2024 Food Security Annual Report

Commission on Women, Children, Seniors, Equity, and Opportunity

Letter from the CWCSEO

Dear Members of the Appropriations, Aging, Environment, Human Services, Planning and Development, and Public Health Committees,

On behalf of the Commission on Women, Children, Seniors, Equity & Opportunity (CWCSEO), it is our pleasure to present our 2024 report on the state of food insecurity in Connecticut, reflecting our commitment as mandated by Public Act 23-204. This report comes at the conclusion of the Commission's first year with a Food & Nutrition Policy Analyst on staff, and is the product of publicly available data and academic research. Additionally, we endeavored to incorporate lived experience and community feedback through 107 individual and small group meetings, a survey of food organizations that collected 162 responses, and presentations to local food collaboratives across the state.

The findings and recommendations of this report are intended to begin an examination of food insecurity in Connecticut that will be continued in future reports. We are grateful to the Connecticut General Assembly and community partners for their support, and look forward to continuing the work to ensure food security for all residents of our state.

Sincerely,

Melvette Hill

Executive Director, CWCSEO

Christian Duborg

Food & Nutrition Policy Analyst, CWCSEO

CWCSEO Mission and Statutory Requirement

To inform and engage all policy makers about constituent needs for women, children and their families, seniors, and the African American, Asian Pacific-American, Latino and Puerto Rican populations in Connecticut. We are a nonpartisan agency with a data-driven, cross-cultural approach to policy innovation. We work to eliminate disparities by identifying opportunities, building connections and promoting change.

The Commission on
Women, Children, Seniors, Equity & Opportunity
CWCSEO
Connecticut General Assembly

Statutory Requirement

Subdivision (4) of subsection (b) of section 155 of Public Act 23-204 requires the Food & Nutrition Policy Analyst to produce and submit an annual report on the state of food insecurity in Connecticut. Subsection (c) requires the report to be submitted along with recommendations to reduce food insecurity.

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Executive Summary

The purpose of this report is to examine the state of food insecurity in Connecticut and make recommendations to address it. To accomplish this, the report uses official data, qualitative input from residents and food organizations, survey responses, and academic research. Sections one through three present an overview of the state of food insecurity through three different lenses. Section 1 examines government programs such as the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and school meals as well as private initiatives such as food banks and pantries. Section 2 discusses the state of nutrition security and nutrition-related health outcomes. Section 3 examines the state of local food businesses in Connecticut and their connection to food security. The overall conclusion is that food and nutrition insecurity in Connecticut are widespread, persistent, and having a significant negative impact on lives and communities across the state. Existing government programs are effective and well-implemented by state agencies, but the scale of the challenge exceeds the current resources allocated.

Specific findings include:

- Depending on the data source, food insecurity affects between 10.4% and 17% of Connecticut's population and has been rising in recent years.
- Food prices increased 25% from 2019 to 2023, and are projected to continue increasing by smaller amounts in the coming years
- There are 65 Low-Income, Low-Access (LILA) census tracts ("food deserts") in Connecticut with an average distance of at least one mile to a grocery store, and 207 with an average distance of at least 0.5 miles.
- Federal nutrition programs like SNAP, WIC, and free school meals effectively reduce food insecurity, but do not reach most food insecure households.
- Federal funding for food security programs has significantly decreased since the end of the COVID Public Health Emergency.
- The nonprofit emergency food system has struggled to keep up with rising needs and costs.
- Measures of nutrition insecurity are still being developed, and so far none have been used widely in Connecticut
- Federal subsidies appear to benefit unhealthy foods more than healthy ones
- The large majority of food spending in Connecticut is on non-local items
- Relatively small profit margins, low wages, and a number of other barriers mean that food businesses and workers are often not financially secure.
- Food and nutrition insecurity have substantial negative effects in other policy areas such as education, healthcare, and housing.

Section four offers a number of policy recommendations to address the findings of sections one through three. These recommendations include:

1. Implement Universal Free School Meals
2. Mitigate Benefits Cliffs
3. Establish a state minimum SNAP benefit amount
4. Apply for a Section 1115 Medicaid Waiver for Food as Medicine Initiatives
5. Create or expand regional community food hubs
6. Establish a state food business incubator program
7. Double SNAP benefits for Connecticut-Grown Produce
8. Fund Local Food Purchasing Agreement (LFPA) Programs at the state-level
9. Expand Support for the Food Systems Capacity Building Grant
10. Partner with research institutions to fill gaps in the current data

Section four also recommends paying for the policy proposals by creating a **Food & Nutrition Special Fund** within the state budget, to be funded by one or more dedicated revenue sources. The section concludes by analyzing the benefits and drawbacks of four possible sources of revenue for the proposed fund.

Acknowledgements

The content of this report has been created with the input of a number of people throughout the state who shared their time, experience, and expertise. The Commission on Women, Children, Seniors, Equity, and Opportunity (CWCSEO) wishes to express its gratitude to all contributors, including CWCSEO Fellows, community members, and state agency partners, without whom this report would not have been possible.

Introduction

This report provides an overview of the state of food insecurity in Connecticut. To do so, it will present the current challenges as well as opportunities to address them. These findings and recommendations are the product of meeting notes and survey responses from stakeholders throughout Connecticut, data collected from local, state, and national sources, and published academic research.

Definitions

The first term to define is food insecurity itself. The United States Department of Agriculture (USDA) defines food security as "access by all people at all times to enough food for an active, healthy life."[1] Furthermore, the USDA states that at a minimum, food insecurity includes "(1) the ready availability of nutritionally adequate and safe foods, and (2) an assured ability to acquire acceptable foods in socially acceptable ways."[2] It is worth noting, however, that some states, such as New Jersey, have opted to adopt a slightly more detailed definition from the High Level Panel of Experts from the United Nations instead, which defines food security as "when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food which meets their dietary needs and food preferences for an active and healthy life" and food insecurity as the absence of any of those components.[3] Furthermore, other countries may adopt slightly different definitions, with Brazil defining food insecurity as "the realization of everyone's right to regular and permanent access to quality food, in sufficient quantity, without compromising access to other essential needs, based on health-promoting food practices that respect cultural diversity and are environmentally, culturally, economically and socially sustainable."[4]

There are likely more definitions in use than just these three, but this example serves to highlight that there isn't currently full consensus around the definition of key concepts such as food security. **This report will adhere to the USDA definition and examine other related concepts such as nutrition insecurity and the local food economy, but the Commission hopes to seek community and expert feedback to build consensus on confirming or re-evaluating this choice for future reports.**

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[1] *See,* USDA ERS - Food Security in the US (https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/)
[2] *See*, USDA FNS - Guide to Measuring Food Insecurity
[3] *See,* NJ Office of the Food Security Advocate - About Food Security in New Jersey (https://www.nj.gov/foodsecurity/food-security/about/)
[4] *See*, Pérez-Escamilla R. (2024). Food and nutrition security definitions, constructs, frameworks, measurements, and applications: global lessons. Frontiers in public health, 12, 1340149. https://doi.org/10.3389/fpubh.2024.1340149

In explaining its definition, the USDA emphasizes that food insecurity is different from hunger. Firstly, hunger happens at the individual level and can change from day to day. Secondly, an individual can have uncertain or unstable access to food, and be food insecure, but end up having enough food not to experience hunger for a day, week, month, or year. While hunger is a common result of food insecurity, there are several other negative impacts of food insecurity a household can face even if they are not currently experiencing hunger, which this report will explore in detail. Additionally, the USDA emphasizes the difference between food insecurity and food insufficiency, with the latter being "more severe" than food insecurity because it "measures whether a household generally has enough to eat."[5] The USDA recognizes these differences by establishing levels of food insecurity:

- High food security (old label = Food security): no reported indications of food-access problems or limitations.
- Marginal food security (old label = Food security): one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.
- Low food security (old label = Food insecurity without hunger): reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- Very low food security (old label = Food insecurity with hunger): reports of multiple indications of disrupted eating patterns and reduced food intake.[6]

For the most part, this report will refer to food insecurity overall instead of a specific level and will note any instances where this is not the case.

Another important term is nutrition security. As with food security, this report will adhere to the USDA definition of nutrition security, which says it is when households "have consistent access to the safe, healthy, affordable foods essential to optimal health and well-being."[7] While nutrition security and food security are related, they are not the same thing. A household can have adequate and certain access to food, therefore being food secure, but not be nutrition secure because the food they consume does not consistently meet their daily nutritional requirements, or has excessive amounts of ingredients detrimental to their health.[8]

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[5] *See*, USDA ERS - Measurement (https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/measurement#:~:text=Food%20insufficiency%20is%20a%20more,than%20to%20overall%20food%20insecurity.)

[6] *See,* USDA ERS - Definitions of Food Security (https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/definitions-of-food-security/)

[7] *See,* USDA National Agricultural Library - Nutrition Security (https://www.nal.usda.gov/human-nutrition-and-food-safety/nutrition-security)

[8] *See,* Appendix E

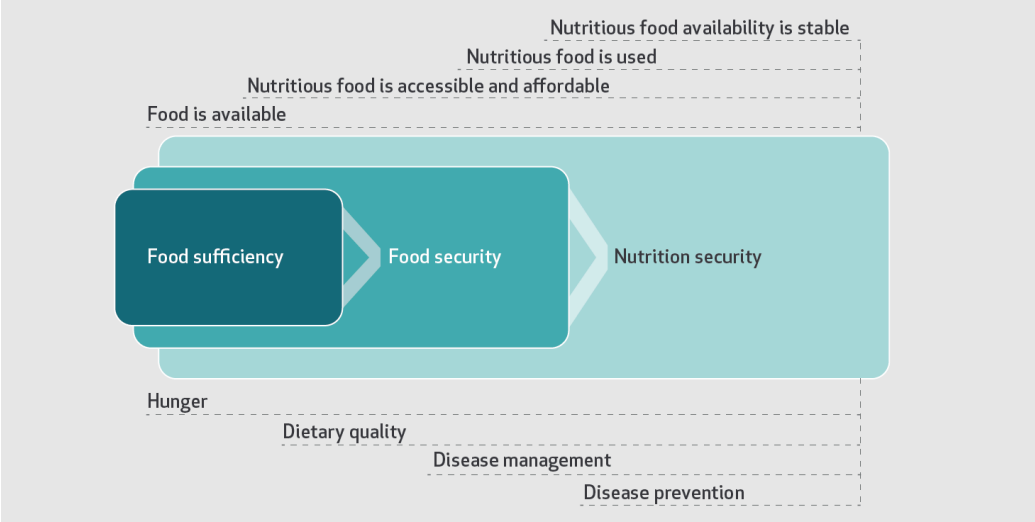

Figure 1: Relationship Between Food Sufficiency, Food Security, and Nutrition Security
Source: Measuring And Addressing Nutrition Security To Achieve Health And Health Equity, " Health Affairs Health Policy Brief, March 30, 2023. DOI: 10.1377/hpb20230216.926558

The last important terms to define are food desert and food swamp. The former is a term that, as of 2013, is no longer used by the USDA, which instead uses the term "low-income, low-access" (LILA) areas.[9] In turn, low-income, in this context, means that an area has a poverty rate of 20% or greater or the area's median family income is less than or equal to 80% of the median income of the state or metropolitan area it is located in.[10] The USDA defines low-access areas as ones where "a significant number (at least 500 people) or share (at least 33 percent) of the population" lives more than a certain distance away from the nearest supermarket or grocery store.[11] Once again, the USDA uses multiple levels of low-access, leading to multiple definitions of a LILA area.[12] The four levels of LILA are as follows:[13]

1. Low income and "a significant number or share of residents is more than **one mile (urban) or ten miles (rural)** from the nearest food store"
2. Low income and "a significant number or share of residents is more than **half of a mile (urban) or ten miles (rural)** from the nearest food store"

[9] *See,* USDA ERS - Introduction to the Food Access Research Atlas (https://gisportal.ers.usda.gov/portal/apps/experiencebuilder/experience/?id=a53ebd7396cd4ac3a3ed09137676fd40)
[10] *See,* USDA ERS - Food Access Research Atlas Documentation (https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/)
[11] Ibid
[12] *See,* Appendix B
[13] *See*, USDA ERS - Measuring Access to Food (https://gisportal.ers.usda.gov/portal/apps/experiencebuilder/experience/?id=a53ebd7396cd4ac3a3ed09137676fd40&page=Measuring-Access)

3. Low income and “a significant number or share of residents is more than **one mile (urban) or 20 miles (rural)** from the nearest food store”
4. Low income and “more than 100 housing units **do not have a vehicle** and are **more than 0.5 mile from the nearest food store**, or a significant number or share of residents are **more than 20 miles from the nearest food store**.”

In keeping with USDA practices, this report will use the term LILA area instead of food desert, and will use the low-access distance to grocery store thresholds of one mile in urban areas and ten miles in rural areas unless otherwise indicated.

Food swamp does not appear to be officially defined by the USDA or any government entity but is worth mentioning because it does appear in public discourse and academic literature about food security. The American Heart Association defines food swamps as “areas with a higher density of fast food and junk food options rather than healthy food options.”[14] These areas may or may not qualify as LILA areas but are differentiated by the relative abundance of foods that may provide food security but not nutrition security. Due to the lack of an official federal definition and very limited data being available to date, this report will not attempt to calculate the number or location of food swamps statewide, but will reference the concept throughout the report, particularly in discussing nutrition security and healthcare outcomes.

Overview of the Food System

This report will discuss factors throughout the food system in Connecticut. Therefore, it is important to briefly outline the key parts of the food system, as well as the individuals and organizations that operate in each. This report will use the same model as the Connecticut Food Policy Council, which is a statewide council administered by the Connecticut Department of Agriculture and made up of 12 members representing agricultural producers, food retailers, produce wholesalers, and state agencies.[15] The Council was created by Public Act 97-11 “to develop, coordinate, and implement a state-wide food policy that links economic development, environmental protection, and preservation with farming and urban issues.”[16] In their overview of the food system, the Council subdivides it into five sections: production, processing, distribution, consumption, and food waste management.[17]

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[14] *See,* American Heart Association - Living near a “food swamp” may increase stroke risk among adults 50 and older (https://newsroom.heart.org/news/living-near-a-food-swamp-may-increase-stroke-risk-among-adults-50-and-older)
[15] *See*, CT Department of Agriculture - Connecticut Food Policy Council (https://portal.ct.gov/doag/boards/boards/connecticut-food-policy-council)
[16] *See*, CT Department of Agriculture - Connecticut Food Policy Council (https://portal.ct.gov/doag/boards/boards/connecticut-food-policy-council)
[17] *See,* Appendix C

In production, the key stakeholders are farmers and other producers of food. This includes traditional farmers, but also urban farmers and community gardens. Urban growing can take a multitude of forms, but some examples include outdoor raised beds and indoor hydroponic facilities. Processing stakeholders include companies that purchase ingredients and produce added value products (one example would be baked goods producers), aggregators, and packagers. One group of entities that are becoming more prominent in this section are local food hubs, which can support small farmers by aggregating multiple individuals' products for wholesale, providing storage for products, coordinating marketing efforts, or even providing a space for farmers to produce value-added products themselves.[18]

Distribution stakeholders include companies that sell food to various organizations in the consumption section. Consumption includes a wide array of stakeholders, as it includes any organization that provides food directly to individuals. This group includes restaurants, grocers, schools, hospitals, food pantries, and individual households. Finally, food waste management stakeholders include every aspect of the food system, as food is wasted at the farm, during production, processing, distribution, food businesses and by consumers. In addition, food rescue organizations and community groups that receive surplus food from donor organizations and deliver it to recipient sites play an important role in keeping edible food within the food system. Each part of the food system and each stakeholder has unique challenges and opportunities related to food and nutrition security that will be discussed in this report.

[18] *See,* Healthy Food Access - Food Hubs (https://www.healthyfoodaccess.org/launch-a-business-models-food-hubs)

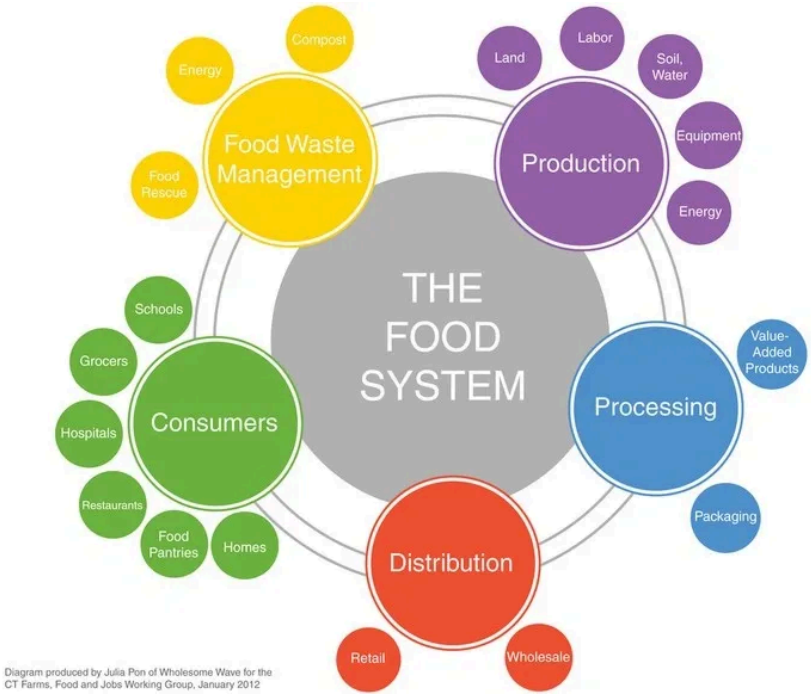

Figure 2: Diagram of the Food System
Source: CT Food Policy Council

Brief Overview of Federal Food & Nutrition Programs

One stakeholder that requires specific examination is the federal government, which supports a number of programs designed to ensure food security. The large majority of these are administered by the Food and Nutrition Service (FNS), which is a part of the United States Department of Agriculture (USDA). On their programs page, the FNS lists 16 different federal nutrition programs, sorted into three categories:[19]

1. **Nutrition Assistance Programs**
    a. **Supplemental Nutrition Assistance Program (SNAP):** Provides benefits to eligible families to help purchase groceries. This is by far the most utilized federal program with over 42 million individuals participating nationwide as of August 2024.[20]
    b. **Special Supplemental Nutrition Program for Women, Infants, and Children (WIC):** Provides grants to states to provide benefits to low-income pregnant, breastfeeding, and non-breastfeeding postpartum women and children up to the age of 5 to purchase nutritious foods.
    c. **Farmers Market Nutrition Program (FMNP):** Provides benefits to eligible WIC recipients to buy produce at approved farmers markets

[19] *See*, USDA FNS - FNS Nutrition Programs (https://www.fns.usda.gov/programs)
[20] *See*, USDA FNS - FNS Program Participation Dashboard (https://www.fns.usda.gov/data-research/data-visualization/program-participation)

   d. **Senior Farmers Market Nutrition Program (SFMNP):** Provides benefits to low income seniors to buy produce at approved farmers markets
   e. **Nutrition Assistance Program for Territories:** Provides block grants to US territories to set up programs in lieu of SNAP.
2. **Child Nutrition Programs**
   a. **National School Lunch Program (NSLP):** Provides paid, reduced-price, and free school lunches at participating schools
   b. **School Breakfast Program (SBP):** Provides reimbursements to states to operate a nonprofit program providing paid, reduced-price, and free school breakfasts at participating schools.
   c. **Child and Adult Care Food Program (CACFP):** Provides reimbursements to programs such as child care centers, adult day cares, after school programs, and emergency shelters that provide nutritious meals or snacks to eligible recipients.
   d. **Fresh Fruit and Vegetable Program:** Provides free fresh fruit and vegetable snacks to students at eligible elementary schools.
   e. **Special Milk Program:** Reimburses schools to provide free milk to children who do not receive meals from the NSLP or SBP.
   f. **Summer Food Service Program (SFSP):** Provides free snacks and meals to children at meal sites during summer break.
   g. **Summer EBT (SUN Bucks):** Provides eligible families with $120 per child to buy groceries during the summer.
3. **Food Distribution Programs**
   a. **Commodity Supplemental Food Program (CSFP):** Provides monthly nutritious food packages to low-income seniors.
   b. **The Emergency Food Assistance Program (TEFAP):** Purchases and distributes free food to low-income individuals via local agencies such as food banks.
   c. **Food Distribution Program on Indian Reservations:** Provides food to eligible households living on or near Native American Reservations.
   d. **Disaster Assistance:** Provides emergency food support to individuals living in states affected by recent natural disasters.

