

COMMUNITY FOOD ASSESSMENT

2019 - 2021



OUR VISION /

We envision a healthier Malden community where all people, especially historically marginalized populations, have access to culturally preferred, high quality, nutritious food.

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EXECUTIVE SUMMARY /

A Community Food Assessment (or CFA) is a systematic process to identify and analyze food system needs and assets. A "food system" is the economic network and chain of activities connecting food production, processing, distribution, consumption, and waste management.¹ The process of identifying these needs and assets is grounded in publicly reported data as well as input from the community through surveys, focus groups, and community meetings. This process raises awareness of food system assets, challenges and opportunities, and provides evidence of the community's needs--- which residents, community organizations, non-profits, and policymakers can use to advocate for effective policy and programs.² The ultimate goal of a CFA is to channel the information gathered into a plan of action to achieve equitable access to healthy food.

The Malden CFA core planning team -- Bread of Life, Cambridge Health Alliance, YWCA Malden, and Malden is Moving! -- came together in 2018 to better understand the critical issues underlying food insecurity in Malden, under the goal of creating a shared understanding of the current state of resources and gaps present within the food system. With that, the community can work toward developing common goals and strategies to ensure our food system more fully and equitably supports the health of Malden's communities and environment.

In the middle of carrying out this CFA, we were confronted with the unprecedented impacts and inequities of the COVID-19 pandemic. COVID-19 has disproportionately impacted communities of color in the United States and around the world, including in the Greater Boston region. Middlesex County, where Malden is located, has consistently seen the highest rate of infection, death, and hospitalizations in MA due to COVID-19. This assessment took on new urgency as Malden collectively worked to address unprecedented levels of food insecurity. Policies and practices that lead to inequities in our food system were exacerbated by COVID-19. Note that the Malden Community Food Security Survey examined pre and post-COVID questions to determine changes/gaps in Malden's food systems. Questions were developed in concert with the Tri-City Hunger Network and were translated into 6 languages (English, Haitian Creole, Portuguese, Chinese, Arabic, and Spanish). The survey garnered 373 valid responses from residents of Malden. Surveyors included Malden High School students participating in a leadership program at YWCA Malden, as well as other community groups and agencies. The survey was also available electronically on the City of Malden website. Survey respondents were representative of the ethnicities languages spoken by Malden residents. Strengths of the Malden community and the food system were channeled to address the community's needs.

This report includes six main sections, with the bulk of the report devoted to assessing four areas of focus of Maldens food system: (1) food consumption, (2) food production, (3) food retail and distribution, and (4) food recovery + waste diversion. Findings and recommendations were guided by a research question for each area of focus, and an overarching set of recommendations was created based on findings that spanned multiple areas of focus. Additional resources and references are included in the <u>Appendix</u>, including a robust exploration of the Social Determinants of Health data related to Malden.

A key overarching recommendation that came out of this assessment is to establish a Food Policy Council (FPC) or comparable organized body as the leading coalition for prioritizing the recommendations of the Malden CFA and creating a Community Food Plan.

We invite you to read on to discover more about Malden's food system!

¹ American Planning Association. Food Systems. Knowledgebase Collection. https://www.planning.org/knowledgebase/food/ 2 https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/projects/CFA/index.html

INTRODUCTION /

A "food system" is the economic network and chain of activities connecting food production, processing, distribution, consumption, and waste management.³ By enhancing a shared understanding of the resources and gaps present within Malden's food system, we can then work toward developing common goals and strategies to ensure our food system supports the health of Malden's people, communities, and environment.

Figure 1: Community Food System

Source: USDA Food and Nutrition Service Office of Community Food Systems



The CFA core leadership team -- Bread of Life, Cambridge Health Alliance, YWCA Malden, Metropolitan Area Planning Council (MAPC), and Malden is Moving! -- came together in 2018 to better understand the critical issues underlying food insecurity in Malden. The initiative was part of Malden is Moving! -- the local Mass in Motion program funded through the Massachusetts Department of Public Health, and coordinated locally by the YWCA Malden, via the City of Malden's Board of Health and multiple community partners. The YWCA approached Cambridge Health Alliance, Bread of Life, and MAPC to collaboratively lead this process.

This report includes **six main sections**:

- 1. <u>Introduction</u> and <u>recommended goals</u> of the assessment.
- 2. <u>Key concepts</u> and <u>guiding principles</u>, defining terms and outlining the principles that guided the approach to this assessment.
- 3. <u>Profile</u> of the Malden community.
- 4. Methods used to conduct this assessment.
- 5. Findings of this assessment of Malden's food system, under the following four areas of focus: (1) food consumption, (2) food production, (3) food retail and distribution, and (4) food recovery + waste diversion.
- 6. <u>Recommendations</u> for strengthening Malden's food system through policy and program strategies.

Additional resources and references are included in the <u>Appendix</u>, including a robust exploration of the Social Determinants of Health data related to Malden.

RECOMMENDED GOALS /

The primary goal of the Malden Community Food Assessment (CFA) is to **create a shared understanding of the current state of resources and gaps present within** Malden's food system. With that, the community can then work toward developing common recommended goals and strategies to ensure our food system more fully and equitably supports the health of Malden's communities and environment.

Based on the findings of the Malden CFA, recommended goals and actions for implementation were compiled by the participants of this collaborative process. The Recommended Goals are listed here, and the Recommended Actions can be found in the <u>Recommendations</u> section.

- 1. Leadership and processes are established for strategic prioritization of CFA recommendations and creation of a Malden Food Plan.
- 2. Ensure all Malden residents at all times have physical access, economic access and decision making power to consume food that meets their dietary needs and cultural food preferences.
- 3. All Malden residents, schools, and community-based organizations have opportunities to grow healthy food.
- 4. All points of sale and distribution in Malden provide food that is representative of the communities' needs and preferences, including access to healthy, affordable, and culturally preferred food options.
- 5. The City of Malden and community-based organizations utilize all available resources to reduce food waste and redistribute food to those that are able to use and consume it, while improving the city's environmental footprint.

KEY CONCEPTS AND GUIDING PRINCIPLES /



What is a Community Food Assessment?

A Community Food Assessment (or CFA) is a systematic process to identify and analyze food system needs and assets. The process of identifying these needs and assets is grounded in publicly reported data as well as input from the community through surveys, focus groups, and community meetings. This process raises awareness of food system assets, challenges and opportunities, and provides evidence of the community's needs-- which residents, community organizations, non-profits, and policymakers can use to advocate for effective policy and programs.⁴ The ultimate goal of a CFA is to channel the information gathered into a plan of action to achieve equitable access to healthy food.

What is Food Planning?

Community and regional food planning is a process that aims to help build stronger, sustainable, and more self-reliant food systems. Food planning may lead to new ideas and suggestions for ways the food system may enhance benefits such as economic vitality, public health, ecological sustainability, social equity, and cultural diversity.⁵ A CFA is one component of food planning.

What is a Food Plan?

The food planning process often produces a document that summarizes the goals, actions, and measures of success that a community plans to undertake to improve its food system. This document is called a food plan. Food plans may include a wide range of policy and program recommendations and action, from developing farmland preservation policies to supporting business development for markets selling healthy food. Many food plans recognize that food system improvements support healthy community development more broadly. Some adopt overarching goals to advance equity, public health, the economy, and ecological sustainability through food system changes.

What is Food Security?

Food security exists when "all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."⁶ Populations more vulnerable to food insecurity include female-headed households, seniors, children, immigrant populations, lower-income populations, and communities of color. Since the 2000 US Census, Malden's disparity in household incomes has grown and there has been significant increases in housing cost burden. This in turn has a strong impact upon households' level of food security.

⁴ https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/projects/CFA/index.html

⁵ American Planning Association. (2007) APA Policy Guide on Community and Regional Food Planning. Retrieved from https://www.planning. org/policy/guides/adopted/food.htm

⁶ http://www.fao.org/fileadmin/templates/faoitaly/documents/pdf/pdf_Food_Security_Cocept_Note.pdf

Guiding Principles

/ EQUITY /

In the context of a Community Food Assessment such as this, equity means that everyone has a fair and just opportunity to thrive. Equity is often discussed in relation to issues such as health or wealth, identities such as race or gender, and places like neighborhoods or regions. Inequities in food systems create unfair differences in access to nutritious and culturally appropriate foods, widen disparities in the burden of diet-related diseases, create barriers to owning land and starting food or farm related businesses, and limit the voice and power of the people most impacted by policy making processes.⁷ As Malden is a community with more than 50% of its population being Asian, Black, and/or Hispanic (respectively) as well as more individuals and families living below the poverty line than the rest of the Commonwealth⁸, equity was a priority and guiding principle for the Malden Community Food Assessment.

/ SOCIAL DETERMINANTS OF HEALTH /

The Social Determinants of Health refer to the social, economic, and environmental conditions in which people are born, live, work, learn, play, and age -- and which, in turn, influence their health outcomes.⁹ In fact, inequitable differences in health outcomes are driven more significantly by Social Determinants of Health than by differences in medical care.¹⁰ The conditions of a food system, housing options, employment opportunities, and education system are all Social Determinants of Health. In conducting this CFA, the work was guided by the understanding that differences in health outcomes are partly the product of social determinants, like the strength of the food system, rather than individual behaviors or choices alone. This report explores the Social Determinants of Health in depth in the Appendix.

/ ROOT CAUSES /

Differences in Social Determinants of Health, such as in the quality of housing and education, the safety and health of the environment, and the accessibility of good jobs, food, and health care services are shaped by root causes. Root causes include forces like institutional racism, sexism, xenophobia, and classism. In other words, historical and present-day policies and practices that privilege people of certain identities, and marginalize or exclude people of other identities, unfairly shape the distribution of power, money, and resources in society. This

inequitable distribution of power, money, and resources, in turn, leads to inequities in the social determinants of health. In this CFA, the team recognized that the above root causes impact access to sufficient amounts of healthy, culturally appropriate food in Malden. Thus, the solutions and recommendations that come from this assessment must take into consideration not only the short term crisis of food insecurity, but also recognize that meaningful, long term change in Malden's food security must address the root cause issues.

⁷ Alkon, A. H. and Agyeman, J. "Cultivating Food Justice: Race, Class and Sustainability." MIT Press, 2011.
8 US Census Bureau, American Community Survey 2014-2018, 5 Year Estimate

⁹ Healthy People 2020. (2017). Social Determinants of Health. Available at: https://www.healthypeople.gov/2020/topics-objectives/ topic/socialdeterminants-of-health.

¹⁰ Heiman, H. J., & Artiga, S. (2015). Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity. Available at: https://www.kff.org/disparities-policy/issue-brief/beyondhealth-care-the-role-of-social-determinants-in-promoting-health-andhealth-equity/.

/ COMMUNITY INVOLVEMENT AND ENGAGEMENT /

In conducting the first-ever Malden Community Food Assessment and report back to the community, the goal was to be inclusive of community thoughts, knowledge, and expertise. This process included the community at a variety of levels including individual surveys (available on paper and electronically and translated into the major languages spoken in Malden) qualitative stakeholder interviews and input from the Hunger Network coalition meetings hosted by Bread of Life. The observations and recommendations that come out of this process were heavily informed along the way by a representative group of Malden residents and social service agencies.

/ THE IMPACT OF COVID-19 /

In the middle of carrying out the Malden Community Food Assessment, the Malden Community Food Assessment process was confronted with the unprecedented impacts and inequalities of the COVID-19 pandemic. COVID-19 disproportionately impacted communities of color in the United States and around the world, including in the Greater Boston region. Middlesex County, where Malden is located, has consistently seen the highest rate of infection, death, and hospitalizations in MA due to COVID-19.

This assessment took on new urgency as Malden collectively worked to address new and exacerbated levels of food insecurity. Policies and practices that lead to inequities in our food system were exacerbated by COVID-19. Note that the Malden Community Food Security Survey examined pre and post-COVID questions to determine changes/gaps in Malden's food systems. Strengths of the Malden community and the food system were channeled to address the community's needs.

The CDC found that in the United States overall, African Americans were 4.7% more likely than white/non-Hispanic persons to be hospitalized with COVID-19 and 2.1% higher risk of dying from COVID. Massachusetts has seen similar disproportionate rates of hospitalization and death among Black non-Hispanic residents. Black non-Hispanic residents represent 6.7% of the total population in Massachusetts, however, according to November 2020 data from the MA Department of Public Health, black non-Hispanics represented 11.7% of all hospitalized COVID patients and 7.9% of all COVID-19 deaths. Similarly, Hispanics represent 11.2% of the total population in Massachusetts but represented 15% of all hospitalized COVID patients and 6.8% of all COVID-19 deaths¹¹. The disproportionate toll on some minority populations can be partially explained through a social determinant of health lens. There's a higher prevalence of obesity, high blood pressure, and diabetes among Black non-Hispanics compared to whites. Another issue to consider is high-stress levels. When a person experiences racial discrimination in their daily lives, it can contribute to chronic stress. Chronic stress is linked to poverty¹² — so this could be a risk factor for low-income communities. The roots of chronic illness stem from the way people live and the choices that may or may not be available to them. People who develop chronic illnesses that put them at higher risk of COVID-19 often lack access to affordable and healthy foods, this was exacerbated by what people saw as high-risk public transportation which left them with fewer options to obtain these healthier food options. This coronavirus has disproportionately impacted communities of color, primarily in densely populated cities where communities of color are more likely to live in multigenerational homes.

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¹¹ https://www.mass.gov/info-details/archive-of-covid-19-cases-in-massachusetts#june-2020-

¹² Stress-Associated Neurobiological Pathway Linking Socioeconomic Disparities to Cardiovascular Disease. Tawakol A, Osborne MT, Wang Y, Hammed B, Tung B, Patrich T, Oberfeld B, Ishai A, Shin LM, Nahrendorf M, Warner ET, Wasfy J, Fayad ZA, Koenen K, Ridker PM, Pitman RK, Armstrong KA. J Am Coll Cardiol. 2019 Jul 2;73(25):3243-3255. doi: 10.1016/j.jacc.2019.04.042. PMID: 31248544.

MALDEN COMMUNITY PROFILE /

Overview of Malden

The City of Malden, Massachusetts has a population of approximately 60,470 people and a geographic area of 5.04 square miles¹³. Malden shares borders with the cities of Everett, Medford, Melrose, Revere, Saugus and Stoneham, as well as the Malden River¹⁴. It is considered a "gateway" community, among other small to mid-sized cities that were historically home to immigrant and working-class households, serving as a launching pad of upward mobility¹⁵. After the turn of the 20th century, Irish and Italian immigrants came to Malden to work in factories, and after World War II, many Jewish immigrants leaving Europe settled in Malden as well. Today, immigrants from China, Haiti, Brazil, Morocco and many other countries also call Malden home¹⁶.

A majority of Malden residents do not own their homes; 59% of housing is renter occupied, while the remaining 41% of housing is owner-occupied (compared to 38% renter occupied and 62% owner occupied for MA)¹⁷.

