¹⁷ and excluding bus route 352 which only passes through Somerville via I-93, the City's priorities for improving bus service include:

- Extend bus route 85 to begin in Winter Hill (the 85 sees the highest share of workplace commutes as opposed to any other trip purpose out of all Somerville bus routes)
- Create priority bus lanes and improved stop facilities at particularly dangerous intersections for bus route 95 (more riders of the 95 pay with reduced-fare monthly passes than any other

monthly pass type, report having the least vehicles per capita, and report the highest Hispanic or Latino ridership of Somerville bus routes; the 95 also has the second highest rate of low-income riders of Somerville bus routes)

- Convert bus route 90 to serve as a Davis Square Assembly Row shuttle bus (riders of the 90 are among the most likely, of Somerville bus route riders, to connect to rail transit)
- Engineer lane and signal priority for bus routes 80 and 101 (riders of the 80 are most likely out of all Somerville bus routes to pay per ride as opposed to with monthly pass, and are most likely of all Somerville bus routes to pay with cash on a per-ride basis as opposed to a CharlieCard; the 101 also has a fair number of minority and low-income riders)

¹⁷ Boston Region Metropolitan Planning Organization 2015-17 MBTA Systemwide Passenger Survey. http://ctps.org/apps/mbtasurvey2018/. Accessed June 3, 2018.



FARMERS' MARKETS AND COMMUNITY SUPPORTED AGRICULTURE

Somerville's population density means there is limited land for food production. Farmers' markets and CSA shares play a significant role in connecting Somerville residents to locally grown products and producers. Somerville hosts three farmers' markets (two summer and one winter) and one mobile market which provide access to locally grown and processed products 48 weeks of the year. Most focus group participants had awareness of multiple farmers markets in Somerville and they were generally viewed positively, but considered too expensive to act as a regular retail outlet to purchase food. Three of the organizations recruited to host focus groups are sites for the Somerville Mobile Farmers' Market, so many participants had utilized this community resource for affordable, fresh produce. Participants were asked about Haymarket, Boston's oldest open-air market which sells low-cost fresh fruits, vegetables, and seafood, as an alternative retail outlet to help lower the cost of food. It was generally perceived as less-accessible and selling lower quality, and therefore less desirable, food. Even so, some participants favorably describe similar retailers as Haymarket in their home country, which offer good quality and cheap products without the amenities of modern U.S. grocery stores.

Davis Square Farmers' Market

The Davis Square Farmers Market has been in operation for more than 20 years and is managed by Mass Farmers Markets, a non-profit that manages three markets in the area and provides training, support, and programming for farmers, consumers, and communities. The Davis Square Farmers' Market operates 28 weeks per season, every Wednesday afternoon from 12PM to 6PM. In 2017, it received 32 vendor applications and accepted 22. Total SNAP transactions captured at the Davis Square Market

in the 2017 season was \$7,600. This market doesn't have a match program, unlike the other markets, and relies solely on HIP benefits to reach SNAP customers. Individual farm vendors can accept HIP and FMNP coupons.

Of note, the draft of the Davis Square Neighborhood plan recognizes the value of preserving space for the market and recommends dedicating building space in the future to better accommodate the market.

Union Square Farmers' Market

The Union Square Farmers' Market has been running since 2005. Union Square Main Streets, a 501c3 non-profit organization, has been the primary manager of the market for 11 out of the past 13 seasons.

The Union Square Farmers' Market operates 28 weeks per season, every Saturday from 9AM to 1PM. USMS accepted 55 vendors in 2017, of which four vendors were HIP qualified. For the 2018 season, two additional HIP-qualified vendors will be added. In addition to fresh fruits and vegetables, Union Square Farmers' Market has a variety of other vendors offering ready-to-eat foods from global cuisines and cultures.

In 2017, the market served approximately 2,000 customers each week and processed 474 SNAP transactions for farmers who do not accept SNAP themselves but sell SNAP-eligible products. Therefore, this number does not include SNAP transactions which were made directly with farmers. HIP, WIC FMNP Coupons, and Senior FMNP Coupons are only accepted directly by farmers and thus the data on sales using such methods are not available from USMS at this time.

In conducting their end-of-season shopper survey, USMS found that 24.2% of Union Square Farmers' Market customers were between the ages of 21 and 30, 35.5% were between the ages of 31 and 40, 16.1% were between 41 and 50, and 22.6%



Photo credit: Holly Fowler, Northbound Ventures



Photo credit: Holly Fowler, Northbound Ventures



Photo courtesy Winter Farmers Market



Somerville is home to many farmers markets: top, Davis Square and Union Square Farmers Market; bottom, Winter Farmers Market at Arts at the Armory. The Somerville Mobile Farmers Market sets up at the East Somerville School.

were older than 50. Over 75% of customers live in Somerville—another 8.2% live in Cambridge, 3.3% in Boston, and 13.1% in other neighboring communities such as Medford, Charlestown, Arlington, and Melrose.

Somerville Mobile Farmers' Market

The Somerville Mobile Farmers' Market (SMFM) was introduced in 2011 as a collaboration between the City of Somerville, The Welcome Project, Groundwork Somerville, and Somerville Housing Authority. Initial funding was provided by the Walmart Foundation and Massachusetts Department of Public Health through Mass in Motion. The SMFM, operated by Shape Up Somerville, has been sustained through regular funding from the Massachusetts Department of Agricultural Resources, Project Bread, and the City of Somerville. Its mission is to sell affordable, locally grown, fresh fruits and vegetables to low–income residents throughout Somerville with the goal of increasing the number of Somerville residents who have access to fresh, affordable, healthy food. Operating 15 weeks a year between July and October, the SMFM delivers fresh produce to four locations throughout the city

Figure 7: Somerville Mobile Farmers Market Sales Growth 2014-2017



by van on Fridays and Saturdays. Four strategic locations selected for the market are the TAB Building (houses Council on Aging and Somerville Center for Adult Learning Experience), Somerville Housing Authority's Mystic Housing Development, Somerville Housing Authority's North Street Housing Development, and East Somerville Community School.

The SMFM, open to all, offers an unlimited 50% match discount for residents of North Street or Mystic Housing or for recipients of SNAP, WIC, or Senior Farmers' Market Coupons. Cash, debit, credit, SNAP, WIC FMNP Coupons, and Senior FMNP Coupons are all accepted. Of the 2,011 total transactions processed by the market in 2017, 77% of customers utilized the match discount, exceeding the goal that at least 75% of customers use the match.

Figure 7 shows that gross sales at the market have increased steadily each year since operations began, with the largest increase of 63% occurring between 2016 and 2017. Net sales increased 54% over the same period. This increase is attributable in large part to the HIP program. Increased marketing budget for promotional materials courtesy of a grant from Project Bread also contributed. The financial sustainability of the mobile market relies on City of Somerville support, grants, and smart purchasing and pricing.

In 2017, SMFM shoppers purchased 13,900 total pounds of produce including 1,700 pounds of culturally-relevant items not regularly found in larger grocery stores, such as callaloo, jiló, and cranberry beans. Following the successful pilot of Groundwork Somerville's World Crops program in 2017, the 2018 Mobile Market season promises to offer an even more diverse harvest of greens, peppers, herbs, and more. Three of the organizations recruited to host focus groups are sites for the Somerville Mobile Farmers' Market, so many participants had utilized this community resource for affordable, fresh produce.

Somerville Winter Farmers Market

The Somerville Winter Farmers Market operates 20 weeks each winter, every Saturday from 9:30AM to 2PM at the Armory on Highland Avenue. Starting in the 2017-2018 season, Groundwork Somerville and the Arts at the Armory co-managed the market. The market received 100 vendor applications from which 63 vendors were selected, some as anchor vendors (65%) at every market and others rotating in and out of the remaining guest booths spaces available throughout the season. Among the vendors are seven qualified HIP growers and multiple meat, cheese and value-added producers (e.g. tea, pasta). Market management also offers a \$10 SNAP match program, funded by community donations. In the 2017-2018 season, management matched \$6,000 in SNAP dollars. Each week, the market drew between 800-1,200 people with the average dwell time of about 30 minutes. Currently the market is self-sustaining with the primary sponsorship from Community Credit Union.

Opportunities exist to better coordinate the markets across the different management entities so that consumers have a more uniform experience. The key differences across markets are separate token systems, which are a symptom of separate financial systems and match programs, separate match programs with different caps, methods, and qualifications, food donation systems, and staffing levels. The first two differences may confuse customers and pose potential barriers to access, while the latter two are back-of-house issues which may create difficulties for market managers. While not all of these systems can be made uniform across markets, management entities are working together to find bridges where possible. Appendix 7 provides a comparion chart of all Somerville Farmers Markets.

One solution which has already been implemented is the creation of a joint summer food flyer which promotes all of the

summer markets and their various match programs as well as other summer food resources such as summer meals via the Somerville Public Schools (SPS) and community meals. This flyer has been distributed to all SPS students for the past two years.

Community Supported Agriculture

Community Supported Agriculture (CSA) started in the U.S. in the late 1980's, piloting a new economic approach to small scale farming, with participants paying up front for farm shares throughout the season and investing directly in the regional agricultural systems. Over 30 years, the concept has grown and today Massachusetts is 6th in the nation for number of CSAs, with a 95% increase since 2007, bringing fresh produce weekly from more rural areas into urban environments like Somerville. Initially primarily vegetables, share offerings can now include fruit, flowers, mushrooms, meat, eggs and more. The early CSA distribution sites in Somerville started on homeowners porches, business parking lots and community spaces like the Growing Center. In the past decade, local businesses such as Tufts, Cambridge Health Alliance and Partners Healthcare offer distribution locations on site to encourage employee participation.

Selected long running CSAs, including Farmer Dave's and Red Fire Farm who have been delivering to Somerville locations for years, were included in the pilot for the MA Healthy Incentives Program, in an effort to make them a more viable economic option for more residents. Currently, according to the Massachusetts Department of Agricultural Resources, seven CSAs deliver within Somerville and an additional six deliver near the border of Cambridge or Medford, not including employee programs. A number of these farms also participate in local food security initiatives, partnering with organizations such as Food for Free and Project Soup by donating excess produce or shares that are not picked up by CSA shareholders.



FOOD FOR SCHOOL-AGED YOUTH

There are 10 Somerville Public Schools serving 4,868 students from Pre-Kindergarten to Grade 12. Figure 8 shows the demographic breakdown of the student population compared to statewide percentages.

Through the National School Lunch Program (NSLP) and School Breakfast Program (SBP), Somerville Public Schools' Food Nutrition Services (SPS FNS) staff provide students with a total of 1.2M breakfast, lunch, snack, and summer meals a year. Participation rates (% of students taking school lunch versus bringing a bagged lunch) varies across schools, but averages 65-70% for lunch and 30-35% for breakfast. Breakfast is free at every school. Current meal prices are presented in Table 6.

Table 6: Somerville Public Schools Meal Prices (SY 2017-2018)

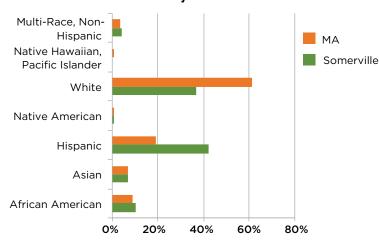
	PreK- Gra	de 8 Schools	High School		
	Paid	Free/Reduced	Paid	Free/Reduced	
Breakfast	Free	Free	Free	Free	
Lunch	\$2.75	Free	\$3.00	Free	
Milk	\$0.50		\$0.50		

In September 2014, FNS piloted Breakfast in the Classroom at Winter Hill Community Innovation School (WHCIS). A Tufts student evaluation of the pilot showed that participation in school breakfast more than doubled as a result of the new program, and Breakfast in the Classroom continues there today.

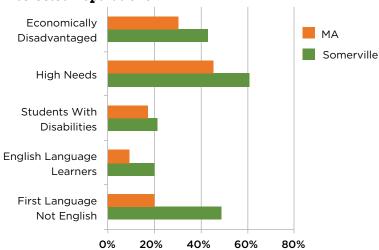
Figure 8: Statewide Demographic Comparison with Somerville Public Schools, 2017-2018 School Year

All Massachusetts Public Schools: 853,748 Students Somerville Public Schools: 4,868 Students

Student Race and Ethnicity



Selected Populations



Source: Massachusetts Department of Elementary and Secondary Education

In 2011-12 school year, the U.S. Department of Agriculture began a three year pilot of the Community Eligibility Provision (CEP), a program that allows districts or schools that meet a certain threshold of qualifying students (40%) to offer free breakfast and lunch to all students without collecting eligibility forms for all students. Students are qualified through means other than collecting eligibility forms. Schools that adopt CEP are reimbursed by USDA using a formula based on the percentage of students categorically eligible for free meals based on their participation in other specific means-tested programs, such as the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF).

USDA reimbursement for free meals is based on 160% of the direct certification count. CEP has allowed high need schools to serve free meals to all students while alleviating the burden for schools and families to process paper applications. In 2017, SPS FNS applied to the Community Eligibility Program (CEP), thus allowing it to provide free lunch in the three eligible schools – Arthur D Healey, Winter Hill Community Innovation School, and Next Wave/Full Circle.

The Massachusetts Department of Elementary and Secondary Education (DESE) administers the NSLP and SBP in the State of Massachusetts. DESE changed their tracking in 2014 from "free or reduced qualifying (F/R)" to High Needs and Economically Disadvantaged¹⁸:

- High needs: Student on an Individualized Education Program (IEP), English Language Learner (ELL) or Formerly ELL, or is economically disadvantaged.
- Economically disadvantaged. Student participated in one
 of the following state-administered programs: SNAP (food
 stamps); TAFDC (welfare); DCF (foster care); MassHealth
 (Medicaid) in October, March, or June.

¹⁸ Massachusetts DESE. http://www.doe.mass.edu/infoservices/data/ed.html

Table 7: Comparison of Eligible Free/Reduced School Meals Somerville and Massachusetts (2014-2018)

Year	Metric	Somerville	Massachusetts
2014	F/R	66.9%	38.3%
2015	ED	35.5%	26.3%
	HN	57.5%	42.2%
2016	ED	36.0%	27.4%
	HN	58.8%	43.5%
2017	ED	39.4%	30.2%
	HN	60.2%	45.2%
2018	ED	43.0%	32.0%
	HN	60.6%	46.6%

KEY:

 $F/R = Free/Reduced \mid ED = Economically Disadvantaged \mid HN = High Need$

Table 7 shows the five-year trend for Somerville's free and reduced meal eligible population compared to the state average. Almost 61% of Somerville's students qualify for free or reduced meal eligibility. All students who qualify for free or reduced lunch do not pay anything for lunch or breakfast. All students are assigned a PIN (personal identification number) to be used daily to receive/purchase breakfast and/or lunch.

Participation in the USDA's Fresh Fruits and Vegetable Program (FFVP) allows SPS FNS to offer students a free mid-morning snack of a fresh fruit or vegetable three days a week (Tuesday-Thursday) at the Albert F. Argenziano School, East Somerville Community School, and the Winter Hill Community Innovation School. The USDA stated goals of the program are threefold: 1) increase fruit and vegetable consumption, 2) expand the variety of fruits and vegetables that children experience, and 3) make a difference in children's diets to impact their present and future health¹⁹. Additionally, all schools, including the High School, have an afterschool snack program for students heading into programming for the afternoon.

During the summer, SPS continues both breakfast and lunch service for students, setting up more than 20 delivery locations throughout the city at places including parks, pools, sports clinics, and the YMCA in addition to schools sites. In 2017, SPS served 45,107 meals at 23 locations during July and August. This represents a slight decline from 2016. The program is changing considerably for summer 2018 due to building renovations and will serve as a pilot to help evaluate future summer meal programming.

Table 8: Summer Meals Served by Somerville Public Schools 2016-2017

Year	Locations	July	August	Sub-Total	July	August	Sub-Total	TOTAL
		BREAKFAST			LUNCH			
2016	22	13,821	4,210	18,031	23,556	7,069	30,625	48,656
2017	23	11,954	4,937	16,891	20,100	8,116	28,216	45,107

¹⁹ Somerville Public Schools Food & Nutrition Services Website and School Nutrition Director's Letter to Parents. http://www.somerville.k12.ma.us/district-departments/food-nutrition-services/farm-school. Accessed April 22, 2018.

School-Based Food Literacy and Nutrition Education

Schools are also the place where Somerville's youth gain food literacy and nutritional education. Nutrition Education for grades K-8 is taught in partnership with UMass Extension Family Nutrition Program at all schools except the Brown and Kennedy. UMass Extension offers classroom nutrition instruction linked to food service improvements and Shape Up Somerville goals. They also teach healthy eating and shopping on a budget to caregivers through workshops.

The Somerville Farm to School Project is a project of the Food and Nutrition Services Department of the Somerville Public Schools. In 2014, the Somerville Public Schools (SPS) district received a one-year USDA Farm to School planning grant and then subsequently received a two-year USDA Farm to School implementation grant. These grants enabled the district to engage a Farm-to-School Project Director to work closely with kitchen staff, educators and organizations to increase local foods in the cafeteria and increase food literacy and nutrition education in and outside of the classroom. According to the farm to school project director, at the end of the grant in 2018, 15% of food served in the cafeteria was grown, raised, or harvested within New England and another 10% was manufactured within New England.