These federal programs are often administered and implemented by state agencies. The USDA lists 14 federal nutrition programs as having a state-level implementing agency in Connecticut.[21] Four of the 16 programs mentioned above: Disaster Assistance, Food Distribution Program on Indian Reservations, Nutrition Assistance Program for Territories, and Summer EBT are not listed. The first three are typically

[21] *See*, USDA FNS - FNS Contacts (https://www.fns.usda.gov/fns-contacts?keywords=&sort_bef_combine=title_fulltext_ASC&f%5B0%5D=fns_contact_state%3A285)

allocated to states recovering from a natural disaster, tribal governments, and US territories, respectively, and as such would not have an implementing agency in the Connecticut state government at this time. Connecticut does participate in Summer EBT administered by the Department of Social Services (DSS), but the federal program began in the summer of 2024 and the USDA website has not yet been updated.[22] As such there is an implementing state agency in Connecticut for 13 of these 16 programs. Furthermore, the USDA contact list provides information for a Connecticut implementing agency for two programs not included in the primary 16 programs listed above. These are:

1. **USDA Foods in Schools**: Provides funds to purchase 100% American-grown foods for schools participating in the NSLP, SBP, and CACFP.[23]
2. **The Patrick Leahy Farm to School Program**: Provides funds for grants, technical assistance, and training to support the inclusion of local foods in the NSLP, SFSP, CACFP, and other child nutrition programs.[24]

One other federal program that is important to mention is the **Elderly Nutrition Program**. Also known as the Title III-C Nutrition Services Program (NSP), this program is unique because unlike SNAP, WIC, school meals, and most other federal programs, it is primarily funded by the Older Americans Act and administered by the US Department of Health and Human Services (HHS) rather than the USDA.[25] The Administration for Community Living (ACL) within HHS provides grants to states to provide meals to individuals over the age of 60 at congregate meal sites or via home delivery as well as nutrition education and other support.[26]

This brings the total number of federal programs with a listed Connecticut implementing agency to 16, though this is not necessarily a comprehensive list. These programs will collectively be referred to as “federal nutrition programs” and many will be individually discussed in detail throughout the report.

Outline of the Report:

The content of this report will be subdivided into four sections. The first three sections will discuss the state of food insecurity through three different lenses: food sufficiency and security, nutrition security, and local food economies. Food sufficiency and security

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[22] *See*, CT.gov - Summer EBT (https://portal.ct.gov/dss/snap/summer-ebt)
[23] *See*, USDA FNS - USDA Foods in Schools (https://www.fns.usda.gov/usda-fis)
[24] *See*, USDA FNS - The Patrick Leahy Farm to School Program (https://www.fns.usda.gov/f2s/farm-to-school)
[25] *See*, Administration for Community Living - Evaluation of the Effect of the Older Americans Act Title III-C Nutrition Services Program on Participants’ Food Security, Socialization, and Diet Quality (https://acl.gov/sites/default/files/programs/2017-07/AoA_outcomesevaluation_final.pdf)
[26] *See*, Administration for Community Living - Older Americans Act Nutrition Programs (https://acl.gov/sites/default/files/news%202017-03/OAA-Nutrition_Programs_Fact_Sheet.pdf)

will look at access to food under the USDA definition of food insecurity, as well as the programs and organizations that are designed to directly combat income and access barriers to food. This will include federal nutrition programs such as SNAP and WIC as well as private initiatives such as food banks and pantries. Nutrition security will look at the state of nutrition security specifically, as well as the impact of both food and nutrition insecurity on the health of individuals and the healthcare system as a whole. Local food economies will look at the structural economic factors that impact the food system, how they contribute to food insecurity, and the relationship between economic opportunity for food businesses and food security.

It is important to emphasize that these three domains do have overlap and each one impacts the others. The separation of these domains into sections is meant to organize the report and provide insights to different aspects of food insecurity. It does not in any way intend to suggest that these are unrelated concepts that should be dealt with separately. Each section will start by presenting the relevant data on the state of the core concept. Then there will be a summary of the key challenges illustrated by that data and a brief discussion of the impact on the lives of Connecticut residents.

The fourth and final section will propose a strategy to address food and nutrition insecurity, recommend specific policies that could be part of that strategy, and offer a few options to address potential fiscal challenges. These recommendations are based on past and present policies in Connecticut that have been effective, best practices being implemented by other state and local governments, and ideas developed by local stakeholders.

Section 1: Food Sufficiency and Security

Food is a basic necessity that every person needs access to in order to live a full, healthy life. However, there are a number of factors that prevent individuals from having access to enough food. This section will examine the state of food access in Connecticut, discuss the causes of inadequate access, and examine the impacts this can have on individuals and households.

State of Food Insecurity in Connecticut:

The primary data point for this section is the percent of state residents experiencing food insecurity. However, there is some disagreement among different estimates. There is a delay in compiling and reporting numbers, meaning that 2022 is usually the most recent year with estimates, especially at the state level. The USDA states that, on average, 10.4% of Connecticut residents were food insecure between 2021 and 2023, which is lower than the national average of 12.2% during that same interval.[27] However, other sources disagree on the number. Feeding America's Map the Meal Gap Data states that in 2022, 12.9% of Connecticut residents were food insecure, which is the 2nd highest level in New England and only slightly lower than the national rate of 13.5%.[28] Both of these estimates are lower than the 17% statewide food insecurity rate reported by DataHaven in their 2022 statewide Community Wellbeing Survey.[29]

While there is a certain amount of disagreement on the exact number of individuals facing food insecurity in Connecticut, there are two key points of agreement across sources. The first is that food insecurity is becoming more widespread over time. While the USDA only offers 3-year averages for individual states, it does release nationwide data yearly. Not only is the 2022 nationwide rate of 12.8% significantly higher than the 2021 rate of 10.2%, but it's higher than any year since 2014.[30] Furthermore, the trend continued in 2023, when the nationwide rate increased even more to 13.5%.[31] Similarly, Feeding America found that Connecticut's food insecurity rate was 23% higher in 2022

[27] *See,* USDA ERS - Food Security in the US (https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/interactive-charts-and-highlights/)
[28] *See*, Feeding America Map the Meal Gap - 2022 Food Insecurity In Connecticut (https://map.feedingamerica.org/county/2022/overall/connecticut)
[29] *See*, DataHaven - DataHaven survey finds food insecurity nearly doubled in Connecticut in 2022 (https://www.ctdatahaven.org/blog/datahaven-survey-finds-food-insecurity-nearly-doubled-connecticut-2022)
[30] *See,* USDA ERS - Food Security in the US (https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/interactive-charts-and-highlights/)
[31] *See*, USDA ERS - Household Food Security in the United States in 2023 (https://www.ers.usda.gov/publications/pub-details/?pubid=109895)

(12.9%) compared to 2021 (10.5%).[32] Once again, DataHaven's estimates are the largest, with food insecurity in Connecticut jumping from 10% in 2021 to 17% in 2022, a 70% increase.[33] There is also some anecdotal evidence to suggest this trend has continued past 2022, as 80.2% of the 162 food organizations surveyed by the CWCSEO reported that demand for their services had increased in the last year (2023-2024), including 89.7% of food banks or pantries.[34]

The second key point of agreement in the data is that while food insecurity is present in every community, some groups and geographic areas are disproportionately affected. **The USDA and DataHaven both state that households with children have a higher food insecurity rate than ones without. Feeding America also notes that while 12.9% of Connecticut's total population faced food insecurity in 2022, 15.4% of the state's children did.** College students similarly face disproportionate food insecurity rates. One survey found that 38% of students at the University of Connecticut (UConn) in 2023 experienced food insecurity.[35] A similar survey at Central Connecticut State University found that 49% of responding students worried food would run out before they had time to buy more, 23% went a full day without eating due to finances, and just 5% utilized SNAP.[36]

Furthermore, all three sources agree that both in Connecticut and nationwide, Black/African American and Hispanic/Latine families face food insecurity at a rate more than double that of White families. Furthermore, DataHaven and Feeding America both assert that the percentage of Connecticut's Hispanic or Latine families experiencing food insecurity is triple that of White families. Another group disproportionately impacted is formerly incarcerated individuals, with a 2019 study estimating that nationwide the rate of food insecurity among this group was roughly double that of the general population.[37]

Finally, Feeding America notes that food insecurity rates vary by planning region within the state, ranging from 10.2% of residents in the Lower Connecticut River Valley to 15%

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[32] *See*, Feeding America Map the Meal Gap - 2022 Food Insecurity In Connecticut (https://map.feedingamerica.org/county/2022/overall/connecticut)
[33] *See*, DataHaven - DataHaven survey finds food insecurity nearly doubled in Connecticut in 2022 (https://www.ctdatahaven.org/blog/datahaven-survey-finds-food-insecurity-nearly-doubled-connecticut-2022)
[34] *See*, Appendix J
[35] *See*, CT Insider - Study shows 1 in 3 college students can't afford food as CT schools roll out programs (https://www.ctinsider.com/recordjournal/article/food-insecurity-college-students-pantries-snap-18710026.php)
[36] *See*, Central Connecticut State University - CCSU Food & Housing Insecurity - 2023 (https://www.ccsu.edu/sites/default/files/2023-07/CCSU%20FHIS%20Survey%202023.pdf)
[37] *See*, Prison Policy Initiative - Food insecurity is rising, and incarceration puts families at risk (https://www.prisonpolicy.org/blog/2021/02/10/food-insecurity/#:~:text=A%202019%20study%20found%20that,incarcerated%20women%20and%20Black%20individuals.)

of residents in Greater Bridgeport. Ultimately, Greater Bridgeport, South Central Connecticut, the Naugatuck Valley, the Capitol Region, and Southeastern Connecticut have food insecurity rates higher than the state average, while the Lower Connecticut River Valley, Northeastern Connecticut, the Northwest Hills, and Western Connecticut have rates lower than the state average. Similarly, DataHaven reports significant variation in food insecurity rates by town, ranging from a high of 32% in Hartford to a low of 4% in Darien and Woodbridge.[38]

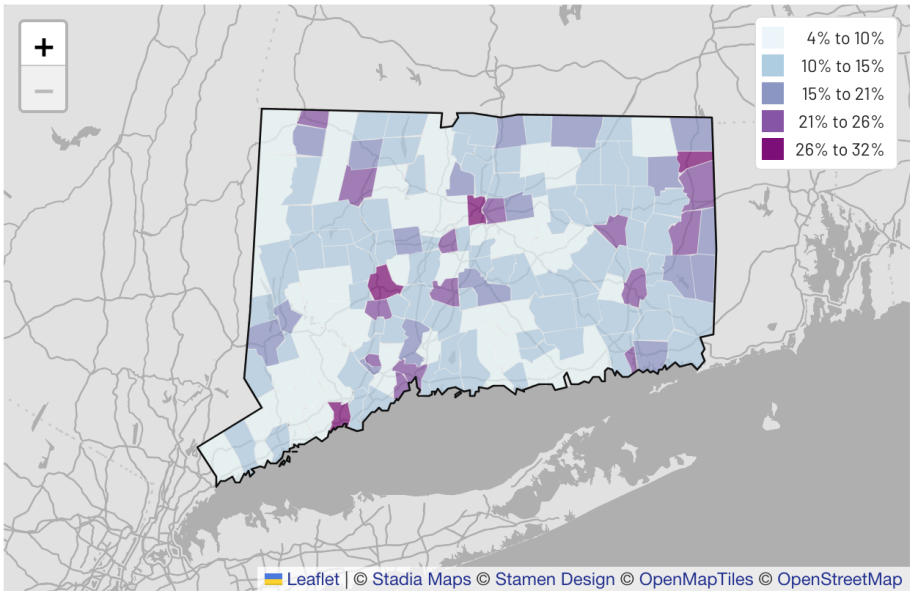

Figure 3: Food Insecurity Levels in Connecticut by Town (2015-2021 Pooled Data)
Source: DataHaven Connecticut Town Data Viewer

This uneven distribution of food insecurity is mirrored by uneven food access, as shown by the presence of LILA areas (formerly known as food deserts) across the state. As of the most recent update in 2019, there are a total of 65 LILA census tracts in the state where the average distance to a supermarket is over a mile in urban areas and over ten miles in rural ones.[39] It is worth noting that the number of LILA areas rises to 207 if you lower the threshold in urban areas from one mile to half a mile.[40] With approximately 828 census tracts in Connecticut, this second figure represents 25% of the state.

As with food insecurity as a whole, LILA areas are not distributed evenly. Many of the LILA tracts cluster together, typically in the outer parts of major cities and the center of medium sized towns. Furthermore, families of color are disproportionately likely to live in these areas without food access. New England Feeding New England states that 14.9%

[38] *See*, DataHaven - Connecticut Town Data Viewer (https://ctdatahaven.org/data-dashboard)
[39] *See*, USDA ERS - Download the Data (Food Access Research Atlas Data Download 2019) (https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data/)
[40] See, USDA ERS - Download the Data (Food Access Research Atlas Data Download 2019) (https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data/)

of White Connecticut residents and 18% of Asian American residents live in a LILA area, compared to 42.4% of the state's Hispanic or Latino residents and 48.3% of the state's Black or African American residents.[41]

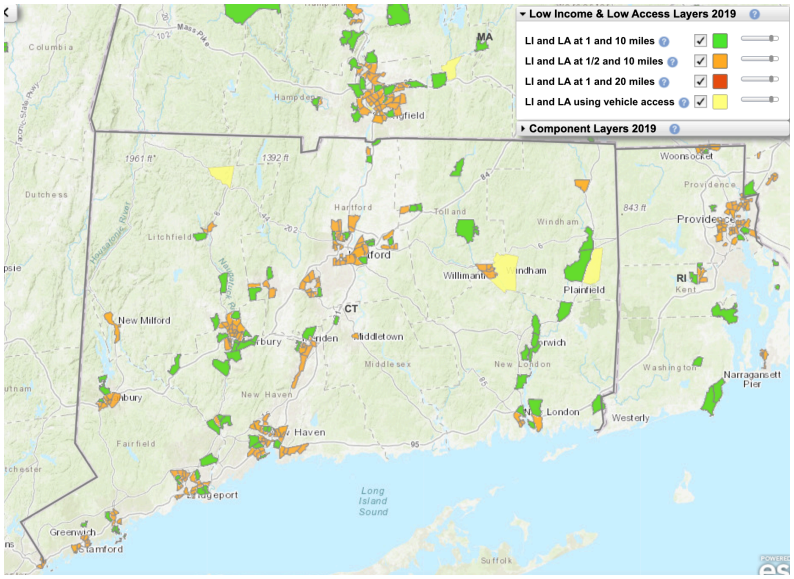

Figure 4: Map of Low Income, Low Access (LILA) Census Tracts in Connecticut
Source: USDA Food Access Research Atlas

Underlying Challenges:

Cost of Food

Perhaps the biggest underlying challenge for food insecurity is that the cost of food has risen significantly in recent years. The USDA found that nationally food prices rose 25% from 2019 to 2023, a larger increase than any other category of household expenses during that time except transportation.[42] While the USDA expects food prices to rise more slowly in 2024 (2.2%) and 2025 (1.6%), it does expect them to continue rising above their already elevated levels.[43] This suggests that more expensive food prices likely will not be returning to pre-COVID levels in the near future.

[41] *See*, New England Feeding New England - Connecticut State Brief (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE-CONNECTICUT-State-Brief.pdf)
[42] *See*, USDA ERS - Food Prices and Spending (https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-prices-and-spending/?topicId=1afac93a-444e-4e05-99f3-53217721a8be)
[43] *See*, USDA ERS - Food Price Outlook, 2024 and 2025 (https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/)

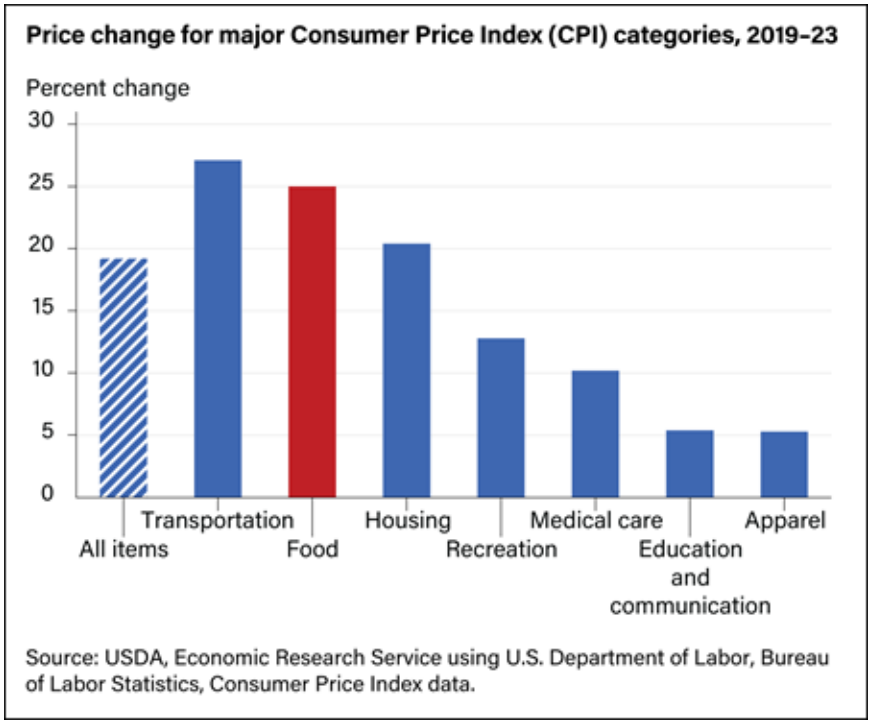

Figure 5: Increase in the Price of Food Compared to Other Expenditure Categories
Source: US Department of Agriculture: Food Prices and Spending

Feeding America found a similarly stark increase in Connecticut, estimating the "average meal cost" in the state in 2022 to be $4.27, a roughly 11% increase compared to just one year earlier.[44] This number, if applied to three meals a day for a year, comes out to a cost of $4,675.65 per person per year. For a household of one living at the 2024 Federal Poverty Level (FPL), this cost represents 31% of their annual income, and that percentage rises with each additional household member.[45] For a family of four at the FPL, the average meal cost represents an even larger 60% of their income.

Eligibility and Enrollment in Federal Support Programs

Another critical challenge is that food insecurity is increasingly common among individuals who struggle to access federal support. Traditionally, federal nutrition programs such as the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) have been a critical tool for combating food insecurity. However, these federal programs cannot do that for many food insecure households who make too much money to be eligible. Feeding America's data states that a slim majority (51%) of food insecure

[44] *See*, Feeding America Map the Meal Gap - 2022 Food Insecurity In Connecticut (https://map.feedingamerica.org/county/2022/overall/connecticut)
[45] *See*, US Department of Health and Human Services - HHS Poverty Guidelines for 2024 (https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines)

residents in Connecticut are not eligible for SNAP at all because their family makes more than 200% of the Federal Poverty Level (FPL).[46]

This suggests that a significant portion of food insecure households would fall into a status known as Asset Limited, Income Constrained, and Employed (ALICE). The United Way coined this term, and defines it as families "that earn more than the Federal Poverty Level, but less than the basic costs of living…. in the communities where they live."[47] There is evidence to support this assertion, as the USDA found that in 2022, a majority of all food insecure households nationwide had at least one member employed full-time, with that number rising above 60% when including households where at least one member is employed part time.[48]

The ALICE Threshold varies by family size and the age of family members, but to use an example, a household of four with two adults, one infant, and one preschool age child living in Connecticut is projected to need to make $126,018 in 2023 to be above the threshold (up roughly $20,000 from 2021).[49] However, in that same year, 200% of the FPL for that same family was $60,000 annually.[50] This suggests that any similar household making between $60,000 and $126,018 did not make enough to afford basic necessities such as food, housing, transportation, child care, and health care, but made too much to be eligible for SNAP, WIC, and other federal nutrition programs. Therefore, these households likely received little or no federal support to help combat food insecurity.