Population Density and Distribution

Malden is a diverse city with a population density of 11,788.6 people per square mile in 2010 (compared to 839.4 in MA)⁹. A map showing population density in Malden is presented in Figure 2, where one dot represents 25 people, and the color of the dot corresponds to the race or ethnicity noted in the map legend. The spaces in the map without any dots correspond to parks, cemeteries, and industrial areas. Dots of different colors appear to be distributed throughout the city of Malden, suggesting there is little residential segregation by race or ethnicity. But, there are exceptions. For example, the collection of green dots in the western-central region of Malden suggests Asian residents are more concentrated in that neighborhood, located close to the MBTA Orange Line station.



¹³ U.S. Census Bureau QuickFacts for Malden city, available at https://www.census.gov/quickfacts/fact/table/maldencitymassachusetts,MA/ PST045219

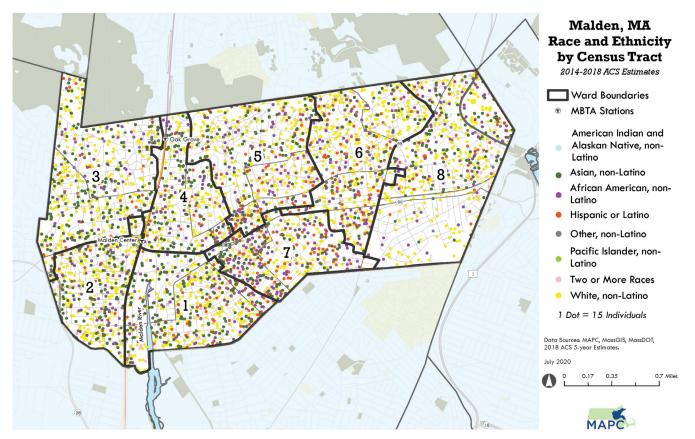
¹⁴ https://www.cityofmalden.org/276/About-Malden

https://massinc.org/our-work/policy-center/gateway-cities/about-the-gateway-cities/
 http://archive.boston.com/news/local/massachusetts/articles/2009/12/23/immigrants_transforming_malden_anew/#:~:text=Immigrants%20
 have%20long%20flocked%20to%20this%20city%20on,fled%20Europe%20before%20and%20after%20World%20War%20II.

¹⁷ U.S. Census Bureau American Community Survey (ACS) 2014-2018 Five-Year Estimates

Figure 2: Malden Population Density by Race and Ethnicity

Source: U.S. Census Bureau American Community Survey (ACS) 2014-2018 Five-Year Estimates



In terms of age distribution, the city has similar age demographics to the state of Massachusetts, with 5.1% under age 5 (MA: 5.3%), 15.1% ages 5–19 (MA: 18%), and 12.3% age 65 and over (MA: 15.8%)¹⁸.

Efforts to improve healthy food access will need to take into consideration the settlement patterns and population group interests within Malden. Locations of grocery stores, culturally appropriate markets, and food pantries influence the degree of ease or difficulty residents have accessing nutritious food. Further, fast food restaurants and convenience stores typically offer cheap, convenient, and non-nutritious foods, and their locations can significantly influence residents' food choices and health. Land use and policy solutions can guide expansion of healthy food availability.

Race and Ethnicity

Malden is a racially and ethnically diverse city, with over half its population identifying as BIPOC (Black, Indigenous or People of Color). As shown in Table 1, Asian and Black residents represent the largest percentages of population by racial/ethnic group, at 23.4% and 16.1%, respectively. Latinx¹⁹ residents represent 9.3% of Malden's population, and residents who identify as Multiracial or Another Race represent 4.2%. With the most diverse public high school in Massachusetts,²⁰ Malden's student body is 23.1% Asian, 19.3% Black or African, 25.2% Latinx, and 28% White.²¹

¹⁸ U.S. Census Bureau American Community Survey (ACS) 2014-2018 Five-Year Estimates

¹⁹ The term "Latinx" refers to Census categories "Hispanic or Latino"

²⁰ https://www.publicschoolreview.com/diversity-rankings-stats/massachusetts/high

²¹ Department of Elementary and Secondary Education (DESE), 2018 - 2019 school year

Foreign-born Malden residents represent 43.7% of the city's population, with the largest percentages of residents having been born in countries in Asia (47.2%), Latin America (32%), and Africa (11.4%). More than half (52%) of Malden's residents speak languages other than English at home and 55.2% of students speak a language other than English as a first language.

Table 1: Malden and Massachusetts Population by Race and Ethnicity

Source: U.S. Census Bureau American Community Survey (ACS) 2014-2018 Five-Year Estimates

	MAL	DEN	MASSACHUSETTS		
RACE OR ETHNICITY	(#)	(%)	(#)	(%)	
American Indian and Alaska Native	15	0.0	8,890	0.1	
Asian	14,277	23.4	440,336	6.5	
Black/African American	9,821	16.1	463,796	6.8	
Latinx	5,684	9.3	789,127	11.6	
Some Other Race Alone (Not Hispanic or Latinx)	704	1.2	53,268	0.8	
Two or More Races (Not Hispanic or Latinx)	1,819	3.0	142,666	2.1	
White	28,757	47.1	4,930,412	72.2	

Health Outcomes and Food Security

Poverty, food insecurity and housing instability are three health indicators that are associated with poorer health outcomes²². Those experiencing poverty are likely to concurrently experience stress and resource-related hardships.

To fully understand food security, it must be explored within the context of the Social Determinants of Health (including poverty, housing instability and transportation infrastructure.) Social Determinants of Health are associated with some of the most pressing health problems in the nation, as well as in Malden. This report explores the <u>Social Determinants of Health</u> in the Appendix.

²² https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

Maintaining good health, consuming a nutritious diet, or managing a chronic disease can be a challenge for people struggling with poverty or food insecurity due to factors like limited finances and resources, competing priorities, and stress.²³ People impacted by poverty or food insecurity may experience additional resource-related hardships, such as housing instability or difficulty paying energy bills, which can further contribute to poor health, nutrition, and disease self-management. These resource-related hardships are further exacerbated by historic and present-day systems of oppression and privilege: laws, policies and practices that unfairly advantage some and disadvantage others, such as structural racism, sexism and classism.

These serve as barriers to maintaining good nutrition and health and addressing existing health conditions, including those related to diet. Further, poorer neighborhoods tend to have fewer health-promoting resources, such as full-service grocery stores. These compounding factors result in a range of diet-related health issues, some being obesity, diabetes, and high blood pressure.

In addition to decreasing quality of life and driving morbidity and mortality, obesity and diet-related chronic diseases have significant economic impacts. Poor health results in increased direct medical costs, decreased worker productivity, and reduced human capital. The diagnosis and treatment costs of obesity-related health conditions are estimated at \$147 billion annually, or about 10% of all medical spending²⁴. Absenteeism, reduced productivity of employees while at work, increases to health insurance premiums, sick leave, and disability-related costs represent significant employer-related economic costs. Childhood obesity may impact academic performance, school attendance, and long-term educational attainment, having an overall negative effect on human capital²⁵.

When looking at access to healthy food, there are a number of commonly referenced health outcomes that are examined. In this section, the report covers pediatric obesity rates, adult diabetes hospitalizations, and adult cardiovascular disease hospitalizations. Local rates are compared to the state rates to put these numbers in context.

Massachusetts' Department of Public Health requires all public school districts to collect pediatric Body Mass Index (BMI) data for all students in grades 1, 4, 7 and 10. During the 2018-19 school year, percentage of youth who were overweight and obese were the following: Grade 1 (31%), Grade 4 (44%), Grade 7 (29%), and Grade 10 (26%).

According to most recent data available from MA Department of Public Health, the rate (per 100,000) of adult diabetes hospitalizations in Malden was 187.8, which was higher than the state rate of 158.9 (2014), and the rate of diabetes mortality in Malden was 22.9, higher than the state rate of 14.8. The rate of adult cardiovascular disease hospitalizations in Malden was 1563.2, which is the same as the state rate of 1563.1 (2012 - 2016).

²³ Hartline-Grafton, H. (2017). The Impact of Poverty, Food Insecurity, and Poor Nutrition on Health and Well-Being. Washington, DC: Food Research & Action Center. Available at: https://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurityhealth-well-being.pdf

²⁴ Centers for Disease Control and Prevention. (2016). Health, United States, 2015 (Table 19).

²⁵ Hammond, R. A., & Levine, R. (2010). The economic impact of obesity in the United States. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy, 3, 285–295. http://doi.org/10.2147/DMSOTT.S7384

ASSESSMENT METHODOLOGY



Conduct Assessment:

The collection and analysis of primary and secondary data for the Malden Community Food Assessment (Malden CFA) was undertaken by members of the Core Leadership Team, with the assistance of Mass in Motion's technical advisors, MAPC. The Malden Board of Health offered access to secondary data as related to retail food establishments. The City of Malden's GIS (Geographical Information Systems) Coordinator also lent expertise in mapping strategies for this report.

PRIMARY DATA COLLECTION:

- Healthy Food Availability Survey: A food retailer survey was conducted at 55 local food retailers, including supermarkets, convenience, and retail stores. A team of Malden High School students from the YWCA entered all retail establishments and compiled healthy food group data and WIC/SNAP availability. The survey was modeled after the "Healthy Food Availability Index²⁶". The primary goals were to determine which markets offer a variety of fresh foods and accepted WIC/SNAP.
- Key Informant Interviews: In addition to the food retail surveys, interviews were conducted with representatives from local organizations regarding the four focus areas of the Malden CFA: (1) Production, (2) Food Retail and Distribution, (3) Consumption and (4) Food Recovery + Waste Diversion. These organizations included: ABCD, ACDC, Bowdoin Apartments, Bread of Life, Cambridge Health Alliance, Chinese Culture Connection, MA Department of Public Health, Greater Malden Asian American Community Coalition, Malden Community Garden, Malden Public Schools Food Service, Malden Teen Enrichment Center, Malden YMCA, Mass Senior Action Council, Melrose-Wakefield Healthcare, Metropolitan Area Planning Council, Mystic Valley Elder Services (MVES), Project Bread, The Greater Boston Food Bank, WIC, and YWCA Malden.
- Malden Community Food Security Survey: A community food security survey was created to evaluate residents' access to and consumption of healthy, affordable, culturally appropriate foods. The Greater Boston Food Bank awarded the Malden CFA committee a grant to conduct a survey to assess consumption habits among Malden residents. Information on food sources, transportation, access to healthy food including financial resources for food, demographics, and socioeconomic status were also collected. Furthermore, we added pre and post-COVID versions of the same questions to ascertain variations in availability, affordability, accessibility

²⁶ Joint Tufts University and Johns Hopkins Center for Livable Future. Using the Healthy Food Availability Index to Explore Corner Stores in Baltimore, MD 2013. Available from: https://sites.tufts.edu/gis/files/2014/11/Przygocki_Liana.pdf

and change of habits due to COVID. The survey was offered both online/virtually through the City of Malden website and paper copies that were distributed throughout the city in Arabic, Chinese, Haitian Creole, English, Portuguese, and Spanish. Additionally, all participating local organizations (listed above) were asked to distribute the surveys through their networks. The survey received 393 responses. Due to COVID, the amount of survey responses was less than originally planned.

SECONDARY DATA COLLECTION: MAPC and CHA provided technical assistance and data analysis and visualization using a variety of publicly available data sources such as:

- U.S. Census American Community Survey (ACS) data
- City of Malden Municipal Data
- MA Department of Elementary and Secondary Education
- MA Department of Public Health

AREAS OF FOCUS /

The Malden CFA focused on four components of the Malden food system: (1) Food Consumption, (2) Food Production, (3) Food Retail and Distribution, and (4) Food Recovery + Waste Diversion. Each section was defined as follows:

- **Food Consumption**: This was defined as food that is consumed by those living in Malden. A survey of Malden residents was conducted to gain a better understanding of where and how people consumed the majority of their food, and how residents felt about the food currently available within the city.
- **Food Production**: For this assessment, the definition of food production in Malden was limited to food that was grown or processed within Malden. More broadly, food production is considered agriculture, cultivating raw materials such as seeds, livestock, seafood and grains, as well as the manufacturing and processing of these ingredients.
- Food Retail and Distribution: The mechanisms by which food is sold or distributed in Malden. Establishments that sell food in Malden were categorized as supermarkets, convenience stores, or retail stores, based on retail square footage and the number and variety of foods available for purchase, as defined by the Malden Municipal Code. Using a survey modeled on the Healthy Food Availability Index (HFAI)²⁷, stores were scored according to the variety and quantity of 11 categories of available staple foods. The HFAI scale ranges from a score of 0 (indicating the fewest options of healthy food available) to 22 (indicating the most options of healthy food available). The HFAI assigns scores that are based on availability of fruits and vegetables, staple foods, and certain protein and dairy options, and allows for comparison between stores. For this part of the assessment, the survey team included high school students participating in a leadership program offered by YWCA Malden who were supervised by members of the Malden CFA Core Leadership Team.

²⁷ Franco, M., Diez Roux, A. V., Glass, T. A., Caballero, B., & Brancati, F. L. (2008). Neighborhood Characteristics and Availability of Healthy Foods in Baltimore. American Journal of Preventive Medicine, 35(6), 561–567. https://doi.org/10.1016/j.amepre.2008.07.003

Also identified were less traditional means of selling and distributing food, including directly from farms through Community Supported Agriculture (CSA) and newer grocery delivery methods. Food pantries, meal programs, and other food distribution mechanisms that aim to address food insecurity among Malden residents were identified. This section also examined physical and financial accessibility as related to food retail and distribution, including the modes of transportation that residents use to get to stores and the ability to use SNAP or WIC benefits to purchase food.

Food Recovery + Waste Diversion: This was defined using the Environmental Protection Agency's Food Recovery Hierarchy. This model illustrated ways in which food is wasted (edible food that is not consumed and is disposed of into a landfill). The goal was to understand the current landscape of food waste and how to better utilize resources to help those in need while improving Malden's environmental footprint.

ASSESSMENT FINDINGS /

Each of the four components were assessed to understand the current landscape within Malden to find what is working well, what barriers or challenges exist, and what policies or programs might be able to address the challenges and lift up or strengthen what is working well. Each of the four components of the assessment will follow the same structure: Overview; Key Assessment Question; Findings. The Recommendations section follows the Assessment Findings Section.

FOOD CONSUMPTION

Overview

In this assessment, consumption is defined as food that is consumed by those living in Malden. This section includes findings from the 2020 Malden Community Food Security Survey, which was conducted to gain a better understanding of where and how people consumed the majority of their food, and how residents felt about the food currently available within the city. It also includes a compilation of previous work done to assess the Malden Public Schools food environment.