Another feature of the food service program is the district's relationship with Drumlin Farms located in Lincoln, MA. Since 2016, Drumlin Farms, part of Mass Audubon society, has provided the schools with fresh produce, harvested the same day, for its Farm Fresh Salad Bar in all schools. Originally once a month and then bi-weekly, popularity among students has driven demand for this feature every week when product is available. Drumlin Farms has also been a partner in training food service staff to handle and prepare different items it grows and with afterschool programming. As SPS has met its purchasing threshold with a single vendor, it must consider if and how it can introduce others into its procurement strategy.

"My kid never eats sweet potato, and veggies in general can be a battle. He came home after the taste-test and asked to have sweet potato for dinner!"

-Mother of 1st grader at Healey School







Photo credit: Devon Byrne/Somerville Public Schools Instagram

L-R: Sweet potato and black bean saute is offered to Somerville Public School(SPS) students in a taste test; Sample SPS lunch; Tomato seedlings grow in a sunny classroom window before being planted in the onsite schoolyard garden.





Photo credit: Holly Fowler/Northbound Ventures

Above: Students care for herbs growing in the Healey School garden. Below: Cafeteria bulletin board at Winter Hill Community Innovation School.

A programming example from the Farm to School project is the Pop-Up Food Literacy Workshop. This 30-minute workshop at morning drop-off time engages students and caregivers in a hands-on, multilingual food literacy program. Multiple food activities provide an opportunity for language and pre-literacy skill development and for students and parents to learn about food and nutrition. Students and parents get to try new foods, learn about food groups, and read about food. In 2014, SPS also received a three-year Carol M. White PEP (physical education program) grant which supported physical activity and healthy eating initiatives throughout the K-8 schools in the district. In collaboration with farm to school, taste tests were conducted at all K-8 schools during National Nutrition Month (March) to encourage students to try new, healthy foods in the cafeterias. PEP & Farm-to-School also worked collaboratively to create Veggie of the Month promotional materials and "kits" for teachers to use to promote the program which features menu items in the cafeterias each month that incorporate the Veggie of the Month.

The MA Farm-to-School Grant also provided funding for the updating, coordination, and activation of school gardens. Work on the school gardens program was done in partnership with several entities, including Groundwork Somerville and Shape Up Somerville, and now gardens exist at all schools. As the grant expires and SPS loses its Farm-to-School Director position, sustainability planning and implementation is underway to ensure the continuation of certain initiatives. Groundwork Somerville has been supporting school gardens in the Somerville Public Schools since 2003. From 2015 to 2018, they worked in close partnership with the Farm-to-School Director to systematize programs and coordination across the district to ensure these gardens are maintained throughout the school year and summer season.

Currently, Groundwork provides over 3,000 student hours of garden and food based education to students across the district,

with some annual variability based on funding from grants and other sources (see Appendix 6 for Groundwork Somerville's full School Gardens Annual Report). They also provide training and support for teachers to use garden spaces with their students on their own. The Somerville Public Schools funds Groundwork to provide two days of garden-based education per year per school, and encourages additional programming as possible through other funding sources. In Fall 2017, the Farm to School grant supported garden champions at every school. However, these roles will not be renewed through the school budget when the grant funding expires. In the 2017-2018 school year, the district created a new position, District Wellness Coordinator, whose work will incorporate features of farm to school programming. Additionally, the district allocated funding to support wellness champions at every school. These positions are 40 hours per school year and focus on the promotion of health messaging.

The Somerville Backpack Program

The Somerville Backpack Program provides weekend food to students at all nine elementary and middle schools in the Somerville Public School District on a weekly basis during the school year. Each bag of food includes two breakfasts, two lunches, snacks and fresh fruit. The program supplements the school meals students rely on during the school week, but don't have access to over the weekend. This school year, The Somerville Backpack Program has been supporting 269 children weekly with supplemental food. Last year, 291 students benefited from this program. The program is run through volunteer support, the dedication of the Somerville Family Learning Collaborative, and community support from organizations like Community Cooks and Food For Free.

Food For Free is a local food rescue organization which serves as a coordinator for and intermediary between food donation locations and rescued food distributors. They also serve as a key connector between disparate school-based food programs. In the Fall of 2018, Food For Free will assume management of the Somerville Backpack Program. Food for Free also hosts a mobile food pantry at the Arthur D. Healey School two Tuesdays per month and provides frozen Family Meals which are available through Somerville Family Learning Collaborative family liaisons. These meals are repurposed into "heat and eat" individual meals for families in need from surplus prepared foods from donors such as Tufts University. Tufts recovers 702 and 1,073 pounds of food from their two Dining Centers which are then repurposed into 674 and 1,039 meals, respectively (Figure 14 shows additional pounds of food donated aside from packaged meals).

Out-Of-School Time Food

Stakeholder interviews and informal reporting revealed further gaps in food access for school-aged youth outside of school. While some schools serve after-school snack school-wide or only in after-school programs, this option is not available across the board. Youth-serving organizations such as libraries, youth groups, and other programs may not have the resources they need to offer food, or healthy food. Older youth may have discretionary funds to buy food, likely unhealthy food from convenience stores, and younger children may have less buying power and are not able to buy after-school food of any kind. Highlights from the youth focus group at Groundwork Somerville included connecting food to image, food as a social activity, purchased at drug stores or fast food retailers more often than grocery stores and neighborhood markets and being eaten at irregular times. More information is needed to determine possible solutions.

EMERGENCY & SUPPLEMENTAL FOOD

Food Pantries

There are currently seven food pantries operating in Somerville and supplemental food is also distributed through transitional centers and shelters, after school programs, free community meals, and directly to those in need. Each year, the SFSC sends a survey to food pantries located in Somerville in order to update information in the annual Food Resource Guide produced by SFSC. The Food Resource Guide is a valuable community communication tool available in three languages—English, Spanish, and Portuguese—on the SFSC website and in printed form.

In 2017, Somerville's pantries collectively reported serving more than 6,000 individuals each month, noting that some clients and families they see every week and others only once. Four of the pantries stated that they know clients are accessing multiple pantries in the area and others were confident that their clients would be interesting in accessing additional pantries if equipped with information in the SFSC Food Resource Guide. The profile of clients ranges in age and include a vast array of ethnicities. Many are recipients of SNAP and WIC benefits. Clients use the pantries and community meals for many reasons: some are experiencing emergent financial situations, while others use the food to supplement what is available to them through their income or other benefits; yet others participate in the community meals primarily as a social endeavor.

"Many churches give away food, but people don't have information about that."

- Head Start Focus Group Participant

Pantry operating hours range from "open by appointment only" to service Monday through Friday. Most pantries are open once or twice a week for a few hours at a time and have different frequencies at which clients can access them (i.e. once a month). As of May 2018, Mission Church of Our Lord Jesus Christ opened a new pantry in Somerville, and will serve clients the first Saturday of every month. No pantries in Somerville, Cambridge, Medford or Everett are officially open on Sundays. Clients learn about pantries in a variety of ways—at church, from city social workers, and via the Project Bread Hotline—but the most important channel is word-of-mouth. See Appendix 9 for a copy of the Somerville Food Pantry Survey.

CHA piloted conducting the Hunger Vital Signs screening at well child visits starting in 2017 as a method of detecting potential food insecurity. Patients who screen positive for food insecurity are referred to the Project Bread Hotline for connection to food resources such as SNAP, farmers' markets, and more. Project Bread's data shows a spike in food-related calls beginning in 2017, likely due to the start of the new HIP benefit that year.

Table 9: Project Bread Hotline Calls from Somerville (2009-2017)

Inquiry	2009	2010	2011	2012	2013	2014	2015	2016	2017
Food related ¹	106	105	118	85	81	64	52	102	209
SNAP related ²	131	102	99	149	120	81	96	60	58
Misc ³	5	2	2	1	4	1	4	8	8
Total	242	209	219	235	205	146	152	170	275

¹ Food-related calls consist of any calls where the caller is requesting information on a food pantry, community meal, SFSP, etc.

² SNAP-related calls concern General information, SNAP guidelines, Prescreens, DTA office information

³ Miscellaneous inquiries include utility assistance, shelter information, etc.

Map 5: Emergency and Supplemental Food Resources

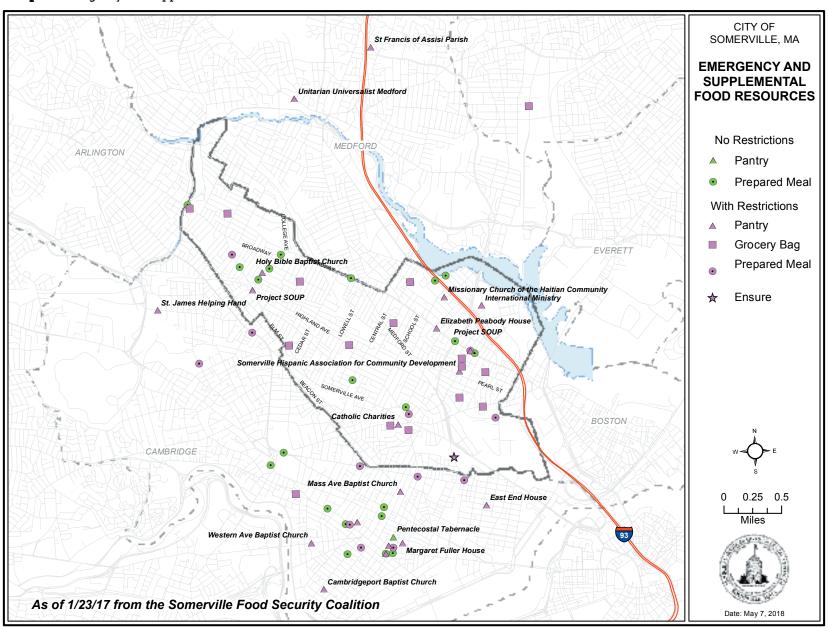


Table 10: Monthly Schedule of Community Meals

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Week l	4:30PM – 5:30PM Project SOUP 89 College Ave		5:00PM – 7:00PM Dormition of the Virgin Mary Church 29 Central Street		
Week 2	4:30PM – 5:30PM Project SOUP 89 College Ave				6:30PM Hearty Meals for All 31 College Ave
Week 3	4:30PM – 5:30PM Project SOUP 89 College Ave		5:00PM – 7:00PM Dormition of the Virgin Mary Church 29 Central Street		
Week 4	4:30PM – 5:30PM Project SOUP 89 College Ave		5:00PM – 7:00PM SFSC at Connexion 149 Broadway		

Community Meals

Free community meals are offered at different sites throughout the month by Project SOUP, Dormition of the Virgin Mary Church, SFSC hosted at Connexion Church, and Somerville Community Baptist Church. Meals are available every Monday, the first, third, and fourth Wednesday, and the second Friday of each month. All are dinners served between 4:30pm and 7:00pm at locations within a 15-minute walk of public transportation.

Among focus group participants, there was variable knowledge of where to access food assistance if friends or family were in need. Some participants enumerated locations of food assistance, while others did not know anywhere in Somerville they could utilize if needed. In addition, sharing information on food resources was mostly informal, by word of mouth through friends and family.

Single Stop at Bunker Hill Community College

Single Stop at nearby Bunker Hill Community College (BHCC) connects students to state and federal financial resources as well as local community services with the goal of helping students overcome barriers to continuing their education, with the long-term goal of economic mobility for students. Single Stop works with a variety of food assistance programs such as Food For Free by offering their prepackaged meals and the Greater Boston Food Bank's monthly mobile pantry program. Many BHCC students are graduates of Somerville High School, so Single Stop is undoubtedly serving Somerville residents. Tying into previously-discussed barriers, stakeholder interviews with Single Stop staff reveal that students also face barriers to transportation—while the MBTA's Youth Pass is a good resource for those under the age of 26, many students are considered non-traditional and may exceed that age limit.

Programs for Seniors

Second Helpings (2016), a collaborative project by Tufts students and the Metropolitan Area Planning Council (MAPC), compiled and shares health data on senior populations and senior-serving food access services in the Greater Boston area. Key players in food access specifically for seniors include Somerville-Cambridge Elder Services, the Somerville Council on Aging, SCM Transportation, Inc., and the MBTA.

Somerville-Cambridge Elder Services (SCES) offers Nutrition and Meals services to help older people and younger people with disabilities remain healthy and independent at home. Services include Meals on Wheels, Community Cafes, Brown Bag Program, Farmers Market Nutrition Program Coupons, Nutrition Supplements, and Nutrition Counseling. Recipients may be residents of Somerville or Cambridge who are 60 years of age and older, spouses of someone receiving services, and residents of any age living at an elder/disabled housing site. It is estimated that they serve about 250 Meals on Wheels households each day as well as 100 people per day in Somerville. They deliver to approximately 175 Brown Bag clients each month and distribute 650 Senior Farmers' Market Nutrition Program Coupon packets each year.

The Somerville Council on Aging (COA) supports older adults in their efforts to maintain their independence by enhancing growth, dignity, and a sense of belonging in mind, body, and spirit while aging in place. The COA offers numerous wellness programs including the popular Fit-4-Life Exercise and Nutrition Program. The COA, along with other senior housing locations in Somerville and Cambridge, also hosts low-cost lunches with opportunities for discounts.

SCM Transportation, Inc., based in the same building as the COA, was founded jointly by the Cities of Somerville, Cambridge, and Medford in 1981 to improve mobility for seniors and people with disabilities. Services are free but donations are requested. SCM, also known as Door2Door, provides weekday paratransit shuttle services to nonemergency medical appointments, grocery stores, family visits at hospitals or nursing homes, lunchtime meals such as those at the COA,

PROJECT SOUP COMMUNITY FOOD CENTER

"Project SOUP is the food assistance program of the Somerville Homeless Coalition. Project SOUP is working to build a community where all people have access to food in a manner that promotes dignity and independence. Project SOUP serves over 350 food insecure Somerville families and individuals each month through food distribution pantries in East Somerville, Davis Square and a home delivery program. Project SOUP's weekly community meal program has been active since 1969. Members represent a diverse set of cultures, languages and circumstances.

Project SOUP is transitioning itself to be a Community Food Center, seeking to move emergency food assistance beyond the traditional boundaries of a pantry. Starting in 2017, Project SOUP introduced a customer choice model, allowing members to utilize the service more like a grocery store. Project SOUP is incorporating a healthy food policy into its operation, providing a consistent assortment of fresh fruits and vegetables daily, and encouraging healthy eating through workshops and partnerships. Project SOUP's move to become a Community food center was inspired in part by a course through the Community Food Centres of Canada."

-Rachel Weil

Manager, Project SOUP, Somerville Homeless Coalition



and replacements for the MBTA's The RIDE when the cost is prohibitive²⁰.

The RIDE is the MBTA's door-to-door paratransit safety net service which operates within roughly the same hours as the MBTA's other transit modes. Application and approval by the MBTA is required to schedule appointments with The RIDE, with a key eligibility requirement being the inability to use fixed-transit service (bus, subway, or trolley) at least some or all of the time due to physical, cognitive, or mental disability²¹. Fares range from \$3.15 to \$5.25 depending on trip distance and type. Some focus group participants expressed concerns about being able to book appointments with The RIDE and that they may not be suitable for trips to food access points.

²¹ The RIDE. https://www.mbta.com/accessibility/the-ride. Accessed June 5th, 2018



In 2011, a vacant lot (above) was transformed into Somerville's first urban farm— South Street Farm. Managed by Groundwork Somerville, South Street Farm hosts the World Crops initiative, bringing unique crops such as jiló and callaloo to the Somerville Mobile Farmers' Markets (shown on facing page). The farm also serves as home base for the Green Team, a youth employment and leadership program.

COMMUNITY GARDENS AND FARMS

Community gardens and farms in Somerville only serve a small segment of the population, and since they do not sustain someone entirely, they are considered here as supplemental food sources.

South Street Farm

Established in 2011 by Groundwork Somerville with support from the city and community volunteers, South Street Farm is Somerville's first urban farm. Just half a block from Union Square, it is an important part of the movement towards sustainability and revitalization in Somerville. Once barren, paved parking lots, this quarter acre parcel now has 5,000 square feet of growing space, a greenhouse, native pollinator habitat, a solar powered rainwater capture system and multiple examples of compost systems.



²⁰ SCM Transportation, Inc. http://scmtransportation.org. Accessed June 5th, 2018

The farm serves as home base for Groundwork Somerville's youth employment program, the Green Team, which uses urban agriculture as a basis to help teens develop leadership and job skills, learn about environmental justice, and practice civic engagement. Between April and December, the Groundwork Somerville Green Team plants, tends, and harvests 2,000 pounds of produce that is sold at the Somerville Mobile Farmers' Market, donated to local food pantries, and used by the Green Team for special events and healthy eating workshops.

South Street Farm is also the site of Groundwork Somerville's World Crops initiative, launched in 2017. Mentor Farmers from various immigrant backgrounds teach Green Team members to grow culturally relevant food for immigrant populations in Somerville. This food is sold at the Somerville Mobile Farmers' Market. In addition to hosting the Green Team program, South

Street Farm acts as a green space for community gatherings and educational opportunities. Hundreds of community members visit South Street Farm each year for educational workshops, fieldtrips, community gatherings such as the Cider Day festival or mid-Summer Harvest Festival, and myriad educational volunteer experiences.

While South Street has advanced Groundwork Somerville's mission to increase green and productive space in the densest city in New England while addressing issues of health and race inequity at the intersection of food access and environmental justice, there is still room to grow. Increasing capacity by a single full-time employee could allow Groundwork Somerville to practice more intensive growing, enhance year-round garden-based education at area schools, host plant sales, increase family engagement, and expand summer programming.