This challenge is widespread, as an estimated 29% of Connecticut households were classified as ALICE in 2022, with another 11% below the federal poverty level.[51] It is also worth noting that while SNAP's eligibility threshold is 200%, other programs require families to make even less than that to be eligible. This is especially true of programs aimed at school age children such as free and reduced price school meals, the Summer

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[46] *See*, Feeding America Map the Meal Gap - 2022 Food Insecurity In Connecticut (https://map.feedingamerica.org/county/2022/overall/connecticut)
[47] *See*, United Way of Connecticut - About ALICE (https://alice.ctunitedway.org/meet-alice-2/)
[48] *See,* USDA ERS - More than half of all food-insecure households work full time (https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=108053)
[49] *See*, United Way of Connecticut - ALICE in Connecticut 2023 (https://alice.ctunitedway.org/wp-content/uploads/2023/09/23UFA_Report_Connecticut_With-Preamble.pdf)
[50] *See,* US Department of Health and Human Services - 2023 Poverty Guidelines: 48 Contiguous States (all states except Alaska and Hawaii) (https://aspe.hhs.gov/sites/default/files/documents/1c92a9207f3ed5915ca020d58fe77696/detailed-guidelines-2023.pdf)
[51] *See,* United For ALICE - Research Center (Connecticut) (https://www.unitedforalice.org/state-overview/connecticut)

Food Service Program (SFSP), and the Child and Adult Care Food Program (CACFP), making the access gap for those programs even larger.[52]

In addition to those who are not eligible, there are some food insecure individuals who are eligible to receive support from federal nutrition programs such as SNAP, WIC, and school meals, but have not enrolled. Connecticut has had some major successes ensuring that eligible individuals receive support from these programs. For example, in 2019, Connecticut had a SNAP utilization rate of 95%, well above the national average of 82%.[53] On the other hand, there are also some remaining challenges, as the state's 2022 WIC utilization rate of 47.2% was slightly below the national average of 53.5%, though that does represent a 1.1 percentage point increase from 2021.[54] Much like food insecurity, federal nutrition program utilization rates differ among different groups. For example, in the last year with data broken down by demographics (2018), SNAP utilization was at 92% for all Connecticut residents but just 64% for Connecticut seniors.[55] These individuals, like those not eligible at all, are currently not getting support from some or all of the programs designed to ensure food security.

Furthermore, even for those who are eligible for support and receiving benefits, the amount received may not be enough to make a meaningful difference. During the pandemic, food price rises were at least partially offset by significant increases in federal funding for nutrition programs. For example, SNAP recipients received Emergency Allotment (EA) supplements throughout the COVID-19 Public Health Emergency. Under this program, each household was receiving an extra SNAP payment totaling the difference between their normal benefits and the maximum allowed amount (or at least $95 more per month, whichever amount was larger).[56] Furthermore, in 2021 the USDA updated its Thrifty Food Plan (TFP) for the first time in 15 years to adjust for increased prices, changed dietary guidance, and different consumption patterns, leading to an increase of approximately 20% in baseline SNAP benefit

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[52] *See*, CT.gov - Income Guidelines for Child Nutrition Programs (https://portal.ct.gov/sde/nutrition/income-guidelines-for-child-nutrition-programs)
[53] *See,* USDA FNS - SNAP Participation Rates by State, All Eligible People (FY 2019) (https://www.fns.usda.gov/usamap/2019)
[54] *See*, USDA FNS - National- and State-Level Estimates of the USDA Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibility and WIC Program Reach in 2022 (https://fns-prod.azureedge.us/sites/default/files/resource-files/wic-eer-2022-summary.pdf)
[55] *See,* USDA FNS - SNAP Participation Rates by State, Elderly People (FY 2018) (https://www.fns.usda.gov/usamap/2018#)
[56] *See,* CT.gov - Extra COVID SNAP Benefits (https://portal.ct.gov/dss/snap/extra-covid-snap-benefits/faq#:~:text=The%20extra%20COVID%20SNAP%20benefits%2C%20also%20known%20as%20Emergency%20Allotments,amount%20of%20%2495%20a%20month.)

amounts.[57] Additionally, the federal government allowed school meals to be free for all students for the 2020-21 and 2021-22 school years.[58]

However, 2023 and 2024 saw many of these programs reduced or eliminated entirely, leading to benefit cuts at the same time that food prices were continuing to rise. The end of the Public Health Emergency in February of 2023 was also the end of federal funding for the EA program, meaning that many families faced substantial reductions in SNAP benefits.[59] A study by the University of Pennsylvania School of Medicine found that the end of EA benefits contributed to as many as two million Americans being pushed into food insufficiency.[60] Additionally, the federal government stopped paying for free school meals for all students in June of 2022. While Connecticut was able to fund full or partial continuations for the 2022-23 and 2023-24 school years using federal funds from the American Rescue Plan Act (ARPA), the expiration of nearly all of these funds means that the current school year (24-25) will see a significant reduction in the number of students receiving free meals.[61] [62]

One positive development at the federal level has been the creation of the Summer EBT (or SUN Bucks) program, which provides eligible families with $120 per child in extra benefits to buy groceries in the summer.[63] However, given that it is limited to the summer months, this new benefit provides less support than the amount lost by reductions in the other programs, meaning that in practice benefit amounts are often decreasing while prices are increasing.

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[57] *See*, USDA FNS - Thrifty Food Plan, 2021 (https://www.fns.usda.gov/cnpp/thrifty-food-plan-2021)
[58] *See*, USDA ERS - State Universal Free School Meal Policies Reduced Food Insufficiency Among Children in the 2022–2023 School Year (https://www.ers.usda.gov/amber-waves/2024/june/state-universal-free-school-meal-policies-reduced-food-insufficiency-among-children-in-the-2022-2023-school-year/#:~:text=However%2C%20six%20States%20)
[59] *See,* CT.gov - Extra COVID SNAP Benefits (https://portal.ct.gov/dss/snap/extra-covid-snap-benefits/faq#:~:text=The%20extra%20COVID%20SNAP%20benefits%2C%20also%20known%20as%20Emergency%20Allotments,amount%20of%20%2495%20a%20month.)
[60] *See*, UPenn Medicine News - More Than 2 Million Additional Americans Faced Food Insufficiency Following Drawdown of Pandemic-Related SNAP Benefits, Penn Medicine Study Finds (https://www.pennmedicine.org/news/news-releases/2023/august/food-insufficiency-increase-following-drawdown-of-snap-benefits#:~:text=Comparing%20trends%20in%20food%20insufficiency,experienced%20a%2021%20percent%20relative)
[61] *See*, CT Public - CT governor signs legislation extending state's free school lunch program (https://www.ctpublic.org/news/2023-02-14/ct-governor-signs-legislation-extending-states-free-school-lunch-program)
[62] *See*, CT Public - The ARPA dollars are spent. What will CT schools do now? (https://www.ctpublic.org/show/the-wheelhouse/2024-07-30/the-arpa-dollars-are-spent-what-will-ct-schools-do-now)
[63] *See*, USDA FNS - SUN Bucks (Summer EBT) (https://www.fns.usda.gov/summer/sunbucks)

Without these expanded benefits, some households close to eligibility thresholds may get extremely small benefit amounts. For example, monthly SNAP benefit amounts are calculated by subtracting 30% of the household's net income from the set maximum benefit amount.[64] For example, a family of four would have a maximum benefit of $975 per month, and would receive that amount if their net income is zero.[65] However, if that household has a net income of $39,000 (more than $20,000 lower than the $60,000 gross income limit), or more and their rent or mortgage is less than $1,100 per month deducting 30% of that income from the maximum benefit amount could result in a benefit amount of $0.

For such households, official SNAP policy is to give a one or two person household a minimum monthly amount of $23, and to deny benefits to a household of three people or more.[66] Unless they can claim significant deductions from healthcare, housing, and childcare expenses, among others, families on the upper end of the SNAP eligible income range receive benefit amounts too small to meaningfully provide food security. It is important to note that many families are able to rightfully claim large deductions on the expenses listed above to reduce their net income to a level that awards substantial benefits. Nationally, the estimated average monthly benefit for a family of four is $726, much closer to the maximum amount than to zero.[67] However, the fact that some eligible households can receive few to no benefits means that being eligible for such benefits is not an automatic guarantee of food security.

Between those who are not eligible for benefits, those eligible but not enrolled, and those enrolled but receiving minimal amounts, it is probable that most food insecure households in Connecticut are receiving insufficient support from federal nutrition programs or no support at all. As a result, these households are likely dependent on nonprofits such as food pantries to make ends meet.

None of this is meant to suggest that these federal nutrition programs are not effective. On the contrary, they are critical tools in combating food insecurity with substantial evidence of being effective. For example, receiving SNAP benefits has been shown to be associated with reduced food insecurity overall and within nearly all subgroups (with one notable exception being households receiving the smallest benefit amounts).[68] A

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[64] *See,* CT.gov - CT SNAP Policy Manual (https://portaldir.ct.gov/dss/SNAP/CalculatingNetIncomeandBenefitLe.html#:~:text=Benefit%20Calculation&text=Multiply%20the%20net%20income%20times,from%20the%20EDG's%20maximum%20benefit.)
[65] *See,* CT.gov - CT SNAP Policy Manual (https://portaldir.ct.gov/dss/SNAP/Tables.html#Incomelimits)
[66] *See,* CT.gov - CT SNAP Policy Manual (https://portaldir.ct.gov/dss/SNAP/MinimumBenefits.html)
[67] *See*, Center on Budget and Policy Priorities - A Quick Guide to SNAP Eligibility and Benefits (https://www.cbpp.org/research/food-assistance/a-quick-guide-to-snap-eligibility-and-benefits)
[68] *See,* USDA FNS - MEASURING THE EFFECT OF SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) PARTICIPATION ON FOOD SECURITY (SUMMARY) (https://fns-prod.azureedge.us/sites/default/files/Measuring2013Sum.pdf)

USDA report from 2022 found that only 35.2% of households with incomes below 130% of the poverty line reported experiencing food insecurity nationally.[69] This suggests that many of the 391,480 Connecticut residents receiving SNAP benefits as of June 2024 are not being counted in the food insecurity data because the program is preventing them from experiencing food insecurity.[70] Other studies have suggested that SNAP reduces both food insecurity and child poverty among participating households.[71] Furthermore, state agencies have in many cases been exceptionally effective in implementing these programs and state-level interventions in Connecticut. However, the combination of rising food insecurity, rising food costs, and falling federal funding has meant that there are simply not enough resources for these programs to reach all of the people who need them.

One example of this dynamic can be seen with the WIC program. While the state's utilization rate (47.2%) may be below the national average (53.5%), the Department of Public Health has developed innovative and effective tools to maximize the program's effectiveness, most notably the WIC Online Interest Form, an online prescreener developed in 2022 to connect applicants to the relevant local WIC agency.[72] A community action agency that administers WIC at the local level noted that this approach has proven effective, and that they receive about 15 referrals daily through the system. However, they also note that due to transportation barriers and limited personnel, it has proven difficult to enroll individuals and help them attend their federally required appointments. It is, however, worth noting that the state WIC program has been able to offer flexibility for most appointment types, with options to attend appointments in-person, over the phone or online.[73] This flexibility stems from a waiver offered by the USDA removing the in-person appointment requirement, originally during 2020 but later extended beyond the end of the Public Health Emergency.[74]

A similar situation of an innovative approach being limited by insufficient resources has been the Community Eligibility Provision (CEP) for school breakfast and lunch, which allows districts or individual schools to provide free breakfast and lunch to all students

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[69] *See*, USDA ERS - Statistical Supplement to Household Food Security in the United States in 2022 (https://www.ers.usda.gov/webdocs/publications/107710/ap-119.pdf?v=3911.1)
[70] *See*, USDA FNS - FNS Program Participation Dashboard (https://www.fns.usda.gov/data-research/data-visualization/program-participation)
[71] *See*, Keith-Jennings, B., Llobrera, J., & Dean, S. (2019). Links of the Supplemental Nutrition Assistance Program With Food Insecurity, Poverty, and Health: Evidence and Potential. American journal of public health, 109(12), 1636–1640. https://doi.org/10.2105/AJPH.2019.305325
[72] *See*, CT Department of Public Health - Connecticut Women, Infants, and Children (Connecticut WIC) Interest Form (https://dphsubmissions.ct.gov/CTWIC_Interest_Form)
[73] *See*, CT Department of Public Health - Find a Local Agency (https://portal.ct.gov/dph/wic/find-a-local-agency)
[74] *See*, USDA FNS - Additional WIC Flexibilities to Support Outreach, Innovation, and Modernization Efforts through ARPA Nationwide Waivers (https://www.fns.usda.gov/wic/flexibilities-support-outreach-innovation-and-modernization-efforts-through)

while receiving federal funds to cover the cost.[75] There are currently 45 public and charter school districts that are participating in CEP districtwide, expanding free school meals to students who otherwise wouldn't receive them, but just over 100 districts don't have any schools participating.[76] This is because many districts are currently ineligible and many others are eligible but would only be partially reimbursed by the USDA, as both eligibility and funding levels are calculated by the percentage of students who are categorically eligible for free and reduced price meals.[77]

Strain on the Emergency Food System

The shortfalls in federal support and the corresponding surge in food insecurity are also causing significant challenges in the emergency food system as nonprofits struggle to keep up with both rising need and rising costs. One food pantry in the Greater Milford area summed up their struggles, stating that "food needs have increased significantly over the past three years, rising 40% (serving nearly 50,000 meals) in 2023 alone." This massive increase in need has led to problems with having enough resources to stay open and serve everyone in the community. The same pantry notes that due to the increased need, "we are meeting issues with scaling, including the funds needed for food and supply procurement and the dining space/facilities (bathrooms) to serve all accessing services."

A pantry in Hartford expressed similar sentiments, stating that "it's becoming tougher as the number increases to have enough food for the people coming in." A pantry in Northwest Connecticut also noted that their cost struggles are not simply linked to increased quantity, but increased prices, stating that "we have been forced to pay higher costs for some items that aren't available to us through FoodShare." These higher costs and increased need are endangering some organizations' ability to operate, with the same pantry noting "although we apply for grants, most grants do not cover rent and administrative costs and thus at times we struggle to keep the doors to our pantry open because we risk losing our facility."

It is worth noting that the emergency food system is the recipient of substantial private donations, with the CT Food Association stating that Connecticut food retailers alone donate 30 million pounds of food and $10 million in monetary donations per year.[78]

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[75] *See,* USDA FNS - Community Eligibility Provision Fact Sheet (https://www.fns.usda.gov/cn/cep/factsheet)
[76] *See,* CT.gov - Community Eligibility Provision (CEP) Annual Notification of Local Educational Agencies (LEAs) Districtwide Data for School Year 2024-25 (https://portal.ct.gov/-/media/sde/nutrition/cep/cep_annual_notification_lea.pdf)
[77] *See,* USDA FNS - Community Eligibility Provision Fact Sheet (https://www.fns.usda.gov/cn/cep/factsheet)
[78] *See*, CT Food Association - Aisles of Good (https://ctfoodassociation.org/aisles-of-good/)

However, the scale of food insecurity means that private donations are still not sufficient to meet all of the operational needs of the emergency food system.

These challenges are not limited to these three pantries, but are common across the emergency food system. Of the 68 food banks, food pantries, or other provider of food free of charge who participated in the CWCSEO's survey of food organizations, 89.7% reported that need had increased in the last year, with 88.2% saying that their input costs (food, staff, etc.) had increased as well.[79]

This combination of higher costs and higher need has meant that strains on the ability to operate have been widespread as well. When asked about challenges encountered in the last year, 26.5% of the same respondents reported having inadequate transportation for their work, 39.7% reported having insufficient staff or personnel, 48.5% reported having inadequate food to meet demand, 48.5% reported having insufficient funds, and 44.1% reported having inadequate storage and/or refrigeration.[80] Only 8.8% reported not facing at least one of the above challenges.[81] Finally, when asked if they were confident that their organization could sustain itself over the next several years, 26.5% of respondents either disagreed or were neutral.[82]

One group that is also a part of the emergency food system and is also affected by these challenges is nonprofit food recovery. These organizations help collect surplus food that would otherwise be thrown out and deliver it to local organizations that can distribute or serve it. Transportation and storage/refrigeration in particular are critical to this model being able to safely and effectively provide high quality food to communities.

Even if the emergency food system was in perfect condition and indefinitely sustainable, it would only serve as a temporary solution, not addressing the factors that cause food insecurity in the first place. However, if the strain on food banks and pantries continues to worsen, the system may not even be able to continue providing that temporary solution, raising the risk of an even more acute crisis.

Transportation to Food Sources

Additionally, food insecurity can happen as a result of inadequate transportation to stores and food pantries. As mentioned previously, there are areas across the state where residents are located far away from their nearest grocery store. An organization operating in Northwest Connecticut notes that these distances are extremely difficult to

[79] *See*, Appendix J
[80] *See*, Appendix J
[81] *See*, Appendix J
[82] *See*, Appendix J

manage for individuals who lack access to a car, especially since many stores aren't currently accessible via public transportation. Certain government programs such as SNAP and WIC may also be more difficult to use both at home and in certain stores, as an organization serving New London County notes that WIC benefits cannot be used for delivery of food and even some large stores in the area like the Walmart in Groton have chosen not to accept them either. To become an authorized WIC retailer and accept WIC benefits, a store must meet minimum stocking requirements for certain items such as milk, fruit, and vegetables and apply for state WIC authorization.[83]

Even in places where public transportation to the store or pantry exists, it can be difficult to transport dozens of pounds of food home via bus or train. For some populations, such as elderly residents, individuals with disabilities or individuals experiencing homelessness, there can be the added barrier that even if they are able to get access to groceries, they may have factors making it impossible to cook and/or store food. However, it is worth noting some programs like meal delivery services, homeless shelters, or communal dining facilities can receive special authorization from the USDA to use SNAP benefits.[84]

Access to Information on Resources

Another barrier to food security is difficulty accessing information about resources available to households. There are a number of federal nutrition programs, many of which have their own eligibility rules, application and renewal processes, and benefit distribution systems.[85] Furthermore, there are hundreds or even thousands of non-government food organizations offering resources to at least part of the state, with Connecticut Foodshare alone working with 650 food pantries.[86] While the large number of programs can be a strength in that it increases the total number of resources available, it can also pose a challenge for individuals who may struggle to find information about all of the different programs in their area.

Locally and regionally, efforts have been made to create guides to all nearby food supports, but raising awareness and use of these guides can be difficult. One example of this can be seen with the food guide created by the City of Milford which lists all of the

[83] *See*, CT Department of Public Health - Retailers (https://portal.ct.gov/dph/wic/retailers)
[84] *See,* CT.gov - CT SNAP Policy Manual (https://portaldir.ct.gov/dss/SNAP/UsingSNAPBenefits.html#:~:text=Eligible%20Items&text=EDGs%20can%20use%20SNAP%20EBT,Meal%20delivery%20services)
[85] *See*, USDA FNS - FNS Contacts (https://www.fns.usda.gov/fns-contacts?keywords=&sort_bef_combine=title_fulltext_ASC&f%5B0%5D=fns_contact_state%3A285)
[86] *See*, Connecticut Foodshare - Home Page (https://www.ctfoodshare.org/#:~:text=We%20partner%20with%20a%20network,programs%2C%20and%20mobile%20distribution%20sites.)

food support options in town as well as when and how to access them.[87] The City has also conducted a robust data collection effort for food insecurity in their community, and in so doing found that 71.7% of surveyed residents were unaware of the food guide, and of those who were aware 47.2% hadn't used it. The volume of information located at different sources means that even well-developed and well-promoted programs can fail to reach households.

Stigma

Finally, the stigma around receiving support from government programs and the charitable food system can represent a major barrier. This is perhaps most visible in the example of the school meals program, where students who receive free and reduced lunch may not eat the food if there is a perception that this could single them out. The Commission asked a public school district superintendent if there were any patterns in why students choose not to eat school breakfast or lunch, with dietary restrictions or unfamiliar foods being offered as examples. Instead, the superintendent responded that "there are children and young people who are on free and reduced meal plans and they do not want to stand out or for other people to know."

This idea is echoed by a report in Massachusetts, which interviewed parents and found that 42% of parents whose families qualified for free and reduced meals said their children would be less likely to eat the meals due to stigma if the state's school meals for all policy were to end.[88] Stigma around accessing food support programs can also be found among adults, reducing the likelihood that families will maximize the resources available to them.

<u>The Impact of Food Insecurity:</u>

All of the aforementioned barriers are contributing to rising food insecurity, and that is having a wide range of effects on households in addition to the substantial distress and discomfort of hunger. The National Institute of Health (NIH) states that food insecurity is a cause of several diseases including heart disease, diabetes, obesity, mental health disorders, and a number of other chronic diseases.[89] Furthermore, food insecurity in children has a significant negative impact on their education. Studies have suggested that food insecurity is linked with negative effects on children's cognitive development

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[87] *See*, City of Milford - Milford Food Guide Spring 2024 (https://www.ci.milford.ct.us/sites/g/files/vyhlif9226/f/uploads/final_milford_food_guide_spring_2024.pdf)
[88] *See,* Nourish Lab - Impact of Massachusetts' Healthy School Meals for All Policy on Families (https://www.childnourishlab.org/_files/ugd/383bcd_45ee5fed8e224ffd8639f0f498086e31.pdf)
[89] *See,* National Institute of Health - Food Accessibility, Insecurity and Health Outcomes (https://www.nimhd.nih.gov/resources/understanding-health-disparities/food-accessibility-insecurity-and-health-outcomes.html)

and academic performance, while also being linked with increased absenteeism, tardiness, and behavioral challenges at school.[90] [91]

For adults, some studies suggest that food insecurity is associated with more sick days and missed work, especially for those with certain conditions such as diabetes.[92] These missed days can negatively impact a household's financial security and, if common enough, can also have impacts on employers and the economy at large. Finally, studies have also shown a link between food insecurity and housing insecurity, as food insecure households who aren't housing insecure are more likely to become housing insecure in the future and vice-versa.[93] This is not to suggest that food insecurity is the sole cause of these outcomes, but that the impact of food insecurity may be limiting the effectiveness of existing policies and interventions in education, healthcare, mental health, housing, and other fields.