Food choice and consumption are not always determined by hunger but by other factors such as:

- ٠ Biological determinants such as hunger, appetite, and taste
- Economic determinants such as cost, income, availability •
- Physical determinants such as access, education, skills (e.g. cooking) and time
- Social determinants such as culture, family, peers and meal patterns
- Psychological determinants such as mood, stress and guilt •
- Attitudes, beliefs and knowledge about food²⁸

This section of the assessment explores residents' access to food: where they purchase food, transportation methods used to reach food, how much they spend, and how accessible it is. In order to better determine food consumption habits, the Malden Community Food Security Survey²⁹ was developed. Questions were developed in concert with the Tri-City Hunger Network and were translated into 6 languages (English, Haitian Creole, Portuguese, Chinese, Arabic, and Spanish). The survey garnered 373 valid responses from residents of Malden.

Initially, the survey was to be launched in March of 2020, but due to COVID, it was delayed. This

²⁸ https://www.eufic.org/en/healthy-living/article/the-determinants-of-food-choice

²⁹ The Malden Community Food Security survey was made possible by a grant from the Greater Boston Food Bank.

however presented itself as an opportunity to assess food security before and during COVID. Surveyors included Malden High School students participating in a leadership program at YWCA Malden, as well as other community groups and agencies. The survey was also available electronically on the City of Malden website. Survey respondents were representative of the ethnicities languages spoken by Malden residents. In order to gain ward specific responses, respondents were asked which ward they lived in. Of note, 180 of the 373 respondents did not know which ward they lived in. The respondents identified overwhelmingly as female and their racial/ethnic background was the following: 35% White, 22% Asian, 21% Black/African Diaspora, 14% Hispanic/ Latinx, 9% Other, 2% Middle Eastern, 1% Native Hawaiian/Pacific Islander.

Key Assessment Questions:

Where and how do Malden residents consume the majority of their food? How do Malden residents feel about the food currently available in the city, including quality, availability, and affordability?

For the Malden Community Food Security Survey, the Malden CFA project team had several research questions that guided analysis of the survey data. These were:

- 1. What does food insecurity look like in Malden?
- 2. What has been the impact of the COVID-19 pandemic on food shopping frequency, cost of living, and food access?
- 3. What is the relationship between transportation and food access?
- 4. What does food access look like for households with children?
- 5. Are there any barriers to residents obtaining the food that they and their family need or want?

Findings

/ MALDEN COMMUNITY FOOD SECURITY SURVEY /

- The majority of Malden residents cook their own food at home daily before and after COVID. Frequency of fast food decreased during COVID, 75 people reported monthly fast food or carry out compared to 55 during COVID.
- Most people thought it was fairly easy to get their food before COVID.
- Residents have voiced concern with the quality and pricing of fresh fruits and vegetables available at Stop & Shop.
- Some respondents suggested better options be made available for SNAP users that would increase HIP dollars, such as online delivery. Since COVID-19, there has been a shift in shopping behavior to reduce the number of trips from selected vendors. Online shopping increased 77% during COVID for people who shopped every 2 weeks.
- Most respondents of the Malden Community Food Security Survey before (89) and during (86) COVID reported spending 30% of their income on food. Additionally, survey respondents indicated a weekly increase of shopping at convenience stores (from 22 to 31 respondents respectively, representing a 41% increase) as opposed to shopping at a supermarket. Residents who reported shopping at a retail market (such as Baba Market, Dom's, etc.) reported a monthly increase (from 25 to 41 respondents respectively, representing a 61% increase).
- The majority of survey takers get their groceries from supermarkets. COVID has impacted food shopping, and survey takers report making less frequent trips to the supermarket and noted that getting food has become more difficult overall.

- Nearly half of survey takers experienced food insecurity in the past 12 months. Survey takers who experienced food insecurity more often represented households with children, made \$50K or less, were BIPOC, and spoke a language other than English at home.
- 1 in 4 survey takers got food from emergency food providers. This was the same both before and during the pandemic, though during the pandemic, they visited them more frequently.
- Survey takers making less than \$50K are less likely to drive to get their groceries and are more likely to use public transportation, walk, or get a ride from a friend.
- Residents voiced concerns that during COVID there was a lack of food and supplies available at stores and significant lines both inside and outside stores.

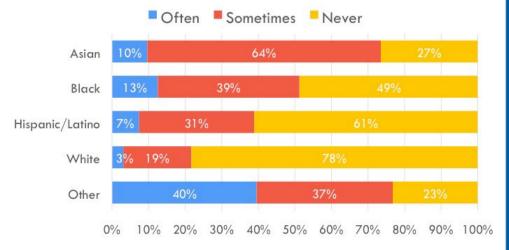
Food Insecurity

Data collected showed that nearly half of survey takers experienced food insecurity in the past 12 months. Additionally, 1 out of 10 households often experience food insecurity, whether they have children at home or not. About half of households with children occasionally experience food security, which is almost double the rate of non-child households.

One out of 5 white participants reported experiencing food insecurity, a much smaller proportion than any other race or ethnicity, compared to three out of four Asian participants who reported experiencing food insecurity, much higher than any other group.

Food Insecurity by Race and Ethnicity

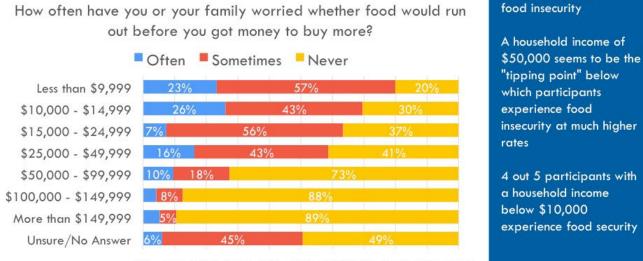
How often have you or your family worried whether food would run out before you got money to buy more?



1 out of 5 White participants experience food security, a much smaller proportion than any other race or ethnicity

Three out of four Asian participants experience food insecurity, much higher than any other group A household income of \$50,000 seems to be the "tipping point" below which participants experience food insecurity at much higher rates, with 4 out 5 participants with a household income below \$10,000 experiencing food security.

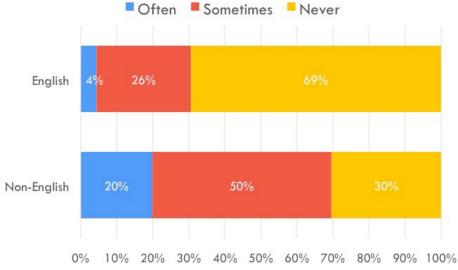
Food Insecurity by Household Income



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Survey respondents who speak a language other than English at home reported experiencing food insecurity at a much higher rate (70%) than those who spoke English (30%). Within the past 12 months, about 3 in 5 households with children reported experiencing food insecurity.

Food Insecurity by Language Spoken at Home



Survey takers who speak a language other than English at home experience food insecurity a much higher rate (70%) than those who spoke English (30%)

There is an inverse

relationship between income and frequency of

ASSESSMENT FINDINGS

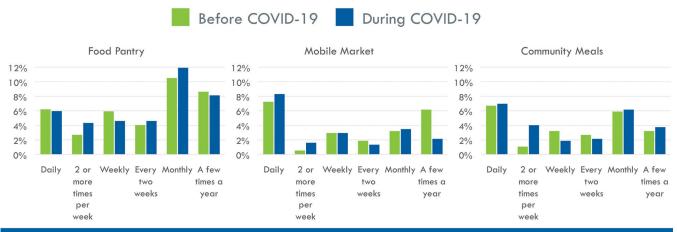
ASSESSMENT FINDINGS

Getting Food

Most residents do the majority of their shopping at a supermarket. Prior to COVID (177) residents made weekly trips to the supermarket, compared to weekly shopping trips (124) during COVID, meaning weekly shopping trips to the supermarket decreased by 30% during COVID. Residents shopped at a convenience store more frequently (weekly) during COVID (31) as opposed to before (22) which represents a 41% increase. These numbers suggest that it was easier to get groceries at a convenience store as opposed to a supermarket and more income was spent at convenience stores, where prices of goods are more often higher compared to a supermarket. Also, since COVID, there



has been a shift in weekly shopping behaviors to reduce the number of trips to typical retailers. Online shopping rose by 50% during COVID as well as Farmers Markets and CSA's where there was an increase of 38%. About 1 out of every 4 survey participants gets food from an emergency food site, this proportion was unchanged by COVID-19. Monthly trips to the Food Pantry increased during COVID, however, since COVID-19, there has been a shift in emergency food behavior to increase the number of trips. Most residents cook at home with a slight increase of (before 233, during 249) of 7% during COVID.



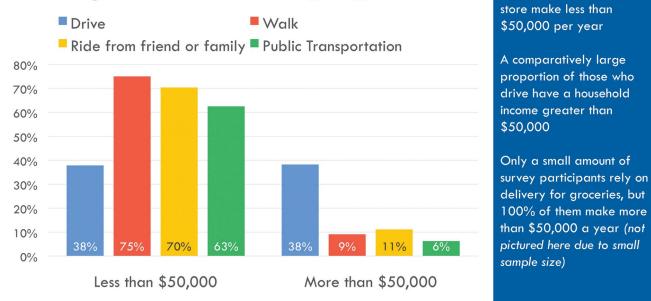
How often do you get food from a...

About 1 out of every 4 survey participants gets food from an emergency food site, this proportion was unchanged by COVID-19 However, since COVID-19, there has been a shift in emergency food behavior to increase the number of trips

Travel to Food

Survey takers making less than \$50K are less likely to drive to get their groceries and are more likely to use public transportation, walk, or get a ride from a friend.

During COVID-19, Household Income by Transportation Mode to get groceries



During COVID-19, the majority of survey takers (69%) drive to get groceries. Yet, more than half of those who walk (55%) to get groceries find food shopping fairly or very difficult. A small proportion also walk (12%), get a ride from a friend or family (7%), or take public transportation (4%). Very few participants used other forms of transportation.

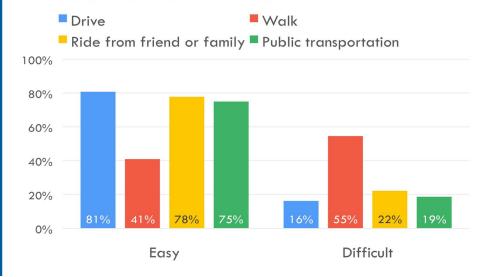
Overall, 3 in 5 survey takers (60%) get to their grocery store in less than 30 minutes. Most of those who take public transportation (69%) spend over 30 minutes getting to their groceries compared with drivers, more than half (62%) of whom have a trip that takes 30 minutes or less and slightly more than a fourth (28%) have a less than10 minute trip.

Overall, 3 of 4 participants (75%) said that since COVID-19 it is very or fairly easy to get groceries. Yet, more than half of those who walk (55%) to get groceries find food shopping fairly or very difficult.

The majority of survey takers who walk, get a ride,

or take public transit to the

During COVID-19, Ease of Food Shopping by Transportation Mode



A very small amount of survey participants rely on delivery for groceries, but 100% of them make more than \$50,000 a year.

/ SCHOOL FOOD /

Overall, 3 of 4 participants

fairly easy to get groceries

Yet, more than half of those who walk (55%) to get

(75%) said that since COVID-19 it is very or

groceries find food shopping fairly or very

difficult

The Malden Public School (MPS) district includes five K-8 elementary schools, one high school and one Early Learning Center. The district's Food Service Department is managed by Whitson's School Nutrition and participates in the National School Breakfast Program (NSBP), a federally-funded nutrition program that provides nutritious breakfast to eligible students at low or no cost during the school year. In Massachusetts, the NSBP is administered by the Department of Elementary and Secondary Education (DESE). Through a legislative appropriation, DESE funds Project Bread to administer the Child Nutrition Outreach Program (CNOP) through an annual grant. CNOP provides technical assistance and innovative solutions to support schools to implement and expand breakfast programs.

In Malden, all K-12 students have access to free school breakfast and lunch since Malden became a designated Community Eligibility Provision Community (CEP) in 2021.

Prior to becoming a CEP community, the MPS's Food Nutrition Services staff provided eligible students with free meals through the National School Breakfast Program (NSBP) and National School Lunch Program (NSLP)³⁰. Eligibility for the programs varied by school (see Table 2 below), but all public schools have greater than 50% of students eligible for the program. As of March 2018, only 998 of the 4583 students eligible for free and reduced-priced meals participated in school breakfast. As only 21% of eligible students used the program, increasing participation represented a potential way to quickly increase nutrition to a significant number of the Malden Public Schools population.

30 http://www.doe.mass.edu/news/news.aspx?id=25653

22 | MALDEN COMMUNITY FOOD ASSESSMENT 2019-2021

		СЕР	TOTAL STUDENTS ELIGIBLE FOR FREE OR REDUCED		F/R ADP		TOTAL ADP	
SCHOOL	ENROLLMEN	T ELIGIBILITY	PRICE	MEALS	LUNCH	BREAKFAST	LUNCH	BREAKFAST
BEEBE SCHOOL	893	Eligible	612	69%	76% (455)	9% (56)	65% (562)	9% (80)
FERRYWAY SCHOOL	902	Eligible	669	74%	78% (503)	55% (352)	71% (616)	48% (413)
FORESTDALE	578	Eligible	348	60%	76% (205)	16% (51)	62% (336)	12% (64)
LINDEN	853	Eligible	500	59%	62% (294)	16% (75)	47% (384)	12% (94)
MALDEN HIGH	1853	Eligible	1261	68%	61% (689)	10% (113)	51% (857)	8% (125)
SALEMWOOD SCHOOL	1229	Eligible	1013	82%	81% (764)	37% (348)	74% (857)	36% (411)
EARLY CHILDHOOD CENTER	410	Near Eligible	180	44%	45% (69)	2% (3)	30% (107)	1% (4)
TOTAL	6718		4583	68%	71% (3023)	23% (998)	59% (3719)	19% (1191)

Table 2. Eligible Students for Free/Reduced School Meals

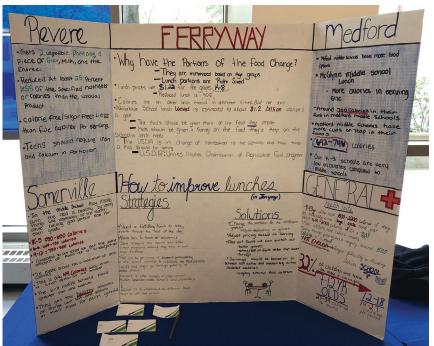
The EOS Foundation's 3rd Annual Massachusetts School Report Card ranked Malden 36 out of 36 high poverty districts Malden was categorized as one of the 12 districts in 2018-2019 that required urgent attention.³¹ Whitson's, the Malden Public School contracted meal service, municipal leadership, and other stakeholders worked to enroll eligible families into the reduced and free school lunch program to ensure that there was a more accurate representation of need in the Malden community. As a result of those efforts, Malden was designated a CEP community in 2021.