Community Gardens

The Conservation Commission initiated and oversees the City's Community Garden program. The Commission helps establish new gardens, hires a city-wide garden coordinator and establishes policies for the gardens. Currently, the City has 12 gardens – 11 active and Lincoln Park scheduled to open in Fall 2018 – shown in Map 6. The Commission administers the Conservation Fund that can accept donations for the assistance with gardens and plantings in the City. Each garden is managed by one or more volunteer garden coordinator. Coordinators assign plots, help gardeners get seeds and compost, and provide information and advice to those who want it. Garden plots are available on a first-come-first-served basis, with surplus demand managed by a "wait list" system. Gardeners are charged a nominal fee and asked to sign a letter of agreement recognizing the cities rights and the gardener's responsibilities²².

22 City of Somerville Community Garden Program



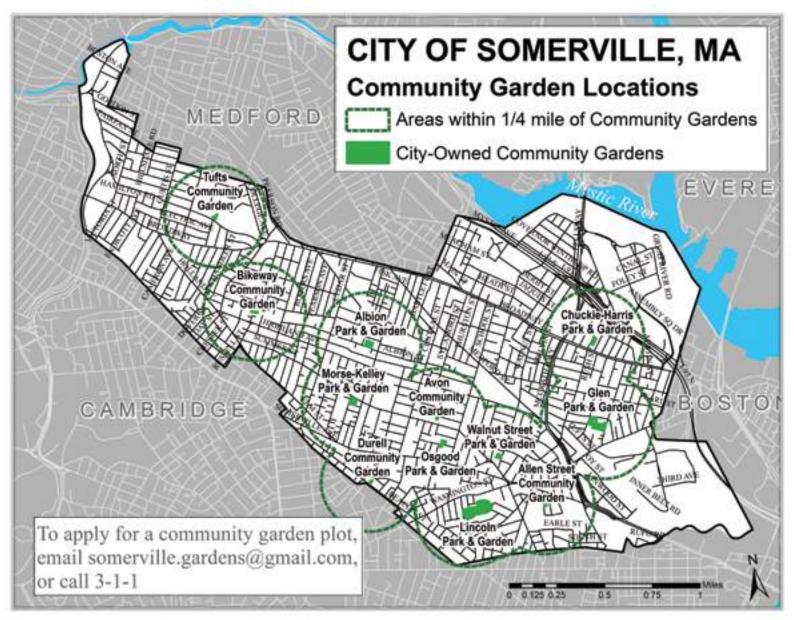
Davis Square Bikeway community garden.

Details regarding the number of plots and waiting list were only available for six gardens. Plot assignment tenure, production value, and number of growers per plot (e.g. individual, couple or multi-generational family) are not tracked or are tracked inconsistently. There are currently 225 individual garden plots, averaging 100 square feet each with annual fees ranging from \$20 to \$35 available and they are assigned for an indefinite period. At the end of the 2017 growing season, there were 130 people on waiting lists for six of the 11 active gardens and some of those people are on multiple waitlists. It is likely there is unmet demand for the six not reporting as well. Focus group participants did not express enthusiasm for growing food as a supplemental food source, although some indicated interest in community gardens. One barrier identified was that some landlords do not allow personal gardens on the property with a few reasons identified, but most notably increased water costs.



Cherry tomatoes at Durell Community Garden

Map 6: Somerville Community Gardens





FOOD ECONOMY ASSESSMENT

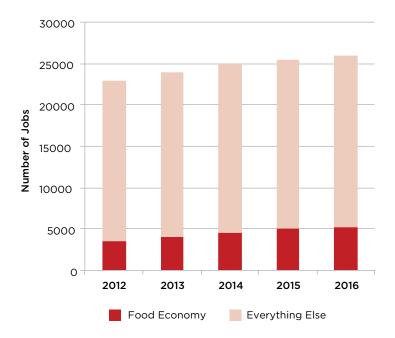
Recognizing that income is a key determinant of food security and health, the workgroup wanted to better understand how Somerville's growing food economy could provide opportunities, particularly for economic and workforce development. The food economy assessment took a closer look at where connections can be made between the food sector, jobs, and food access. This section is therefore organized first by employment and then by the food industry sectors: production, processing, distribution, and food services. A fifth sector, food recovery, redistribution, and waste, is taken up in greater detail in the next section.

Food Workforce and Development

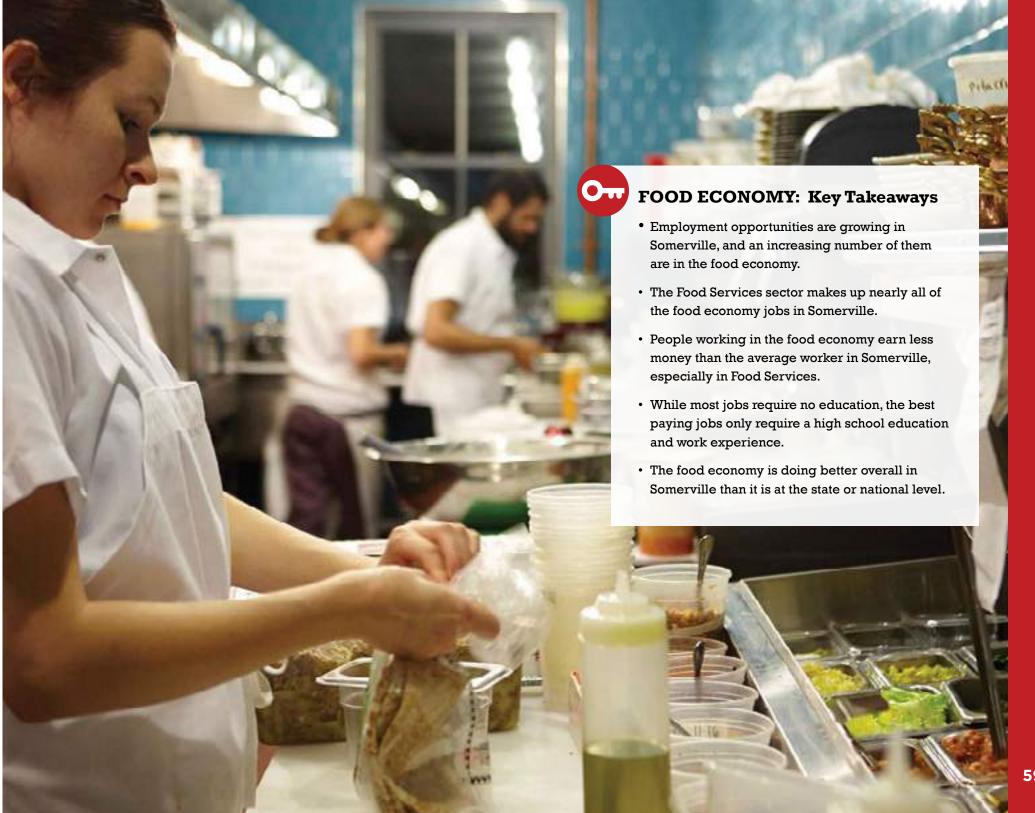
Employment opportunities are growing in Somerville, and an increasing number of them are in the food economy. In 2016, there were over 5,200 people employed in the Somerville food economy at 330 different businesses. This represents approximately 20% of all workers in Somerville, up from a little over 16% in 2012. In short, the food economy is growing, slowly but steadily.

The Food Services sector makes up nearly all of the food economy jobs in Somerville. Roughly 4,900 of the 5,200 jobs in the Somerville food economy are in food services. Two-thirds of those jobs are in restaurants, and nearly a quarter are in grocery stores. After Food Services, Processing is the next largest food economy sector with 281 jobs, followed by Distribution. There is only one commercial business in agricultural production, Green City

Figure 9: Job Growth in Somerville, MA



Source: Massachusetts Executive Office of Labor and Workforce Development. Employment and Wages (ES-202). Accessed July 29, 2017 by website: http://lmi2.detma.org/lmi/lmi_es_a.asp.



Food Industry Sectors

Food Services Sector Detail

3% Drinking Places (Alcoholic Beverages)

5% Special Food Services

3% Beer, Wine, and Liquor Stores

2% Specialty Food Stores

22% Grocery Stores

Figure 10: Breakdown of Somerville Food Economy, by Sector, 2016

Source: Massachusetts Executive Office of Labor and Workforce Development. Employment and Wages (ES-202). Accessed July 29, 2017 by website: http://lmi2.detma.org/lmi/lmi_es_a.asp.

Growers. One non-profit, Groundwork Somerville, also provides a few jobs in this sector. Although Tufts' Food Rescue Collaborative is the only food recovery organization based in Somerville, the community is served by three businesses that focus on composting and three that focus on redistribution.

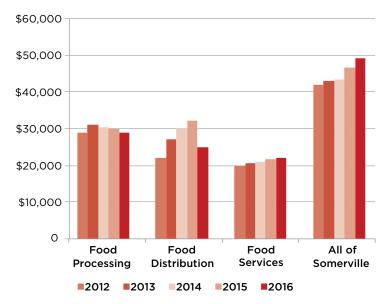
People working the food economy earn less money than the average worker in Somerville, especially in Food Services. People working in food services earn half as much money as the average person working in Somerville, and this hasn't changed in the past five years. In 2016, people working in the food services sector in Somerville (whether or not they were Somerville residents) earned an average of \$24,544 per year, compared to the \$49,296 average across all Somerville job sectors. Both processing and distribution jobs have provided somewhat higher wages, but their annual wages are still \$10-\$20k below the average Somerville job. Distribution wages have been rising until a sudden drop in 2016, while

processing wages have remained steady at about \$30,000 per year.

While most food sector jobs require no formal education, the best paying jobs only require a high school education and work experience. The most common jobs in the Somerville food economy are minimum wage positions in food services, such as waiters and cashiers. Those workers who meet the requirements and are able to land supervisory roles, such as head cook, are able to earn two to three times more than the minimum wage.

The food economy is doing better in Somerville than it is in the state or the country. In the past five years, the food economy has grown by 14% in Somerville, compared to 10% in Massachusetts and 13% in the country. Food economy workers in Somerville make \$0.66 more per hour than their peers in Massachusetts and \$2.07 more per hour than their peers in the rest of the country. However, these wages are still below median income levels in Somerville, and there are interventions to address this wage gap.

Figure 11: Average Annual Wages in Somerville, by Food Sector



Source: Massachusetts Executive Office of Labor and Workforce Development. Employment and Wages (ES-202). Accessed July 29, 2017 by website: http://lmi2.detma.org/lmi/lmi_es_a.asp.

The organized movement pushing employers to guarantee living wages in the restaurant industry is an exemplary strategy. Raise Up Massachusetts is leading the "Fight for 15" which would increase the minimum wage by \$1 for four years and then adjust "each year to rise along with the increases in the cost of living"²³. The living wage for Middlesex County by type of household is presented in Table 13. On June 28th, 2018, just before the printing of this report, Governor Baker signed a bill²⁴ that will increase the Massachusetts minimum wage to \$15 by 2023.

WHAT IS A LIVING WAGE?

"Analysts and policy makers often compare income to the federal poverty threshold in order to determine an individual's ability to live within a certain standard of living. However, poverty thresholds do not account for living costs beyond a very basic food budget. The federal poverty measure does not take into consideration costs like childcare and health care that not only draw from one's income, but also are determining factors in one's ability to work and to endure the potential hardships associated with balancing employment and other aspects of everyday life. Further, poverty thresholds do not account for geographic variation in the cost of essential household expenses.

The living wage model is an alternative measure of basic needs. It is a market-based approach that draws upon geographically specific expenditure data related to a family's likely minimum food, childcare, health insurance, housing, transportation, and other basic necessities (e.g. clothing, personal care items, etc.) costs. The living wage draws on these cost elements and the rough effects of income and payroll taxes to determine the minimum employment earnings necessary to meet a family's basic needs while also maintaining self-sufficiency.

The living wage model is a 'step up' from poverty as measured by the poverty thresholds but it is a small 'step up', one that accounts for only the basic needs of a family. The living wage model does not allow for what many consider the basic necessities enjoyed by many Americans. It does not budget funds for pre-prepared meals or those eaten in restaurants. It does not include money for entertainment nor does allocate leisure time for unpaid vacations or holidays. Lastly, it does not provide a financial means for planning for the future through savings and investment or for the purchase of capital assets (e.g. provisions for retirement or home purchases). The living wage is the minimum income standard that, if met, draws a very fine line between the financial independence of the working poor and the need to seek out public assistance or suffer consistent and severe housing and food insecurity."

- Dr. Amy K. Glasmeier from the MIT Living Wage calculator website

²³ Raise Up Massachusetts. https://raiseupma.org/campaigns/the-fight-for-15/. Accessed June 3, 2018.

²⁴ https://malegislature.gov/Bills/190/H4640

Table 11: Most Common Food Occupations in Somerville, 2016

SOC	Occupation	Median Hourly Wage	Number of Jobs	Typical Education Requirement
35-3031	Waitstaff	\$11.49	797	No formal educational credential
41-2011	Cashiers	\$11.08	751	No formal educational credential
35-3021	Combined Food Preparation and Serving Workers	\$11.60	591	No formal educational credential
35-2014	Cooks, Restaurant	\$13.58	369	No formal educational credential
35-3022	Counter Attendants (Cafeteria, Food Concession, and Coffee Shop)	\$10.65	319	No formal educational credential

Source: Emsi. Q3 2017 Data Set. Comparing Occupation Across Regions. Accessed August 2017 by free trial. www.economicmodeling.com.

Table 12: Highest Paid Economy Occupations in Somerville, 2016

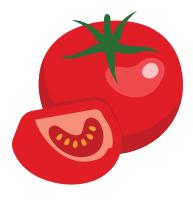
SOC	Occupation	Median Hourly Wage	Number of Jobs	Typical Education Requirement
51-1011	Supervisors of Production and Operating Workers	\$33.09	85	High school diploma or equivalent
11-9051	Food Service Managers	\$30.55	61	High school diploma or equivalent
35-1011	Chefs and Head Cooks	\$26.04	54	High school diploma or equivalent
41-1011	Supervisors of Retail Sales Workers	\$20.44	276	High school diploma or equivalent
51-3021	Butchers and Meat Cutters	\$18.72	20	No formal educational credential

Source: Emsi. Q3 2017 Data Set. Comparing Occupation Across Regions. Accessed August 2017 by free trial. www.economicmodeling.com.

Table 13: Living Wage by Household Type, Middlesex County

Wages	Living Wage	Poverty Wage	Minimum Wage	Required annual income pre-tax
l Adult	\$14.21	\$5.00	\$11.00	\$29,547.00
l Adult, l Child	\$30.36	\$7.00	\$11.00	\$63,144.00
l Adult, 2 Children	\$33.92	\$9.00	\$11.00	\$70,547.00
l Adult, 3 Children	\$41.41	\$11.00	\$11.00	\$86,131.00
2 Adults (1 Working)	\$21.59	\$7.00	\$11.00	\$44,900.00
2 Adults (1 Working), 1 Child	\$25.45	\$9.00	\$11.00	\$52,932.00
2 Adults (1 Working), 2 Children	\$28.32	\$11.00	\$11.00	\$58,912.00
2 Adults (1 Working), 3 Children	\$31.74	\$13.00	\$11.00	\$66,029.00
2 Adults (1 Working Part- time), 1 Child*	\$20.68		\$11.00	\$64,533.00
2 Adults	\$10.79	\$3.00	\$11.00	\$44,900.00
2 Adults, 1 Child	\$16.09	\$4.00	\$11.00	\$66,943.00
2 Adults, 2 Children	\$18.46	\$5.00	\$11.00	\$76,784.00
2 Adults, 3 Children	\$21.10	\$6.00	\$11.00	\$87,760.00

Source: MIT Living Wage Calculator



FOOD SECTOR SUMMARIES

Production

Early in the project, the working group made the decision to focus less attention on surrounding regional production and internal production capacity within the city. The food production sector is defined as commercial-scale urban agriculture. This does not include community gardens, of which there are several located in Somerville. The decision to focus more on other aspects of the food economy was based on three key factors, namely a desire not to duplicate complementary initiatives focused on state and regional production, acknowledgment of the prioritization of land use for housing, and recognition that Somerville's density inclines it toward food service workforce and consumer impacts.

There are two entities, one not-for-profit and one for-profit located in Somerville that meet the food production definition. The former is the aforementioned Groundwork Somerville which manages South Street Farm and sells produce to the Somerville Mobile Farmers' Market. Groundwork Somerville employs a total



The Green City Growers team at their Somerville office.

of 20 to 30 seasonal, part time jobs for youth, the equivalent of one full time job, as well as additional hourly wages for up to five community members. The latter is Green City Growers (GCG), which was established in 2008 and has since developed a portfolio of food production services for commercial, municipal, educational, and residential spaces that have become a national model. GCG continues to grow their residential clientele, but has seen significant growth in corporate customers, including restaurants, over the past five years. GCG manages almost 500 square feet of gardens for two corporate clients in Somerville, Federal Realty and Partners HealthCare, which are both located at Assembly Row. For GCG, space is the number one concern in urban agriculture. GCG chose to locate their headquarters in Somerville because they were able to find a place with a central location and ample space for growing food. GCG's footprint in Somerville continues to expand. In Spring 2018, GCG began leasing space in the City's ArtFarm greenhouse, funded by Massachusetts Department of Agriculture (MDAR).

Processing

The food processing sector is defined as commercial-scale food and beverage manufacturing. Key findings in this report were generally based on the following broad NAICS categories, with additional details informed by Emsi data.

Table 14: Food Processing Industry Codes

NAICS	Industry		
311	Food Manufacturing		
3118	Bakeries and Tortilla Manufacturing		
3121	Beverage Manufacturing		

Note: Food Manufacturing includes Bakeries and Tortilla Manufacturing, but not Beverage Manufacturing.