[90] *See*, Gallegos, D., Eivers, A., Sondergeld, P., & Pattinson, C. (2021). Food Insecurity and Child Development: A State-of-the-Art Review. International journal of environmental research and public health, 18(17), 8990. https://doi.org/10.3390/ijerph18178990

[91] *See,* Meyers, A. F., Sampson, A. E., Weitzman, M., Rogers, B. L., & Kayne, H. (1989). School Breakfast Program and school performance. American journal of diseases of children (1960), 143(10), 1234–1239. https://doi.org/10.1001/archpedi.1989.02150220142035

[92] *See*, Weinstein, J. M., Kahkoska, A. R., & Berkowitz, S. A. (2022). Food Insecurity, Missed Workdays, And Hospitalizations Among Working-Age US Adults With Diabetes. Health affairs (Project Hope), 41(7), 1045–1052. https://doi.org/10.1377/hlthaff.2021.01744

[93] *See*, Lee, C. Y., Zhao, X., Reesor-Oyer, L., Cepni, A. B., & Hernandez, D. C. (2021). Bidirectional Relationship Between Food Insecurity and Housing Instability. Journal of the Academy of Nutrition and Dietetics, 121(1), 84–91. https://doi.org/10.1016/j.jand.2020.08.081

Section 2: Nutrition Security

The importance of this section can perhaps best be summed up by the story of a woman in Danbury. She was initially referred to a pilot program run by the United Way of Coastal and Western Connecticut, Nuvance Health and Connecticut Institute for Communities (CIFC) specifically for hypertension, and like many people with cardiovascular disease (CVD), she was also living with Type 2 diabetes. As a participant in this program, she was able to shop every other week at the “Food Farmacy”, where she had access to fresh fruit and vegetables, lean proteins, low fat dairy, and whole grains for free. She also met monthly with a registered dietician on site, who was able to assist her with identifying the best food items to help mitigate her co-morbidities and could participate in UConn Extension programming to learn new recipes and ways to prepare the food she received. After a few months in this program, the woman emailed the Food Farmacy after her latest endocrinologist appointment, stating that "in no small part due to the Food Farmacy" her blood pressure was down and her A1C had fallen below the diabetic and pre-diabetic thresholds into a normal range.

This story illustrates that food is a key social determinant of health, as what people eat can either lead to massively improved health outcomes or cause a number of serious diseases. As a result, it is important to examine not only the quantity of food that is available to households, but the quality as well. The state’s Healthy Connecticut 2025 State Health Improvement Plan recognizes this connection, including “Healthy Food and Housing” as one its priority areas.[94] Sometimes, the perception is that nutrition is solely a personal choice, and while choice can be a component, there are also a number of structural factors that make it difficult for individuals and communities to choose or even find healthy options. This section will examine the state of nutrition security, the barriers preventing people from accessing nutritious food, and the potentially substantial benefits of improving that access.

State of Nutrition Insecurity in Connecticut:

While there are many different and conflicting measurements of food insecurity in Connecticut, nutrition insecurity faces the opposite problem. As of now, there do not appear to be any universally accepted measures of nutrition insecurity that have been implemented nationally or in Connecticut. A publication on current research gaps from December of 2023, citing a workshop hosted by the NIH, CDC, and USDA in 2021, noted that there is a “need for additional methodological research, such as the development and validation of tools to accurately measure and standardize data

[94] *See*, Connecticut Department of Public Health - Healthy Connecticut 2025 (https://portal.ct.gov/-/media/dph/state-health-planning/ct_dph_ship_report_r1-10-6-2021.pdf)

collection related to nutrition insecurity and the food environment."[95] Furthermore, the NIH released a Notice of Special Interest that ran from June 2022 to November 2024 that, among other things, "calls for the development of new measures for nutrition security."[96] Tufts University's Food is Medicine Institute has collected initial validation data on a measure of nutrition insecurity they developed, but notes that "nutrition security measurement remains nascent, with several proposed tools being evaluated at this time."[97]

This means it is difficult to say with a high degree of confidence how many people in Connecticut are experiencing nutrition insecurity, though that may change in the near future if new measures are successfully validated and implemented. In the meantime, there are some other data points, from Connecticut and elsewhere in the country, that can allow for some inferences to be made or provide some context on the situation.

Firstly, there are at least a few studies that have piloted measures and produced data on nutrition insecurity in other areas. One such study was conducted in Los Angeles County in 2022 using survey questions and found a reported food insecurity rate of 24% and a nutrition insecurity rate of 25%, though notably the rate of experiencing both simultaneously was just 13.5%.[98] This means that just under half of the individuals who reported food insecurity did not report nutrition insecurity and vice-versa. These numbers cannot meaningfully be applied to Connecticut given that the data was gathered from California, but this study does illustrate that while related, food and nutrition insecurity are different. It is therefore likely there are individuals in Connecticut who are food secure but not nutrition secure.

Turning to potential indicators that could help inform an inference about nutrition insecurity in Connecticut, the prevalence of inadequately nutritious diets is an important place to start. According to the USDA, poor nutrition is the leading cause of illness nationwide, and is tied to 600,000 deaths caused by those diseases annually.[99] Data

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[95] *See*, Odoms-Young, A., Brown, A., Agurs-Collins, T., & Karen Glanz RDN. (2023). Food Insecurity, Neighborhood Food Environment, and Health Disparities: State of the Science, Research Gaps and Opportunities. The American Journal of Clinical Nutrition, 119(3). https://doi.org/10.1016/j.ajcnut.2023.12.019

[96] *See*, NIH Grants - Notice of Special Interest (NOSI): Stimulating Research to Understand and Address Hunger, Food and Nutrition Insecurity (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-22-135.html)

[97] *See*, Tufts University Gerald J. and Dorothy R. Friedman School of Nutrition Science and Policy Food as Medicine Institute - Development and Validation of a Nutrition Security Screener (https://tuftsfoodismedicine.org/project/nss/)

[98] *See*, Livings, M. S., Bruine de Bruin, W., Wasim, N., Wilson, J. P., Lee, B. Y., & de la Haye, K. (2024). Food and nutrition insecurity: Experiences that differ for some and independently predict diet-related disease, Los Angeles County, 2022. the Journal of Nutrition. https://doi.org/10.1016/j.tjnut.2024.05.020

[99] *See*, USDA FNS - USDA Actions on Nutrition Security (https://www.usda.gov/sites/default/files/documents/usda-actions-nutrition-security-infographic.pdf)

provided by a study from the American Heart Association also finds that poor nutrition is widespread. The study estimates that the prevalence of a “poor diet” in the US was 52.5% of adults in 2020, and was projected to decrease slightly to 51.1% of adults by 2050.[100]

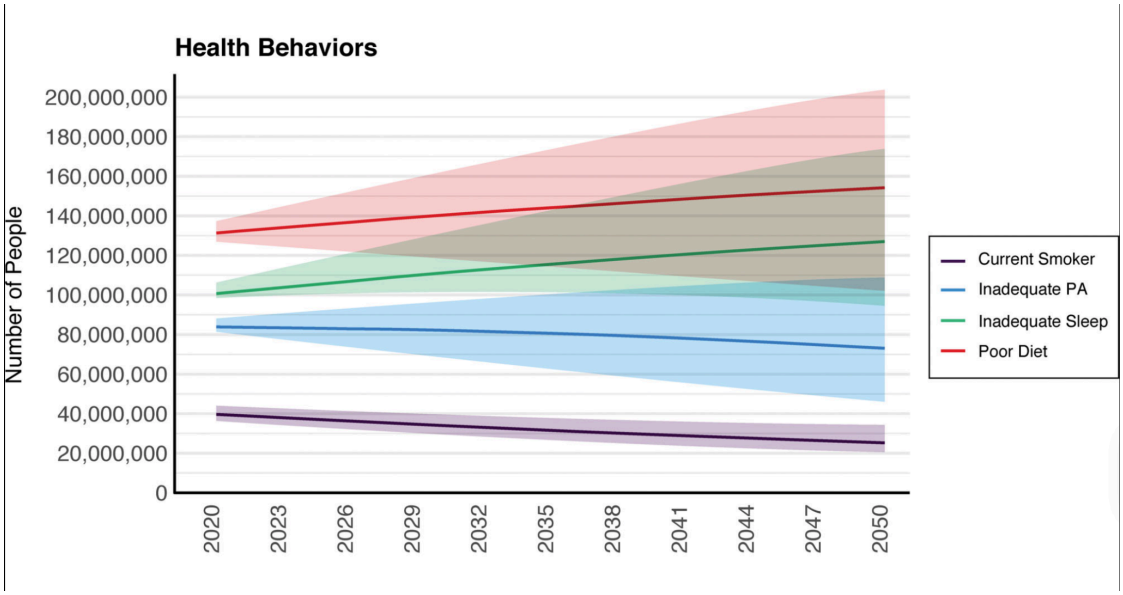

Figure 6: Projected Prevalence of Cardiovascular Disease Risk Factors among US Adults

Source: Joynt, K. E., Elkind, M. S. V., Aparicio, H. J., Commodore-Mensah, Y., de Ferranti, S. D., Dowd, W. N., Hernandez, A. F., Khavjou, O., Michos, E. D., Palaniappan, L., Penko, J., Poudel, R., Roger, V. L., & Kazi, D. S. (2024). Forecasting the Burden of Cardiovascular Disease and Stroke in the United States Through 2050—Prevalence of Risk Factors and Disease: A Presidential Advisory From the American Heart Association. *Circulation*, *150*(4). https://doi.org/10.1161/cir.0000000000001256

While a slight decrease suggests the situation is not becoming significantly worse, neither is it significantly improving if it is expected to still affect more than half of Americans in 2050. There are also specific dietary requirements that are being met by even fewer Americans. A CDC publication in 2019 found that only 12.3% of American adults eat enough fruit to meet federal nutrition recommendations, and only 10% eat

[100] *See*, Joynt, K. E., Elkind, M. S. V., Aparicio, H. J., Commodore-Mensah, Y., de Ferranti, S. D., Dowd, W. N., Hernandez, A. F., Khavjou, O., Michos, E. D., Palaniappan, L., Penko, J., Poudel, R., Roger, V. L., & Kazi, D. S. (2024). Forecasting the Burden of Cardiovascular Disease and Stroke in the United States Through 2050—Prevalence of Risk Factors and Disease: A Presidential Advisory From the American Heart Association. *Circulation*, *150*(4). https://doi.org/10.1161/cir.0000000000001256

enough vegetables.[101]

There is also some state level data on the prevalence of poor diet quality, though some of it is less recent. In 2016, the CDC's Connecticut State Nutrition, Physical Activity, and Obesity Profile found that 33.7% of adults and 36.7% of adolescents in the state reported eating fruit less than once per day, with 22.2% of adults and 34.2% of adolescents reporting the same for vegetables.[102] The CDC also found in 2019 that 16.1% of Connecticut adults eat enough fruit to meet federal nutrition recommendations (the highest rate in the country), and 14.1% eat enough vegetables (3rd highest in the country).[103]

On the other hand, there are some items which are considered detrimental to a nutritious diet that are consumed widely. Between 2010 and 2015 the CDC found that 72.2% of adults in Connecticut reported drinking sugar sweetened beverages (which it states are tied to numerous nutrition related diseases) at least once daily, which was the 5th highest percentage in the country and above the national average of 63%.[104]

Another relevant datapoint is the prevalence of nutrition-related diseases and risk factors. Poor nutrition is linked with heart disease, diabetes, and obesity, among other conditions.[105] The CDC has collected data on the prevalence of all of these at the state level. Starting with diabetes, the prevalence among adults in Connecticut rose from 8.3% in 2019 to 9.4% in 2021, before falling slightly to 9.2% in 2022.[106] For indicators of Cardiovascular Disease, high blood pressure (hypertension) among adults in Connecticut declined slightly from 45.8% in 2019 to 45.3% in 2021, and high cholesterol has increased slightly from 30.4% to 30.9% in the same timeframe.[107] The trend in obesity is similar, with prevalence among adults in Connecticut increasing slightly 29.1% in 2019 to 30.7% in 2022 and prevalence among high school students increasing from

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[101] *See*, Lee SH, Moore LV, Park S, Harris DM, Blanck HM. Adults Meeting Fruit and Vegetable Intake Recommendations — United States, 2019. MMWR Morb Mortal Wkly Rep 2022;71:1–9. DOI: http://dx.doi.org/10.15585/mmwr.mm7101a1.
[102] *See*, CDC Division of Nutrition, Physical Activity, and Obesity - Connecticut State Nutrition, Physical Activity, and Obesity Profile 2016 (https://stacks.cdc.gov/view/cdc/118775/cdc_118775_DS1.pdf)
[103] *See*, Lee SH, Moore LV, Park S, Harris DM, Blanck HM. Adults Meeting Fruit and Vegetable Intake Recommendations — United States, 2019. MMWR Morb Mortal Wkly Rep 2022;71:1–9. DOI: http://dx.doi.org/10.15585/mmwr.mm7101a1.
[104] *See*, CDC Nutrition - Get the Facts: Sugar-Sweetened Beverages and Consumption (https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html)
[105] *See*, USDA - Food and Nutrition Security (https://www.usda.gov/nutrition-security#:~:text=Nutrition%20security%20means%20consistent%20access,Tribal%20communities%20and%20Insular%20areas.)
[106] *See*, CDC - Chronic Disease Indicators, Diabetes Among Adults (https://cdi.cdc.gov/?location=CT&category=DIA&indicators=DIA01)
[107] *See*, CDC - Chronic Disease Indicators, High Blood Pressure Among Adults and High Cholesterol among Adults who have been Screened (https://cdi.cdc.gov/?location=CT&category=CVD&indicators=CVD01,CVD03)

14.4% in 2019 to 15.1% in 2021.[108] Overall, the trend is that the prevalence of these diseases is fairly stable and relatively widespread, suggesting they have not become significantly more or less widespread in recent years.

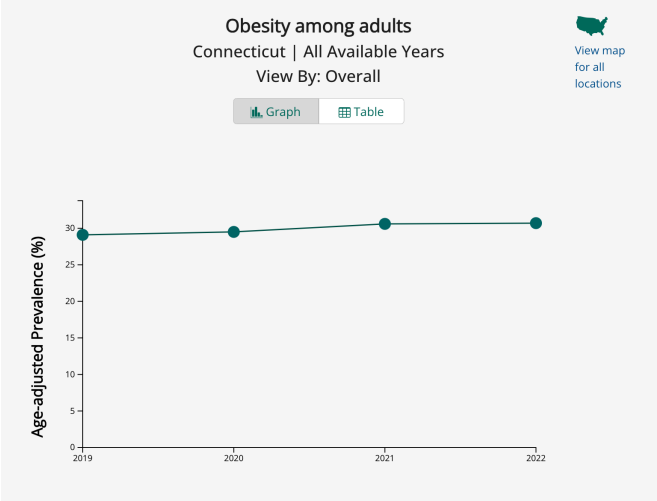

Figure 7: Prevalence in Obesity among CT Adults (2019-2022)
Source: Centers for Diseases Control and Prevention Chronic Disease Indicators

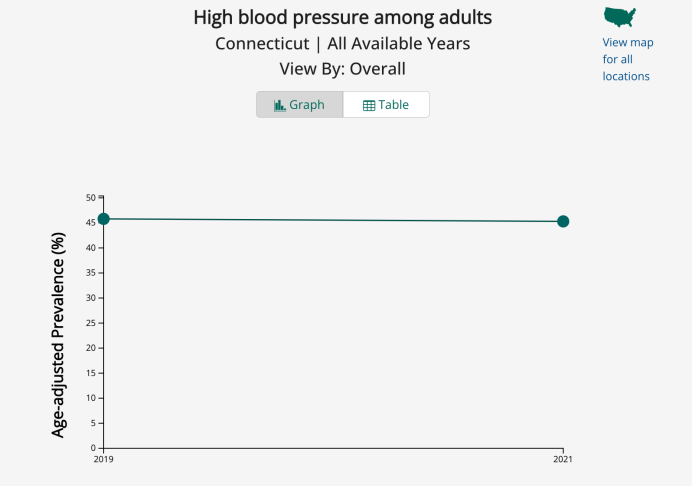

Figure 8: Prevalence in High Blood Pressure among CT Adults (2019-2021)
Source: Centers for Diseases Control and Prevention Chronic Disease Indicators

[108] *See*, CDC - Chronic Disease Indicators, Obesity Among HIgh School Students and Obesity Among Adults (https://cdi.cdc.gov/?location=CT&category=NPAW&indicators=NPW13,NPW14)

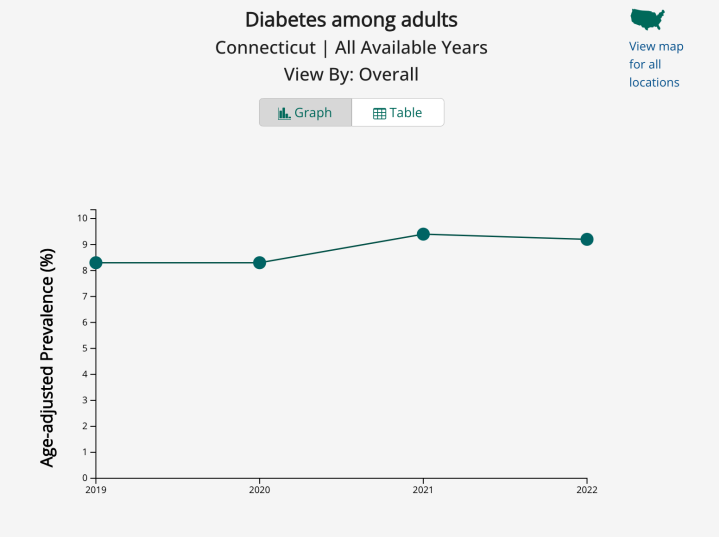

Figure 9: Prevalence in Diabetes among CT Adults (2019-2022)
Source: Centers for Diseases Control and Prevention Chronic Disease Indicators

As with food security, both poor diet and nutrition related diseases affect everyone, but affect certain communities at disproportionate levels. The USDA's 2017-2020 What We Eat in America Survey found that, nationally, fruit and vegetable consumption increased with family income. Specifically, it found that households making under 131% of the poverty level consumed about 1/5th cup (about 15%) less vegetables per day than the national average and a little under 1/10th cup (about 7.5%) less fruit.[109] Similarly, the CDC found that sugar sweetened beverage consumption was disproportionately high among both youth and adults from low-income households, as well as among males and those who identified as Black or African American.[110] The American Heart Association also found that the prevalence of what it termed as a "poor diet" linked to cardiovascular diseases was disproportionately high among young adults and those who identified as Black or African American.[111]

It is important to note that not everyone with an inadequately nutritious diet or diagnosed with a nutrition-related disease is experiencing nutrition insecurity, as some will have consistent access to affordable nutritious foods but choose to purchase less nutritious alternatives or may develop chronic diseases due to other risk factors.

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[109] *See*, USDA ARS - Food Patterns Equivalent Intakes from Food: Consumed per Individual by Family Income (https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/fped/Table_4_FPED_POV_1720.pdf)
[110] *See*, CDC - Get the Facts: Sugar-Sweetened Beverages and Consumption (https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html)
[111] *See*, Joynt, K. E., Elkind, M. S. V., Aparicio, H. J., Commodore-Mensah, Y., de Ferranti, S. D., Dowd, W. N., Hernandez, A. F., Khavjou, O., Michos, E. D., Palaniappan, L., Penko, J., Poudel, R., Roger, V. L., & Kazi, D. S. (2024). Forecasting the Burden of Cardiovascular Disease and Stroke in the United States Through 2050—Prevalence of Risk Factors and Disease: A Presidential Advisory From the American Heart Association. *Circulation*, *150*(4). https://doi.org/10.1161/cir.0000000000001256

However, the relatively widespread nature of these issues and mostly stable prevalence are significant challenges regardless of the cause.