Malden Public Schools students at the Ferryway School and Malden High School who participated in Generation Citizen³² in 2018 raised concerns regarding the amount, variety, and nutritional content of school meals. They expressed a desire for the food in the schools to be more culturally representative of their diets, as well as to adjust portions depending upon age. Students who surveyed surrounding communities (Medford, Somerville, and Revere) summarized that their lunches were calorically deficient.

31 http://eosfoundation.org/wp/wp-content/uploads/2019/05/Eos-School-Breakfast-Report-2019-1.pdf

32 https://generationcitizen.org/everydayequity/

They also pointed out the need for more iron and calcium-fortified meals and felt that vegetable and fruit substitutions would be advantageous to the overall lunch menu. Students thought recipe modifications could be made to reduce unwanted calories, improve taste, and quality and make meal choices more healthy. School food can be a complex issue; school lunches must meet Federal nutrition requirements, but decisions about what specific foods to serve and how they are prepared are made by local school food authorities. School lunches, breakfasts, and snacks can account for a lot of the food that students



eat during the week. Having access to healthy, nutritionally balanced food in school can help students focus and excel in their classes, and can also help them develop good eating habits for life. It may prove feasible to work with chefs to develop healthy, nutritious recipes.

Recognizing the important role school meals play in a community's overall food security, all school meals were provided to every student in the Commonwealth, regardless of socio-economic levels of the household, during the COVID-19 pandemic.

Consumption Recommendations: See <u>Recommendations Section</u> for specific **Consumption Recommendations**.

FOOD PRODUCTION

Overview

As part of this assessment, Malden's 2017 Open Space and Recreation Plan (OSRP) was reviewed and local food production organizations were interviewed. Many of the recommendations made in the OSRP surrounding community gardens and resident opportunities to garden align with information gathered in the current CFA process. The 2017 Malden Moratorium Survey also indicated that Malden residents by a wide margin supported community garden upgrades. Of the 2,000+ residents who took the survey, 69.3% ranked community gardens as a high priority for open space consideration.

Community and schoolyard gardens represent one way to increase food production, healthy eating practices, and also increased sense of community. A survey by MAPC, done for the Malden OSRP, states that while this represents a small fraction of the food supply, it is an important step in community participation in food sourcing.

Key Assessment Question:

How well does the production component of Malden's food system provide residents with opportunities to grow healthy food?

Findings

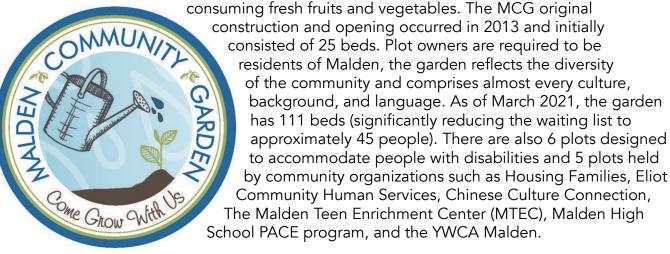
Food production in Malden centers around small-scale home gardens, school gardens, and a robust community garden. Commercial-scale urban agriculture does not currently exist in Malden. While there is strong interest in growing produce among Malden families and organizations, gardening knowledge, land availability, ownership, and funding constraints must be addressed in order to expand access.

Malden Community Garden

The Malden Community Garden (MCG) is located along the Northern Strand Community Trail (NSCT) otherwise known as the bike path between Bryant and Faulkner Streets. The land is owned by the MBTA and leased to the city for garden purposes. Funding for the MCG originally came from several sources including a federal community development block grant obtained by the Malden Redevelopment Authority, private donations from Keurig, Inc., and the non-profit organization Seeds of Change. Non-profit partners also included Bike to the Sea, Inc., Malden Cultural Council, and the Malden YWCA. Councilor Barbara Murphy and Clay Larsen, Project Manager for Groundwork Somerville/Lawrence, with help from volunteers and Bike to the Sea, helped get the MCG off the ground.

The mission of the Malden Community Gardens is to empower residents of the City of Malden to become active stewards of a communal setting for growing their own produce and flowers. Through their stewardship, garden members become invested community stakeholders, giving back to the community by providing educational gardening events and activities, as well as helping, sharing, and collaborating with other community groups in Malden.

The MCG has benefited the community in a number of ways. It has allowed residents to experience urban gardening while they interact with each other in a socially meaningful and physically productive way. The garden allows residents an increase in nutritional habits by



ASSESSMENT FINDINGS

K-8 School Gardens

Malden has school gardens at two of the K-8 schools, Ferryway and Salemwood, with Salemwood's garden having exposure to over 1,200 students. The Ferryway School's science curriculum had instituted a hydroponic growing learning system for its students. The Ferryway School's after school program (conducted by the YWCA) and Green City Growers had a program to install raised bed gardens and run garden classes in outdoor and indoor classrooms.

Production Recommendations: Please see <u>Recommendations Section</u> for specific <u>Production Recommendations</u>.

FOOD RETAIL + DISTRIBUTION *Overview*

Retail outlets (as defined by Malden Statute³³) and major emergency and supplemental food distribution sites were assessed in this section with a specific lens of accessibility, specifically looking at retail outlets that accept SNAP and WIC (defined below). Using a survey modeled on the Healthy Food Availability Index (HFAI)³⁴ stores were scored according to the variety and quantity of 11 categories of available staple foods. The HFAI scale ranges from a score of

0 (indicating the fewest options of healthy food available) to 22 (indicating the most options of healthy food available). The HFAI assigns scores that are based on availability of fruits and vegetables, staple foods, and certain protein and dairy options, and allows for comparison between stores. The survey team for this part of the assessment included Malden High School students participating in a leadership program by YWCA Malden and supervised by members of the Malden CFA Core Leadership Team.

A large number of smaller retail and convenience stores exist throughout Malden neighborhoods (which allows for greater access due to closer proximity than large supermarkets to where people live). However, many of these stores don't have fresh produce and healthier food items regularly available, nor do they all universally accept Supplemental Nutrition Assistance Program (SNAP) or Women Infants and Children (WIC) benefits.

/ SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) /

SNAP is a federal program that helps millions of low-income Americans continue to afford food during difficult times, and nearly half of all SNAP participants nationwide are children³⁵. Federal eligibility for SNAP is limited to people with gross incomes up to 130% of the federal poverty line, meaning a family of four can make no more than \$2,633 a month to receive benefits³⁶. SNAP benefits are distributed monthly through Electronic Benefit Transfer (EBT) cards and can be used at participating stores. According to the US Census Bureau American Community Survey (ACS), 13.6% of Malden households participate in SNAP, and of those households, 39.2% have children under 18.³⁷ Most recent data from the Food Bank of Western MA shows that Malden's SNAP Gap is at 52%³⁸.

³³ https://malden.municipalcodeonline.com/book?type=ordinances#name=12.32.060_DEFINITIONS_-_ZONING

³⁴ Franco, M., Diez Roux, A. V., Glass, T. A., Caballero, B., & Brancati, F. L. (2008). Neighborhood Characteristics and Availability of Healthy Foods in Baltimore. American Journal of Preventive Medicine, 35(6), 561–567. https://doi.org/10.1016/j.amepre.2008.07.003

³⁵ https://www.feedingamerica.org/take-action/advocate/federal-hunger-relief-programs/snap 36 ibid

³⁷ US Census Bureau American Community Survey (ACS) 2014 - 2018 5-Year Estimates

³⁸ https://public.tableau.com/profile/food.bank.of.western.ma#!/vizhome/SNAPGAP2021/AllDistricts

The SNAP Gap is defined as the difference between the number of low-income MA residents eligible and the number of resident actually receiving SNAP³⁹.



/ WOMEN INFANTS AND CHILDREN (WIC) /

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a Federal Program that provides grants to states for supplemental food, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, infants, and children up to age five. WIC is a prescription program for the above named who are found to be at nutritional risk. Of the 55 stores surveyed in Malden, only 6 stores accept WIC. While the number of stores that accept WIC in Malden is low, one of the stores that does accept WIC is Stop & Shop, which is consistently first or second in the state for redeeming WIC benefits.

The Malden WIC program (which includes some surrounding cities and towns) has estimated that there was a 102% increase in WIC participation between March 15 and July 30, 2020. The City of Malden was in the top 5 cities for increased participation in the WIC program. The total number of Malden residents served on March 15, 2020 (pre-COVID), and November 15, 2020 (during COVID), are 823 & 857, respectively. Individual stores such as convenience stores or neighborhood markets must apply to become WIC vendors. It is reported that many do not apply because of the time-consuming process it takes to become approved and remain an authorized WIC vendor. The application process, annual training, bi-annual inspections, inventory requirements, and point of service responsibilities are administratively burdensome for small vendors. Additionally, although Public Charge (a federal rule referring to immigrants who the government deems may be likely to become dependent by having received one or more public benefits and therefore can be denied green cards, visas, or permission to enter the country) is not applicable to WIC, most who potentially could qualify and benefit from the program stray away due to fear, rumors and misinformation.

Of the 55 Stores in Malden that were surveyed, 40 stores accepted SNAP and only 6 accepted WIC.

Key Assessment Question:

To what degree does the retail and distribution component of Malden's food system ensure that residents have the ability to readily access healthy, affordable, and culturally relevant food options?

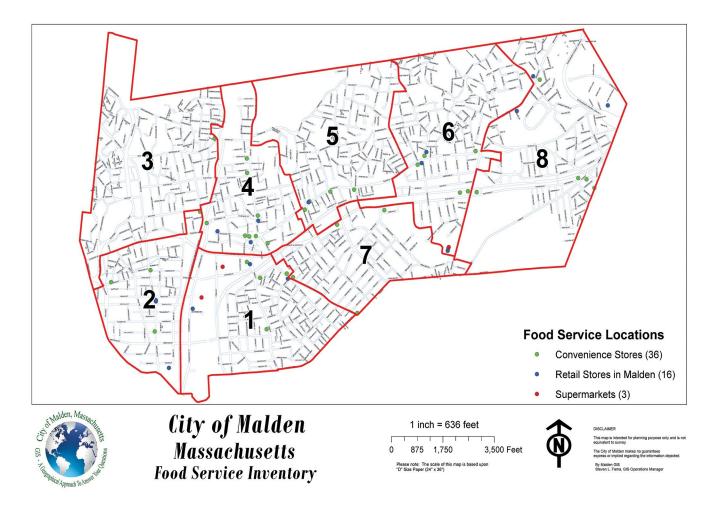
Findings

/ FOOD RETAIL RESOURCES /

There are 55 food retailers in Malden, including 3 supermarkets, 36 convenience stores, and 16 retail stores. The locations of these retailers are shown on the map in Figure 3. When evaluated using the Health Food Availability Index⁴⁰, 10 of the 55 stores scored in the lowest tier of healthy food availability (0-7 points); the majority (39 stores) scored in the middle tier (8-14 points); and only 6 scored in the highest tier (15-22 points), including all three supermarkets, as well as Fouad Market, Broadway Market, and P&C Market. Of the 6 stores scoring in the highest tier, 5 accept SNAP, and 1 accepts WIC.

Figure 3: Malden Food Service Inventory Map

Source: The City of Malden GIS (Geographical Information Systems) Coordinator



⁴⁰ Franco, M., Diez Roux, A. V., Glass, T. A., Caballero, B., & Brancati, F. L. (2008). Neighborhood Characteristics and Availability of Healthy Foods in Baltimore. American Journal of Preventive Medicine, 35(6), 561–567. https://doi.org/10.1016/j.amepre.2008.07.003

/ SUPERMARKETS /

A supermarket is defined as "a retail store that carries a broad range of food products and may also sell a limited selection of other items, **included are grocery stores and excluded are convenience stores**"⁴¹ by Malden statute.

Malden has three supermarkets: 99 Asian Supermarket, Super 88 Supermarket, and Super Stop & Shop. The map in Figure 3 shows two stores within walking distance in Ward 1 and one store in Ward 6 both of which are accessible by public transportation. Based on the Healthy Food Availability Survey, supermarkets in Malden had the highest average score of 20 points. All supermarkets accept SNAP, while only one accepts WIC.

/ RETAIL STORES /

Retail stores have been defined by Malden statute as "a retail store that carries a broad range of different products such as a dollar store, or a large selection of a particular kind of products...and **specifically excluding a supermarket or grocery store**."⁴² There are 16 retail stores in Malden. Retail stores are dispersed throughout Malden, except Wards 3 and 7. Neighborhood market retail stores are different from larger supermarkets, as they are generally locally owned and tend to reflect food items of the culture within which they are located. There are a variety of culturally specific food retailers in Malden including Baba Supermarket, Balahi Indian and American Groceries, Italimport, and Kim Long Market. Our Healthy Food Availability Survey showed that retail stores had an average score of 12.06. Only 6 retail stores accept SNAP while no retail stores accept WIC.

/ CONVENIENCE STORES /

Convenience stores, defined by Malden statute as "a retail store that carries a limited selection of basic items... is open longer hours...and can include marts, variety stores, and superettes."⁴³ There are almost double the number of convenience stores in Malden (36) as supermarkets and retail stores combined (19). These stores are limited in the number and variety of fresh food items available. Most only carry staple items, like milk, bread, eggs, and rice. The Healthy Food Availability in Malden Survey found convenience stores to have the lowest average scores (9.05), with 28 stores accepting SNAP and 5 accepting WIC.

In 2016, Malden is Moving! partnered with MAPC on a Plan for Health project that would engage small retailers such as corner stores or commonly known as convenience stores. This project engaged small retailers to better understand procurement practices, barriers, and interest in receiving assistance to increase the offering of healthier foods - including those that would be culturally and ethnically representative of the Malden community. That survey found that owners tend to purchase food at retail prices at local grocery stores, making the options offered at retail stores cost prohibitive for residents. Smaller retailers' needs tend to vary and they often need much smaller quantities of food items, and as such, larger distributors and wholesalers tend to prohibit serving these retailers. This follows national trends, in which retail and convenience store prices are 10-54% higher than grocery store prices.⁴⁴ These findings point to barriers for smaller stores to purchase healthier foods and sell them at affordable prices for residents.

⁴¹ https://malden.municipalcodeonline.com/book?type=ordinances#name=12.32.060_DEFINITIONS_-_ZONING

⁴² https://malden.municipalcodeonline.com/book?type=ordinances#name=12.32.060_DEFINITIONS_-_ZONING

⁴³ https://malden.municipalcodeonline.com/book?type=ordinances#name=12.32.060_DEFINITIONS_-_ZONING

⁴⁴ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5580618/

Community Supported Agriculture (CSA) is a community of individuals who pledge support to a farm operation. Members purchase a share of the farm's production before each growing season, which provides the farmers necessary economic security for the growing season.⁴⁵ The members share the risks and benefits of food production with the farmer and in return, receive regular distribution of the farm's bounty.