NIBBLE ENTREPRENEURS

"Nibble is a multifaceted program serving as the culinary arm of the Somerville Arts Council. In recognizing that food is also a form of artistic and cultural expression, Nibble includes a variety of activities and programs that support entrepreneurship in the world of food amongst the immigrant community here in Somerville. Through our annual Nibble Entrepreneurship Program workshop series we teach those who are interested how to start a food business of their own, including promotion, food costing, and recipe development. This type of workforce development program aims to reduce the barriers that exist between taking a food business concept from dream to reality, particularly amongst the rich immigrant community.

Nibble also features a wide array of community programming that includes international cooking classes, the Ignite! Festival of food and fire, and Market Tours that connect the community to Union Square's long standing international markets. Our goal is to maintain the vibrant international community that has made Somerville - and Union Square in particular - such an interesting place to live. Nibble uses cuisine to promote cultural interchange and to support the immigrant community. Late this summer Nibble is taking on a new project as we open up Nibble Kitchen in Bow Market, located in the heart of Union Square. Nibble Kitchen will be a collective of our international Nibble chefs and will feature a rotating menu that may include arepas one day, Ethiopian wots the next, and Brazilian street food on the weekend. The possibilities are endless."

-Dani Willcutt

Culinary Coordinator, Somerville Arts Council, City of Somerville



Taza Chocolate

There were 19 businesses and 305 food manufacturing jobs in Somerville in 2016. These jobs have grown in Somerville by a surprising 25% over the past five years, compared to a growth rate of 8.3% in Massachusetts and 9.5% in the U.S. overall. This may be a sign that Somerville has a unique competitive advantage in the food processing sector. The largest food manufacturers produce a variety of artisanal products from chocolate to beer, and are primarily based in the Union Square neighborhood.

Table 15: Top Four Food Manufacturers in Somerville, 2016

Business Name	Size (Employees)	Zip Code	Neighborhood
Taza Chocolate	Medium (50-249)	02143	Union Square
Deano's Pasta, Inc.	Small (0-49)	02145	East Somerville
Aeronaut Brewing Co.	Small (0-49)	02143	Union Square
Petsi Pies	Small (0-49)	02143	Union Square

Source: Emsi. Q3 2017 Data Set. Industry Snapshot. Accessed August 2017 by free trial. www.economicmodeling.com.

Distribution

The Distribution sector is defined as commercial-scale food and beverage wholesalers. This does not include farmers markets and CSA operations, although these are also methods of food distribution in Somerville.

There were 5 businesses and 40 jobs in distribution in Somerville in 2016. Since 2011, jobs in this sector have fallen by 12.5% and the number of businesses has reduced drastically from nine to five. An example of one distributor in Somerville is Winebow, which is a wine distributor located near Union Square. Unfortunately, more detailed information on other businesses in this sector is unavailable.

Food Services

The Food Services sector is defined as commercial-scale operations that sell food directly to consumers. This includes grocery stores, restaurants, and other eating and drinking establishments.

Table 16: Food Services Industry Codes

NAICS	Industry
445	Food and Beverage Stores
4451	Grocery Stores
4452	Specialty Food Stores
4453	Beer, Wine, and Liquor Stores
722	Food Service and Drinking Places
7223	Special Food Services
7224	Drinking Places (Alcoholic Beverages)
7225	Restaurants and Other Eating Places

Note: 4-digit industries are simply subcategories of the 3-digit industries. For example, Grocery Stores are one subcategory of Food and Beverage Stores.

INDUSTRY SNAPSHOT: FULL-SERVICE RESTAURANTS

As of February 2018, Somerville has 293 restaurants: 83% (242) of them have been in business for more than two years and 17% (51) have opened over the past two years (since February 2016). 11% (30) of the restaurants in business in 2016 have since closed.

There were 1,954 jobs at full-service restaurants in Somerville in 2016. Somerville experienced a 21.8% job growth in this industry from 2011 to 2016, outpacing the state by 8 percentage points and the country by 5.5 percentage points. This may be a sign that Somerville has a unique competitive advantage in the restaurant industry. Although Somerville has a large number of independently owned restaurants and a relatively small number of fast food chains, it should be noted that three of the top five are regional or national chain restaurants, including McDonald's.

Table 17: Top Five Full-Service Restaurants in Somerville, 2016

Business Name	Size (employees)	By Zip Code	Neighborhood
Redbones Barbeque	Medium (50-249)	02144	Davis Square
Outback Steakhouse	Medium (50-249)	02145	Assembly Row
Legal on the Mystic	Medium (50-249)	02145	Assembly Row
Mount Vernon	Medium (50-249)	02145	East Somerville
McDonald's	Small (0-49)	02143	Inner Belt

Source: Emsi. Q3 2017 Data Set. Industry Snapshot. Accessed August 2017 by free trial. www.economicmodeling.com.

160 ■ All Forms: Citywide 140 Malt & Wine: Citywide of Licenses Available ■ All Forms and/or Beer & Wine: 120 Assembly Square 22 All Forms: Enhancement Areas 12 100 Beer & Wine: Enhancement Areas 17 10 16 All Forms: Transformative Areas 80 16 ■ Beer & Wine: Transformative Areas 16 **Total Number** 60 The SomerVision Comprehensive 86 Plan maps residential neighborhoods 82 40 72 to conserve, squares and corridors to 64 64 enhance, and areas to transform. See 20 SomerVision page 17 for a map of these areas. 1991 2000 2008 2012 2016*

Figure 12: Alcohol Licenses in Somerville (1991–2016)

^{*} Of the 65 licenses enabled by the 2016 legislation, 32 will not be available until 2019.

For most dine-in restaurants, a liquor license is critical; typically liquor sales make up 20% of sales for a restaurant. However, obtaining a liquor license often comes with many barriers especially if the restaurateur must buy a private license, which is more expensive and requires the owner to take on more debt or give more equity to investors. Obtaining a City-owned liquor license at \$2,000-3,500 is more affordable compared to a private liquor license, wherein a business owner could spend between \$300,000-\$600,000. As a result, the City has worked hard to bring more publicly-owned licenses to the City, requesting 65 new licenses from the state in 2016, 60% more than the previous request. Of those 65 new licenses, half will not be available until 2019. This drastic reduction in cost helps new businesses succeed, particularly those without extensive financial resources or access to capital.

Many of Somerville's chefs, grocers and restaurateurs are inspired by their ethnic and cultural heritage. Indian markets, Venezuelan pop-ups or French patisseries are some examples of what you can find. Consequently, language can at times be a barrier for these enterprises when complying with City and State code. There are few resources provided by the City to aid food entrepreneurs, who are responsible to provide their own interpreter when navigating required municipal processes. ISD has created some forms in other languages and training videos, but these are used only after an infraction has occurred. Providing upfront resources in more languages in the future could ease and expedite the business development process for entrepreneurs who want to contribute to Somerville's thriving food industry

INDUSTRY SNAPSHOT: FOOD AND BEVERAGE STORES

This category includes grocery stores and other food retailers of which there were 100 open in 2016 and 126 open in 2018. There were 1,165 jobs at food and beverage stores in 2016. Job growth in Somerville for this industry was 5.4% over the past five years, which was lower than the state and the country by about 1 and 3 percentage points, respectively.

Table 18: Top Five Food and Beverage Stores in Somerville, 2016

Business Name	Size (Employees)	Zip Code	Neighborhood
Market Basket	Large (250+)	02143	Union Square
Super Stop & Shop	Large (250+)	02145	East Somerville
Target	Medium (50- 249)	02143	Union Square
Star Market	Medium (50- 249)	02143	Inner Belt
Whole Foods Market	Medium (50- 249)	02143	Union Square

Source: Emsi. Q3 2017 Data Set. Industry Snapshot. Accessed August 2017 by free trial. www. economicmodeling.com.



INDUSTRY SNAPSHOT: SPECIALTY FOOD STORES

There were 67 jobs at specialty food stores in Somerville in 2016. Job growth in Somerville over the past five years is 3.1%, which is between the Massachusetts rate of 1.3% and the national rate of 7.5%. The largest specialty stores sell meats or sweets.

Table 19: Top Five Specialty Food Stores in Somerville, 2016

Business Name	Size (Employees)	Zip Code	Neighborhood
McKinnon's Meat Market	Small (0-49)	02144	Davis Square
Orange Leaf Frozen Yogurt (now closed)	Small (0-49)	02144	Davis Square
Sugar Heaven	Small (0-49)	02145	Assembly Row
M.F Dulock Pasture Raised Meats	Small (0-49)	02143	Central Hill
Modelo's Butcher Market	Small (0-49)	02145	Magoun Square

Source: Emsi. Q3 2017 Data Set. Industry Snapshot. Accessed August 2017 by free trial. www. economicmodeling.com.



FOOD RECOVERY & WASTE DIVERSION

he Food Recovery sector is defined as commercial-scale operations that compost or otherwise divert organics from the trash. There are currently three non-Somerville-based composting companies offering pick-up services in Somerville to both residential and business clients. The oldest has been operating in Somerville since 2011 and the most recent for just over a year. Collectively, these services reach 860 clients (2.5% of households) with some growing subscribers by as much as 50% each month. Average monthly collection is 28,356 pounds, or more than 170 tons of organic waste diverted from landfills. Some of what is collected is returned in the form of finished product. In 2017, Bootstrap Compost and Garbage to Garden returned approximately 7,200 pounds of compost back to its Somerville subscribers for use in gardens and donated 180 pounds of compost to Groundwork Somerville, plus another 60 lbs to the Mystic Learning Center/ Housing Authority.

"Based on demand growth, Somerville is the most food waste-conscious community we serve."

- Emma Brown, Bootstrap Compost

Most food waste, both commercial and residential, in Somerville is currently disposed of in the trash, which is sent to a waste-to-energy facility in Saugus. In 2015, Mayor Curtatone established a compost task force that diligently prepared the framework for a city-based curbside compost pilot project. However, the pilot program was put on hold because a sustainable, responsible way to provide compost pick-up citywide was not feasible in the financial and regulatory landscape at that time. The Office of Sustainability and Environment continues to conduct research and financial analysis to determine whether possible revisions of the overall waste program could make composting financially feasible in Somerville. The City does sell discounted backyard compost tumblers for those looking to compost their food waste at home.

The food recovery landscape in Somerville and around Greater Boston is exceptionally well-networked. Boston has a lot of activity outside or alongside the mainstream model (i.e. dominated by Feeding America). To understand the food recovery and redistribution landscape, the FSA working group reached out to the Greater Boston Food Bank for an interview. To research and map additional food flows and organizational relationships within and through Somerville, the FSA working group partnered with Tufts University Professor Cathy Stanton and her Practicing in Food Systems class.



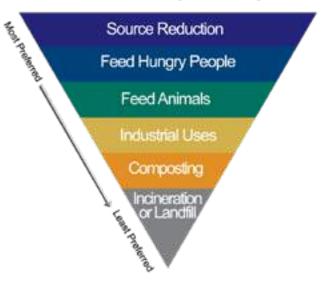
FOOD RECOVERY: Key Takeaways

- The food recovery landscape in Somerville and Greater Boston is well-networked, and numerous organizations, large and small, work together closely to ensure maximized efficiency and capacity across the system and its many scales.
- Flows of food within, through, and to Somerville are complex.
- Food rescue practices at stores are not yet standardized, but such an effort could improve consistency and quality across the food recovery system.

At left, Tufts students package excess food from the university's dining centers into family meals as part of the Tufts Food Rescue Collaborative and Food for Free collaboration. Above, the City of Somerville sells discounted rodent-proof composters to residents. The Somerville Community Growing Center has a compost education and demonstration area. *Photo courtesy of Tufts Food Rescue Collaborative*

Figure 13: U.S. EPA Food Recovery Hierarchy

Food Recovery Hierarchy



Working in teams, students surveyed four main areas - West Somerville/Medford, Highland Ave/Union Square, East Somerville, and Cambridge/Somerville. Students tracked flows of food from 19 donor sources, mainly grocery stores, to and through four intermediary organizations plus the Greater Boston Food Bank, landing at 36 recipient agencies.

Within the food rescue/food provision landscape, there are four levels of activity throughout the Boston area:

• The Greater Boston Food Bank (60.7 million pounds of food provided last year, 5.5 million of which came from 290 stores and food producers).

- Mid-sized intermediaries (Food for Free and Lovin Spoonfuls are the main ones in the Boston area; Food for Free plays by far the biggest role in the Somerville/Cambridge area although Lovin Spoonfuls is larger overall - 3 million pounds of food per year vs 2 million at Food for Free).
- Smaller intermediaries such as Arlington's FoodLink, at under half a million pounds per year, and Tufts' Food Rescue Collaborative.
- Direct food provision agencies (pantries, churches, community organizations, community meals), with varying connection to the network and each other.

These levels continually intersect, with exchanges of food and services across all levels in a way that aims to maximize efficiency and capacity across the system.

The Greater Boston Food Bank (GBFB) is an essential feature of this landscape. GBFB does not pick up or deliver food itself, but acts as a matchmaker between grocery stores and other donors, food rescue organizations, and recipients. In 2017, the Greater Boston Food Bank (GBFB) provided 1.4M pounds of food donations to 13 Somerville partners – pantries, shelters, transitional centers, after school programs, and direct distribution. Partners depend on the GBFB for between 14-100% of their donations and the average is 76% across all recipient organizations. Of the food items received in Somerville from GBFB, 36% is fresh produce, which is more than the GBFB overall average of 30%.

The intermediary organizations pick up from a variety of locations and drop off at multiple recipient agencies, with some overlap in routes and a good deal of traffic through the Greater Boston Food Bank. The Tufts class found that the best way to understand the food rescue landscape in and through Somerville was not to map just the donor/recipient routes or to trace specific donations,

but to follow the routes and networks mediated by key intermediary organizations.

The ability to operate effectively and responsively at a wide range of scales is crucial to the functioning of the entire network. The mid-sized intermediaries are large enough to deal with large-scale donations but nimble enough to fill gaps as needed. Because they have paid staff rather than relying on volunteers, they are able to provide the regular pickup schedules that large donors like grocery stores ask for. The much smaller intermediaries play a surprisingly important role in adding even greater flexibility into the system, filling gaps allowing the mid-sized organizations to fine-tune their operations. For example, LCS fills the weekend pickup shifts at the Whole Foods stores covered during the week by Food for Free, whose drivers don't work on the weekends. Although these amounts are not large, the function of filling the weekend gap is important, as grocery stores and pantries prefer or require consistency in pickups.

Many food rescue practices at grocery stores are improvised rather than standardized. Most employees talked to (even at a managerial level) did not know which specific organization picked up their donated food; most referred to this simply as "the food bank." There is a great deal of information about food rescue best practices available to stores (corporate guidelines, GBFB quarterly refresher visits, Lovin Spoonfuls quarterly visits plus video tutorials for staff at stores) but reception is irregular, resulting in a wide range of practices for deciding what food should be set aside for rescue. While stores have guidelines from the corporate level, there is a disconnect at the individual store level. From visits and conversations with various actors (loading dock workers, managers, customer service), the team found that there is inconsistency and sometimes a lack of knowledge about guidelines.

DATE LABELING AND THE IMPACT ON FOOD WASTE

"Confusion over the meaning of dates applied to food products can result in consumers discarding wholesome food. In an effort to reduce food waste, it is important that consumers understand that the dates applied to food are for quality and not for safety. Food products are safe to consume past the date on the label, and regardless of the date, consumers should evaluate the quality of the food product prior to its consumption."

Via https://www.fsis.usda.gov/



Listed below are what different informants noted as "guidelines":

- WIBI (Would I Buy It)" policy
- "Is it rotten"/ "Is it presentable" policy
- Choosing to compost or donate once best if used by date has past
- Choosing to donate or discount the foods approaching best if used by dates

Effective food rescue still often depends on individual staff members, leading to inconsistencies. Frequent staff turnover at grocery stores is one of the biggest problems for food rescue and store employees appear to often lack understanding of specific donation guidelines. There is a clear need for stores to identify an in-store champion who coordinates with intermediary organizations and to establish practices that are communicated consistently across departments. Some grocery chains have done this, while others operate on a more ad hoc basis.

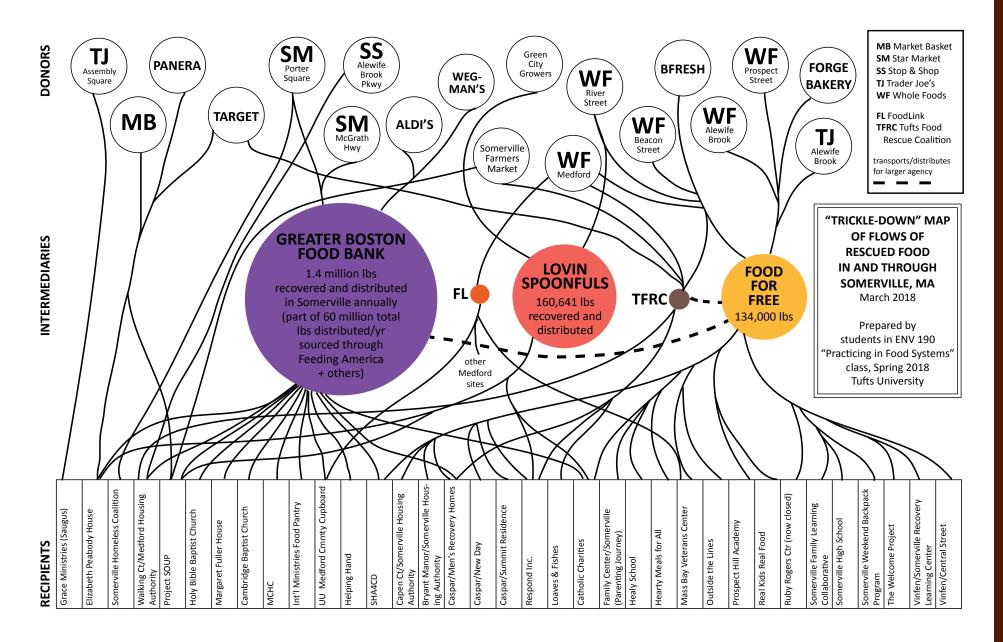
Grocery stores look for consistency from organizations/agencies picking up food. The intermediary organizations play a crucial role here, since their paid drivers are more accountable and consistent than most volunteer-based organizations can provide.