Underlying Challenges

Affordability

As with food insecurity, lack of affordability plays a significant role in nutrition insecurity, specifically the perceived unaffordability of nutritious food options. As mentioned above, low income households tend to consume fewer fruits and vegetables and more of certain non-nutritious items such as sugar sweetened beverages, a pattern that may be partially explained by the perceived difference in costs. When investigating barriers to eating a heart healthy diet, the Cleveland Clinic found that 46% of Americans cited their belief that healthy food options are more expensive than unhealthy options, double the level of the second most commonly mentioned barrier (lack of time to cook, cited by 23% of respondents).[112] Feeding America's Hunger in America Study found a similar sentiment, where in 2014, 79% of households in the study reported purchasing cheap and unhealthy food options in response to limited money to spend on food, making it the most commonly reported "coping strategy" for food insecure households.[113]

There is some disagreement over whether healthy foods are actually more expensive than unhealthy ones. A 2013 study conducted by the Harvard T.H. Chan School of Public Health found that the healthiest diets cost an average of $1.50 more per day compared to the least healthy ones.[114] However, a USDA study from 2012 produced more mixed results, finding that healthy foods were more expensive per calorie than less healthy "moderation foods," but cheaper when you measure price by edible weight or portion size.[115] When discussing these results, the study notes "it is not possible to conclude that healthy foods are more expensive than less healthy foods. Much depends on the specific foods compared."[116] However, the widespread perception that healthy

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[112] *See*, Cleveland Clinic - Americans Cite Cost of Heathy Food as Biggest Barrier to a Heart-Healthy Diet, According to Cleveland Clinic Survey (https://newsroom.clevelandclinic.org/2023/02/01/americans-cite-cost-of-heathy-food-as-biggest-barrier-to-a-heart-healthy-diet-according-to-cleveland-clinic-survey)
[113] *See*, Feeding America - Hunger in America Study (https://www.feedingamerica.org/research/hunger-in-america)
[114] *See*, Harvard T.H. Chan School of Public Health - Eating healthy vs. unhealthy diet costs about $1.50 more per day (https://www.hsph.harvard.edu/news/press-releases/healthy-vs-unhealthy-diet-costs-1-50-more/#:~:text=The%20researchers%20found%20that%20healthier,meats%2C%20and%20refined%20grains)
[115] *See*, USDA ERS - Are Healthy Foods Really More Expensive? (https://www.ers.usda.gov/webdocs/publications/44678/19980_eib96.pdf)
[116] *See*, USDA ERS - Are Healthy Foods Really More Expensive? (https://www.ers.usda.gov/webdocs/publications/44678/19980_eib96.pdf)

food options are unaffordable is a significant barrier to nutrition security regardless of any nuances in the reality.

Food Price Volatility

It is also important to note that changes in food prices are not uniform across food items, and this can change the relative affordability of healthy and unhealthy items. For example, the USDA notes that the price of fresh vegetables increased by more than the price of sugars and sweets in 2018 and 2019, while the reverse was true in 2020 through 2023.[117] This suggests that in some years a healthy diet can become cheaper relative to an unhealthy one, and in other years it can become more expensive.

Lower income households may find it particularly challenging to sustain a consistent diet in the face of price volatility since a large share of their income is already committed to food. The USDA found that in 2022, the households in the lowest income quintile spent 31.2% of their income on food, while those in the highest quintile spent just 8% and no other quintile spent more than 16.6%.[118]

Federal Subsidies

Furthermore, the affordability of unhealthy items could also be affected by interventions from the federal government. Over 99% of the USDA's expenditures under the Farm Bill fall into four categories: nutrition (76.1%), crop insurance (8.9%), conservation (6.8%), and commodity programs (7.3%).[119] Nutrition covers SNAP, WIC, school meals, and many of the other federal nutrition programs covered in section one, with SNAP accounting for a large majority of total expenditures in this category.[120] Conservation programs are designed to help farmers "improve their environmental performance" and offer payments to take lands out of agricultural production or implement conservation practices on land that is still in production.[121]

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[117] *See*, USDA ERS - Food Price Environment: Interactive Visualization (https://www.ers.usda.gov/data-products/food-price-outlook/food-price-environment-interactive-visualization/)
[118] *See*, USDA ERS - Food Price Environment: Interactive Visualization (https://www.ers.usda.gov/data-products/food-price-outlook/food-price-environment-interactive-visualization/)
[119] *See*, USDA ERS - Farm Bill Spending (https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/farm-bill-spending/)
[120] *See*, USDA ERS - Food Security and Nutrition Assistance (https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-security-and-nutrition-assistance/?topicId=d7627f77-6cee-4ab9-bbb9-8c74d4778941)
[121] *See*, USDA ERS - Conservation Programs (https://www.ers.usda.gov/topics/natural-resources-environment/conservation-programs/)

The remaining two categories are the ones that provide the bulk of subsidies directly intended for crop production. Two of the three main commodity programs, Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC), are designed to guarantee farm incomes by making payments when total crop revenue or effective crop prices drop below fixed levels.[122] Crucially, however, only 22 crops are eligible for subsidies under these programs, a list which contains mostly grains such as corn, wheat, and rice with only a few vegetables (such as lentils and dry peas) and no fruits included.[123] The third main program, the Marketing Assistance Loans, allows farmers to use their crops as collateral for government loans, but this is also limited to a relatively small number of eligible crops including wheat, corn, cotton, rice, peanuts, and sugar.[124]

The crop insurance programs subsidize crop insurance rates for farmers.[125] In practice, these subsidies appear to also disproportionately accrue to a few crops. In 2016, the data nonprofit USAFacts reported that the crops receiving the most subsidies from the USDA were corn (about $2.2 billion) and soybeans (about $1.6 billion), both receiving nearly four times as much as the most heavily subsidized fruit or vegetable that year (Oranges at about $436 million).[126] Another nonprofit found that when looking at total insurance premium subsidies by crop from 1995-2023, corn ($47.4 billion) and soybeans ($28.1 billion) remain the top two crops and together account for 55% of the total amount spent.[127]

The most highly subsidized crop on both lists, corn, is used to create high fructose corn syrup, which is one of the most common added sugars and is associated with a number of negative health outcomes.[128] More broadly, the food items that benefit the most from federal subsidies appear to be less healthy options than less subsidized items like fresh

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[122] *See*, USDA FSA - Title I: Crop Commodity Program Provisions (https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/title-i-crop-commodity-program-provisions/)
[123] *See*, USDA FSA - Agriculture Risk Coverage (ARC) & Price Loss Coverage (PLC) (https://www.fsa.usda.gov/resources/programs/arc-plc#:~:text=22%20covered%20commodities%20including%20wheat,%2C%20crambe%2C%20and%20sesame%20seed.)
[124] *See*, USDA FSA - Title I: Crop Commodity Program Provisions (https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/title-i-crop-commodity-program-provisions/)
[125] *See*, USDA ERS - Title XI: Crop Insurance Program Provisions (https://www.ers.usda.gov/topics/farm-economy/farm-commodity-policy/title-xi-crop-insurance-program-provisions/)
[126] *See*, USA Facts - Federal farm subsidies: What the data says (https://usafacts.org/articles/federal-farm-subsidies-what-data-says/)
[127] *See*, Environmental Working Group - Share of Premium Subsidies by Crop, 1995-2023 (https://farm.ewg.org/cropinsurance.php?fips=00000&summpage=PS_BY_CROP&regionname=theUnitedStates)
[128] *See*, UC Davis Department of Nutrition - Nutrition & Health Info Sheets for Consumers - Added Sugars and High-Fructose Corn Syrup (https://nutrition.ucdavis.edu/outreach/nutr-health-info-sheets/consumer-addedsugars)

produce. For example, a study that examined consumption of products coming from subsidized crops from 2009 to 2014 found that individuals who consumed more subsidized crop products had a higher risk of obesity and certain cardiometabolic problems.[129] It is important to note that with regard to sugar beets and sugarcane specifically, the USDA employs programs designed to keep prices high and reduce the amount of sugar available in the US market for human consumption.[130] Overall however, it appears that federal policy may be indirectly subsidizing unhealthy items, including those containing high fructose corn syrup such as soda and candy.

There is disagreement over whether these subsidies make the food items cheaper than they otherwise would be, with some arguing that without subsidies, prices would be the same or even lower.[131] However, the sentiment that subsidies contribute to overconsumption of unhealthy food items is present in the discourse, with food journalist and author Mark Bittman summing up this concept by stating "you can't make good food affordable without government support. You can't actually even make bad food affordable without government support. One of the reasons everyone says 'oh well junk food is less expensive than good food'… is because it's subsidized."[132]

Limited Healthy Food Access and Food Swamps

As with inadequate affordability, lack of access to nutritious food options is also an issue that contributes to nutrition insecurity. A Cleveland Clinic survey found that access to nutritious food is a significant barrier to heart healthy diets that disproportionately affects communities of color, noting that 15% of Americans who identify as white and 20% of Americans who identify as Black or African American say it's hard to access stores that sell healthy food.[133]

As discussed in section one, there are numerous areas in the state without a supermarket, known as LILA areas. Living in these areas presents a significant barrier

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[129] *See*, Do, W. L., Bullard, K. M., Stein, A. D., Ali, M. K., Narayan, K. M. V., & Siegel, K. R. (2020). Consumption of Foods Derived from Subsidized Crops Remains Associated with Cardiometabolic Risk: An Update on the Evidence Using the National Health and Nutrition Examination Survey 2009-2014. Nutrients, 12(11), 3244. https://doi.org/10.3390/nu12113244

[130] *See*, USDA ERS - Sugar and Sweeteners Policy (https://www.ers.usda.gov/topics/crops/sugar-and-sweeteners/policy/)

[131] *See*, Fields S. (2004). The fat of the land: do agricultural subsidies foster poor health?. Environmental health perspectives, 112(14), A820–A823. https://doi.org/10.1289/ehp.112-a820

[132] *See*, Apple Podcasts - How America's food is making us sick (https://podcasts.apple.com/de/podcast/how-americas-food-is-making-us-sick/id1577591053?i=1000664065542)

[133] *See*, Cleveland Clinic - Americans Cite Cost of Heathy Food as Biggest Barrier to a Heart-Healthy Diet, According to Cleveland Clinic Survey (https://newsroom.clevelandclinic.org/2023/02/01/americans-cite-cost-of-heathy-food-as-biggest-barrier-to-a-heart-healthy-diet-according-to-cleveland-clinic-survey)

to nutrition security, but some research has shown that areas classified as food swamps due to low access to nutritious foods but high access to non-nutritious foods can pose the same challenge. A 2017 national, county-level study led by Dr. Kristen Cooksey Stowers from the UConn Department of Allied Health Sciences and Rudd Center for Food Policy and Health found that food swamps were more strongly associated with geographic inequities in adult obesity prevalence compared to food deserts.[134] Furthermore, a subsequent national 2020 study of 4305 adults found that residing in a food swamp is linked to poor self-reported eating habits, and that racial and ethnic minorities are at increased risk of living in a neighborhood that is characterized as a food swamp, particularly Black Americans.[135]

While research and data collection with regards to food swamps, like nutrition insecurity more broadly, is still quite limited, there have been a few findings in Connecticut, largely courtesy of the Health Equity Lab for the People led by Dr. Cooksey Stowers. This project developed a Food Swamp Audit Tool, which identifies food swamps by giving neighborhoods an index score based on the percentage of food stores that are classified as unhealthy and intermediate. When used to map food swamps in parts of Hartford, the index found that 37.8% of examined neighborhoods had between 50% and 85% of their food outlets classified as unhealthy or intermediate and 31.1% of neighborhoods between 85% and 100%.[136] Finally, the study also found that "communities that consisted primarily of Latinx and Black residents had higher food swamp exposure scores."[137]

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[134] *See*, Cooksey-Stowers, K.; Schwartz, M.B.; Brownell, K.D. Food Swamps Predict Obesity Rates Better Than Food Deserts in the United States. Int. J. Environ. Res. Public Health 2017, 14, 1366. https://doi.org/10.3390/ijerph14111366

[135] *See*, Cooksey Stowers, K., Jiang, Q., Atoloye, A., Lucan, S., & Gans, K. (2020). Racial Differences in Perceived Food Swamp and Food Desert Exposure and Disparities in Self-Reported Dietary Habits. International journal of environmental research and public health, 17(19), 7143. https://doi.org/10.3390/ijerph17197143

[136] *See*, Appendix F

[137] *See*, Appendix G

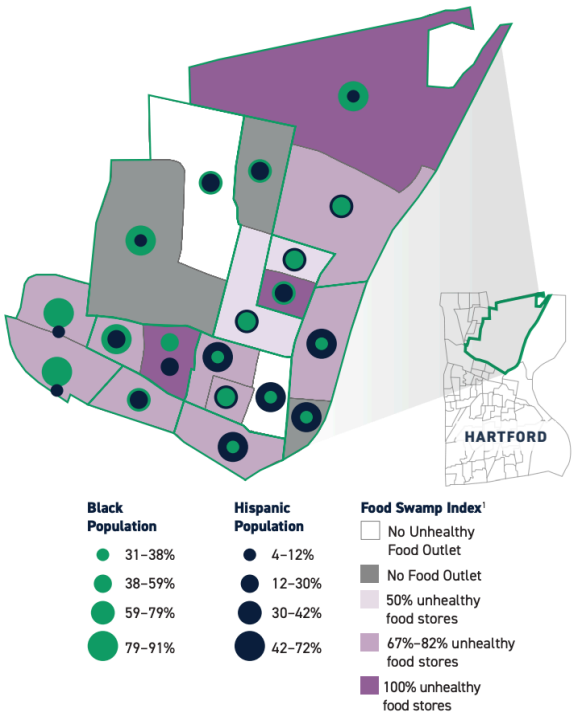

Figure 10: Map of Hartford's North End with Food Swamp Index Scores
Source: Community Action Task Force and University of Connecticut, North Hartford Neighborhood Food Swamp Profiles

A closely related photovoice study that worked with Black and Latina women living in these Hartford neighborhoods identified several ways that food swamps act as barriers to nutrition security.[138] The study notes that participants found it difficult to access stores with healthier options while stores with unhealthy options were comparatively easier to access, with lack of transportation being a particularly significant barrier. They also note that the price of healthier foods such as fresh produce tends to be higher and more volatile at the accessible stores and the produce tends to be low quality and prone to spoiling quickly. On the other hand, these stores tended to heavily advertise and prominently display non-nutritious food items such as candy.[139]

This lack of access to nutritious food items can also affect the emergency food system, with one food pantry operating in Norwich stating "because inventory at food banks is often limited by what is donated to them, it can be a struggle to find healthy food at a food bank. At times, it can feel like food banks have more sugar sweetened beverages

[138] *See*, Antrum, C., Atoloye, A., Ajayi, O., Holter, D., Singerman, D., & Cooksey Stowers, K. (2024). Black and Latina women's lived experiences with navigating neighborhood food swamps to find healthy food: A photovoice approach. Journal of Human Behavior in the Social Environment, 1–19. https://doi.org/10.1080/10911359.2024.2355141
[139] *See*, Community Action Task Force - Food Access in Hartford's North End (https://drive.google.com/file/d/1urVWQVz24G1q7RNfktg4a0tTSRigFSpL/view)

and beverages in general than healthy foods." All of these factors mean that living in a food swamp can contribute significantly to nutrition insecurity at both the individual and community level.

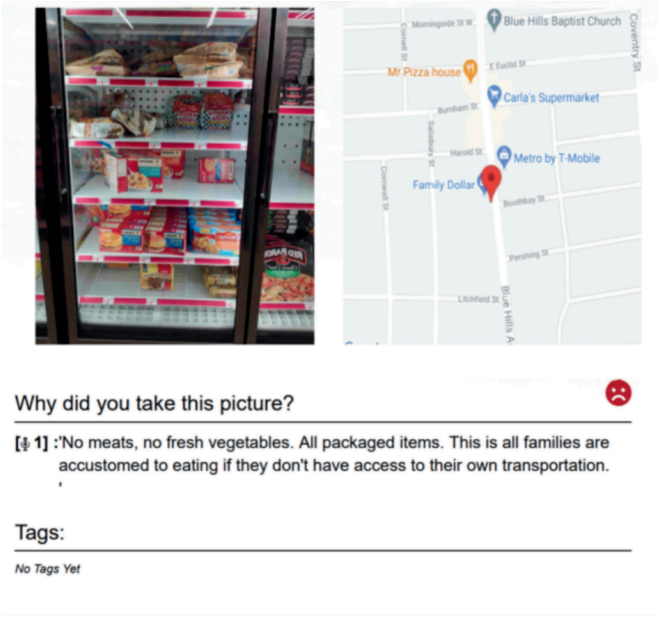

Figure 11: Sample Photovoice Submission from Participant Detailing Challenges in a Food Swamp in Hartford's North End
Source: Community Action Task Force, University of Connecticut, and Healthy Hartford Hub, Food Access in Hartford's North End

Time to Prepare Meals

Another factor that can be a significant barrier to accessing nutritious food is time. The USDA found in 2014 that the average American adult spent 37 minutes on food preparation and cleanup, though that varied substantially, with young adults, employed individuals, households without children, and males tending to spend less time than average.[140] Individuals who spend less time cooking are more likely to eat away from home or get pre-prepared options.

While not all of these ready made options are inherently unhealthy, there is some evidence to suggest that a higher consumption of them is associated with a less nutritious overall diet. A 2009 study found that adults who spent the most time cooking tended to have the most nutritious diets, while those who spent the least time on

[140] *See*, USDA ERS - Americans Spend an Average of 37 Minutes a Day Preparing and Serving Food and Cleaning Up (https://www.ers.usda.gov/amber-waves/2016/november/americans-spend-an-average-of-37-minutes-a-day-preparing-and-serving-food-and-cleaning-up/)

cooking relied on away from home options such as fast food the most.[141] Finding this time can be particularly challenging for households where all adults work, especially in lower income households where adults may work multiple jobs. Another study conducted with working mothers found that time scarcity was a major barrier to preparing healthy meals, especially for low and moderate wage mothers.[142]

Food Advertising

Advertising of unhealthy food options is also a significant factor. The Rudd Center notes that of the nearly $14 billion spent per year on food advertising in the US, over 80% "promotes fast food, sugary drinks, candy, and unhealthy snacks."[143] The effects of food advertising are particularly pronounced for children. The American Psychological Association states that 50% of all ad time on children's shows is food ads, the contents of which "are almost completely dominated by unhealthy food products."[144]

Furthermore, it states that these ads are very effective, as the more of these ads children watch, the more unhealthy items they eat and greater risk of obesity they face.[145] This effectiveness is likely due to the fact that children, especially younger children, are more susceptible to advertising than adults due to a developmental inability to understand the intent of ads.[146] This is a particularly large risk today, as food companies increasingly target children through ads disguised as regular content on social media, video games, and other online platforms that parents are less likely to see.[147] This marketing skews perceptions of what constitutes a nutritious diet, especially among children.

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[141] *See*, Monsivais, P., Aggarwal, A., & Drewnowski, A. (2014). Time spent on home food preparation and indicators of healthy eating. American journal of preventive medicine, 47(6), 796–802. https://doi.org/10.1016/j.amepre.2014.07.033 (https://pmc.ncbi.nlm.nih.gov/articles/PMC4254327/)
[142] *See*, Jabs, J., Devine, C. M., Bisogni, C. A., Farrell, T. J., Jastran, M., & Wethington, E. (2007). Trying to Find the Quickest Way: Employed Mothers' Constructions of Time for Food. Journal of Nutrition Education and Behavior, 39(1), 18–25. https://doi.org/10.1016/j.jneb.2006.08.011
[143] *See*, UConn Rudd Center for Food Policy and Health - Food Marketing (https://uconnruddcenter.org/research/food-marketing/#:~:text=Food%20Marketing.%20Food%2C%20beverage%20and%20restaurant%20companies,budget%20for%20all%20chronic%20disease%20prevention%20and)
[144] *See*, American Psychological Association - The impact of food advertising on childhood obesity (https://www.apa.org/topics/obesity/food-advertising-children)
[145] *See*, American Psychological Association - The impact of food advertising on childhood obesity (https://www.apa.org/topics/obesity/food-advertising-children)
[146] *See*, Coleman, P. C., Hanson, P., van Rens, T., & Oyebode, O. (2022). A rapid review of the evidence for children's TV and online advertisement restrictions to fight obesity. *Preventive Medicine Reports*, *26*, 101717. https://doi.org/10.1016/j.pmedr.2022.101717
[147] *See*, Pressure Cooker - The Wild Wild West of Food Marketing (Part 1) (https://www.pressurecooker.fm/episodes/7tv97ypdwhezyn7ujia4pgvmuf6ery)

Access and Affordability for Diet Specific and Culturally Connected Items

Finally, lack of access and affordability are particularly pronounced for food items that meet certain dietary requirements. For example, a study from Columbia University found that, while the situation had improved from 2006 to 2016, gluten free food options were still almost twice as expensive (183%) and available in fewer stores compared to alternatives with gluten.[148] This challenge applies to food allergies generally, which according to some estimates affect up to 10.6% of American adults and 7.6% of children.[149] A study on health disparities in pediatric food allergies notes that allergen-free food items are generally more expensive, costing between two and four times more than allergen-containing ones.[150]

Similarly, religiously and/or culturally connected food items can be particularly expensive and hard to find. For example, a Halal Food Accessibility Study in New York notes that halal meat is generally more expensive than non-halal, and that many food pantries struggle to find and/or afford it.[151] Kosher meat items are also often significantly more expensive and can be more difficult to find than non-Kosher items.[152] Furthermore, a study conducted in Chicago found that most food stores in predominantly Latino and African American neighborhoods did not offer culturally relevant fruits and vegetables.[153] An inability to find and afford these items could contribute to the demographic inequities in the prevalence of nutrition related diseases and non-nutritious diets.