SESSMENT FINDING

Malden currently has one CSA, Farmer Dave's. Farmer Dave's offers shares almost all year round with their weekly pickup site location at Cambridge Health Alliance's (CHA) Malden Care Center on Canal Street.⁴⁶ Investing in a community-supported agriculture share oftentimes incurs a heavy upfront cost. However, through an ongoing partnership with CHA and the Department of Transitional Assistance, Farmer



Dave's participates in the Supplemental Nutrition Assistance Program (SNAP) and the Healthy Incentive Project (HIP) which provides an opportunity for income-eligible individuals and families to access fresh, locally grown produce at a greatly reduced cost.

/ COMMERCIAL KITCHEN AND FOOD BUSINESS INCUBATOR /

Stock Pot Malden is a shared commercial kitchen space and food business incubator. It operates two facilities, both located on Pearl Street in Malden, totaling 10,000 square feet. Stock Pot serves three primary types of food start-ups:

- **Centrally-prepared meal companies** that deliver complete meals to individual customers in their homes, or to various institutional customers such as corporate offices, schools, restaurants with no or minimal kitchens, including take-out places, food pods, and food vending machines.
- Food truck companies that make their living as a combination of street-vending, catering and special events such as food truck festivals.
- **Food product companies** that develop and sell single products or product lines (e.g., bakery products, spices, or juices) that are distributed through web sites, farmers markets, specialty retailers, and Big Box retailers.

Additionally, Stock Pot Malden provides space for chefs and food educators to offer cooking lessons to individuals. The kitchen is fully licensed with the City of Malden and offers a kitchen outfitted with a hood, easy-access burners, ovens, fryolators, and a tilt skillet, supported by dry storage, walk-in storage, and freezer areas. Stock Pot Malden also offers ServSafe Food Safety Manager Certification. Every food business, whether it's a restaurant, commercial kitchen, or table at the farmer's market,



⁴⁵ https://www.nal.usda.gov/afsic/community-supported-agriculture 46 https://www.farmerdaves.net/csa-locations/

needs at least one person with a food safety manager certification. ServSafe is a food and beverage safety training and certificate program administered by the US National Restaurant Association. Instruction is offered monthly and class time is conducted in English, but textbooks and exams are available in both Spanish and Mandarin Chinese.

/ MEAL AND GROCERY DELIVERY /

With the rise of the gig economy, as well as the presence of COVID-19, there has been a rise in the use of meal and grocery service delivery services. Currently, multiple retail businesses offer meal delivery services as well as grocery delivery services such as: PeaPod, Amazon Fresh, and Instacart. These services offer convenience and time savings, however, depending on the service, costs may be higher than when purchased in stores.

The 2014 Farm Bill included an Online Purchase Pilot (OPP) for eight states to use SNAP to purchase groceries online. Massachusetts is one of the states participating in the SNAP Online Purchasing Pilot⁴⁷. Three retailers in MA have been approved to accept SNAP purchasing online (Aldi, Amazon and Walmart). In Malden, this option can help to alleviate transportation as a barrier for SNAP participants purchasing food. However, there are tradeoffs: for example, when delivery fees are assessed, they cannot be paid with SNAP benefits.⁴⁸ Current participants in the online pilot program stated their top three reasons for participating in the program were convenience, being able to pay for groceries without other shoppers seeing they were using SNAP benefits, and for parents, not having to navigate the grocery store with children.⁴⁹

While online shopping and delivery service is not yet available in Malden, it represents new opportunities to reduce stigma when using SNAP benefits, a common barrier to their use, and opportunities for those with difficulty mobilizing to improve independence.

Emergency and Supplemental Food Distribution Resources: Community Organization Highlights

Malden has a number of community and faith-based organizations that distribute emergency and supplemental food to residents of Malden and beyond. For the most updated information about current food distribution sites, please refer to <u>Greater Boston Food Bank's Partner Agency</u>. Locator and Project Bread's Need Help website. The Greater Boston Food Bank (GBFB) is the major emergency food distribution supplier for Eastern Massachusetts. In 2019, GBFB distributed 68.5 million pounds of food throughout Eastern Massachusetts, providing nutritious food to approximately 143,000 food insecure individuals.⁵⁰ GBFB acquires food through food industry partners and financial donations, then redistributes it to over 500 partner agencies. Three major partner agencies of GBFB in Malden are Bread of Life, the Malden YMCA through the Mystic Community Market, and the Melrose-Wakefield Health Care Mobile Market.

Food distribution for Emergency and Supplemental Food Distribution providers increased greatly during COVID-19. It quickly became obvious that all food assistance providers would have to go above and beyond their usual services in order to make sure neighbors in Malden and surrounding communities had food on their tables in the midst of economic crisis, illness and death brought upon by the pandemic. This increase in demand immediately stretched capacity to the limit at Emergency and Supplemental Food Distribution sites in Malden. The ability to process patrons at the various food pantries has been continually challenged by lack

- 47 https://www.fns.usda.gov/snap/online-purchasing-pilot
- 48 https://www.mass.gov/info-details/snap-online-purchasing-program-frequently-asked-questions
- 49 https://www.npr.org/sections/thesalt/2019/12/19/787465701/how-online-grocery-delivery-could-help-alleviate-food-deserts
- 50 https://www.gbfb.org/who-we-are/about-us/

of volunteers. Some pantries required an increase in staff hours and/or had to hire more staff when volunteering decreased due to COVID-19 safety measures. In some instances prepared meals were resourced when meal partner groups were unable to continue volunteering and preparing evening meals during COVID-19. The ability to source enough food to meet the demand was challenged by delays in the supply chain. The ability to pick up food at the GBFB was challenged by the limitations of truck capacity. Out of necessity during this crisis, strong innovative collaborations were born. Examples include healthcare systems working with a moving company to donate a truck and driver once a week to help alleviate the capacity to bring food from GBFB back to the community. Additional funding to support new programs such as a Grocery Delivery Program for patrons with COVID-19 unable to leave their homes, as well as purchasing additional infrastructure such as more freezer capacity.

/ BREAD OF LIFE /

In 2019, Bread of Life served 949,352 meals to a diverse group of residents from Malden (60%), Everett (32%), Medford (5%), and Melrose (5%). Revere and Chelsea were recently added as community Bread of Life service partners. Bread of Life receives 80-90% of its food from the Greater Boston Food Bank.

/ MALDEN YMCA MYSTIC COMMUNITY MARKET /

The Malden YMCA operates the Mystic Community Market (MCC) in Medford, MA, which serves Malden residents. *In 2019, the MCC distributed 270,000 lbs. of food*. The MCC receives the majority of their food from the Greater Boston Food Bank.

/ MELROSE - WAKEFIELD HEALTH CARE MONTHLY MOBILE MARKET /

Serving about 400 families per month, the Melrose Wakefield Health Care system's mobile market served about 4,800 families in 2019. The market receives a majority of its food from the Greater Boston Food Bank.

Food Retail + Distribution Recommendations: See <u>Recommendations Section</u> for specific <u>Food Retail + Distribution Recommendations</u>.

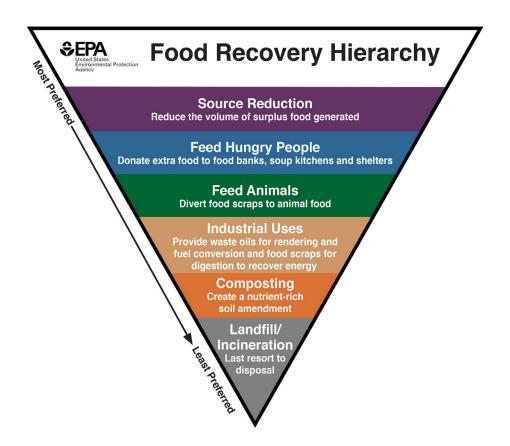
FOOD RECOVERY + WASTE DIVERSION Overview

Food Recovery + Waste Diversion is the process of taking food that is no longer sellable (but still usable) and distributing it to those who are able to use it. This process works to achieve the dual goals of reducing food waste and providing food to those who need it.

In the U.S, food waste is estimated at between 30% - 40% of the food supply. Wasted food is the single largest category of material placed in municipal landfills and represents nourishment that [can help] feed families.⁵¹

⁵¹ https://www.fda.gov/food/consumers/food-loss-and-waste#:~:text=In%20the%20United%20States%2C%20food,worth%20of%20food%20 in%202010.

Figure 4: U.S. EPA Food Recovery Hierarchy⁵²



U.S. EPA Food Recovery Hierarchy (Figure 4) prioritizes interventions that organizations can use to prevent and divert wasted food, and focuses on different management strategies for wasted food.⁵³ The most preferred and higher up methods create the most benefit for society, the environment and the economy. According to the EPA, reducing the volume of food surplus generated (Source Reduction) is the preferred method, followed by donating extra food to food banks, soup kitchens and shelters (Feed Hungry People). The EPA then recommends diverting food scraps to animal feed and to industrial uses. Finally, the EPA recommends utilizing composting before putting food waste in landfills or incinerators.

While all aspects of the hierarchy are important, due to the landscape of Malden, this CFA focused specifically on local organizations working on three specific tiers - Feeding Hungry People, Composting, and Landfill.

Key Assessment Question:

What does the current landscape of Food Recovery + Waste Diversion look like in Malden, and how can resources be better utilized to help those in need while improving the city's environmental footprint?

⁵² https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy

⁵³ https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy

/ FEEDING HUNGRY PEOPLE /

The food recovery landscape around Greater Boston is exceptionally well-networked. To understand the food recovery landscape in Malden, the authors of this CFA relied upon community partners and research conducted by neighboring communities to better understand strengths and challenges that could be addressed.

To maximize efficiency in reducing waste by getting food directly to those who need it, three organizational levels intersect in and around Malden:

- The Greater Boston Food Bank (GBFB): As previously discussed, the GBFB serves as a central platform to match food donations with organizations that have the capability to distribute food directly to individuals.
- Mid-sized intermediaries: Lovin' Spoonfuls, a Boston-based food recovery organization, recovers food directly from grocery stores, wholesalers, farms and farmers markets and delivers it to over 160 nonprofit partners, including organizations within Malden.⁵⁴
 - Direct food provision agencies: This includes food pantries (such as Bread of Life and . YMCA) as well as faith based organizations, community organizations and community meal sites. These organizations offer different services such as food pick-ups, prepared pick up meals, and community sit down dinners.

Though each tier has a separate focus, all work together to reduce food insecurity.

While Malden participates in a robust regional network, effective recovery and distribution depends on a variety of factors, ranging from individual education to organizational capacity.

Despite best efforts to direct food to those in need, food is still being wasted. One contributing factor to this is confusion over date labeling. The USDA states, "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." 55

This is not a problem limited to Malden. Over the course of the past several years, Massachusetts has legislation pending (e.g. S.492 and S.2683) to decrease confusion around date labeling and reduce food waste.⁵⁶ The legislation advocates for requiring two dates, clearly labeled as "Quality date" and "Safety date."

Another challenge facing food distribution organizations is the capacity to store donated food that needs to be refrigerated. According to the GBFB, there is more food available in the Boston metropolitan area than there is capacity to recapture it, primarily because there is a lack of refrigeration and freezer space in pantries and emergency food distribution sites as well as limitation in the number of trucks, drivers and volunteers available to pick up from stores on a regularly

⁵⁴ https://lovinspoonfulsinc.org/food-rescue/what-we-do/

⁵⁵ https://www.fsis.usda.gov/wps/portal/fsis/home

⁵⁶ https://malegislature.gov/Bills/191/S492

scheduled times tables. While Lovin' Spoonfuls has refrigerated trucks for transportation, many of the direct food provision agencies do not have large scale refrigerator space to adequately store the donations. These are expensive but vital purchases for food rescue programs to work at their maximum capacity.

/ COMPOSTING /

Currently, Malden has two private companies - Bootstrap Compost and Black Earth Compost - that offer composting services for Malden residents for a fee. The services pick up food waste (weekly, biweekly or monthly), compost the waste, and then return nutrient-rich dirt back to the resident. There are about 100 households utilizing these services, diverting over 4,500 pounds of food scraps per month from Malden⁵⁷. However, this is significantly less than surrounding areas. This represents an area of opportunity to reduce Malden landfill waste.

Improving Malden's composting network is in line with the Massachusetts Department of Environmental Protection "Pathway to Zero Waste" plan⁵⁸. The ten year plan lays a framework to reduce Massachusetts' overall landfill contributions. Neighboring towns have tried to implement town wide composting programs, with varying success⁵⁹. Cost is generally seen as the prohibiting factor, specifically the cost of the driver performing pick-ups.

A municipal partnership with these companies, beginning with a feasibility analysis for municipal curbside composting services in Malden, may present an opportunity to significantly reduce waste while potentially engaging in garden enrichment and educational programming to intersect with school curriculum.

/ LANDFILL /

In October 2014, the Massachusetts Department of Environmental Protection (MassDEP) banned the disposal of commercial organic waste by institutions and businesses that dispose of one ton or more of these materials per week⁶⁰. The ban requires these organizations to divert disposal through one of the other options in the EPA Food Recovery Hierarchy (food donation, animal feed, composting and anaerobic digester). The ban has increased food donations in the state by 22% since its inception⁶¹. Additionally, the state offers resources to help organizations struggling with complying, including Recycling Works. The organization prioritizes food rescue and donation over composting.

Food Recovery + Waste Diversion Recommendations: See **Recommendations** Section for specific Food Rescue + Waste Diversion Recommendations.

⁵⁷ Interview with Bootstrap Compost and Black Earth Compost in Spring 2020 58 https://www.mass.gov/doc/2010-2020-solid-waste-master-plan-a-pathway-to-zero-waste/download

⁵⁹ https://www.cambridgema.gov/Services/curbsidecomposting/projectreports

⁶⁰ https://www.mass.gov/guides/commercial-food-material-disposal-ban

⁶¹ https://www.wbur.org/news/2019/06/05/massachusetts-food-waste-ban

RECOMMENDATIONS /

Based on the findings of the CFA, the following Recommended Goals and Recommended Actions for implementation were compiled by the participants of the collaborative Malden Community Food Assessment process.

OVERARCHING RECOMMENDATIONS

Recommended Goal: Leadership and processes are established for strategic prioritization of CFA recommendations and creation of a Malden Food Plan.

Recommended Actions:

- 1. Seek approval or adoption of Malden CFA by Malden city leadership.
- 2. Establish a Food Policy Council (FPC) or comparable organized body as the leading coalition for prioritizing the recommendations of the Malden CFA and creating a Community Food Plan. FPCs bring together stakeholders from diverse food related sectors to examine how the food system is operating and develop recommendations to improve it. FPCs involve a variety of stakeholders from different segments of the local food system. FPCs are also involved in education efforts and the implementation of policies and programs related to the food system, particularly to help achieve food security.
- 3. Ensure all policies, practices and programs launched by the FPC are equitable by utilizing a health equity impact assessment during development and implementation.
- 4. Ensure FPC works closely with other boards, commissions and municipal departments to guarantee that food access and food security goals are included in other municipal plans and policies. These may include, but are not limited to: Comprehensive/Master Plans, Transportation Plans, Housing Plans, and Open Space and Recreation Plans (OSRP).
- 5. Consider launching a civic engagement campaign due to large numbers of survey respondents not knowing what ward they live in.