According to GBFB, there is more food available in the Boston area than agency capacity to recapture it, but there is a lack of refrigerator or freezer space in pantries and there are limitations in the number of trucks, drivers, and volunteers available to pick up from stores.



In December 2012, Somerville's Project Soup installed a new refrigeration unit onsite, greatly increasing their capacity to provide fresh food and produce to clients.

Figure 14: Food Rescue Flows Within and Through Somerville





FOOD POLICY

ood policy at the local, state and federal policy levels affect Somerville businesses, non-profits, institutions and eaters alike. The interwoven network of policy has allowed some aspects of the food system to flourish, while other aspects merit support through additional policy or policy change.

LOCAL

Urban Agriculture

In 2012, Somerville became the first city in Massachusetts to adopt an urban agriculture ordinance²⁵. Known still as one of the most progressive urban agriculture ordinances, it classifies activities under "Urban Agriculture" into categories including farming (sale of produce grown on designated city or private lots and/or on rooftops), gardening (growing produce not for sale on city and private lots, in greenhouses and/or on rooftops), and the keeping of animals (chickens and honeybees). There are also guidelines and permitting structures surrounding the sale of foods, recommendations for soil safety and rodent control, and fee structures for the keeping of animals. The City offers a guide, The ABC's of Urban Agriculture, which clearly outlines growing guidelines and requirements, including what, where, and how produce may be sold. This guide is available on the City's website.

In 2012, Somerville-based Green City Growers partnered with the City of Somerville to promote urban agriculture through citywide initiatives and garden installations. Mayor Curtatone sponsors the Urban Agriculture Ambassador Program every spring, which trains 20 Somerville residents in horticulture skills they can apply at home and in the community. In exchange, Ambassadors volunteer 30 hours in community agriculture projects like the Groundwork Somerville's growing sites, the Growing Center, and The Somerville Mobile Farmers' Market²⁷.

According to municipal permit records, there are currently eight apiary installations scattered throughout the City, and twelve chicken coops²⁶. Both of these numbers represent a decline from peak levels registered in 2015 for hives (10) and coops (16). The City does not require a permit for raised beds or planters. Data from Green City Growers, a Somerville-based company providing commercial and residential gardening services, shows that there are more than 20 households and businesses which enlist a service for on-site food production, but there are many more backyard growers than this small number suggests.

²⁵ https://www.somervillema.gov/news/somerville-becomes-first-city-commonwealth-un-veil-urban-agriculture-ordinance. Accessed March 20, 2018.

²⁶ Somerville Urban Agriculture Ordinance Permits and Patterns

²⁷ Green City Growers. https://greencitygrowers.com/about-green-city-growers/part-ners/. Accessed March 20, 2018.



Food trucks often act as an indicator species for a vibrant food scene, but in a city like Somerville with a robust food culture and economy, they are noticeably scarce. While Ordinance 8-362 specifically addresses mobile food vendors, the permissibility of

food trucks in Somerville was unclear in early working group conversations. The ordinance requires an independent license be obtained before operating as a mobile food vendor (including ice cream trucks) in one or more locations. Licenses are approved by the Board of Alderman.

Figure 15: Food Truck Permit Process

1 Establish your food truck

You'll need:

- Food truck
- Commissary kitchen
- MA Hawkers & Peddlers License
- Workers Compensation Insurance

2 Apply online

You'll need:

- Truck layout, equipment specs, photos
- Menu (if ice cream, 2 references and a CORI check)
- Vending site plan
- \$50 nonrefundable fee

City Process: Estimated to take 2-3 months.

3 Health approval

Health Inspectional Services will inspect your truck and ensure you are following appropriate food codes.

4 Fire approval

If you're cooking food on your truck using a flammable material, the Fire Department will need to inspect the truck.

5 Location approval

If you want to vend in a location not already approved, Traffic & Parking must assess and the Board of Aldermen must approve in Step 6.

6 Aldermen approval

The Board of Aldermen will hear any public feedback about your application and decide whether or not to provide final approval.

7 Pay & finalize

You will pay \$75 for the public hearing fee and \$165 for your annual license fee. Then, you'll be ready to start vending in Somerville!



The Davis Square Neighborhood draft plan²⁸, released in April 2018, also highlights the potential for food trucks to play a larger role in the Somerville food system and Figure 15 is their recommendations to consider streamlining the permitting process.

Food Licensing

Massachusetts food inspection requirements means the majority of food establishments must be inspected once every six months. According to the 1999 Food Code, a food establishment is "an operation that stores, prepares, packages, serves, vends, or otherwise provides food for human consumption"²⁹. Restaurants, catering operations, and food trucks are examples of establishments

that fall into this category. Outlets that offer only prepackaged foods that are not potentially hazardous (at risk for causing food borne illness) are not considered food establishments. Somerville's Inspectional Services Division (ISD) conducts food inspections for annual, seasonal and temporary food permits.

Currently there are two food inspectors who both inspect and address all types of food reviews and inspections. Each inspector covers different wards and precincts and inspects permits that fall within their area. Somerville has seen an increase in demand in food permit applications. Between 2015-2016 temporary food permits totaled 314; a 30% increase in a year. Food establishments requiring annual food permits has grown by 18% over the past two years, between 2016 and 2018.

Inspectors enforce the 1999 FDA Food Code, a model for safeguarding public health and ensuring food is unadulterated and honestly presented when offered to the consumer. It represents

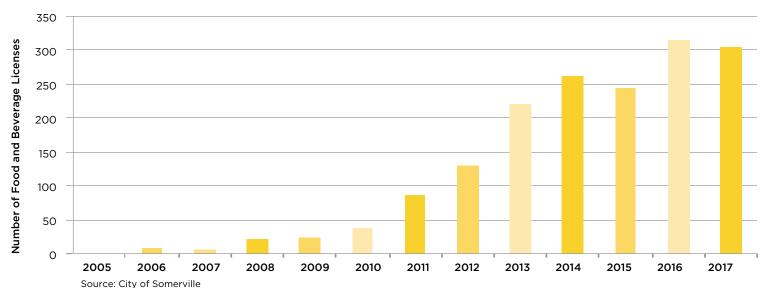


Figure 16: Temporary Licenses for Food and Beverage Vendors (2005-2017)

²⁸ p. 39 https://2xbcbm3dmbsg12akbzq9ef2k-wpengine.netdna-ssl.com/wp-content/up-loads/2018/04/20180427-DSQ-Neighborhood-Plan_PublicReviewDraft_Reduced.pdf

⁹ Citation: 105 CMR 590.000: STATE SANITARY CODE CHAPTER X--MINIMUM SANI-TATION STANDARDS FOR FOOD ESTABLISHMENTS- which adopts 1999 FDA Food code

FDA's best advice for a uniform system of provisions that address the safety and protection of food offered at retail and in food service. The model is offered for adoption by local, state, and federal governmental jurisdictions for administration by the various departments, agencies, bureaus, divisions, and other units within each jurisdiction that have been delegated compliance responsibilities for food service, retail food stores, or food vending operations³⁰.

A more recent Food Code exists and it is anticipated that Somerville will adopt a more recent version (e.g. Food Code 2013) when one is adopted at the state level. When this happens, it will require significant effort by ISD to adapt their systems. In response to the city's growing food services sector and the possible adoption of the 2013 Food Code, ISD has requested budgeting to include an additional inspector in the coming year.

U.S. FDA Food Code 2013. https://www.fda.gov/Food/GuidanceRegulation/RetailFood-Protection/FoodCode/ucm374275.htm. Accessed March 11, 2018.



STATE

Commercial Food Material Disposal Ban³¹

Beginning October 1, 2014 Massachusetts Department of Environmental Protection (Mass DEP) promulgated a food waste regulation requiring businesses and institutions that throw out one ton or more of commercial organic waste to divert from disposal through options such as donation, animal feed, composting, and anaerobic digestion. MassDEP enforces this ban statewide and treats it similar to other banned material by doing inspections at landfills or solid waste transfer to monitor loads that have large volumes of banned materials. Over the course of the nearly four years the regulation has been in effect, Mass DEP has issued 15 notices of non-compliance and 2 penalties due to their first two years emphasizing outreach and education. Businesses and institutions that are in violation of the ban are referred to Recycling Works for technical assistance on ways to divert their food waste. The tonnage threshold is per individual site rather than aggregate business. Based on 2011 data from a food waste generator document on MassDEPs website, there are several Somerville enterprises that likely meet the one ton threshold³². Ways municipalities can support businesses in complying with the ordinance is through their inspectional services department. During food safety inspections, inspectors can share or refer businesses and institutions to Recycling Works and provide information on how to manage food waste while minimizing odor, pest concerns or other health safety concerns.

³¹ https://www.mass.gov/guides/commercial-food-material-disposal-ban

³² https://www.mass.gov/files/documents/2017/12/14/foodmap.pdf

Massachusetts Food Trust

The Massachusetts Food Trust program allocates \$1 million in the state budget to go towards funding capital projects that "increase access to healthy, affordable food as a means to improve health outcomes and to encourage innovation in healthy food retailing and distribution in nutritionally underserved communities", according to Kristina Cyr Kimani, coalition and advocacy manager for the Massachusetts Public Health Association. "Examples of eligible projects include but are not limited to food processing infrastructure, non-retail food commissaries, food co-ops, greenhouses and farmers' markets, food hubs, commercial markets, and mobile/innovative markets. Although preferred, projects are not required to have a local food component". The FY'19 budget will likely include \$100,000 in operating expenses to support the program.

See Appendix 10 for upcoming state legislation.

FEDERAL

Farm Bill

The farm bill is the largest piece of legislation affecting both agriculture and food access in this country. It is up for reauthorization every 5 years. The omnibus bill includes titles on commodity programs, trade, rural development, farm credit, conservation, agricultural research, food and nutrition programs and marketing. Historically, the majority of the multi-billion dollar budget appropriated by the farm bill has gone to nutrition programs.

The farm bill affects Somerville food access in many ways. Title 4 of the 2014 Farm Bill appropriates budget, dictates program eligibility, sets requirements and establishes thresholds for the following grant and entitlement programs:

- Supplemental Nutrition Assistance Program: provides benefits for low-income and eligible participants to purchase food at participating retailers, farms and farmers markets; also includes SNAP education, which covers UMass Extension's Nutrition Education services
- The Emergency Food Assistance Program: provides food to food banks and other feeding programs serving low-income households
- Commodity Supplemental Food Program: supplements diets of low-income seniors (60 years +) with USDA food
- Senior Farmer's Market Nutrition Program: provides coupons for low-income seniors to be used at farmer's markets, market stands, CSAs etc.
- Fresh Fruit and Vegetable Program: provides fresh fruit and vegetables to be distributed at schools
- Food Insecurity Nutrition Incentive: grant program that funds programs that incentivize SNAP participants to choose fruits and vegetables. Provided funding for HIP program in MA.
- Healthy Food Financing Initiative: supports projects, grants and tax credits to programs that increase access to healthy affordable food.
- Food and Agriculture Learning Service Program: funds food, garden and nutrition education

Congress has been developing versions of the bill, in both the House of Representatives and the Senate. The House of Representatives 2018 reauthorization of the farm bill calls for large cuts to SNAP and increased work requirements for SNAP participants. At the time of writing, the bill was under debate.

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WHAT WE LEARNED

The goal of the FSA was to compile existing secondary data and augment it with some primary data to create a more holistic picture of Somerville's food landscape, using the lens of food security and equity. This report serves as the foundation for informing a future food action plan. However, as information was uncovered or dots were connected throughout the assessment process, ideas for what to do next came up during workgroup meetings. The following sections pull together findings from this assessment with some potential next steps with the goal of improving healthy food access for all who live, work, play, raise families and age in Somerville.

OBJECTIVE #1

Understand what Somerville stakeholders want in their community as it directly or indirectly relates to their cultural, social and economic food practices.

Relevant Assessment Activities

- Six focus groups (see Table 1)
- Customer intercept interviews from the Healthy Corner Stores 2016 Tufts Project
- Food system stakeholder interviews

What We Learned

- **1.1** Focus group participants are price-conscious shoppers looking for high-quality and culturally-appropriate foods.
- **1.2** Shoppers are willing to travel to multiple stores to find the right items at the right prices, whether within or outside of Somerville and not necessarily their closest store.
- **1.3** Most focus group participants prefer to cook at home with fresh ingredients.
- **1.4** People are familiar with grocery delivery models used in other parts of the world (shop in store, store delivers to home), and are interested in seeing such programs expanded here in the US.
- 1.5 More people want to grow their own food than have access to at home or community gardens with safe soil and/or raised beds. Some of those who have space at home to grow have experienced that their landlords do not allow personal gardens on property due to the increased water costs. This issue was also raised in 2014 when the SFSC engaged 150 youth and 150 parents of children aged birth to eight in food security surveys and discussions on community strategies.

OBJECTIVE #2

Determine the factors (where, what, how, why) that contribute to the daily consumption patterns of Somerville stakeholders.

Relevant Assessment Activities

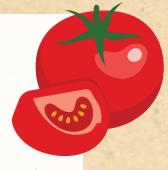
- Food asset mapping
- Six focus groups
- Data collection from schools, mobile market, farmers markets, neighborhood market engagement
- Economic data from Emsi, an economic modeling platform
- Stakeholder interviews

What We Learned

- **2.1** Shoppers prefer to use a car for grocery shopping (particularly owned or borrowed as opposed to cabs) but are not always able to access cars for shopping.
- **2.2** Most shoppers have a preferred grocery store, usually based on affordability and availability of products sold. If possible, they would rather arrange for a ride than walk to their nearest store.
- **2.3** Shoppers walk or take the bus when cars are unavailable, but report that the MBTA is inadequately equipped for travelling with groceries and different bag limit policies are enacted depending on line and driver.
- **2.4** Somerville farmers' markets are successful in connecting farmers to Somervillens and reaching a broad swath of the community, but there are further steps required to make it easier for

Somervillens to navigate the markets (given differences) and increase accessibility for all populations.

2.5 Despite food resources in the community and at schools, gaps in food access remain in the day (and, more broadly, school vacations) for youth.



2.6 Low-income residents, seniors, some immigrant communities, youth, people with disabilities, and female-headed households remain the populations most likely to have more variable access to sufficient and healthy food.

OBJECTIVE #3

Assess the existing and future food landscape that will influence consumption habits, understand gaps and identify solutions to help all Somerville residents achieve their optimal health, while respecting cultural values (measure assets and needs in the community).

Relevant Assessment Activities

- Food Asset Mapping
- Participation rates from schools, mobile market, farmers market, neighborhood market engagement
- Economic data from Emsi, an economic modeling platform
- Stakeholder interviews

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What We Learned

- **3.1** Somerville has ten full-service grocery stores in Somerville or right outside the border. All residents live within a 1-mile drive of a full-service grocery store and about half of Somerville residents live within a 10-minute walk of a full-service grocery store.
- **3.2** Neighborhoods in Somerville that are not fully within a 10-minute walk of a full-service grocery store are Winter Hill which includes Mystic Housing Development (one of Somerville's densest and lowest-income neighborhoods), Spring Hill, Powderhouse, East Somerville, and pockets of West Somerville.
- **3.3** There are 21 neighborhood markets in Somerville. Of the neighborhood markets which were assessed and carried items to make a complete grocery basket (n = 4) or a complete alternative basket (n = 9), they were on average 36% more expensive for the same items as a full grocery store yet they are more physically accessible.
- **3.4** Given prior development patterns, more food retailers might open near the new Green Line stops. This would put more residents in these neighborhoods within walking distance of food resources but may also impact affordability of food.
- **3.5** The Green line will improve public transportation options to food for some people in Somerville.
- **3.6** Somerville has seventeen food pantries, the majority of which are primarily supported by the Greater Boston Food Bank.
- **3.7** In 2017-2018 season, the Healthy Incentives Program (HIP) made a significant positive impact on food access for Somerville SNAP recipients at farmers' markets, mobile markets, and CSAs.

- **3.8** Somerville Public Schools' participation rate is 68% for lunch and 32% for breakfast; and snack is also offered in all schools. Some schools have unique opportunities such as Breakfast in the Classroom at WHCIS or fruit and vegetable snack.
- **3.9** Some grocery chains ask for personal information to sign up for loyalty cards. Not all residents feel comfortable sharing such information, so access to discounts is inequitable.
- **3.10** There are 225 individual community garden plots in Somerville. The interest in using these plots exceed availability, demonstrated by the 130 names listed for 6 of the 11 active gardens.

OBJECTIVE #4

Identify opportunities to grow our local food economy and create more food-related, safe and fair paying jobs and food/health ambassadors.