The Impact of Nutrition Insecurity:

The most direct impact of nutrition insecurity is its link to negative healthcare outcomes. The American Heart Association's report predicts that by 2050, approximately 61% of American adults will have hypertension (up from 51% currently) and 15% will have

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[148] *See*, Lee, A., Wolf, R., Lebwohl, B., Ciaccio, E., & Green, P. (2019). Persistent Economic Burden of the Gluten Free Diet. *Nutrients*, *11*(2), 399. https://doi.org/10.3390/nu11020399

[149] *See*, Brown, Emily, et al. "Food Insecure and Allergic in a Pandemic: A Vulnerable Population." *The Journal of Allergy and Clinical Immunology: In Practice*, vol. 8, no. 7, July 2020, pp. 2149–2151, https://doi.org/10.1016/j.jaip.2020.04.038.

[150] *See*, Tepler, E., Wong, K. H., & Soffer, G. K. (2022). Health disparities in pediatric food allergy. Annals of allergy, asthma & immunology : official publication of the American College of Allergy, Asthma, & Immunology, 129(4), 417–423. https://doi.org/10.1016/j.anai.2022.04.022

[151] *See*, Arab-American Family Support Center - Accessibility of Halal Food Aid in NYC (https://aafscny.org/wp-content/uploads/2022/08/Halal-Food-Accessibility-Study-re-upload.pdf)

[152] *See*, Jewish Telegraphic Agency - The high price of kosher food takes a bite out of these NYC teens' budgets (https://www.jta.org/2023/04/24/food/the-high-price-of-kosher-food-takes-a-bite-out-of-these-nyc-teens-budgets)

[153] *See*, Grigsby-Toussaint, D. S., Zenk, S. N., Odoms-Young, A., Ruggiero, L., & Moise, I. (2010). Availability of commonly consumed and culturally specific fruits and vegetables in African-american and Latino neighborhoods. Journal of the American Dietetic Association, 110(5), 746–752. https://doi.org/10.1016/j.jada.2010.02.008

severe cardiovascular diseases such as stroke and coronary heart disease (up from about 11% currently).[154] When examining the “health behaviors” that are causing these diseases, poor diet was the most common, affecting a majority of US adults now and in 2050.[155] Similarly, the Institute for Health Metrics and Evaluation found that in 2021, 30% of all cardiovascular disease deaths were directly attributed to a poor diet.[156] Given that the CDC lists heart diseases as the leading cause of death in the US, causing over 700,000 in 2022, this makes nutrition insecurity a significant risk factor.[157]

Furthermore, food insecurity (and by extension the most severe forms of nutrition insecurity) is also associated with increased risks of other health issues such as diabetes, obesity, and mental health disorders, each of which comes with its own significant risks and harms.[158] One study published in 2024 suggests that food insecurity and marginal food security are both associated with a higher risk of premature mortality and a shorter life expectancy.[159] Overall, the health challenges caused by food and nutrition insecurity can substantially reduce individuals' quality of life and even possibly place lives at risk.

In addition to the health impacts themselves, the healthcare costs associated with treating diseases related to nutrition insecurity can be a significant financial burden on households. In an interview, food journalist and author Mark Bittman stated that “my back of the envelope calculus is that for every $1 you spend on good food, you save $3

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[154] *See*, Joynt, K. E., Elkind, M. S. V., Aparicio, H. J., Commodore-Mensah, Y., de Ferranti, S. D., Dowd, W. N., Hernandez, A. F., Khavjou, O., Michos, E. D., Palaniappan, L., Penko, J., Poudel, R., Roger, V. L., & Kazi, D. S. (2024). Forecasting the Burden of Cardiovascular Disease and Stroke in the United States Through 2050—Prevalence of Risk Factors and Disease: A Presidential Advisory From the American Heart Association. *Circulation*, *150*(4). https://doi.org/10.1161/cir.0000000000001256

[155] *See*, Joynt, K. E., Elkind, M. S. V., Aparicio, H. J., Commodore-Mensah, Y., de Ferranti, S. D., Dowd, W. N., Hernandez, A. F., Khavjou, O., Michos, E. D., Palaniappan, L., Penko, J., Poudel, R., Roger, V. L., & Kazi, D. S. (2024). Forecasting the Burden of Cardiovascular Disease and Stroke in the United States Through 2050—Prevalence of Risk Factors and Disease: A Presidential Advisory From the American Heart Association. *Circulation*, *150*(4). https://doi.org/10.1161/cir.0000000000001256

[156] *See*, Institute for Health Metrics and Evaluation - Diet (https://www.healthdata.org/research-analysis/health-risks-issues/diet#:~:text=Photo%20by%20Filip%20Milovac.,and%20low%20whole%20grain%20intake.)

[157] *See*, CDC National Center for Health Statistics - Leading Causes of Death (https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm)

[158] *See,* National Institute of Health - Food Accessibility, Insecurity and Health Outcomes (https://www.nimhd.nih.gov/resources/understanding-health-disparities/food-accessibility-insecurity-and-health-outcomes.html)

[159] *See*, Ma, H., Wang, X., Li, X., Heianza, Y., Katzmarzyk, P. T., Franco, O. H., & Qi, L. (2024). Food Insecurity and Premature Mortality and Life Expectancy in the US. JAMA Internal Medicine. https://doi.org/10.1001/jamainternmed.2023.7968

on healthcare.[160]" The reverse of that, however, is households that are not able to afford or access "good food" then incur those significant healthcare costs.

A nationwide study from 2011 to 2013 found that food insecurity was associated with an average of slightly over $1,800 per person per year in additional healthcare costs.[161] Another study found that in 2016-17 food insecure households had significantly higher average annual healthcare expenditures than food secure ones regardless of whether the household had insurance that was private (an average of $2,017 more per year), public (an average of $1,855 more per year), or mixed (an average of $3,531 more per year).[162] These costs can further limit a household's ability to make ends meet, potentially making existing food or nutrition insecurity even more severe.

[160] *See*, Apple Podcasts - How America's food is making us sick (https://podcasts.apple.com/de/podcast/how-americas-food-is-making-us-sick/id1577591053?i=1000664065542)
[161] *See*, Berkowitz, S. A., Basu, S., Meigs, J. B., & Seligman, H. K. (2018). Food Insecurity and Health Care Expenditures in the United States, 2011-2013. Health services research, 53(3), 1600–1620. https://doi.org/10.1111/1475-6773.12730
[162] *See*, Palakshappa, D., Garg, A., Peltz, A., Wong, C. A., Cholera, R., & Berkowitz, S. A. (2023). Food Insecurity Was Associated With Greater Family Health Care Expenditures In The US, 2016-17. Health affairs (Project Hope), 42(1), 44–52. https://doi.org/10.1377/hlthaff.2022.00414

Section 3: Local Food Economies

When discussing food access, the term “food desert” has traditionally been commonly used. However, in recent years it has fallen into disuse due to criticisms of inaccuracy. Deserts are naturally occurring phenomena, where there are few resources and little opportunity for things to grow. By contrast, neighborhoods without equitable access to food are not naturally inhospitable and certainly not devoid of people who want access to food or individuals with the talent and desire to provide that food. Instead, the barriers that prevent the development of stores, farms, and other businesses that provide food access are primarily economic, and can be overcome.[163]

This dichotomy not only explains why the term Low-Income Low-Access (LILA) area is being used instead of “food desert” in this report but also illustrates the importance of economic factors in ensuring food security. Poverty and food insecurity are directly linked, with inability to afford food and afford transportation to and from stores or food pantries being some of the primary causes of food insecurity.[164] While the food system can often be examined from a deficit perspective, especially when discussing low income areas, a strong food economy also has the potential to not only provide physical access to food, but also to help combat poverty and reduce the number of people facing food insecurity in the first place. This section will examine the current state of the food economy in Connecticut, the barriers facing food businesses, especially in LILA areas, and examine the impacts of the food economy on food security.

State of the Food Economy in Connecticut:

When examining the state of the food economy, the first datapoint to consider is the size of that economy and its share of the total GDP in Connecticut. Nationally, the USDA states that agriculture, food, and related industries accounted for $1.53 trillion in output in 2023, approximately 5.6% of the US GDP.[165] A very small amount of this is categorized as textile, apparel, and leather manufacturing and shouldn’t be counted in the food economy. The vast majority of food and agriculture GDP falls into five sectors: farms, forestry/fishing, food/beverage/tobacco manufacturing, food and beverage

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[163] *See*, University of Michigan - ‘Food desert’ vs. ‘food apartheid’: Which term best describes disparities in food access? (https://seas.umich.edu/news/food-desert-vs-food-apartheid-which-term-best-describes-disparities-food-access#:~:text=While%20the%20term%20food%20desert,ditch%20the%20term%20food%20desert.)

[164] *See*, Feeding America - Hunger and Poverty in America (https://www.feedingamerica.org/hunger-in-america/poverty)

[165] *See*, USDA ERS - Ag and Food Sectors and the Economy (https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/)

stores, and food services.[166] While the USDA does not appear to have output numbers by sector for individual states, they do track statewide food expenditure amounts. In 2023, they estimated that food sales in Connecticut totaled approximately $22.8 billion, split between $10.5 billion on Food at Home (FAH) such as groceries and $12.3 billion on food away from home (FAFH) such as restaurants.[167] From 1997 to present, the total food sales amount has increased every year except 2008 to 2009 and 2019 to 2020, with those decreases likely attributable to the 2008 Financial Crisis and COVID-19 respectively.

The Federal Reserve estimated the total GDP of Connecticut to be $345.9 billion in 2023, meaning that food expenditures would have accounted for an estimated 6.6% of the state's total economy.[168] New England Feeding New England estimates a higher total food spending amount for Connecticut in their report on the local food system due to accounting for alcohol and food that is furnished or donated. These estimations increase the numbers to $26.3 billion total (7.6% of the state GDP) split between $12.08 billion on FAH and $14.25 billion on FAFH.[169] Furthermore, a previous report on Connecticut estimated that in 2017, the food system generated 211,600 jobs statewide, the majority of which were in food services such as restaurants.[170] The report also projects the growth of the food economy to continue, as it estimates the per person annual expenditure on food in Connecticut will grow from $5,702 in 2020 to $6,363 by 2030.[171]

Within that larger number, there are a few different sectors that contribute to the food economy, working with food from its production to processing to distribution and consumption. The first of these sectors are the ones representing food production: agriculture and manufacturing. The USDA's 2022 Agriculture Census states that there are 5,058 farms and 372,014 acres of farmland in Connecticut, a decline of 8% and 2% from 2017, respectively.[172] These trends are roughly in line with the national averages of

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[166] *See*, USDA ERS - Ag and Food Sectors and the Economy (https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/)
[167] *See*, USDA ERS - State food sales, without taxes and tips, for all purchasers (https://www.ers.usda.gov/data-products/food-expenditure-series/)
[168] *See*, Federal Reserve Bank of St. Louis - Gross Domestic Product: All Industry Total in Connecticut (https://fred.stlouisfed.org/series/CTNGSP)
[169] *See*, New England Feeding New England - Connecticut Local Food Count 2022 (https://nefoodsystemplanners.org/wp-content/uploads/Connecticut-Local-Food-Count_2022.pdf)
[170] *See*, New England Feeding New England - Connecticut State Brief 2023 (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE-CONNECTICUT-State-Brief.pdf)
[171] *See*, New England Feeding New England - Connecticut State Brief 2023 (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE-CONNECTICUT-State-Brief.pdf)
[172] *See*, USDA NASS - 2022 Census of Agriculture, Connecticut (https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Connecticut/cp99009.pdf)

7% and 2.2% decreases, respectively.[173] These Connecticut farms had an average size of 74 acres and together sold just over $704 million in products.[174] It is also worth noting that these products are not the only way that agriculture contributes to the economy. A UConn report from 2015 states that the "total economic impact of Connecticut's Agriculture Industry" was between $3.3 and $4 billion annually and generated between 20,007 and 21,696 jobs.[175] These amounts include activities from farms, forestry/fishing, and food and beverage manufacturing.

Looking at manufacturing and processing specifically, a New England Feeding New England report estimated that these sectors created 7,731 jobs and generated $3.3 billion in sales in 2017.[176] These estimates would have the sector representing 3.7% of jobs and 6.7% of total sales in the food system. The same report identifies bakeries and tortilla manufacturing as the largest employer within the sector in Connecticut, accounting for 42% of all food manufacturing jobs.[177] After that, "other food products" (22% of food manufacturing jobs) and dairy products (11%) are the next largest employers.

Overall, the data suggests that a significant majority of food sold in Connecticut is not produced here. A 2022 New England Feeding New England report focused on food spending specifically estimated that just 2.7% of Connecticut's spending is on local food.[178] As such, a substantial portion of the money spent on food is ultimately going to out of state producers and leaving the Connecticut economy.

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[173] *See*, USDA NASS - 2022 Census of Agriculture, United States, p. 13 (https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf)
[174] *See*, USDA NASS - 2022 Census of Agriculture, Connecticut (https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Connecticut/cp99009.pdf)
[175] *See*, UConn College of Agriculture, Health, and Natural Resources - Economic Impacts of Connecticut's Agricultural Industry (https://portal.ct.gov/-/media/deep/forestry/economicimpactspdf.pdf)
[176] *See*, New England Feeding New England - Economic Impact of New England's Food System (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE_Volume-3_Economic-Impact-of-Regional-and-State-Production.pdf)
[177] *See*, New England Feeding New England - Economic Impact of New England's Food System (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE_Volume-3_Economic-Impact-of-Regional-and-State-Production.pdf)
[178] See, New England Feeding New England - Connecticut Local Food Count 2022 (https://nefoodsystemplanners.org/wp-content/uploads/Connecticut-Local-Food-Count_2022.pdf)

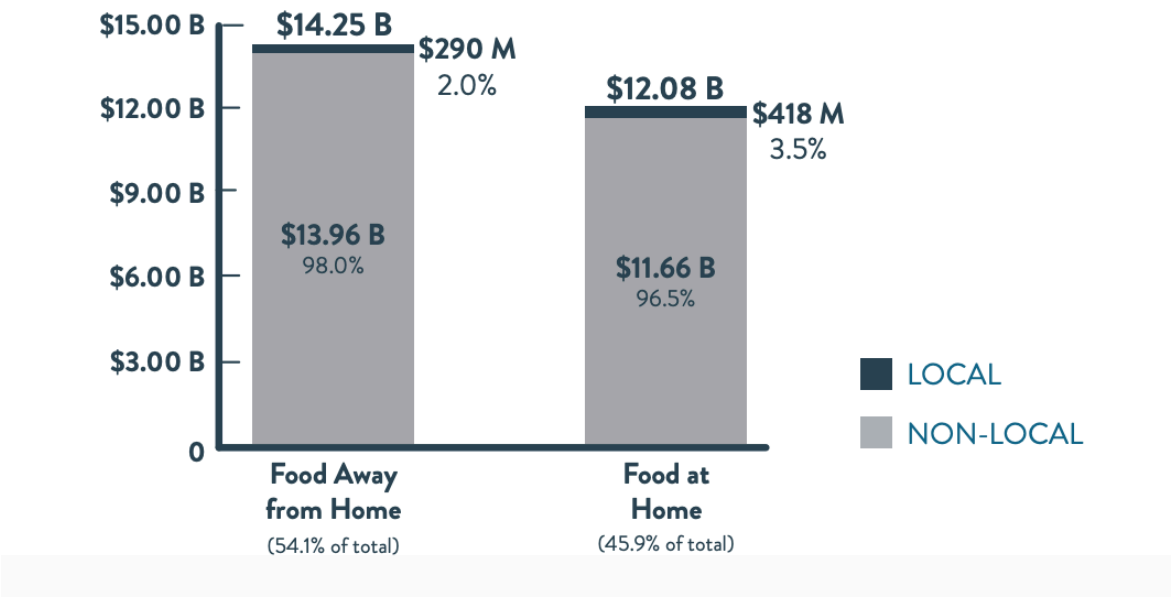

Figure 12: Share of CT Food Spending that is on Local Products
Source: New England Feeding New England Connecticut Local Food Count 2022

After agriculture and manufacturing, distribution and sales are the other major sectors of the food economy. The first component of this is wholesale distributors, who buy food in bulk and sell it to direct sale businesses such as retail outlets and restaurants. A report from the International Foodservice Distributors Association asserts that in 2022, wholesale distributors serving food service businesses such as restaurants alone created 13,000 jobs in Connecticut and in 2022 generated $5.5 billion in sales and contributed $1.3 billion to the state's GDP.[179] According to a New England Feeding New England report, retail sellers represent an even bigger sector, accounting for $9.2 billion in total sales in 2017, 48.4% of all food sales that year.[180] Furthermore, the same report states that food stores generated 44,728 jobs in 2017, accounting for 21.1% of the food system jobs in Connecticut at the time.[181]

This economic impact was spread across a total of 764 stores, of which 50.9% are part of national chains, 14.3% are part of Northeast regional chains, and 34.8% are either

[179] *See*, International Foodservice Distributors Association - The Economic Impact of the U.S. Foodservice Distribution Industry (https://ifdaonline.org/wp-content/uploads/2024/02/2023-IFDA-Foodservice-Distribution-Industry-Economic-Impact-Study-web.pdf)
[180] *See*, New England Feeding New England - Connecticut State Brief 2023 (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE-CONNECTICUT-State-Brief.pdf)
[181] *See*, New England Feeding New England - Connecticut State Brief 2023 (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE-CONNECTICUT-State-Brief.pdf)

independent stores or part of local chains.[182] Breaking these numbers down further, 32.7% of food stores in the state are independent, local stores, while the largest single chain is Dollar Tree/Family Dollar at 15.8%, Stop and Shop at 11.5%, and Dollar General at 9.9%, while no other chain had more than 5% of total food stores.[183] As for food services, the Federal Reserve states that the Real GDP of Food Services and Drinking Places in Connecticut was $5.2 billion in 2022, and had increased every year since 2014 aside from a massive COVID-19 induced decline from 2019 to 2020.[184] This sector is responsible for the largest number of jobs, with New England Feeding New England estimating that 122,550 jobs existed statewide in this sector in 2017, representing 58% of the food system jobs in Connecticut.[185]

One final part of the food system that is not necessarily recognized as part of the food economy, but does have an impact, is food waste. The Environmental Protection Agency (EPA) estimates that food waste represents 21% of all solid waste in the US and the National Resources Defense Council reported that up to 40% of all food in the US ends up being wasted.[186] Within Connecticut, a 2015 report from the Department of Energy and Environmental Protection (DEEP) found that food waste accounted for 22.3% of all municipal solid waste in the state, up from 13.5% in 2010, and representing a larger share than any other category except paper.[187] Much of this food waste will not be eaten, despite the fact that the EPA estimates that 70% of it was edible when it was thrown out.[188] Less than 3% of Connecticut's edible surplus food in 2023 is estimated to have been donated to food banks and food recovery organizations, with the rest becoming food waste.[189] Food waste in Connecticut, including food scraps that were never edible, is diverted through commercial composting or anaerobic digestion

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[182] *See*, New England Food System Planners Partnership - Food Stores (https://nefoodsystemplanners.org/dashboard_posts/food-stores-2/)
[183] *See*, New England Food System Planners Partnership - Food Stores (https://nefoodsystemplanners.org/dashboard_posts/food-stores-2/)
[184] *See*, Federal Reserve Bank of St. Louis - Real Gross Domestic Product: Food Services and Drinking Places (722) in Connecticut (https://fred.stlouisfed.org/series/CTFOODDPRGSP)
[185] *See*, New England Feeding New England - Connecticut State Brief 2023 (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE-CONNECTICUT-State-Brief.pdf)
[186] *See*, CT Department of Energy and Environmental Protection - Food Waste Reduction and Recovery (https://portal.ct.gov/deep/reduce-reuse-recycle/waste-reduction/food-waste---reduction-and-recovery)
[187] *See*, CT Department of Energy and Environmental Protection - 2015 Statewide Waste Characterization Study (https://portal.ct.gov/-/media/deep/waste_management_and_disposal/solid_waste_management_plan/cmmsfinal2015mswcharacterizationstudypdf.pdf)
[188] *See*, CT Department of Energy and Environmental Protection - Food Waste Prevention & Food Recovery Roadmap
[189] *See*, ReFED - Food Waste Monitor (https://insights-engine.refed.org/food-waste-monitor?break_by=destination&indicator=tons-surplus&state=CT&view=detail&year=2023)

facilities, if not disposed of at waste to energy facilities or landfilled out of state.[190] It is worth noting that under Connecticut's Commercial Organics Recycling Law will require businesses and institutions affected by the law to begin reporting the amount of edible food donated and non-edible food scraps recycled to DEEP starting March 1st, 2025, which may lead to these estimates being adjusted.[191]

Not only does food waste greatly reduce the amount of food accessible to individuals and communities, but it represents substantial economic loss and environmental damage. Food waste in landfills generates methane emissions as it rots and incinerators release other greenhouse gases into the atmosphere.[192] ReFed states that uneaten food nationwide accounts for 6.1% of all greenhouse gas emissions, 22% of all freshwater use, 24% of landfill contents, and has a value equivalent to 1.8% of the entire US GDP.[193] According to the National Resources Defense Council (NRDC), between 40 and 50% of food waste comes from homes, with the rest coming from businesses throughout the food system.[194] At the state level, the 2015 DEEP report states that 20% of residential waste is food waste, compared to 25% of commercial waste.[195] For food businesses, this food waste represents an unnecessary cost to purchase then dispose of unused food, a missed opportunity for additional revenue, or both.