FOOD CONSUMPTION

Recommended Goal: Ensure all Malden residents at all times have physical access, economic access and decision making power to consume food that meets their dietary needs and cultural food preferences.



Recommended Actions:

- 1. Ensure all eligible residents receive food assistance resources. a. This should include efforts to maximize enrollment and participation in WIC, SNAP, HIP, as well as food assistance resources that do not have income eligibility criteria, such as area food pantries.
- 2. Increase food retail options that offer affordable, healthy, and culturally preferred food. This should include exploring options for online shopping and delivery, particularly at supermarkets; partnering with neighborhood markets/convenience stores to increase the availability of affordable and fresh foods. A neighborhood market/convenience store strategy could include establishing a CSA drop off at such a location, which would require no financial risk or commitment of the store owner, bring in additional customers, and increase fresh, local food offerings that could be SNAP/HIP eligible.
- 3. Promote transportation services improvements that modify or add bus routes and stops around supermarkets and food pantries.
- 4. Promote transportation infrastructure improvements that expands and enhances sidewalk and bicycle infrastructure across Malden, and particularly in areas that facilitate connections to supermarkets and food pantries.
- 5. Engage the school committee, food service providers, parents, and students to provide information and promote revision to and improvement of the Malden Public Schools District Wellness Policy.
- 6. Support student-led efforts to further assess school meals (i.e. quality and quantity of meals served) and work with school administrators to incorporate feasible recommendations for an improved school menu.
- 7. Explore the creation of a student advisory group dedicated to making changes and improvements to the school food.
- 8. Explore best practice approaches to encouraging healthy eating in schools in a culturally appropriate and youth-empowered manner, such as involving students in the development of school meals.
- 9. Work with contracted school food service providers to expand the Mass Farm to School initiative. Farm to school activities enhance classroom education through hands-on learning related to food, health, agriculture, and nutrition.⁶² School food service directors can improve the nutritional value and taste of school meals while also supporting the local economy. Farmers selling locally-grown products to schools can earn a profit while finding new ways to connect with schools. Farm to school provides all students access to nutritious, high-quality, local food so they are ready to learn and grow.
- 10. Address gaps in wage and housing by assessing and evaluating the effectiveness of the MA Economic Development Bill (2018)⁶³ and the Malden Affordable Housing Trust Fund Ordinance⁶⁴ and how the Community Preservation Act can benefit the affordability of housing in Malden.⁶⁵

65 https://www.cityofmalden.org/313/Community-Preservation-Committee-CPC

⁶² https://www.massfarmtoschool.org/

⁶³ https://www.cityofmalden.org/DocumentCenter/View/2511/20191112-Affordable-Housing-Trust-Fund-Ordinance-FINAL?bidId= and how the Malden Community Preservation Act can benefit the affordability of housing in Malden 64 https://www.chapa.org/housing-news/massachusetts-legislature-establishes-an-economic-mobility-commission and the Malden

Housing Trust Fund Ordinance

FOOD PRODUCTION

Recommended Goal: All Malden residents, schools, and community-based organizations have opportunities to grow healthy food.

Recommended Actions:

The Malden Open Space and Recreation Plan (OSRP)⁶⁶ was last updated in 2017, and one goal in particular aligns with the goals and findings of the current CFA: **Goal #7* Increase opportunities for community gardening and urban agriculture**. Malden OSRP Goal 7 and associated recommended actions below are aligned with the Massachusetts Local Food Action Plan⁶⁷. Specific MA Local Food Plan references are: Action 3.2.8; Recommendation 3.16; and Action 3.16.1. Some recommended actions the OSRP identifies for the municipality to reach this goal include:

- 1. Inventory and assess suitability of municipally-owned parcels for food production, and prioritize these for establishing or expanding community gardens and urban agriculture
- 2. Partner with Malden community groups to develop a strategy for establishing and expanding community gardens and urban agriculture
- 3. Maintain a city-wide plan to provide resources and availability of community and home gardening to residents.
- 4. Facilitate exchange of community gardening knowledge between residents and community groups with expertise in this area.

In addition to the Malden OSRP recommendations, the Malden CFA also recommends the following actions:

- 5. Include rooftops and privately-owned vacant parcels in inventory and assessment of food production parcels. Areas of Malden that could benefit from community gardening and urban agriculture include: along the Northern Strand Community Trail (NSCT), parks and recreation areas, along the Malden River, Malden Housing Authority housing developments and senior housing (given that residents in those developments are involved in all aspects of planning and implementation)
- 6. Apply design principles and implement programming to ensure inclusive and accessible community gardening and urban agricultural opportunities for all residents from various cultural, linguistic and ethnic backgrounds, and of all abilities.
- 7. Expand partnerships with neighboring community groups on aligned initiatives.
- 8. Explore ways for the Malden Public Schools, after-school programs, and/or Malden's Mayor's Summer Youth Employment Program (MSYEP) to access existing community gardens, and/or for the community to access school gardens, such as through a shared or joint use agreement

⁶⁶ http://www.mapc.org/wp-content/uploads/2018/10/8.29-FINAL_Malden_OSRP.pdf 67 https://mafoodsystem.org/plan/

 Explore a financial and leadership sustainability plan for Malden Community Garden (consider 501c3 designation, inclusive leadership of all Maldonians, ensuring language accessibility, maintain a relationship with MBTA/National Grid to increase the number of current plots, etc.)

FOOD RETAIL + DISTRIBUTION

Recommended Goal: All points of sale and distribution in Malden provide food that is representative of the communities' needs and preferences, including access to healthy, affordable, and culturally preferred food options.

Recommended Actions:

- 1. Conduct an in-depth retail assessment to determine how the distribution system can cater to the needs of smaller stores and have healthy affordable food reach more residents of Malden. This could include:
 - a. identify barriers for retail stores to accept WIC;
 - b. identify possible incentives and resources for food retailers to offer more produce;
 - c. identify possible incentives and resources for food retailers to accept SNAP and WIC;

d. identify evidence-based practices to increase the buying power of small retailers to offer more healthy, culturally appropriate food (fresh fruits, vegetables, and whole grains).

e. mapping current supply chain and distribution networks;

f. identify and engage local and regional distributors to understand barriers to procurement and interest in participating in distribution networks;

g. work with smaller food retailers that had high HFAI scores. Support acceptance of SNAP and WIC, and address their business goals and needs. Increase capacity to meet community food needs.

- 2. Explore options to increase the number of fresh, local food vendors (i.e. farmers markets and CSAs) in Malden.
- 3. Incorporate food security, in collaboration with emergency food distribution sites, into municipal emergency preparedness and resiliency plans to meet challenges of increased demand in the future.
- 4. Source collaborative funding to handle infrastructure requirements tied to increased demand for emergency food distribution.
- 5. Request that the Malden legislative delegation support:

a. the Massachusetts Department of Transitional Assistance (DTA) Healthy Incentives Program (HIP) to provide SNAP doubling at farmers markets and CSAs statewide.

b. statewide efforts to implement a common application portal for MassHealth, SNAP, and other needs-based programs, that serves as an integrated, streamlined eligibility system for state-administered benefits.

FOOD RESCUE + WASTE DIVERSION

Recommended Goal: The City of Malden and community-based organizations utilize all available resources to reduce food waste and redistribute food to those that are able to use and consume it, while improving the city's environmental footprint.

Recommended Actions:

1. Request Malden legislative delegation support statewide efforts to decrease food waste, such as:

a. Legislative Session 21/22 dockets SD1338/HD1192: An Act Decreasing Food Waste by Standardizing the Date Labeling of Food and An Act encouraging the donation of food to persons in need SD.385⁶⁸:

b. Mass Department of Environmental Protection (DEP) proposed waste ban amendments to 310 CMR 19.000⁶⁹ that would: 1) Add mattresses and textiles to the list of materials banned from disposal in Massachusetts, and 2) Lower the threshold for the existing ban on disposal of commercial organic (food) materials so that it applies to facilities that generate one-half a ton per week or more of these materials for disposal.

- 2. Explore ways to coordinate an education campaign for institutions, consumers, businesses, and nonprofits to understand, raise awareness of, and take action to standardize label dating. This could include groups like MassDEP, DPH, MDAR, Food for Free, etc.
- 3. Explore ways (such as the Food Security Infrastructure Grant program⁷⁰) to increase capacity to rescue more fresh produce and increase refrigeration capacity of pantries/distribution sites.
- 4. Examine institutional and commercial food waste and devise strategies for connecting good food to the emergency food network and residents most in need.
- 5. Explore ways to initiate composting at residences and schools, and incorporate composting into classes, such as through a feasibility analysis for municipal curbside composting services.
- 6. Support all school food waste reduction efforts. Conduct waste audits in school cafeterias to help determine best practices in reducing food waste, for example, whether portion sizes are appropriate, what foods are preferred by students or if adopting an "offer versus serve" approach could help reduce food waste.

⁶⁸ https://mafoodsystem.org/projects/legislation/ 69 https://www.mass.gov/guides/massdep-waste-disposal-bans

⁷⁰ https://www.mass.gov/service-details/food-security-infrastructure-grant-program

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Like many community food assessments, the Malden Community Food Assessment has been a labor of love and collective action. The Malden Food Assessment Core Planning Team would like to thank the cities and communities whose prior CFA work informed our process, as well as the dedicated guidance and support of our local partner organizations. We also acknowledge the Tri-City Hunger Network for being the vehicle for meaningful conversation and action that led to this assessment. We also thank the dedicated interns, researchers, and community members who conducted focus groups, compiled data, and provided informative reports.

CORE PLANNING TEAM (Authors)	FUNDERS	INTERNS & COMMUNITY MEMBERS
Bread of Life (Marcia Manong)	Greater Boston Food Bank	Holly Grace, Project Bread
Cambridge Health Alliance (Renee Cammarata Hamilton & Kathleen O'Brien)	Malden is Moving!	Naomi Fener, Harvard T.H. Chan School of Public Health
YWCA Malden/ Malden is Moving! (Christina Murphy & Kristine Glynn)	Melrose Wakefield Healthcare	YWCA TASK Members
Metropolitan Area Planning Council		

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Tri-City Hunger Network Members:

Action for Boston Community Development (ABCD)

Asian Community Development Corporation

Bowdoin Apartments/WinnCo

Bread of Life

Cambridge Health Alliance

Department of Public Health

Greater Boston Food Bank

<u>City of Malden</u>, with special thanks to GIS Coordinator <u>Steve Fama</u>, and the Malden Health Department

Malden Asian American Community Coalition

Malden Community Garden

Malden Housing Authority

Malden Public Schools Food Service

Malden Teen Enrichment Center

Malden YMCA

Mass Senior Action Council

Melrose Wakefield Healthcare

Metropolitan Area Planning Council (MAPC)

Mystic Valley Elder Services (MVES)

Project Bread Child Nutrition Outreach Program

WIC- Commercial Street Malden

YWCA Malden



APPENDICES /

APPENDIX I: Social Determinants of Health and Food Security

Social determinants of health including poverty, food insecurity, housing instability and transportation infrastructure are associated with some of the most pressing health problems in the nation, as well as in Malden.

Maintaining good health, consuming a nutritious diet, or managing a chronic disease can be a challenge for people struggling with poverty or food insecurity due to factors like limited finances and resources, competing priorities, and stress.⁷¹ People impacted by poverty or food insecurity may experience additional resource-related hardships, such as housing instability or difficulty paying energy bills, which can further contribute to poor health, nutrition, and disease self-management. These resource-related hardships are further exacerbated by historic and present-day systems of oppression and privilege: laws, policies and practices that unfairly advantage some and disadvantage others, such as structural racism, sexism and classism.

One such policy and practice that has had lasting impacts on poverty, food insecurity, housing instability and transportation is "redlining," which was the practice of denying or limiting financial services to certain neighborhoods based on racial or ethnic composition. In the 1930s, the federal Home Owners Loan Corporation (HOLC) graded neighborhoods into 4 categories, largely along racial lines, and used these categories to determine riskiness of mortgages⁷². The HOLC made maps and shaded neighborhoods red that it deemed "hazardous," where financial institutions would not invest. That risk level was largely based on the number of African Americans and immigrants living there. Neighborhoods that were undesirable would be denied federal loans forcing people to use predatory lending firms with high interest rates. The HOLC maps presented in Figures 5 & 6 show that 46% of Malden was graded "hazardous" in the 1930s.

⁷¹ Hartline-Grafton, H. (2017). The Impact of Poverty, Food Insecurity, and Poor Nutrition on Health and Well-Being. Washington, DC: Food Research & Action Center. Available at: https://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurity-health-well-being. pdf

⁷² Mapping Inequality. University of Richmond, Virginia Tech, University of Maryland, Johns Hopkins University. https://dsl.richmond.edu/ panorama/redlining/#loc=5/39.1/-94.58

APPENDICES

Figure 5: Home Owners Loan Corporation (HOLC) Map of Malden, 1930 Source: Mapping Inequality

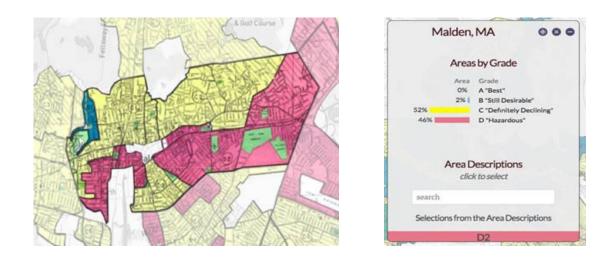
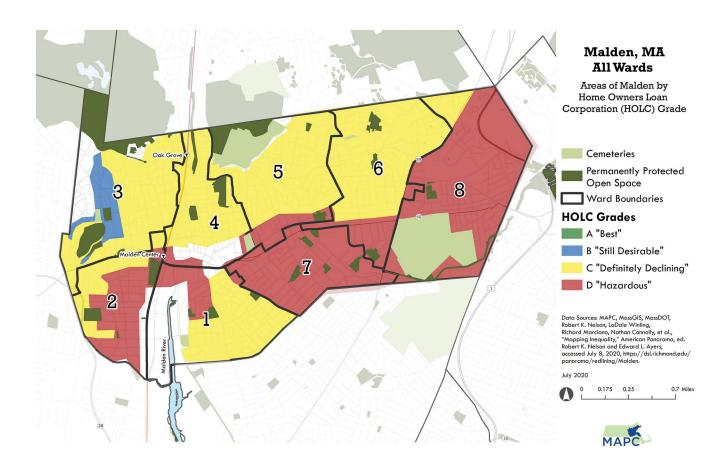


Figure 6: Home Owners Loan Corporation (HOLC) Map of Malden, 1930 <u>with</u> <u>present-day ward overlay</u>

Source: Mapping Inequality and MAPC



While the Community Reinvestment Act passed in 1977 outlawed this practice, it has had lasting impacts, as the median value of homes in redlined areas is approximately \$50,000 less than those in desired areas.⁷³ Redlining not only denied persons of color the ability to invest in homeownership and generate wealth that could be passed down for generations, it also dictated where retailers (such as supermarkets) would or would not locate. Lack of access to supermarkets has been strongly linked to diet, which has been strongly linked to obesity, hypertension and diabetes⁷⁴.