Relevant Assessment Activities

- Review of publicly available data via Emsi and municipal sources
- Neighborhood market surveys
- Stakeholder interviews

What We Learned

- **4.1** In the past five years, the food economy has grown by 14% in Somerville, compared to 10% in Massachusetts and 13% in the country.
- **4.2** Food economy workers in Somerville make \$0.66 more per

hour than their peers in Massachusetts and \$2.07 more per hour than their peers in the rest of the country. However, these wages are still below median income levels in Somerville.

- **4.3** The Food Services sector (as opposed to agriculture or food processing sectors) makes up nearly all (94%) of the food economy jobs in Somerville. Two-thirds of those jobs are in restaurants and nearly a quarter are in grocery stores.
- **4.4** People working in the food economy earn less money than the average worker in Somerville, especially in Food Services.
- **4.5** Most jobs in this sector require no education, and the best paying jobs often require only a high school education and work experience. Two training programs exist in and around Somerville, though: the Somerville High School's Culinary Arts Program and BHCC's Culinary Training Program.
- **4.6** The food economy is doing better overall in Somerville than it is at the state or national level, but opportunities for improvement still exist, particularly around increasing the minimum wage.
- **4.7** Neighborhood markets identified rising rent as a business challenge, and weekly revenues from sales varies widely across these stores.
- **4.8** There are only two commercial-scale entities growing food in Somerville. While it is not feasible to increase commercial food production operations in the city due to space constraints, the City should encourage use of innovative urban agriculture practices such as vertical and rooftop farming.
- **4.9** Jobs in food processing in Somerville have grown by 25% in

the past five years compared to a growth rate of 8.3% in Massachusetts and 9.5% in the U.S. overall.

4.10 Requests for annual and temporary food permits in Somerville is increasing, but the city process is confusing and burdensome to small businesses.

OBJECTIVE #5

Investigate how all stakeholders hear about food resources and learn about nutrition. Operationalize communication systems to improve multi-sector, multi-level knowledge of existing food resources and information.

Relevant Assessment Activities

- Focus groups
- Online research
- Stakeholder interviews

What We Learned

- **5.1** Constituents express varying levels of knowledge of food assistance sources despite varying lengths of years of residence, and generally do not have a clear idea of how to share information on food resources and food assistance effectively. Additionally, when available, information needs to be translated more often when available.
- **5.2** Many service providers in Somerville recognize the connection between food security and other health and academic outcomes, and see firsthand how food insecurity affects their clients.

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However, there are varying levels of knowledge of food resources and nutrition programming that exist among city and community workers.

- **5.3** Taste testing via community organizations has been identified as a strategy to increase nutrition and food literacy. However food safety concerns and enforcement preclude programs from implementing. This has also been identified as a concern in the Somerville Food Security Coalition Meetings.
- **5.4** Prospect Hill Academy Charter School works with community partners to run school gardens, school meals, and afterschool care. However, little is known about food security among their students, and opportunities exist to engage further with staff and families.
- **5.5** Grant-funded Farm-to-School activities and staffing have provided additional capacity within SPS for the past three years, but without the full-time position, food and nutrition education in the cafeteria, classroom, and for parents will be limited.



6. OBJECTIVE #6

Explore leverage points for food recovery and ways to reduce food waste. This includes edible food (recovered and donated for consumption by people) and inedible food, diverted from landfills.

Relevant Assessment Activities

- Stakeholder questionnaire
- Tufts class semester project map flows of recoverable food
- Tufts class semester project interviews of grocery store staff on practices

What We Learned

- **6.1** There are intricate and intersecting flows of food recovery in Somerville. Navigating and managing this network is a complex effort for emergency food providers.
- **6.2** While there is a robust food recovery network across Greater Boston, groups operate at different scales and thus encounter limitations to further redistribution such as storage, vehicle availability, and staff/volunteer capacity.
- **6.3** The food retailer donation and recovery system relies upon a patchwork of store policies and practices, and thus the success of a recovery program frequently depends on individual "champions" in each store.

NEXT STEPS:

Transit

- Collaborate with stores and neighbor cities on an affordable grocery delivery service and shuttle to grocery stores (1.4, 2.1, 2.2, 2.3)
- Establish a ride-share volunteer program (2.1, 2.2, 2.3)
- Investigate, and, if indicated, eliminate, MBTA restrictions on bags (2.3)
- Request training for MBTA drivers for accommodating people with groceries (2.3)
- Offer a subsidized grocery caddy to assist those walking to access food (2.1)
- Add bike racks at food retailers and pantries to promote active transit to food assets (2.2)

Awareness of Resources

- Develop graphic, multilingual, educational bulletin boards in food stores, libraries, laundromats, schools, and community & youth centers about food assistance services (5.1)
- Host coalesced information online (such as on the Somerville Hub and SFSC website) to increase reach of existing resources and discourage duplication; continue to seek alternative resource-sharing methods (5.1)

- Identify and incentivize community champions or community health workers to promote food resources and help inform & design interventions and polices to improve equitable food access (5.2)
- Develop a community-wide communication platform to connect consumers to a variety of food resources (5.1)
- Increase enrollment of SNAP and WIC among those who are eligible (5.1)

Cultural Relevance & Inclusion

- Translate key information into more languages such as Mandarin and Arabic (5.1)
- Engage community champions in designing and implementing any related interventions listed from the food system assessment (5.2)
- Use an equity lens when considering future food policies and aim for inclusive stakeholder engagement (2.6)

Food for School-Aged Youth

- Address school nutrition program participation rates—specifically for summer meals, breakfast, and lunch at the high school—and collaboration between out-of-school food providers (2.5)
- Develop programming that addresses out

- of school time nourishment specifically during vacations, weekends, snow days, summer, and after school (2.5)
- Connect more children to out of school programming and work with these programs to provide healthy meals (2.5)
- Research feasibility for Somerville to implement a Child and Adult Care Food Program (CACFP) funded Supper Program (2.5)
- Explore feasibility to host share tables at schools in Somerville (2.5)
- Strengthen partnership with Prospect Hill Academy Charter School to create more wrap around services as it relates to out of school time food access (5.4)

Food and Nutrition Education

- Continue to embed Farm to School programming into school curriculum (5.5)
- Advocate for Farm to School funding where gaps remain and capacity is needed (5.5)

Next Steps

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Food Retail

- Model a healthy neighborhood market initiative after successful examples in other communities; partner with the City's Economic Development staff to pilot a low-risk initiative for market owners and operators (3.2, 3.3)
- Support zoning amendments that allow neighborhood markets to exist in neighborhoods across Somerville (3.3)
- Incentivize and provide stores with technical assistance to accept WIC and SNAP, and advocate for continued funding for such programming (3.3)
- Introduce price signage at point of selection in neighborhood markets (3.3)
- Market Somerville as a food destination and expand Union Square Main Streets/ Somerville Arts Council-style food tours to Winter Hill and East Somerville neighborhoods (4.7)
- Consider food or cooking cooperatives and group procurement options (3.2)
- Offer language services at local food retailers (5.1)
- Encourage more retailers to offer a senior discount (2.6)
- Develop and improve relationships with grocery and drug store chains to reduce barriers to food access (examples include customer loyalty cards or affordable food delivery) (3.1, 3.2, 1.4)

Food Recovery and Waste

- Develop an informational guide for businesses on how to donate or compost food through the lenses of community benefit and trash removal cost savings (6.3)
- Incentivize food recovery and transparency of food recovery data through City of Somerville (6.3)
- Check in with stores more frequently, perhaps including an annual event to facilitate relationships and reward grocery stores for good donation practices (6.3)
- Disseminate information to people in a multitude of store positions, so practices are implemented at all levels and are not dependent on managers alone (6.3)
- Provide Somerville-area stores with a clear, simple, area-specific infographic for guidelines, resources, and data that can be posted near food donations. Emphasize local/community connections, need, and availability of services (6.1)
- Develop an emergency response plan for Somerville pantries for climate change impacts (i.e. superstorms, electrical outages) and food shortages (6.2)
- Set up more cold storage in sites across the City to store fresh food that emergency and supplemental food providers can use (6.2)

Urban Agriculture and Community & Home Gardens

- Formalize community gardens access process and track their use (1.5)
- Use an equity approach when considering community garden waitlists (1.5)
- Consider opportunities and incentives for increasing backyard gardening, such as landlord engagement and discounted raised beds and rain barrels (1.5)
- Incorporate discussions about soil safety when addressing urban agriculture opportunities (1.5)
- Support efforts to support a wider range of urban agriculture practices, from window boxes to rooftop farms and beyond (4.8)

Food Jobs and Increasing Food Security & Access for Food Service Workers

- Develop and improve relationships with food retailers to improve outreach to food service workers (4.4)
- Encourage improved employer practices like back-of-house profit/tip-sharing models (4.2)
- Provide workforce training programs (4.4) and workers' rights workshops (4.5)
- Join advocacy efforts to work towards increasing the minimum wage (4.2, 4.6)

- Utilize opportunities to share stories as it relates to food workers' experience with food access and security (4.6)
- Explore night-time childcare solutions for late shift workers (4.4)
- Increase education and awareness of transportation options for late night/early morning shift workers, including business paying for transit for workers required to leave after T shut down (4.4)
- Support Person in Charge (PIC) food safety training programs for food service workers in order to improve communication gaps between ISD and the food establishment, reduce or eliminate language barriers around food safety issues, reduce communication burdens, and reduce re-inspection rates (4.5, 4.10)
- Find funding and space for a community kitchen for nutrition education and community meals (4.0)
- Consider ways to expand existing commercial kitchens to support food business entrepreneurs (4.0)

Permits

- Review the permitting and licensing process for permanent and temporary food permits (4.10)
- Adopt 2013 food code (4.10)

- Examine and publicize the resources and assets Somerville offers to make it easier to start food businesses (4.10)
- Streamline the permitting process and outline it in a translated tool with clearly designated gatekeepers to promote food business growth (4.10)
- Work with ISD to make it easier to give samples of cooked foods at events (5.3)
- Encourage public distribution of multilingual forms at relevant events like Ignite (4.10)

Policy

- Encourage municipal planning processes to include food access in neighborhood and transit planning; identify current and upcoming opportunities to begin this intentional inclusion and point people (3.2)
- Identify multi-sector, multisystem approaches for promoting tap water (2.0)
- Consider opportunities for streamlining funding and administration of Farmers Market match programs (2.4, 3.7)
- Create models for healthy food and beverage policies to be enacted at municipal and organizational levels, and subsequently encourage their adoption (2.0)
- Continue to align local food system goals with the Massachusetts Food System Collaborative work (2.0, 4.0, 6.0)

Some additional questions raised throughout this process warrant a deeper look. This list will certainly grow and aims to be a working document to coordinate conversations and activities that occur in the community among various food system stakeholders.

Future research projects

- Study the best practices and regional feasibility for incentivizing business and institutions to reduce or divert wasted food.
- Create a composite index for store availability and affordability and incorporate these indicators into a food access map (3.3)
- Measure Somerville's Food Swamp to Healthy Food Ratio (3.1)
- Activate all the Food Asset Maps produced for this assessment (5.2)
- Better understand daily food access opportunities and gaps for youth and seniors through case studies (2.0, 3.0)
- Map Somerville's Food & Nutrition Literacy resources (5.2)
- Engage in community dialogue about structural racism in the food system (2.0)
- Learn more about "just green enough" concept and see if applicable for "just food enough" per CUNY food policy institute (1.0, 3.0)
- Host an online free public space where all locally produced food system related reports can be accessed (5.0)

Next Steps

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GLOSSARY

CACFP Child and Adult Care Food Program

Provides aid to child and adult care institutions and family or group day care homes for the provision of nutritious foods that contribute to the wellness, healthy growth, and development of young children, and the health and wellness of older adults and chronically impaired disabled persons.

CEP Community Eligibility Provision

Allows high need schools to serve free meals to all students while alleviating the administrative burden to collect paper applications.

CHA Cambridge Health Alliance

An academic community health care provider in Cambridge, Somerville, and Boston, Massachusetts' metro-north communities specializing in primary care, mental health, substance abuse, and caring for diverse and complex populations.

CBPR Community Based Participatory Research

Partnership approach to research that equitably involves community members, organizational representatives, and researchers in all aspects of the research process.

CS-FSA Comprehensive Food System Assessment

A food system assessment typology is a multidimensional evaluation of the food system. Such an assessment considers qualitative and quantitative food systems data with regard to its social, economic and ecological components.

COA Council on Aging

A municipal division which supports older adults in their efforts to maintain their independence by enhancing growth, dignity, and a sense of belonging in mind, body, and spirit while aging in place. The COA provides access to fitness, health, and wellness activities, socialization opportunities, educational programs, transportation, and support services.

DTA Department of Transitional Assistance

Assists and empowers low-income individuals and families to meet their basic needs, improve their quality of life, and achieve long term economic self-sufficiency by offering direct economic assistance (cash benefits), food assistance (SNAP benefits), and workforce training opportunities.

FMNP Farmers' Market Nutrition Program

A program funded by the USDA and state governments aiming to make local, fresh foods at farmers' markets and farmstands more affordable for low-income seniors and WIC clients.

FSNE Food Solutions New England

A regional, collaborative network organized to support the emergence and continued viability of a New England food system that is a resilient driver of healthy food for all, racial equity, sustainable farming and fishing, and thriving communities

ISD Inspection Services Division

Ensures the safety of residents and community members by enforcing city ordinances as well as state and federal codes relating to building construction and public health.

HIP Healthy Incentives Pilot

A food access program of the Massachusetts DTA which provides a dollar-for-dollar match on the purchase of local fruits and vegetables at farmers' markets, mobile markets, farmstands, and CSAs. The HIP benefit is immediately added to SNAP households' EBT card after each purchase.

NSLP National School Lunch Program

A federally-assisted meal program operating in public and nonprofit private schools and residential child care institution, providing nutritionally-balanced low-cost or free lunches to children each school day.

OSPCD Office of Strategic Planning and Community Development

A municipal department which seeks to enhance low and moderate income areas of the sity, stimulate economic development, increase job opportunities, create future development opportunities, improve the City's neighborhoods, expand housing options, preserve and enhance open space and improve transportation access, with a focus on Somerville's long-term economic, environmental, and social quality of life.

SBP School Breakfast Program

Provides cash assistance to states to operate nonprofit breakfast programs in schools and residential childcare institutions. The USDA Food and Nutrition Service administers the SBP at the Federal level. State education agencies administer the SBP at the state level, and local school food authorities operate the program in schools.

SCALE Somerville Center for Adult Learning Experience

Provides classes and support services to more than 1,200 adult learners annually who need basic reading, writing, and math skills, English instruction for non-native speakers, or a high-school credential. Classes are free. Fees are charged for orientations, adult evening school, testing, and for the Adult Diploma Program.

SCES Somerville-Cambridge Elder Services

A local non-profit elder services agency dedicated to helping people maintain independence and well-being at home by providing services, supports, and information.

SFSC Somerville Food Security Coalition

Brings people together in order to compile and raise awareness about community resources as well as to maximize the impact of existing efforts to bring Somerville residents healthy, accessible, affordable and culturally comfortable food.

SHA Somerville Housing Authority

Provides access to more than 1,400 subsidized housing units in Somerville for eligible low- and moderate-income families and the elderly.

SNAP Supplemental Nutrition Assistance Program

A program administered by the USDA Food and Nutrition Service which offers nutrition assistance to millions of eligible, low-income individuals and families and provides economic benefits to communities. SNAP is the largest program in the domestic hunger safety net.

SPS Somerville Public Schools

One of the top urban districts in the state serving a diverse and dynamic population of more than 5,000 students from Pre-Kindergarten through 12th grade across 11 schools. The District believes in developing the whole child by nurturing the intellectual, social, emotional, and physical potential of all students and providing students with the skills, opportunities, and resources that will nurture innovative ideas, foster pride in diversity, inspire students to become lifelong learners and empower them to enrich their communities.

SUS Shape Up Somerville

Builds healthy, equitable communities in Somerville through interdisciplinary partnerships, programming, and policies related to food systems and active living.

WIC Women, Infants, and Children Program

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides nutritious foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are income eligible at nutritional risk.

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APPENDIX 1: Somerville Community Food Resources

Somerville Wellbeing Report https://www.somervillema.gov/sites/default/files/wellbeing-of-somerville-report-2017.pdf

Somerville Food Security Coalition http://somervillefoodsecurity.org/

Union Square Farmers Market http://www.unionsquaremain.org/

Davis Square Farmers Market http://massfarmersmarkets.org/davis/

Somerville Winter Farmers Market https://www.somwintermarket.org/

Somerville Mobile Farmers Market https://somervillemobilefarmersmarket.wordpress.com/

APPENDIX 2: Focus Group Survey and Facilitation Guide

Focus Group Demographic Survey

Thank you for participating in tonight's Somerville Food System listening session. We ask that you please answer the following questions to the best of your ability. This information will be used in combination with the comments you provide during the discussion to help us determine what improvements need to be made to improve access to healthy foods in Somerville. The information that you provide will be kept confidential. Please do not write your name, address or telephone number anywhere on this survey.