As with the last two chapters, the food economy exists in every community in the state but is not distributed evenly. In the farm sector, a large majority of income is limited to a small handful of farmers. According to the New England Food System Planners Partnership, 3.6% of Connecticut's farms have more than $500,000 in annual sales and collectively account for 82.5% of all sales statewide, while 76.9% of farms have less

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[190] *See*, ReFED - Food Waste Monitor (https://insights-engine.refed.org/food-waste-monitor?break_by=destination&indicator=tons-waste&state=CT&view=detail&year=2023)
[191] *See*, CT Department of Energy and Environmental Protection - Food Waste Prevention & Food Recovery Roadmap ()
[192] *See*, USDA - Food Waste and its Links to Greenhouse Gases and Climate Change (https://www.usda.gov/media/blog/2022/01/24/food-waste-and-its-links-greenhouse-gases-and-climate-change#:~:text=Food%20loss%20and%20waste%20also,even%20more%20potent%20greenhouse%20gas.)
[193] *See*, ReFed - In the U.S., 38% of all food goes unsold or uneaten – and most of that goes to waste. (https://refed.org/food-waste/the-problem?gad_source=1&gclid=Cj0KCQjwv7O0BhDwARIsAC0sjWOWouqzz1q6IdI7D3HKWMlXPTafb3ZhiJ35K7EYK4yMvH5DRhP3uLoaAsbpEALw_wcB)
[194] *See*, NRDC - Additional Research on Household Food Waste (https://www.nrdc.org/bio/andrea-collins/additional-research-household-food-waste#:~:text=A%20family%20eating%20lunch%20in%20their%20kitchen.&text=Household%20food%20waste%20accounts%20for,of%20food%20waste%20every%20year.)
[195] *See*, CT Department of Energy and Environmental Protection - 2015 Statewide Waste Characterization Study (https://portal.ct.gov/-/media/deep/waste_management_and_disposal/solid_waste_management_plan/cmsfinal2015mswcharacterizationstudypdf.pdf)

than $25,000 in sales and collectively account for just 2.53% of sales.[196] Furthermore, at least 96.7% of farm producers counted in the USDA's Census of Agriculture in Connecticut identified as non-Hispanic white.[197]

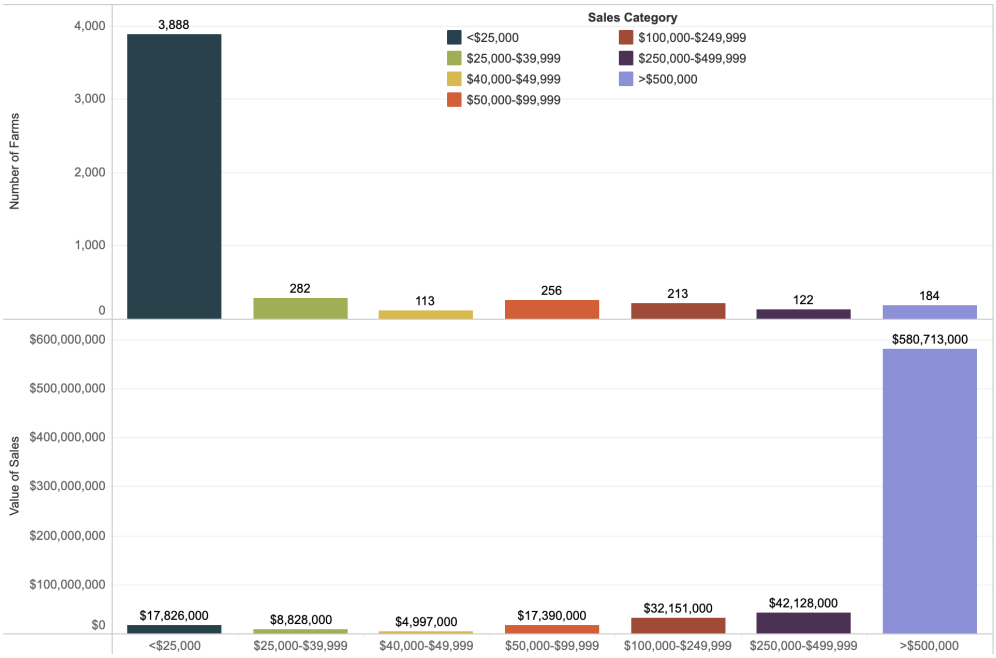

Figure 13: Number of Farms in Connecticut Sorted by Value of Annual Sales
Source: New England Food System Planners Partnership Data Dashboard

In the grocery and retail section of the food economy, there are significant geographic disparities. As mentioned in a previous section, there are 207 census tracts across the state where residents must travel on average at least half a mile to reach a supermarket and 65 census tracts where residents must travel at least a mile.[198] These LILA areas tend to cluster around major cities and towns, with a smaller group being present in the most rural areas of the state.[199] They are also not evenly spread across the state. While most counties' share of the LILA tracts in the state is either slightly larger or slightly smaller than their share of the state population, it is worth noting that New Haven County stands out with a disproportionately high number of LILA tracts (34.8% of LILA tracts compared to 24% of the state population).[200] At the municipal level, there are 45

[196] *See*, New England Food System Planners Partnership - Farm Viability, Connecticut (https://nefoodsystemplanners.org/dashboard_posts/viability/)
[197] *See*, USDA NASS - 2022 Census of Agriculture, Connecticut (https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Connecticut/cp99009.pdf)
[198] *See*, USDA ERS - Food Access Research Atlas (https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/)
[199] *See*, Appendix D
[200] *See*, Appendix I

towns in Connecticut that have at least one LILA tract, with Waterbury having the most at 24.[201]

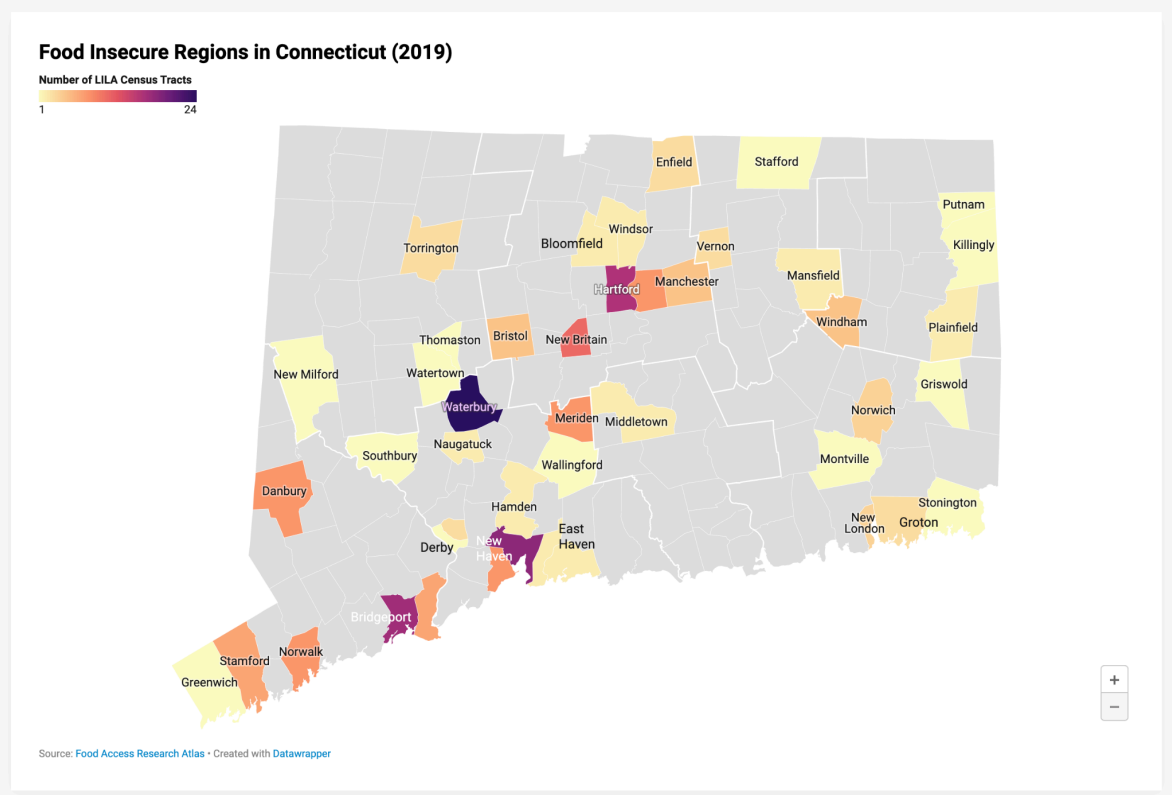

Figure 14: Towns in Connecticut that have at least one LILA area as of 2019
Source: CT Department of Economic and Community Development via Datawrapper

In these areas there are few if any grocery stores, and roughly 60% of LILA tract residents identify as persons of color, a group that represents at most 3.3% of farm producers in the state.[202]

Underlying Challenges

Income Levels and Profit Margins

A key challenge to growing the Connecticut food economy is the relatively low incomes of those already working in it. When looking at Connecticut farms, net cash farm income was $143 million in 2022, representing a 74% increase in total net income from 2017

[201] *See*, CT Department of Economic and Community Development (via Datawrapper) - Food Insecure Regions in Connecticut (2019) (https://www.datawrapper.de/_/EI3cy/)
[202] *See*, New England Feeding New England - Connecticut State Brief 2023 (https://nefoodsystemplanners.org/wp-content/uploads/NEFNE-CONNECTICUT-State-Brief.pdf)

and the per-farm average net income of $28,428 was an even larger 90% increase.[203] While this growth is encouraging, there are two caveats that are important to note. The first is that many farms are on the lower end of this average, as in 2022 65% of farms had less than $10,000 in sales.[204] The other caveat is that even the average net income of $28,428 is well below the state's median household income of $88,429 and is below the federal poverty level for any household of four or more people.[205] [206]

Looking at grocery stores, limited profit margins can make income a challenge. Data maintained by the NYU Stern School of Business states that the grocery and food retail sector has a net profit margin of 1.18%, less than half of the general retail margin of 3.09% and far below the all industry average of 8.54%.[207] Within the food system, farming/agriculture (7.12%), food processing (6%), and food wholesaling (1.21%) all have net profit margins below the all industry average, while alcoholic beverages (8.59%), restaurants/dining (10.66%), and soft beverages (13.73%) have margins above it.[208]

Startup and Operating Costs

These relatively low incomes are a particularly severe problem when combined with large startup and ongoing costs that can prove prohibitive for new food businesses entering the market. Of these costs, land is arguably the most significant. For farmers, the price of farmland in Connecticut is $14,300 per acre, which is tied with Massachusetts for the 3rd highest price in the country and more than triple the national average of $4,170.[209] There are also recurring costs such as seeds, fertilizer, staffing, maintenance, and equipment among others. Statewide, production expenses add up to a total of $648 million, meaning that these expenses alone offset 92% of the market

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[203] *See*, USDA NASS - 2022 Census of Agriculture, Connecticut (https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Connecticut/cp99009.pdf)
[204] *See*, USDA NASS - 2022 Census of Agriculture, Connecticut (https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Connecticut/cp99009.pdf)
[205] *See*, US Census Bureau - Connecticut State Profile (https://data.census.gov/profile/Connecticut?g=040XX00US09)
[206] *See*, US Department of Health and Human Services - HHS Poverty Guidelines for 2024 (https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines)
[207] *See*, NYU Stern School of Business - Margins by Sector (US) (https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/margin.html?nofollow=true)
[208] *See*, NYU Stern School of Business - Margins by Sector (US) (https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/margin.html?nofollow=true)
[209] *See*, USDA NASS - 2024 Farm Real Estate Value by State (https://www.nass.usda.gov/Charts_and_Maps/graphics/farm_value_map.pdf)

value of all products sold.[210] These significant costs can also reduce the number of jobs created, as one farm in the Litchfield area notes “we need more help to farm our land, but we can't afford to hire people, [it is] very difficult for us to do all the work.”

These significant costs are also true for grocers and other food stores. When the Federal Reserve looked into the causes of the 25% increase of grocery prices from 2019-2023, they found that much of it was driven by rising costs rather than rising profits. The average profit margin of grocery stores did increase from 2.9% in 2019 to 4.4% in 2023, but the report attributes the bulk of the cost increase to large spikes in commodity prices and increases in staffing costs that were steeper than in other industries.[211] It is worth noting that is still a 51.7% increase in profit margins, which contributes to an even larger 79% increase in profit in dollar terms during the timeframe ($25 up from $14 billion), but even that is relatively small in comparison to the $100 billion increase in revenue during that time.[212]

Overall, these costs can pose an especially significant challenge for local, small food businesses across the food system, as common necessities such as land, storage space, refrigeration, equipment to produce value added goods, staffing, and refrigerated trucks or other means of transportation can cost significant sums of money. Without access to significant capital, startup costs can make starting a food business difficult, while ongoing costs can make it challenging for existing food businesses to remain open.

Food Worker Wages

Despite being a major cost for businesses, a relative increase in staff costs does not mean that food system jobs like ones in the industries listed above are exceptionally well paying. On the contrary, the Bureau of Labor Statistics states that as of May 2023, the median hourly income for “food preparation and serving related occupations” in Connecticut was $16.71, slightly above minimum wage and lower than any other “major occupational group” listed in the data set.[213] “Farming, Fishing, and Forestry Occupations” are only slightly ahead at $17.00 per hour.[214] It is worth noting that this

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[210] *See*, USDA NASS - 2022 Census of Agriculture, Connecticut (https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Connecticut/cp99009.pdf)
[211] *See*, Federal Reserve Bank of New York Liberty Street Economics - What Was Up with Grocery Prices? (https://libertystreeteconomics.newyorkfed.org/2024/07/what-was-up-with-grocery-prices/)
[212] *See*, Federal Reserve Bank of New York Liberty Street Economics - What Was Up with Grocery Prices? (https://libertystreeteconomics.newyorkfed.org/2024/07/what-was-up-with-grocery-prices/)
[213] *See*, Bureau of Labor Statistics - Occupational Employment and Wage Statistics (Connecticut) (https://www.bls.gov/oes/2023/may/oes_ct.htm#35-0000)
[214] *See*, Bureau of Labor Statistics - Occupational Employment and Wage Statistics (Connecticut) (https://www.bls.gov/oes/2023/may/oes_ct.htm#35-0000)

number is close to the $16.95 per hour Adverse Effect Wage Rate (AEWR) required to be paid to “temporary nonimmigrant” farmworkers in Connecticut on H-2A visas at that same time.[215] However, as of December 2024, the AEWR required wage in Connecticut has increased to $18.83 per hour, and it is unclear if the wage for farmworkers not on H-2A visas has seen a corresponding increase.[216]

Not every job in the food system pays such low wages, as some individual jobs will pay well above the occupation median, and some individual occupations within these categories pay much better. For example, jobs such as chefs and head cooks ($29.12), food service managers ($37.17), and food scientists ($39.96) pay more than the median hourly wage for all jobs in Connecticut ($26.98).[217] However, these three occupations combined account for fewer than 5,000 jobs statewide, while other occupations such as cashiers, fast food workers, farmworkers and laborers, and food preparation workers all have median incomes even lower than $16.71 an hour (or $34,750 per year).[218] Given that the estimated ALICE Household Survival Budget for a household of one in 2023 requires a salary of $39,141, it seems likely that many employees that keep the food system operating are themselves at risk for food insecurity due to their limited income.[219]

Natural Disasters

The combination of high costs and low incomes would be an issue in any sector, but the food system is particularly susceptible to natural disasters that can greatly exacerbate this dynamic. The National Oceanic and Atmospheric Association’s (NOAA) National Centers for Environmental Information state that there were 28 “weather and climate disasters” across the United States in 2023, which is the highest number ever recorded and caused a minimum of $92.9 billion in damages.[220] Given that farming often occurs outdoors, it is particularly vulnerable to natural disasters and crops can be damaged or destroyed in a number of ways ranging from sudden freezes to flooding. The American Farm Bureau Federation (AFBF) estimates that 23.6% of all losses from those 2023

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[215] *See*, US Department of Labor - AEWR Table Effective March 30 to June 30, 2023 (https://flag.dol.gov/sites/default/files/2023-12/Historical%20AEWR%20Effective%20March%2030%20to%20June%2030%202023.pdf)
[216] *See*, US Department of Labor - H-2A Adverse Effect Wage Rates (https://flag.dol.gov/wage-data/adverse-effect-wage-rates)
[217] *See*, Appendix H
[218] *See*, Appendix H
[219] *See*, United Way of Connecticut - ALICE in Connecticut 2023 (https://alice.ctunitedway.org/wp-content/uploads/2023/09/23UFA_Report_Connecticut_With-Preamble.pdf)
[220] *See*, Climate.gov - 2023: A historic year of U.S. billion-dollar weather and climate disasters (https://www.climate.gov/news-features/blogs/beyond-data/2023-historic-year-us-billion-dollar-weather-and-climate-disasters#:~:text=NOAA%20map%20by%20NCEI.,376%20events%20exceeds%20$2.660%20trillion.)

weather and climate disasters were lost crops and rangeland, totaling $21.94 billion in damages.[221] Flooding brought on by one of those disasters in July of 2023 destroyed more than $20 million in crops in Connecticut alone.[222] As of February, 2024, the American Farm Bureau Federation estimates that approximately $12 billion of the nationwide crop losses had been covered by existing programs from the USDA's Risk Management Agency (RMA), meaning that nearly $10 billion is either not covered under these programs or is experiencing a delay of several months.[223] One of the main programs administered by the RMA is the Federal Crop Insurance Corporation (FCIC), which develops, approves, and sometimes subsidizes crop insurance policies.[224] However, the AFBF estimates that in 2023, just 42% of major losses in Connecticut were protected by crop insurance, below the national average of 55%.[225]

It is worth noting that the RMA is not the only USDA agency that provides disaster relief to farmers, with the Federal Emergency Management Agency (FEMA) noting that USDA's Farm Services Agency (FSA) and Natural Resources Conservation Services (NRCS) also have relevant programs.[226] The USDA itself notes that between these three agencies there are 13 different programs that provide disaster assistance.[227] However, the same resources that each of those programs has different eligibility rules for which agricultural products (ex. Livestock, trees, dairy, etc.) and types of disasters

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[221] *See*, American Farm Bureau Federation - Major Disasters and Severe Weather Caused Over $21 Billion in Crop Losses in 2023 (https://www.fb.org/market-intel/major-disasters-and-severe-weather-caused-over-21-billion-in-crop-losses-in-2023#:~:text=The%20assessment%20puts%20total%20crop,programs%20as%20of%20February%202024.)