Therefore, inequities in rates of <u>poverty</u>, <u>food insecurity</u>, <u>housing instability</u> and <u>transportation</u> <u>modes</u> in Malden presented below should be examined with the equity lens discussed in our introduction, knowing that historic unjust practices like redlining have created barriers to good jobs, homes, food, and health outcomes.

To illustrate how each of these social determinants of health work together to impact the average Malden household, below is a series of average costs to understand what the **average** family of four's expenses look like (Table 3). Housing is considered affordable when it accounts for 30% or less of a household's income. Below is a snapshot of the monthly income and expenses of a 2-adult, 2-child renter household in Malden making the median income (\$64,178), which breaks down to \$5,196.75 per month, about \$30/hr.

73 Homes in Formally Redlined Areas Trailing in Value. https://www.prnewswire.com/news-releases/homes-in-formerly-redlined-areas-trailing-in-value-300636102.html 74 HealthyPeople.gov: Access to Foods that Support Healthy Eating Patterns

Table 3: Monthly Income and Expenses Snapshot of an "average" Malden renter household

MEDIAN HOUSEHOLD INCOME ⁷⁵			
Gross household income/year	\$64,178.00		
Gross household income/month	\$5,196.75		
Gross Hourly Wage	\$30.56		
MONTHLY HOUSING COSTS			
Median 2-bedroom rent ⁷⁶ (as of July 2020)	\$2,255.00		
Percentage of income spent on rent (housing cost burden) based on median rent	42.16%		
OTHER MONTHLY COSTS			
Childcare ⁷⁷	\$1,336.00		
Food ⁷⁸	\$1,445.00		
Transportation ⁷⁹	\$876.00		
MONTHLY BALANCE	-\$563.83		

Takeaway: This family, which represents the "average" household in Malden (half are above and half are below this income level) is **housing cost burdened** and will have a hard time covering other monthly expenses, as shown by the negative balance above. This snapshot uses gross income, and housing cost does not include utilities. This family could be eligible for affordable housing if it were available, as their income is less than 80% of the area median income (AMI) and considered "Low Income." If not, they could be pushed out of traditional housing options and be one major unexpected expense away from experiencing homelessness. This has severe negative implications for public health, well-being and educational outcomes.

^{75 2018} ACS 5 Year Estimates (2014-18)

⁷⁶ https://www.apartments.com/malden-ma/

⁷⁷ MIT Living Wage Calculator

⁷⁸ https://www.gbfb.org/news/press-releases/cost-food-massachusetts/

⁷⁹ MIT Living Wage Calculator

/POVERTY AND INCOME/

In general, Malden has higher poverty rates and lower median income compared to Massachusetts overall. An estimated 16.4% of Malden residents live below the federal poverty level, compared with 10.8% statewide.[®] As shown in Table 4, Malden has a greater percentage of residents under 18 living below poverty level compared to the state. Over 18% of Malden residents ages 65 and older are living below poverty level, compared to 9% in Massachusetts. Similarly, Malden has a greater percentage of families living below poverty level compared to the state. Similarly, Malden has a greater percentage of families living below poverty level compared to the state. Single mothers and their children, people of color, and people who are disabled are more likely to experience poverty, and as a result also experience greater food insecurity.^{®1}

Table 4: Malden and Massachusetts Poverty

Source: 2018 ACS 5 Year Estimates (2014-18)

POVERTY RATES ⁸²	MALDEN	MA
Population under 18 living below poverty level	20.1%	13.9%
Population 65 and older living below poverty level	18.1%	9.0%
Families living below poverty level	13.3%	7.5%

Since 2000, median household income has increased in Malden, but so has the percentage of families living below the poverty level. As shown in Table 5, growth in median household income has increased since 2000 in Malden (by 40.6%), it has been at a slower rate of growth than the state (53.2%). Median household income (\$64,178) remains lower compared to Massachusetts overall (\$77,378). Conversely, the percentage of families living below poverty level in Malden has increased at a much higher rate than the state.

Table 5: Income and Poverty: Change Over Time

Source: 2018 ACS 5 Year Estimates (2014-18)

	MALDEN			MA		
MEASURE	2000	2018	% CHANGE	2000	2018	53.2%
Median Household Income	\$45,654	\$64,178	40.6%	\$50,502	\$77,378	53.2%
Families below poverty level	\$6.60%	13.30%	-	6.70%	7.50%	-

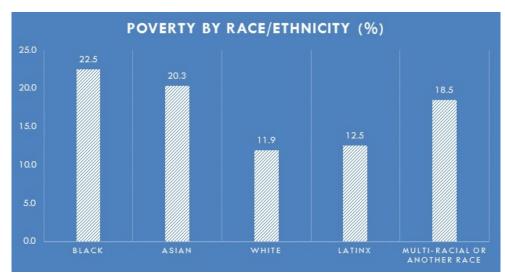
⁸⁰ US Census Bureau American Community Survey (ACS) 2014 - 2018 5-Year Estimates

⁸¹ Massachusetts Food Insecurity: Landscape and Innovation (2014), Tufts University.

⁸² https://data.census.gov/cedsci/table?q=S1701&g=0400000US25&tid=ACSST5Y2018.S1701&hidePreview=true

Both in Massachusetts and across the country, poverty is experienced disproportionately by people of color.⁴³ This is also true in Malden, as poverty rates are higher among Black, Asian, Multi-racial and Latinx residents relative to White residents (see Figure 7 below).



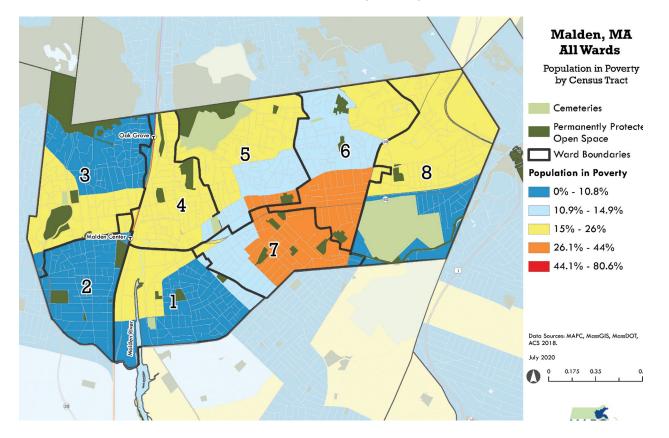


⁸³ US Census (2015 and 2016). Income and Poverty in the United States: 2016, Table 3: People in Poverty by Selected Characteristics 2015 and 2016. Retrieved July 2018 from https://www.census.gov/content/dam/Census/library/publications/2017/demo/P60-259.pdf.

Poverty is also experienced to varying degrees across Malden's geography. Figure 8 below shows the percentage of the population living below the poverty level by Census Tract. Ward boundaries are also shown to better understand poverty within political jurisdictions of the City. It shows that all wards except Ward 2 have portions of the population living below the poverty level at a higher rate than the state average, which is 10.8%.

Figure 8: Malden Poverty Estimates

Source: U.S. Census Bureau American Community Survey (ACS) 2014-2018 Five-Year Estimates



Food Insecurity

The USDA defines food security as the condition of having access at all times to enough food for an active, healthy life. Closely related, food insecurity and hunger are distinct concepts. Food insecurity describes the condition of having limited financial resources to buy food, whereas hunger refers to the personal, physical sensation of discomfort from not having eaten enough.

Figure 9: Hierarchy of Food Needs

Source: Ellyn Satter Institute⁸⁴

E. SATTER HIERARCHY OF FOOD NEEDS

We have to allow ourselves "enough" food before we can become selective.

FUNCTION	Able to select food to achieve a desired physical, cognitive, or spiritual outcome.
NOVEL	The risk of wasting food is less risky, and experimenting with novel food is possible.
TASTE	Once food security is addressed food choices are influenced by aesthetic and gustatory considerations.
RELIABLE ACCESS	Assured that adequate, familiar, and acceptable food is currently available. Able to plan for subsequent meals, store food, and budget.
ACCEPTABLE	Free enough from the threat of hunger. Food is selected based on quality and social norms: people often refer to core food items as "common," "regular," or "ordinary."
ENOUGH	Those experiencing food insecurity function of this level. They are driven by hunger and anxiety about getting enough: nutritional value is not a priority. Decreased focus on taste. Reduced focus on experimentation due to risk of wasting food.

"Map the Meal Gap 2019," the latest report by Feeding America® and the Greater Boston Food Bank (GBFB), the largest hunger-relief organization in New England, details food insecurity and the cost of food in the United States at the county and congressional district level. This report reveals that food insecurity exists in every county in the country, including all nine counties in GBFB's service area (Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, and Suffolk).

Three counties in GBFB's service area - Barnstable, Middlesex, and Suffolk - are among the top 50 counties in the United States in terms of cost of food. Massachusetts was the fourth-most expensive state in terms of cost of food in last year's report, becoming the most expensive state this year. Massachusetts is the most expensive state in the country in terms of the cost of a meal. Additionally, residents of Eastern Massachusetts, GBFB's service area, have the highest food costs in the state⁸⁵.

⁸⁴ https://www.ellynsatterinstitute.org/family-meals-focus/56-hierarchy-of-food-need/ 85 https://www.gbfb.org/news/press-releases/cost-food-massachusetts/

^{50 |} MALDEN COMMUNITY FOOD ASSESSMENT 2019-2021

The estimated rate of household food insecurity in Massachusetts was 9.1% in 2018, which is lower than the national rate of 12.5%, while in Malden the rate was 15.1%.⁸⁶ Malden's level of food insecurity qualified most of the schools within the district to participate in the USDA "Breakfast After The Bell" program.⁸⁷ The prevalence of food insecurity is higher in some parts of Malden than in others, as shown in Figure 10 below.

Figure 10: Malden Food Insecurity Estimates

Source: Map the Meal Gap and Greater Boston Food Bank, 2016

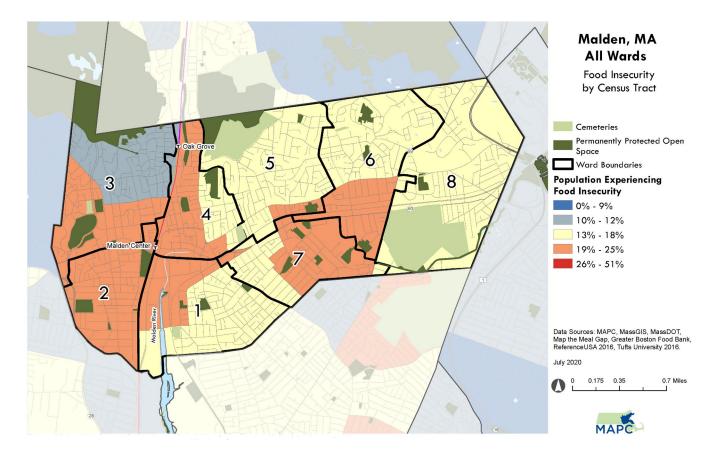


Figure 10 shows food insecurity estimates by census tract, collected through the Greater Boston Food Bank and Feeding America's 2016 report. All census tracts in Malden have at least 13% of the population experiencing food insecurity, and the highest rates (between 19% and 25%) occur in the western part of the city (all of Ward 2 and portions of Wards 3, 4 and 1) as well as portions of wards 6 and 7. It is important to note that while poverty and food insecurity are usually intertwined, the data sources used for the poverty map in Figure 8 and this food insecurity map are different, so the rates do not match up⁸⁸.

⁸⁶ Feeding America, Map the Meal Gap, Food Insecurity in the United States and Massachusetts. Retrieved September 27, 2019 from https://map.feedingamerica.org/. Gundersen, C., A. Dewey, A. Crumbaugh, M. Kato & E. Engelhard. Map the Meal Gap 2018: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2016. Feeding America, 2018. Courtesy of The Greater Boston Food Bank

⁸⁷ http://www.doe.mass.edu/cnp/nprograms/sbp/2019-1108mandate-breakfeast.html

⁸⁸ he population in poverty map (Figure 4) relies on the 2014-2018 ACS, while the food insecurity map uses the Greater Boston Food Bank and Feeding America's 2015 report. The ACS collects survey information continuously, nearly every day of the year, and then aggregates results over a specific time period - in this case 5 years - so as to not over-represent any given moment in a year. This contrasts with "point-in-time" estimates, like the Feeding America survey, which goes out once and represents a snapshot of households in that moment. Finally, the time periods on these data sets, while overlapping, are different.

RESULTS OF CONSUMPTION SURVEY: EXPERIENCES WITH FOOD INSECURITY FOR MALDEN RESIDENTS

Housing Instability

Housing instability encompasses a number of challenges, such as having trouble paying rent, overcrowding, moving frequently, staying with relatives, or spending the bulk of household income on housing.⁸⁹ These experiences may negatively affect physical health and make it harder to access health care.⁹⁰

Households are considered to be **housing cost burdened** if they spend more than 30% of their income on housing, and **severely housing cost burdened** if they spend more than 50% of their income on housing; these households have little left over each month to spend on other necessities such as food, clothing, utilities, and health care⁹¹. Across the U.S., Black and Hispanic households are almost twice as likely as White households to be cost burdened.⁹²

In Malden, renters make up a majority of the occupied housing units (59% are renters while 41% are owners), and renters carry this housing cost burden more than owners. As the graph below shows, 26.3% of Malden renters are spending between 30% - 49% of their income on housing (cost burdened), and 23.7% are spending more than 50% of their income on rent (severely cost-burdened), bringing the total of renters who are cost-burdened or severely cost burdened to 50%, while 19.6% of Malden home owners are cost-burdened and 14.8% are severely cost-burdened, making a total of 34.4%.

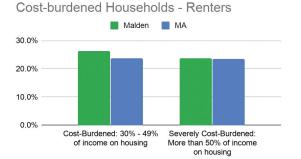
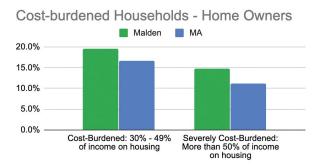


Figure 11: Malden Renter and Home Owner Housing Cost Burden Source: U.S. Census Bureau, American Community Survey 2014 - 2018



Poverty, food insecurity, housing instability, and chronic hunger have long-term impacts on educational achievement, workforce productivity, chronic disease risk, and mental health. For example, children's academic performance may be negatively affected by food insecurity, and food insecure adults have higher rates of absenteeism at work. Food insecurity is also correlated with higher rates of obesity, which remains one of the most prevalent health problems in the United States.