1. Wha	1. What is your age?				
2. Wha	t is your gender?				
	Male				
	Female				
	Transgender				
3. Wha	t is your zip code?				
	02143				
	02144				
	02145				
4. How	many years have you lived in Somerville?				
	Less than 1 year				
	1-3 years				
	4-8 years				
	8 or more years				

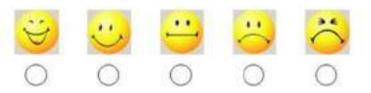
5. What app	t race best describes how you identify yourself? (select all ply)					
	American Indian or Alaska Native					
	Asian					
	Black or African American					
	Native Hawaii or Pacific Islander					
	White					
	Other (please specify):					
6. Whic	ch of the following best describes your heritage?					
	African					
	Caribbean					
	Central American					
	South American					
	Northern American					
	European					
	Eastern Asian					
	South Central Asian					
	South Eastern Asian					
	Other (please specify):					

7. What is the number of adults over age 18 living in your household (including yourself) currently?	11. Have you ever purchased food from the Somerville Mobile Farmers Market?		
□ 1	□ Yes		
□ 2	□ No		
□ 3 □ 4	12. Have you or any members of your household used any of the following food sources in the past 12 months? (select all that apply		
□ 5+	☐ SNAP (also known as Food Stamps)		
8. What is the number of children 18 and younger living in your household currently?	□ WIC□ School Breakfast Program		
0	☐ School Lunch Program		
□ 1	☐ After School Nutrition Program		
□ 2	☐ Summer Nutrition Meals		
□ 3	☐ Free meals at daycare		
□ 4	☐ Senior Farmers Market Nutrition Coupons		
□ 5+	☐ Food Pantries		
9. Within the past 12 months we worried whether our food would run out before we got money to buy more. Select one.	□ Community meals□ Church		
☐ Often True	☐ Family		
☐ Sometimes True	☐ Friends		
☐ Never True	□ None		
10. Within the past 12 months, the food we bought just didn't last and we didn't have money to get more. Select one.	☐ Other (please specify):		
☐ Often True	chase for your family?		
☐ Sometimes True ☐ Never True	<u> </u>		

14. How satisfied are you with the quality of the food that is available for your family?



15. How satisfied are you with the variety of food that is available to your family?



Thank you for completing this survey, and for participating in the listening session!

Post-Focus Group Question:

How comfortable did you feel participating in today's listening session?

- ☐ Very uncomfortable
- ☐ Somewhat uncomfortable
- ☐ Comfortable
- ☐ Somewhat comfortable
- ☐ Very comfortable

FOCUS GROUP GUIDE

Somerville Food System Assessment - Focus Group Script

*Specific questions used during focus groups may vary slightly between each group.

INTRODUCTIONS: PART I

Facilitator to Read out loud: Hello everyone! Thank you so much for coming today! My name is ______ and I am a community researcher with Shape Up Somerville. [Share a little about yourself]. My role today is to keep the group focused, maintain momentum for the conversation, and get closure on questions as needed.

Your input is very important so **thank you** for taking this time to tell us about your own food experiences.

CONTEXT & CONSENT

Facilitator to Read out loud: We are conducting a series of listening sessions with Somerville residents so we can hear from all of you about your ability to find and buy the types of foods you want to eat.

While you talk, it will be our job to listen. We are recording this session so that we don't miss anything important that is said. The consent form you signed when you came in says that we have your permission to record your comments. The information that you provide will be kept confidential, which means that we will never identify you by name when we summarize the comments. If you do not wish to be recorded, you may choose to leave at any time without penalty. If you do not understand a question or comment someone makes, please do not hesitates to ask for clarification. Today we have Spanish, Portuguese, and English speakers on hand to help.

The survey that you were given when you came in will help us gather general information about who is in the room. We do not want you to put your name on the survey to protect your privacy. All information that you provide will be kept confidential.

Once we have completed all the listening sessions and the other components of the food system assessment, we will publish our findings in a publicly available report.

Are there any questions at this time?

STOP Before you start, collect **ALL** of the informed consent forms prior to moving forward with the focus group.

GROUND RULES

Facilitator to Read out Loud: We have some ground rules today for the group. These ground rules are posted for the group and I will review them with you now.

- We all agree to listen and not talk when others are sharing with the group.
- We all agree to give others the chance to speak.
- We all agree to participate actively.
- We all agree to protect confidentiality names and comments shared today will not be discussed outside of this group setting.

INTRODUCTIONS: PART II

Facilitator to Read out Loud: Now that we've covered the ground rules of today's listening session, please introduce yourself to the group and share the top 2-3 places you get food. It does not have to be in Somerville! Remember, there is no need to use last names!

FOCUS GROUP QUESTIONS

Current Shopping Habits: We just heard from you all on where you get your food. The first thing we want to know is: Are you able to find every food item you want to be eating from these places? If not, what's missing for you? (Ex. specific food items)

Probing questions if needed:

- In addition to grocery stores, do you ever shop at any other stores such as neighborhood markets, convenience stores or drug stores? (Specific store names if possible)
- If you could change one thing about where you get food, what would it be? (Ex. variety, transportation, prepared foods, ethnic foods, etc.)
- How do you eat most of your food? (Ex. sitting at a table with family, on the go, snacks, home cooked foods, etc.)

Transportation: How do you get to the store most often? (Ex. car, bus, walk, bike, etc.)

Probing questions if needed:

- How does the way you get to the store make a difference on what you buy?
- Do you ever walk or ride the bus to do your shopping?
- How long does it take you to travel to get food (one-way)?
- What might make it easier for you to get to the store? (Ex. more buses, walking paths, delivery options, etc.)

Food Decisions: How do you decide WHERE to get your food? (Ex. location, store type, price, coupons/sales, etc.)

Probing questions if needed:

- How do you decide WHAT foods to buy? (Ex. family practices, affordability, sales, heritage, etc.)
- What makes it hard for you to get everything you would like? Is there any place else you would like to get food?
- What are the reasons you do not currently get food more frequently from these places?
- What might make it easier for you?
- What would make it easier for you and others in your community to buy healthier food?

Do not read out loud- as a reference if needed: Definition of Healthy – Food that contributes to the nourishment of your body. Eating it does not put you at risk for diseases later on in life. (by this we mean non-fried versions of vegetables, fruit, dairy, fish, eggs, white meat, small amounts of red meat, grains, beans, herbs, spices and oils)

Alternative Food Sources: Places like Haymarket sell food that is left over from the week, such as products that grocery stores do not want. This makes it cheaper to buy things like fruits and vegetables. What are your thoughts on buying imperfect fruits and veggies that are cheaper?

Probing questions if needed:

- What are your thoughts on farmers' markets, community garden, food bank/pantry as a way to get more fruits and veggies into your household?
- What are your thoughts on rescued food (Daily Table, Haymarket, etc.)?

Getting information: What are the best ways to get information to you and your friends and family about services and events in Somerville?

• If your friends or family were concerned food was running out before they could afford more, where do you think they could go for help?

Facilitator to read out loud: In the spirit of sharing information, we brought some information about the mobile market and a guide that shows some places where to get cheap or free food. Please take some and help us pass this information along!

Thank you!

Thank you very much for your participation!! We really appreciate you sharing your experiences. Your input will help to shape future steps in our efforts to improve access to healthy foods in Somerville. Please accept this \$10 Market Basket gift card as a token of our appreciation for your time and contribution to this important project. We will be putting together a report from what we learn and will make sure to share it with you.

If you have any questions about the process, please contact Lisa Robinson at the e-mail or phone number provided on the participant information sheet.

APPENDIX 2B: Focus Group Survey Results

For results of Q1-9, see Table 1

Q9: Within the past 12 months we worried whether our food would run out before we got money to buy more. Select one.

#	Answer	%	Count
1	Often True	9.86%	7
2	Sometimes True	40.85%	29
3	Never True	49.30%	35
	Total	100%	71

Q10: Within the past 12 months, the food we bought just didn't last and we didn't have money to get more. Select one.

#	Answer	%	Count
1	Often True	5.56%	4
2	Sometimes True	41.67%	30
3	Never True	52.78%	38
	Total	100%	72

Q11: Have you ever purchased food from the Somerville Farmers Market?

#	Answer	%	Count
1	Yes	60.27%	44
2	No	39.73%	29
	Total	100%	73

Q12: Have you ever purchased food from the Somerville Farmers Market?

#	Answer	%	Count
1	SNAP (also known as Food Stamps	9.85%	13
2	WIC	15.15%	20
3	School Breakfast Program	16.67%	22
4	School Lunch Program	23.48%	31
5	After School Nutrition Program	1.52%	2
6	Summer Nutrition Meals	4.55%	6
7	Free meals at daycare	0.00%	0
8	Senior Farmers Market Nutrition Coupons	5.30%	7
9	Food Pantries	2.27%	3
10	Community Meals	1.52%	2
11	Church	3.79%	5
12	Family	3.03%	4
13	Friends	2.27%	3
14	None	7.58%	10
15	Other (please specify)	3.03%	4
	TOTAL	100%	132

Q13: How satisfied are you with the price of the food that you purchase for your family?

#	Answer	%	Count
1	Extremely Satisfied	23.53%	16
2	Somewhat Satisfied	23.53%	16
3	Neither Satisfied or Dissatisfied	27.94%	19
4	Somewhat Dissatisfied	17.65%	12
5	Extremely Dissatisfied	7.35%	5
	Total	100%	72

Q14: How satisfied are you with the quality of the food that is available for your family?

#	Answer	%	Count
1	Extremely Satisfied	37.31%	25
2	Somewhat Satisfied	26.87%	18
3	Neither Satisfied or Dissatisfied	26.87%	18
4	Somewhat Dissatisfied	8.96%	6
5	Extremely Dissatisfied	0.00%	0
	Total	100%	67

Q15: How satisfied are you with the variety of food that is available for your family?

#	Answer	%	Count
1	Extremely Satisfied	43.28%	29
2	Somewhat Satisfied	26.87%	18
3	Neither Satisfied or Dissatisfied	23.88%	16
4	Somewhat Dissatisfied	5.97%	4
5	Extremely Dissatisfied	0.00%	0
	Total	100%	67

APPENDIX 3: WIC Retailers in Somerville

Market Basket #28	400 Somerville Ave	02143	(617)666-2420
Star Market #7580	14 McGrath Highway	02143	(617)625-4070
Walgreens #2945, Formula only	16 Beacon Street	02143	(617)497-5763
Stop & Shop Supermarket #2411	105 Alewife Brook Parkway	02144	(617)625-1546
Star Market #7575	275 Beacon Street	02145	(617)354-7023
Super Stop & Shop (F&P) #498	771 McGrath Highway	02145	(617)666-1024
Walgreens #2760, formula only	337 Broadway	02145	(617)776-5104

APPENDIX 4: Shape Up Somerville Retail Food Assessment Tool 2017

Shape Up Somerville Retail Food Assessment (Adapted HFAI) 2017 First, introduce yourself, Explain that you are gathering information for Shape Up Somerville's Food Access project and provide the following information: Hello, we are doing an assessment of food stores in the area to learn about food availability in the community. We are not here to do a health inspection. If you don't mind, we'd like to take a few minutes and record the prices of some food and see what you offer at your store. The actual prices that we record will not be published, but will be used in aggregate across retailers in Somerville. If you would rather not be included in the project, just let me know, and we'll leave. Thank you very much for your time. **Measure 0: General Pre Questions** (0.1) Assessor Name(s): (0.2) Date: (0.3) Store Status: ☐ Open ☐ Closed ☐ Refused (0.4) Store Name: (0.5) Store ID: (0.6) Store hours: (check all that apply) ☐ Before 8 am **□** 8-12 pm (0.7) Bus stop in sight: [] Yes (0.8) Covered: [] Yes □M □T □W □R □F □Sa □Su ☐ 12-6 pm ☐ After 6 pm [] No [] No (0.9) Type of Store: (0.10) WIC: (0.11) Prepared (0.14) [] Cultural Specialty store : []Yes Food: ■ Supercenter [] Yes [] No Culture(s) Represented ☐ Grocery Store [] DK [] No ☐ Neighborhood Market (0.13) Parkina (0.12) SNAP: (0.15) [] Language(s) other than English spoken: ☐ Drug store []Yes Lot: [] No []Yes [] DK [] No Measure 1: Milk Measure 2: Other dairy Measure 3: Fruit (1.0)[]Yes (2.0)[]Yes (3.0)Fruit Available: []Yes (3.1)[]1-3 Available: [] No Yogurt [] No [] No Available [] 4-6 Available: []7-10 types: [] Yes [] 11- 25 (1.1) Milk (2.1) Plain / []Yes []25+ alternatives [] No unflavored [] No Available: available: (2.2) Eggs []Yes []Yes (3.3) Price (1 pound): (1.2) 1% or Skim []Yes (3.2)Bananas Available: Available: Available: [] No [] No [] No Unit: _ (3.5) Price (1 pound): (1.3) Whole [] Yes (2.3) Price (1 dozen): (3.4) Apples Available: []Yes

[] No

[]Yes

[] No

[]Yes

[] No

Unit:

Unit:

(3.9) Price of cheapest available tropical fruit

Unit:

(3.7) Price (1 pound):

Price: \$

(3.6) Oranges Available:

(3.8) Tropical Fruit

Available:

Available

Formula

Unit

Available

(1.5) Price of 1% ($^{1}/_{2}$

gallon): \$_____

(1.4) Infant

ON []

[]Yes

[] No

Unit:

Measure 4: Vegetables					Measure 5: Red Meat			
(4.0) Vegetables	[]Yes	(4.1)	[] 1-3 [] 4-6	(5.0) Red Meat		(5.1) Available types:		
Available:	[] No	Available	[] <i>7</i> -10 []11-2	5 Available:		[]Beef []Lamb		
		types:		[] Yes [] No		[] Pork [] Other		
(4.2) White Potatoes	[] Yes		(5.2) % Lean:					
Available:	[] No	\$ Unit:		(of leanest available		(5.3) Price of cheapest ground beef (I pound): \$	_
(4.4) Yams/Sweet	[]Yes	(4.5) Price (1 pour	beef)	ne .	% Lean:Unit:			
Potatoes Available:	[] No	\$ Unit:	beery					
(4.6) Broccoli	[] Yes			Measure 6: Chicken				
Available:	[] No	\$ Unit:		mousoic of efficaci				
(4.8) Carrots	[]Yes	(4.9) Price (1 pound):		(6.0)		[] Yes		
Available:	[] No	\$ Unit:		Chicken Available:		[] No		
(4.10) Tomatoes	[] Yes	(4.11) Price (1 po	(4.11) Price (1 pound):			(6.2)		
Available:	[] No	\$ Unit:				Price of cheapest cut (1 pound):		
(4.12) Onions	[] Yes	(4.13) Price (1 pound):		Cuts Available:				
Available:	[] No	\$ Unit:	\$ Unit:		ed	\$		
	5 3 3 4	(4.15) Price of cheapest available		[] breast/tenders		Unit: Fresh / Frozen		
(4.14) Leafy Greens		leafy green	(1 bunch)	[] thighs/drumsticl	ks	116311 / 1162611		
Available:	[] No	Price: \$	_ Unit:	[] other parts				
Measure 7: Seafood Measure			re 8: Frozen Foods					
(7.0) Seafood Availab	ole:	[] Yes [] No	(8.0) Fruit(s) Avai			(11.0) Bread Available:	[] Yes [] i	No
(7.1) Option(s) Availal	ble:	[] Fresh	(8.1) Vegetable(s) [] Yes	[] No	(11.1) 100% Whole Wheat	[] Yes [] I	No
[] Fr		[] Frozen	Available:			(11.2) Price of (16 oz) Loaf: \$		
(7.2) Price of cheapest white fish (1 pound):			(8.2) Price of froz			B) Corn [] Yes (11.4) Price		
\$ Unit:		Fresh / Frozen	\$ Unit	<u> </u>	Torti	las Available: [] No \$	_ Unit:	
Measure 9: Packaged Foods					Measure 10: Canned Foods			
(9.0) Dried beans [] Yes	(9.1) Price (16 oz):	(10.0) Sou	o []Yes	(10.1) Low-Sodium Soup Available:	[] Yes	[] No
Available: [] No	\$ Unit:	Available:	[] No				
(9.2) Rice [] Yes	(9.3) Price (32 oz):	(10.2) Fruit	r(s) [] Yes	(10.3	3) Fruit packed in juice:	[] Yes	[] No
Available: [] No	\$ Unit: Availab		[] No	(10.4	l) Vegetable(s) Available:	[] Yes	[] No
] Yes	(9.5) Price (16 oz):	(10.5) Tund	ı []Yes) Price (5 oz):		
Pasta Available: [] No		Available:	[] No	\$	Unit:			
(9.6) Peanut [[] Yes (9.7) Price (16 oz): (10.7)		(10.7) Bea	ns [] Yes	(10.8	3) Price (15.5 oz): \$ Type:	Unit:	
` '		\$ Unit:			`	, , , , , , , , , , , , , , , , , , , ,		-
L								

Measure 12: Cereal		Measure 13: Fats				
(12.0) Cereal Available:	[] Yes	(13.0) Oil	[] Yes	(13.1) Price (24 oz bottle):		
(1207, 2002, 2004,	[] No	Available:	[] No	(**************************************		
(12.1) Low Sugar Options:	[] Yes	7., 44	[]	\$ Type:		
(<7 g sugar, >3 g fiber per	[] No					
serving)	11			Unit:		
(12.2) # Low Sugar/High Fiber	[]]	(13.2)	[] Yes	(13.3) Price (16 oz):		
Options:	[]2+	Butter/Butter	[] No	\$		
·		Equivalent				
(12.3) Price of Oats (18 oz) :		Available:		Unit:		
\$ Unit:						
		M -	14. 6	Peneral Post Questions		
		Me	asure 14: G	peneral Post Questions		
(14.0) Produce overall appearance	e?					
☐ Fresh ☐ Overripe ☐ P	oor (e.g. rotten, n	noldy, damaged)				
(14.1) Is organic produce availab	le?	(14.2) Is locally grown produce available?				
☐ Yes ☐ No		☐ Yes ☐	l No			
(14.3) Is halal meat available? [(14.3) Is halal meat available? [] Yes [] No (14.4) Is kosher meat available? [] Yes [] No					
(14.5) Does the store sell culturally	specific items?	•				
☐Yes (If yes, please specify	☐Yes (If yes, please specify what type below 14.6) ☐ No					
(14.6) Spices Meat Produce Packaged/canned foods Offrozen foods Other products						
(14.6) a Spices a Medi arrod	luce u rackaged	i/cannea rooas	■frozen foc	oas — Omer products		
(14.7) If the store does sell cultura				ice do these items take up?		
□ 1-10% □ 11-25% □26-50% □51-75% □76-100%						
INTERVIEWER NOTES: Please give your overall impression of the	the stare and it's a.					
riedse give your overall impression or i	me store and it's pr	oducis:				

APPENDIX 5: Neighborhood Market Survey

Somerville Neighborhood Market Engagement Survey

INTRODUCTION: The City of Somerville is conducting a food system assessment in 2017-2018 led by Shape Up Somerville and the Somerville Food Security Coalition. The goal of the project is to improve equitable food access and opportunities for all who live, work, play and raise families in Somerville. To do this, community organizations and research partners are looking at consumer purchasing behaviors, preferences and education, supply chain partnerships, current food offered by Somerville businesses, and how excess food is handled. We know that many people rely on neighborhood markets for some if not all of their food purchases. For this reason, we are interested in learning more about YOUR experience and observations via the questions in this survey. This survey is being delivered by a community researcher, who can assist with its completion or leave it with you and collect it in a week's time. Thank you!