92 Joint Center for Housing Studies. The state of the nation's housing 2014 [Internet]. Boston: Harvard University; 2014 Jun 26 [cited 2017 Nov 27]. Available from: http://www.jchs.harvard.edu/sites/default/files/sonhr14-color-full_0.pdf

⁸⁹ Healthy People 2020. Housing Instability. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/ interventions-resources/housing-instability

⁹⁰ Kushel MB, Gupta R, Gee L, Haas JS. Housing instability and food insecurity as barriers to health care among low-income Americans. J Gen Intern Med. 2006;21(1):71-7. doi: 10.1111/j.1525-1497.2005.00278

⁹¹ Healthy People 2020. Housing Instability. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/ interventions-resources/housing-instability

Transportation

Transportation mode is consistently a key factor affecting food access. Different modes of transportation incur different trade offs including time, cost, and ease of travel with groceries. While groceries at a convenience store may be more expensive, the time to travel and the cost of a bus or taxi to get lower priced groceries at a supermarket is often not worth it when accounting for other factors.

Figure 12: Malden Food Access Score Along Walking Network *Source: MAPC*

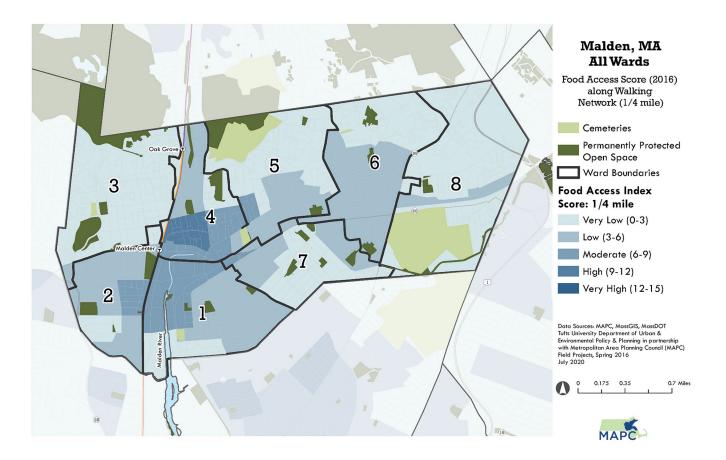
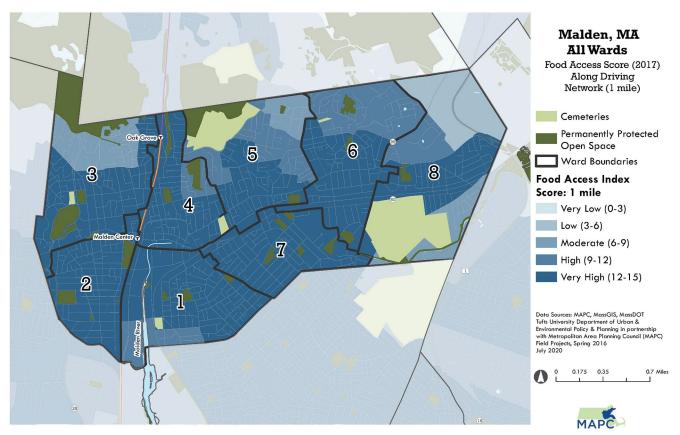


Figure 13: Malden Food Access Score Along Driving Network Source: MAPC

APPENDICES



Recent mapping by MAPC shows that residents in Ward 4 that walk have access to a variety of food stores with a range of food products. In other areas within Malden, there is a challenge for those residents to walk to food stores. Mapping shows that for those that drive, food access is significantly improved. Across most parts of Malden, for those that drive, there is 'very high' access to a variety of food stores with a range of food products.

In Malden, the most frequently utilized bus lines have stops within walking distance of 2 of the 3 supermarkets. The third supermarket has multiple bus routes stopping near it as well, however analysis of ridership shows less people are getting on and off at the stops near the third grocery store. As seen during the COVID-19 pandemic, a disruption of transportation services has a disproportionate impact on the food security of those dependent upon public transportation.

The Food Security survey results showed that the highest number of people drove to get groceries and the second highest number walked. During COVID of the 373 people surveyed 41% that drove thought it was easy compared to 55% who walked and found it difficult. Similarly, with biking 67% thought it was easy opposed to 33% thought it was difficult. (Slide #34 during COVID ease of transportation.

APPENDIX II: MALDEN CFA STAKEHOLDER SURVEY

Malden Community Food Assessment, Stakeholder Survey

We are interested in learning more about your organization, how it is engaged in healthy food access and security promotion. We appreciate your insights and input, which are essential to the success of the Malden Community Food Assessment.

Untitled Section

- 1. Organization Name and Contact information
- 2. Provide a brief description of your organization.

3. Please describe how your organization is engaged in promoting healthy food access and security.

4. The Malden Community Food Assessment will assess the following categories. Which areas does your organization work in? Check all that apply. Refer to the February notes for the definition of these categories (attached in email).

Check all that apply.

Production

Food Retail and Distribution

Consumption

- Excess Food / Recovery
- 5. What major gaps and barriers does your organization see related to the categories you checked above.

6. What promising opportunities or innovative solutions does your organization see related to the categories you checked above.

7. Is there any additional information you would like to share that would inform the Malden CFA?

APPENDIX III: MALDEN CFA STAKEHOLDER SURVEY

MALDEN HEALTH FOOD AVAILABILITY SURVEY

NAME OF FOOD RETAILOR:

FOOD GROUP	AVAILABLITY	
	SCORES	SCORE
	variety	
	none = 0	
Fresh	1 - 4 = 1	
Vegetables	4 or more = 2	
	variety	
	none = 0	
	1 - 4 = 1	
Fresh Fruit	4 or more = 3	
	variety	
	none = 0	
Milk	whole or $2\% = 1$	
IVIIIK	skim or 1% = 2	
	none = 0 frozen = 1	
Beef	fresh lean meat = 2	
DEEI		
	none = 0 frozen	
	(breaded/fried) = 1	
Chicken	fresh lean meat = 2	
Chicken		
	variety none = 0	
	high sugar = 1	
	low sugar = 2	
	(Cheerios, Corn	
Cereal	Flakes, etc.)	
	none = 0	
	whole wheat or	
Bread	multigrain = 1	
	variety	
	none = 0	
	prepared meals = 1	
Frozen Foods	low fat/sodium = 2	
	variety	
	none = 0	
	1 - 4 = 1	
Canned Foods	4 or more = 2	
	none = 0	
Pico	white = 1	
Rice	brown = 2	
	none = 0	
	white = 1 whole wheat or	
Pasta	multigrain = 2	

ACCEPTS SNAP/EBT	ACCEPTS WIC
Yes	Yes
No	No



APPENDICES

APPENDIX IV: MALDEN FOOD SECURITY SURVEY Malden Community Food Security Survey

This survey is a collaborative effort to assess food insecurity and inequity in the City of Malden. It is designed to better understand where you get your food and any barriers that stop you from getting the food you and your family need.

Your participation in the survey is voluntary. We will not ask for your name and this is completely anonymous. Your personal information will not be reported to government agencies. Taking this survey will not affect any services you receive.

Thank you for taking the time to complete this survey!

Sincerely, Malden Community Food Assessment Committee

For more information about this survey or participating in future community food assessment meetings, please contact any of the contacts below:

Renee Cammarata Hamilton at: <u>rcammaratahamilton@challiance.org</u> Marcia Manong at: <u>marcia.manong@breadoflifemalden.org</u> Chris Murphy at: <u>cmurphy@ywcamalden.org</u> * <u>Required</u>

1. Do you live in the City of Malden? *

Mark only one oval.

O Yes

🔵 No (thank you)

2. What ward do you live in?

Mark only one oval.

- Ward 1 (Councilor Peg Crowe)
- Ward 2 (Councilor Paul Condon)
- Ward 3 (Councilor Amanda Linehan)
- Ward 4 (Councilor Ryan O'Malley)
- Ward 5 (Councilor Barbara Murphy)
- Ward 6 (Councilor David Camell)
- Ward 7 (Councilor Neal Anderson)
- Ward 8 (Councilor Jadeane Sica)
- 📃 l don't know
- 3. How many people live in your household under the age of 18?
- 4. How many people live in your household between the ages of 18-64?
- 5. How many people live in your household over the age of 64?

6. How do you describe your race and/or ethnicity? Check all that apply

Check all that apply.

Asian
Black or African American or African diaspora
Hispanic or Latinx
Middle Eastern
Native American or Alaska Native
Native Hawaiian or Pacific Islander
White
Other:

7. What language do you primarily speak at home? *

Check a	ll that	apply.
---------	---------	--------

Arabic
Cantonese
English
French
Haitian Creole
Mandarin
Portuguese
Spanish
Vietnamese
Other:

8. What is your living situation? *

Mark only one oval.

I rent my home

Most nights I stay in a shelter

Most nights I stay with friends/family (couch surfing)

Most nights I stay in car or on street

Other:

9. How long have you lived in Malden? *

Mark only one oval.

- Less than one year
- 🔵 1-5 years
- 🔵 6-15 years
- _____16+ years
- 10. How do you describe your gender? *

Mark only one oval.

- Male
- ____ Female
- Non-binary
- Other gender identity

1

1.	Within the past 12 months, how often have you or your family worried whether
	food would run out before you got money to buy more? *

Mark only	one oval.
-----------	-----------

\subset	Often
\subset	Sometimes
(Never

12. Within the past 12 months, how often are you unable to buy healthy foods because you are out of money/assistance? *

Mark only one oval.

Of	ten
Sc	metimes
	ever
Food Sources	Now we will be discussing where you get your food. The next 7 questions will be broken down into two sections: Section A: Before COVID (prior to March 2020) and Section B: Since COVID (March 2020 to present). Please be sure to fill out both Section A and Section B.

Section A: Before COVID (prior to March 2020)

13. How often do you get food from the following places? Section A - before COVID *

Check all that apply.

	Daily	2 or more times per week	Weekly	Every two weeks	Monthly	A few times a year	Never
Convenience store							
Supermarket (example: Stop & Shop, Super 88, Market Basket, Wegmans)							
Small grocer (Dom's, Atlas, Baba Supermarket, Kim Longs)							
Warehouse store (example: Costco, BJs)							
Farmer's market or CSA (example: Farmer Dave's)							
Online retailer (example: Amazon Fresh, Peapod, Instacart)							
Fast food or carry out (example: McDonald's, Dunkin, pizza parlor)							
Food pantry (example: Bread of Life or local church)							
Mobile Market on Commercial Street (example: Second							

DICES	Saturday distribution at Melrose/Wakefield Health Center)				
APPEN	Community Meal (example: Bread of Life or Senior Center meals)				

14. How often do you cook where you live? Section A - before COVID *

Mark only one of	oval.
------------------	-------

Daily
2 or more times per week
Weekly
Every two weeks
Monthly
A few times a year
Never
Other:

15. Please estimate the percentage of your monthly income that is spent on the following categories: **Section A - before COVID ***

	0%	10%	20%	30%	40%	50%	60%	70%	>70
Housing	\bigcirc	\square							
Food	\bigcirc	\square							
Childcare	\bigcirc	\square							
Medical costs (ie. premiums, prescriptions, co-pays, deductibles)		\bigcirc							

Mark only one oval per row.

16. How easy is it for you to get your groceries? Section A - before COVID *

Mark only one oval.

Very easy Fairly easy Fairly difficult Very difficult Don't know

17. If it is difficult, why? **Section A - before COVID**

18.

What form of transportation do you use most often to get your groceries? Section A - before COVID *
Mark only one oval.
Drive
Bike
Walk
Ride from friend or family
Ride share (Uber, Lyft, etc.)
Public transportation
Other:

19. How long does it take you to get your groceries (getting to the supermarket, grocery store, or food pantry)? **Section A - before COVID ***

Mark only one oval.

S minutes
5-10 minutes
10-20 minutes
20-30 minutes
30-45 minutes
45-60 minutes
Over 60 minutes
Other:

Section B: Since COVID (March 2020 to present)

20. How often do you get food from the following places Section B - since COVID, March 2020 *

Check all that apply.

	Daily	2 or more times per week	Weekly	Every two weeks	Monthly	A few times a year	Never
Convenience store							
Supermarket (example: Stop & Shop, Super 88, Market Basket, Wegmans)							
Small grocer (Dom's, Atlas, Baba Supermarket, Kim Longs)							
Warehouse store (example: Costco, BJs)							
Farmer's market or CSA (example: Farmer Dave's)							
Online retailer (example: Amazon Fresh, Peapod, Instacart)							
Fast food or carry out (example: McDonald's, Dunkin, pizza parlor)							
Food pantry (example: Bread of Life or local church)							
Mobile Market on							

ENDICES	Commercial Street (example: Second Saturday distribution at Melrose/Wakefield Health Center)				
APP	Community Meal (example: Bread of Life or Senior Center meals)				

21. How often do you cook where you live? Section B - since COVID, March 2020 *

Mark	only	one	oval.
------	------	-----	-------

Daily	
2 or more times per week	
Weekly	
Every two weeks	
Monthly	
A few times a year	
Never	
Other:	

22. Please estimate the percentage of your monthly income that is spent on the following categories: Section B - since COVID, March 2020 *

	0%	10%	20%	30%	40%	50%	60%	70%	>70
Housing	\bigcirc	\square							
Food	\bigcirc	\square							
Childcare	\bigcirc	\square							
Medical costs (ie. premiums, prescriptions, co-pays, deductibles)	\bigcirc								

Mark only one oval per row.

23. How easy is it for you to get your groceries? **Section B - since COVID**, **March 2020**

Mark only one oval.

\bigcirc	Very	easy
------------	------	------

📃 Fairly easy

- Fairly difficult
- Very difficult
- 🔵 Don't know

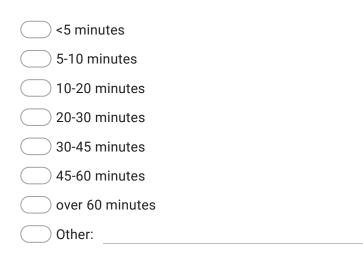
24. If it is difficult, why? Section B - since COVID, March 2020

25. What form of transportation do you use most often to get your groceries? Section
 B - since COVID, March 2020 *

Mark only one oval.
Drive
Bike
Walk
Ride from friend or family
Ride share (Uber, Lyft, etc.)
Public transportation
Other:

26. How long does it take you to get your groceries (getting to the supermarket, grocery store, or food pantry)? **Section B - since COVID**, **March 2020** *

Mark only one oval.



27.	Is there anything you would like to change about the food available in Malden?
8.	Do you feel like there are barriers for you to get the food you want? (Yes or No) If so, what are they?

29. What is your annual household income?

Check all that apply.