1. Store Name:	Date:
2. How long have you been in l	ousiness in Somerville?
Months	Years
3. Is this business	
☐ Family-owned	
☐ Independently-owned	
☐ Other	
4. Number of employees Full-time	Part-time

5. Who are your typical customers? Check all that apply.
☐ School-aged youth
☐ Professionals
☐ Families
☐ Seniors
6. Has your customer base changed over the last 5 years? 10 years? If yes, how?
7. Do your customers speak other languages?
NoYes
If yes, which languages?
Is it ever difficult to communicate with them?
NoSometimesYes
8. What does a typical day or week look like (e.g. # of customers, average sales)?
Number of Customers (#)
Average Sales (\$)
Number of Deliveries (#)

9. What are your most popular items (top 3 food and non-food products)?	12. Please tell us about your experience accepting (or not accepting SNAP or other benefits.			
Food//	How easy is it? What % sales are SNAP? What equipment do you use? How do you track and report?			
Non-Food//				
10. Do people ask for any items you do not carry? NoYes If yes, what items?	 What are your business challenges? Check all that apply. □ Operating costs □ Rent □ Labor (e.g. finding and keeping help) 			
11. Which distributor(s) or other source do you use for each food category? Please include any small, local producers or farms by name. CATEGORY:	 □ Reliable distribution □ Product quality □ Store security/personal safety □ Administrative requirements (e.g. licenses, permits) 			
Milk/Dairy:	□ Other			
Dry Goods:				
Produce:	14. What would make your business more viable or effective in serving the community?			
Meats:				
Local Food Companies/Farms:				

15. What do you do with unsold food?						
	Throw away Donate Compost Return to supplier					
16. Wo	uld you be interested in any of the following (check all that					
	Ability to offer more fresh items (e.g. fruits, vegetables)					
	Ability to promote fresh items on the sidewalk					
oth	Support with marketing and signage (e.g. information in her languages)					
	Support with posting nutritional information and pricing					
□ Ma	☐ Being a pilot with the City for a "Healthy Neighborhood Market" program					
	Donating or composting unsold food					
☐ info	☐ Hosting a community bulletin board with food access information					
	Other (Tell us what you think is needed.)					
Thank you!						

Contact: Lisa Robinson Director, Shape Up Somerville lrobinson@somervillema.gov 617-625-6600

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APPENDIX 6: Groundwork Somerville School Gardens Annual Report



Groundwork Somerville School Garden Support, Annual Report 2017-18

Summary & Highlights of programs in Somerville Public Schools

Programming:

3.400+ hours of hands-on education

2,800 students served

220 garden lessons

115 maple syrup lessons (culminating with Maple Boil fieldtrip)

100+ teachers engaged (teacher trainings and lesson modelling)

Salad Days and Seed to Taste program extended

World Crops Program launched



Infrastructure:

4 new garden beds (Capuano, Brown)

1 new pollinator garden (Argenziano)

2 New irrigation systems (Capuano, Argenziano)

Additional improvements: garden benches, tool boxes, garden documentation and more

76 garden beds: ongoing upkeep and maintenance

- 3,000 sq ft of green space across nine schools

Coordination, Maintenance and Operations:

9 Garden Champions supported (in partnership with Farm to School)

700+ hours seasonal maintenance of 9 gardens (Staff, Green Team and volunteers)

30+ individual volunteers recruited, trained and coordinated for ongoing service to schools

District-wide coordination systems created (Weekly newsletters, Online garden care app, etc)

Over 100 additional one-day volunteers engaged to support gardens

Garden visioning and development at Capuano School, Next Wave/ Full Circle

District-level coordination and collaboration with Farm to School Project **

Funding and Resources Leveraged:

\$20,000+ additional funds from Groundwork operating budget (Grants include: BOGS Foundation, Merck Family Fund, Collaborate Boston and others)

^{**} Groundwork Somerville works closely with the Somerville Farm to School Project to ensure collaborative support for school gardens across the Somerville Public School District. The numbers above reflect the Groundwork Somerville specific programming and support only.

APPENDIX 7: Somerville Farmers Markets Overview

Market Name:	Where:	When:	Match:	Translators	Do Any Vendors Accept
Union Square Farmers Market	Union Square Plaza	Every Saturday from May 12 through November 17; 9:00 am- 1:00 pm	Dollar-for-dollar match up to \$10 every week	Spanish	SNAP: HIP: WIC FMNP: Senior FMNP: ✓
Somerville Mobile Farmers' Market	Council on Aging (167 Holland Street), East Somerville Community School (50 Cross Street), North Street Housing Dev. (24 North Street), Mystic Housing Dev. (530 Mystic Ave.)	Fridays, 11:00AM – 1:00PM, Fridays, 2:30PM – 4:30PM, Saturdays, 10:00AM – 12:00PM, Saturdays, 1:30PM – 3:30PM	Unlimited 50% discount for residents of North Street or Mystic Housing, or for showing your SNAP, WIC, or Senior Farmers' Market Coupons.	Spanish, Portuguese, Haitian Creole, occasionally others site-by-site informally	SNAP: HIP: WIC FMNP: Senior FMNP:
Davis Square Farmers Market	Day St & Herbert St lot	Every Wednesday from May 16 through November 21	None	To be determined	SNAP: ✓ HIP: ✓ WIC FMNP: ✓ Senior FMNP: ✓
Somerville Winter Market	Arts at the Armory (191 Highland Ave)	Every Saturday 9:30AM- 2:00PM Dec 2 through April 14	SNAP dollars are matched up to \$10 each week		SNAP: HIP: WIC FMNP: Senior FMNP:

APPENDIX 8: Somerville Community Growing Spaces & Urban Ag

DESCRIPTION	ADDRESS		
Albion Playground Community Garden	109 Albion Street		
Allen Street Community Garden	30 Allen Street		
Avon Street Community Garden	44 Avon Street		
Bikeway Community Garden	No Address - Railroad Right-Of-Way		
Durell Community Garden	244 Beacon Street		
Glen Park Community Garden	149 Glen Street		
Morse-Kelley Playground Community Garden	1 Craigie Street		
Mystic Housing Development Community Garden	500 Mystic Avenue		
Osgood Park Community Garden	6 Osgood Street		
Tufts Community Garden	80 Powderhouse Boulevard		
Walnut Street Park Community Garden	15 Walnut Street		
South Street Farm	92 South Street		
Growing Center	22 Vinal Avenue		
ArtFarm	10 Poplar Street		

APPENDIX 9: Somerville Food Security Coalition Food Pantry Survey

- 1. Please confirm your public contact information (address, phone, contact person, email contact).
- **2.** What are your hours of operation?
- **3.** Who does your pantry serve?
- 4. Demographics of participants (age, race/ethnicity, language)
- **5.** Number of participants per year (or month)
- **6.** Known health issues, related to dietary needs
- **7.** Could you serve more clients, with your current capacity?
- **8.** What are your eligibility requirements?
- **9.** Do you offer any other services or resources for food pantry participants? If so, what?
- **10.** Where do you source your food?
- 11. Primary Source
- **12.** Additional Sources
- **13.** Do you have the capacity to provide food for any special diets? If so, what type? (low-sodium, diabetic, gluten-free, etc.)
- **14.** Are you aware of other food pantries in the area that your participants may also be visiting regularly? If so, which ones?

APPENDIX 10: Upcoming Food Policy Legislation

Upcoming Relevant Legislation

In large part due to the Massachusetts Food System Collaborative, several recent legislative priorities involve different aspects of the food system across the state. Bills relevant to this report are highlighted below.

HB2131 – An Act relative to an agricultural healthy incentives program

As previously mentioned, the first year of the implementation of the 3 year HIP grant was so successful that the program spent over \$3.9 million in reimbursements in a single year, despite a budget of \$1.25 million. This bill calls for funding to be added into the FY'19 budget. As of the writing of this report, a line item has been added into the budget, but at a lower rate than what was utilized in its first year.

SB242/HB 327 – An Act regarding breakfast in the class-room/Breakfast After The Bell

Students who eat breakfast before the school day perform better in school. Often, students face a variety of barriers to getting to school before the day begins to eat breakfast. Breakfast after the Bell legislation will require that all schools where 60% or more of the students qualify for free and reduced meals serve breakfast after the bell, in the classroom.

HB 101/SB612 – An Act improving public health through a common application for core food, health and safety-net programs

Several Massachusetts residents who are on MassHealth do not receive SNAP, although they qualify. A common application for both programs would improve food security among these clients, by

streamlining the processes to check eligibility and enroll in SNAP.

HB 3329 An Act to Promote Healthy Alternatives to Sugary Drinks

This bill proses a state-wide excise tax on drinks sold in Massachusetts based on their amount of sugar. "Drinks with more added sugar would have a higher per ounce tax than a drink with less added sugar."

H2365/S1004: An Act to improve the Commonwealth's economy with a strong minimum wage and a strong tipped minimum wage

This bill would increase the minimum wage to \$15 by 2021. Approximately 29% of the state's workforce, or 947,000 workers earn less than this now.

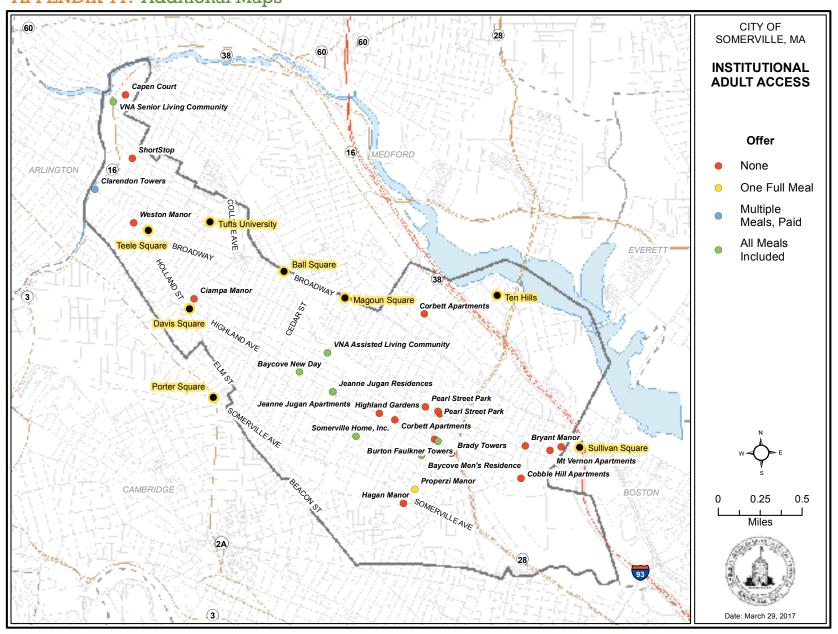
HB3549: An Act relative to healthy eating in school cafeterias

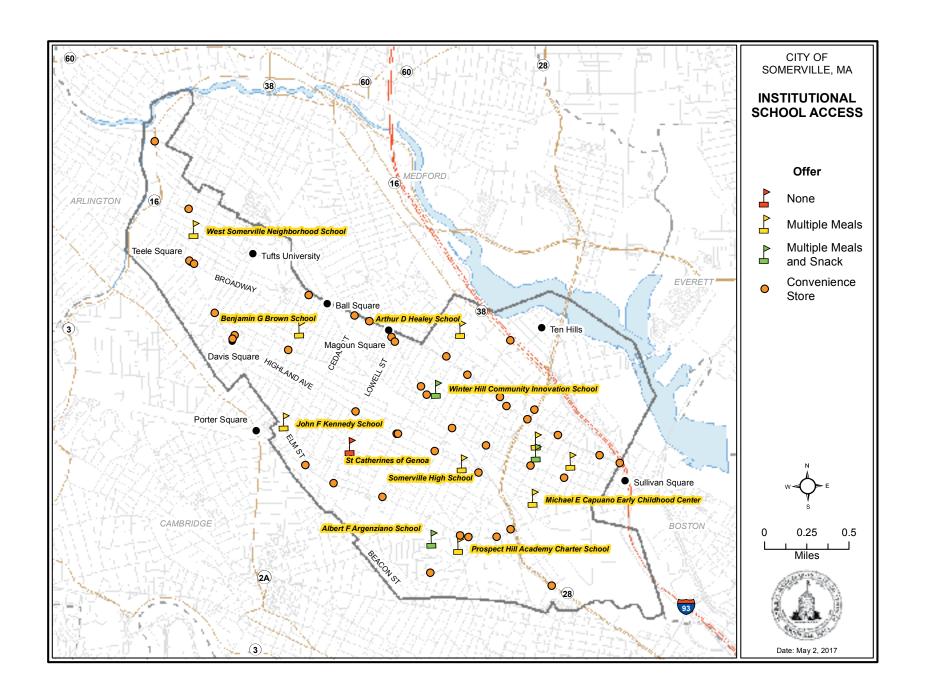
This bill would establish pilot programs to support schools in upgrading their kitchens to do more scratch cooking, provide minigrants for farm-to-school programming, and set parameters for a Farm to School Interagency Task Force.

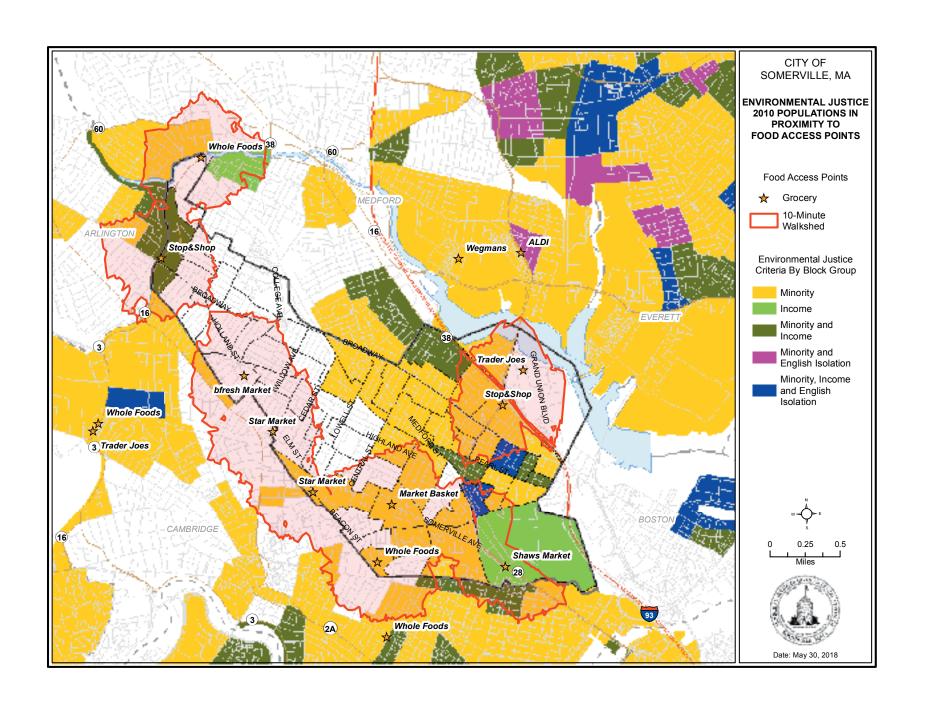
S.838/H.3327: An Act encouraging the donation of food to persons in need, Sen. Eileen Donoghue/Rep. Hannah Kane

This bill would provide civil liability protection for persons who donate food directly to consumers, as well as for food establishments that donate food whose labeled date has passed and a tax credit to Massachusetts farmers in the amount of the fair market value of the donated food, with a \$2,000 annual cap per farmer.

APPENDIX 11: Additional Maps







NOTES

Inside Back Cover: Top Row: Get-N-Go convenience store; restaurants at Assembly Row; ArtFarm in Union Square Middle Row: Somerville Mobile Farmers Market; Neighborhood Produce in Winter Hill; Market Basket grocery store

Bottom Row: Bow Street Market; Little India neighborhood market; South Street Farm









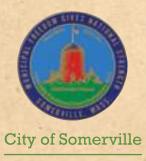












FOOD System Assessment

July 2018

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