[222] *See*, CT Public - Damages to CT farms from freak July flood exceed $20 million in lost sales, a figure that will rise (https://www.ctpublic.org/news/2023-07-21/damages-to-ct-farms-from-freak-july-flood-exceed-20-million-in-lost-sales-a-figure-that-will-rise)

[223] *See*, American Farm Bureau Federation - Major Disasters and Severe Weather Caused Over $21 Billion in Crop Losses in 2023 (https://www.fb.org/market-intel/major-disasters-and-severe-weather-caused-over-21-billion-in-crop-losses-in-2023#:~:text=The%20assessment%20puts%20total%20crop,programs%20as%20of%20February%202024.)

[224] *See*, USDA RMA - History of the Crop Insurance Program (https://legacy.rma.usda.gov/aboutrma/what/history.html)

[225] *See*, American Farm Bureau Federation - Major Disasters and Severe Weather Caused Over $21 Billion in Crop Losses in 2023 (https://www.fb.org/market-intel/major-disasters-and-severe-weather-caused-over-21-billion-in-crop-losses-in-2023#:~:text=The%20assessment%20puts%20total%20crop,programs%20as%20of%20February%202024.)

[226] *See*, FEMA - USDA Disaster Assistance Programs (https://www.fema.gov/emergency-managers/practitioners/recovery-resilience-resource-library/usda-disaster-assistance#:~:text=USDA%20Disaster%20Assistance%20includes%20programs,Risk%20Management%20Agency%20(RMA).)

[227] *See*, USDA - USDA Disaster Assistance Programs At a Glance (https://www.farmers.gov/sites/default/files/2022-07/farmersgov-disaster-assistance-brochure-07-21-2022.pdf)

(ex. Fire, flooding, etc.) are covered.[228] Furthermore, some additional federal disaster support may be approved by Congress in response to specific disasters.[229] As such, it is difficult to say with certainty what share of damages are covered by all of these programs combined, and the exact number would likely vary based on individual circumstances. However, navigating the requirements of different programs could pose a challenge for farmers, and any gaps in crop insurance or other disaster programs could place them at significant financial risk.

Federal Funding

Another factor that exacerbates the challenge of limited income, particularly for farmers, is the risk of reduction in federal spending. In December of 2021, the USDA announced the creation of the Local Food Purchase Assistance Cooperative Agreement Program (LFPA), which would use funding from the American Rescue Plan Act (ARPA) to provide grants to purchase locally grown food.[230] Connecticut was the second state in the country to sign an LFPA agreement with the USDA in April of 2022, enabling the state's Department of Agriculture to provide $4 million to tribal governments, food banks and pantries, food hubs, community health centers, and other organizations to purchase local food and provide it to members of the community.[231] One report has claimed that between December 2021 and June 2023 the LFPA program provided $691 million to local farmers and ranchers nationwide, contributing an estimated total of $1.53 billion to local economies.[232] This program has had a significant positive impact on local producers, with a farmer in Middletown summing up its importance by stating "that program [of funding food banks to buy local food] keeps our farm financially afloat" and expressing concern that it "runs out this year" with the end of "excess COVID money."

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[228] *See*, USDA - USDA Disaster Assistance Programs At a Glance (https://www.farmers.gov/sites/default/files/2022-07/farmersgov-disaster-assistance-brochure-07-21-2022.pdf)

[229] *See*, American Farm Bureau Federation - Major Disasters and Severe Weather Caused Over $21 Billion in Crop Losses in 2023 (https://www.fb.org/market-intel/major-disasters-and-severe-weather-caused-over-21-billion-in-crop-losses-in-2023#:~:text=The%20assessment%20puts%20total%20crop,programs%20as%20of%20February%202024.)

[230] *See*, USDA - USDA Establishes Food Purchase Program to Transform the Food System, Build Back Better via Local Food Purchase (https://www.usda.gov/media/press-releases/2021/12/06/usda-establishes-food-purchase-program-transform-food-system-build)

[231] *See*, CT Department of Agriculture - Connecticut Department of Agriculture Hosts USDA Under Secretary Jenny Lester Moffitt, Signs Local Food Purchase Assistance Cooperative Agreement (https://portal.ct.gov/doag/press-room/press-releases/2022/connecticut-department-of-agriculture-hosts-usda-under-secretary-jenny-lester-moffitt)

[232] *See*, Wallace Center at Winrock International - USDA Local Food Purchase Assistance Program: Initial Impacts, Opportunities, and Recommendations (https://wallacecenter.org/wp-content/uploads/2023/06/Local-Food-Purchase-Assistance-Program-Initial-Impact-Report_Wallace-Center_-Executive-Summary.pdf)

Another farmer in Northwestern Connecticut expressed a similar sentiment, noting that the LFPA program allowed them to expand their operations, hire three new employees, and connect with a local food bank to which they donate surplus produce.

Concern that the program will stop stems from the fact that the funding sources are one-time allocations from ARPA and the Commodity Credit Corporation (CCC), meaning that long-term funding is not guaranteed.[233] Reliance on ARPA funding is of particular concern because it was funding provided specifically to address the impact of the COVID-19 pandemic, and as such is unlikely to be renewed.[234] Furthermore, all current ARPA funds are required to be obligated by December 31, 2024, and spent by December 31, 2026.[235] As such, absent any new allocation of federal funds, support for the LFPAs could run out in the near future, depriving local food producers of a key source of income and reducing local communities' access to the food they produce. It is, however, worth noting that the USDA has announced another round of LFPA awards for 2025 with funds from the CCC.[236]

The Impact of the Food Economy:

Growth in the local food economy has the potential not only to mediate food and nutrition insecurity but also to develop local communities. However, this also means that areas where the food economy is relatively small are not experiencing benefits that they otherwise would be. The most direct benefit is that money spent in the local food economy stays in the state economy and boosts other sectors in the process. Some of these benefits apply to any local business. For example, a report from Michigan State University claims that for every $100 spent at a locally owned business, $73 would stay in the local economy, compared to just $43 out of $100 spent at a non-locally owned business.[237] The continuing circulation of that extra $30 in the local economy can be spent at more local businesses, pay local salaries, and contribute to the overall economic development of the community.

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[233] *See*, National Sustainable Agriculture Coalition - Report illustrates initial success of local food purchasing agreements (https://sustainableagriculture.net/blog/report-illustrates-initial-success-of-local-food-purchasing-agreements/#:~:text=Barriers%20to%20Implementation,Commodity%20Credit%20Corporation%20(CCC).)

[234] *See*, the White House - American Rescue Plan Act Fact Sheet (https://www.whitehouse.gov/wp-content/uploads/2021/03/American-Rescue-Plan-Fact-Sheet.pdf)

[235] *See*, National Conference of State Legislatures - ARPA State Fiscal Recovery Fund Allocations Database (https://www.ncsl.org/fiscal/arpa-state-fiscal-recovery-fund-allocations#:~:text=Territories%20will%20receive%20a%20total,31%2C%202026.)

[236] *See*, USDA - Local Food Purchase Assistance Cooperative Agreement Program (LFPA25) (https://www.ams.usda.gov/sites/default/files/media/LFPA25_NOFO.pdf)

[237] *See*, Michigan State University Center for Community and Economic Development - Why Buy Local? An Assessment of the Economic Advantages of Shopping at Locally Owned Businesses (https://ced.msu.edu/upload/reports/why%20buy%20local.pdf)

There is also evidence that food businesses specifically can generate significant additional benefits to local economies. A report from UConn states that every dollar in agricultural industry sales generates an additional two dollars in the state's economy, and that "overall, the agricultural industry in the state generates more jobs per million dollars of sales than nearly any other sector in the rest of the state economy."[238]

[238] *See*, UConn College of Agriculture, Health, and Natural Resources - Economic Impacts of Connecticut's Agricultural Industry (https://portal.ct.gov/-/media/deep/forestry/economicimpactspdf.pdf)

Section 4: Recommendations

The previous sections have illustrated three key takeaways: 1) food and nutrition insecurity in Connecticut are widespread, 2) they have numerous underlying causes, and 3) a large number of negative effects on individuals and communities. Food and nutrition insecurity are complex and multifaceted, and as such it is important to begin a section on recommendations to address them by acknowledging that there is no single policy, organization, or initiative that can solve food and nutrition insecurity alone.

This report has already discussed a number of highly effective government and private initiatives, such as SNAP, WIC, LFPA, school meals, food banks and pantries, and food recovery to name a few. Each of these initiatives has significant positive impacts, but none of them reach every food and/or nutrition insecure individual in the state, nor do they single-handedly meet all of the needs of every individual they do reach. **As such, this report recommends a multipronged policy approach within a holistic strategy to address all aspects of food and nutrition insecurity.** This section will offer one proposed strategy, individual policy options within that strategy, and potential options to address fiscal challenges.

Proposed Strategy:

The overall strategy recommendation is to make food more affordable, accessible, and local. Specifically, it recommends providing resources directly to food insecure households and building the infrastructure to make it easier to produce, prepare, transport, and distribute local food. The underlying assumption in this approach is that providing resources to families would ensure food and nutrition security in the short term, while investing in infrastructure would address the underlying causes by making food easier to access and afford in the long term.

Recommendation Criteria:

This report used the following criteria to identify specific policies that were consistent with the proposed overall strategy and likely to be practical in implementation:

1. **Addresses both Causes and Effects**: The policy should theoretically be able to both provide food for today or this week and make individuals less likely to be food insecure in the future by addressing one or more of the underlying challenges discussed in this report. In order to do this, it should be able to plausibly impact at least two of three domains covered in sections one through three: food sufficiency and security, nutrition security, and local food economies.

2. **Is Requested by Impacted Communities:** The policy should be requested by communities experiencing food insecurity and organizations working in the food system to ensure that any resources provided will actually be usable on the ground.
3. **Has an Evidence-Based Theory of Change:** The policy should have research showing either that this program has had the desired impact when implemented elsewhere or that its underlying assumptions (ex. Higher vegetable consumption leads to reduced risk of disease) are valid.
4. **Invests in Connecticut Communities:** The policy should ensure any government funds that are spent, to the maximum extent possible, go into the Connecticut food economy and contribute to more income and financial security for food workers and businesses.
5. **Is Fully Funded and Fiscally Sustainable:** The policy must provide the implementing agency with the resources needed to effectively perform required functions. Furthermore, the policy should offer benefits proportional to the fiscal cost and ideally have a decreasing net cost to the state over time, achieved by diminishing annual costs, adding new federal investments, or generating significant savings in other parts of the state budget (including reducing government expenditures on food-related health services).

Not every policy will meet every criterion, but the following either met all of the criteria or aligned very strongly with multiple criteria.

Policy Recommendations:

1. Fund / Implement Universal Free School Meals

By providing free meals that meet existing school nutrition standards, this policy can combat food and nutrition insecurity simultaneously. Additionally, there is an opportunity to pair this program with **food and nutrition education** about the science of growing food, how nutrition affects the human body, and the effects of food waste, possibly either in health or science class. In addition to education, promoting the use of **share tables and food donation** where consistent with public health rules could also help limit food waste from this policy. Furthermore, including a **local purchasing requirement** to the funds could ensure that a substantial portion of the funds go to local producers, investing in the local food system as well. To help local districts meet this requirement without exceeding budget limitations, standard funding amounts could be supplemented or reimbursements for the existing **Local Food for Schools Incentive**

Program (LFSIP) could be expanded.[239] Eight states have already implemented Universal Free School Meals policies, including Vermont, Maine, and Massachusetts in New England.[240] The USDA found that in these states, Universal Free School Meal policies reduced child food insufficiency rates relative to other states.[241]

School meals would address the effects of food insecurity by providing 10 free meals per child per week and would address the causes by providing financial relief to families. As mentioned in section one, a large number of food insecure households are not currently eligible for free school meals. For the current school year, a household of 4 would need to make no more than $40,560 to be eligible, roughly one-third of the ALICE Survival Budget amount for the same household.[242] By eliminating this income limit, many food insecure households would have a chance to receive benefits they currently do not. As for financial relief, the gap between the paid and free lunch reimbursement rates from the USDA is $4.01, while the gap for breakfast is $1.98, leading to a daily estimated cost to families of $5.99 per child per day or $1,078.20 per child over the course of a 180-day school year.[243] This amount represents 23.1% of the estimated meal cost of $4,675.65 per person per year, substantially reducing the amount of food spending needed to ensure food security for those children. Additionally, the policy could provide financial relief to school districts, as an article from March 2024 states that about 50 Connecticut school districts had a combined $366,403 in school meal debt.[244]

Reducing food insufficiency and insecurity among children also has been shown to improve education outcomes.[245] As for food and nutrition education, the CDC states that 40 to 50 hours of nutrition education is needed per year to affect behavior change, but the average student receives just eight.[246] Similarly, a meta-analysis of 11 different studies concluded that nutrition education can significantly increase the

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[239] *See*, CT Department of Agriculture - Connecticut Local Food for Schools Incentive Program (https://portal.ct.gov/doag/adarc/programs/farm-to-school-overview/connecticut-local-food-for-schools-incentive-program)
[240] *See*, Hunter College NYC Food Policy Center - States that Have Passed Universal Free School Meals (So Far) (https://www.nycfoodpolicy.org/states-with-universal-free-school-meals-so-far-update/)
[241] *See*, USDA ERS - State Universal Free School Meal Policies Reduced Food Insufficiency Among Children in the 2022–2023 School Year (https://www.ers.usda.gov/amber-waves/2024/june/state-universal-free-school-meal-policies-reduced-food-insufficiency-among-children-in-the-2022-2023-school-year/)
[242] *See*, CT.gov - Income Guidelines for Determining Eligibility for Free and Reduced-price Meals or Free Milk in the School Nutrition Programs (https://portal.ct.gov/-/media/sde/nutrition/nslp/forms/freered/income_guidelines_snp.pdf)
[243] *See*, USDA - NSLP, SMP, SBP - National Average Payments/Maximum Reimbursement Rates (https://img.federalregister.gov/EN10JY24.021/EN10JY24.021_original_size.png)
[244] *See*, CT Insider - CT has more than $366,000 in student lunch debt halfway though this school year, report shows (https://www.ctinsider.com/news/article/ct-schools-student-lunch-debt-meals-18758310.php)
[245] *See*, The Impact of Food Insecurity (Page 19 of this Report)
[246] *See*, CDC - Healthy Eating Learning Opportunities and Nutrition Education (https://www.cdc.gov/healthyschools/nutrition/school_nutrition_education.htm)

consumption of fruits and vegetables, but that effect appears to fade after a year, leading to a need for continuing interventions.[247]

While the cost would be recurring and unlikely to decrease significantly over time, this policy would bring substantial new federal funds to the state via the Community Eligibility Provision (CEP). CEP is a federal program that allows schools to make breakfast and lunch free for all students and be reimbursed for the cost with federal money.[248] Schools and districts are eligible to participate if they have an identified student percentage (ISP) of at least 25%, meaning that at least 25% of their student body automatically qualifies for free meals through Direct Certification.[249] Direct Certification is provided to students who participate in means-tested programs (such as SNAP) or have certain statuses including, but not limited to, participating in Head Start or receiving foster care.[250] However, the reimbursement formula is the ISP multiplied by 1.6, meaning that only schools and districts with an ISP of 62.5% or higher get fully reimbursed by the USDA, requiring many others to pay the difference from their own budgets.[251] As such, many Connecticut schools and districts that are eligible to participate in CEP opt not to contribute the necessary funds to close the gap, thus missing out on federal funds that would cover between 40% and 100% of their costs.[252] Funding the CEP gap would unlock those funds, potentially bringing millions of dollars of new federal investment to Connecticut.

2. Mitigate Benefits Cliffs

Another possible policy approach would be to increase access to established successful federal nutrition programs such as SNAP by mitigating benefits cliffs across programs. By encouraging families to participate in support programs while also increasing their earned income without fear of quickly losing those supports (i.e. mitigating benefit cliffs), the state could address both short term food insecurity and a root cause of food

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[247] *See*, Medeiros, G. C. B. S., Azevedo, K. P. M., Garcia, D., Oliveira Segundo, V. H., Mata, Á. N. S., Fernandes, A. K. P., Santos, R. P. D., Trindade, D. D. B. B., Moreno, I. M., Guillén Martínez, D., & Piuvezam, G. (2022). Effect of School-Based Food and Nutrition Education Interventions on the Food Consumption of Adolescents: A Systematic Review and Meta-Analysis. International journal of environmental research and public health, 19(17), 10522. https://doi.org/10.3390/ijerph191710522
[248] *See,* USDA FNS – Community Eligibility Provision Fact Sheet (https://www.fns.usda.gov/cn/cep/factsheet)
[249] *See,* USDA FNS – Community Eligibility Provision Fact Sheet (https://www.fns.usda.gov/cn/cep/factsheet)
[250] *See,* USDA FNS – Community Eligibility Provision Fact Sheet (https://www.fns.usda.gov/cn/cep/factsheet)
[251] See, Food Research & Access Center – Community Eligibility: Making it Work with Lower ISPs (https://frac.org/wp-content/uploads/making-cep-work-with-lower-isps.pdf)
[252] *See*, CT State Department of Education - Community Eligibility Provision (CEP) Annual Notification of Local Educational Agencies (LEAs) (https://portal.ct.gov/-/media/sde/nutrition/cep/cep_annual_notification_lea.pdf)

insecurity – poverty. Given that the two generation initiative was tasked to study this issue and make recommendations pursuant to Special Act 24-8, this report will not make any detailed recommendations on this topic and defer to the report already being produced.[253]

3. Establish a State Minimum SNAP Benefit Amount

Another possible policy to improve the ability of federal nutrition programs to combat food insecurity would be to establish a state minimum SNAP benefit amount to ensure all recipients receive sufficient support to make a difference, regardless of household size. The federal minimum monthly SNAP amount is $23.[254] This would follow the precedent set in New Jersey, which supplements federal payments to ensure all SNAP recipients receive a state minimum amount of $95 a month.[255]

4. Apply for Section 1115 Medicaid Waiver for Food as Medicine Initiatives

Another policy that could increase access to and use of federal support programs would be pursuing a Section 1115 Medicaid Waiver to allow Medicaid funds to cover measures such as produce prescriptions and medically tailored meals. Section 1115 of the Social Security Act allows the federal Department of Health and Human Services "to approve experimental, pilot, or demonstration projects that are found by the Secretary to be likely to assist in promoting the objectives of the Medicaid program."[256] Most commonly, the federal government pays for 50% of the cost of Connecticut's Medicaid waivers.[257]

In Connecticut, the Department of Social Services is the state Medicaid agency that applies for these waivers for new programs, as they did in 2021 requesting a waiver for new Substance Use Disorder treatments.[258] KFF, formerly known as the Kaiser Family Foundation, states that there are currently nine states who have had a Section 1115

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[253] *See*, CGA - Special Act No. 24-8 (https://www.cga.ct.gov/2024/ACT/SA/PDF/2024SA-00008-R00HB-05369-SA.PDF)
[254] *See,* CT.gov - CT SNAP Policy Manual (https://portaldir.ct.gov/dss/SNAP/MinimumBenefits.html)
[255] *See*, New Jersey Department of Human Services - NJ SNAP (https://www.nj.gov/humanservices/njsnap/apply/eligibility/)
[256] *See*, Medicaid.gov - About Section 1115 Demonstrations (https://www.medicaid.gov/medicaid/section-1115-demonstrations/about-section-1115-demonstrations/index.html)
[257] *See*, CT.gov - A Précis of the Connecticut Medicaid Program (https://portal.ct.gov/-/media/departments-and-agencies/dss/medicaid-hospital-reimbursement/precis_of_ct_medicaid_program.pdf)
[258] *See*, CT.gov - Section 1115 Demonstration Waiver for Substance Use Disorder (SUD) Treatment (https://portal.ct.gov/dss/health-and-home-care/substance-use-disorder-demonstration-project)

waiver approved that included nutrition supports, including nearby New York, Massachusetts, and New Jersey.[259]

There is evidence to suggest that using nutrition interventions can improve health outcomes and fiscal outcomes. The American Heart Association conducted a simulation that predicted that implementing a produce prescription program for 6.5 million Americans with diabetes who also experience food insecurity would prevent 292,000 "cardiovascular disease events" over 25 years, saving $39.6 billion in healthcare costs and $4.6 billion in productivity costs compared to $44.3 billion in total implementation costs.[260] This simulation suggests that healthcare and productivity savings would almost completely offset the cost of the program in the long term. Another study goes even farther by predicting that food as medicine programs could save more money than they spend. The study estimates that providing medically tailored meals to 6.3 million Americans with diet-related medical conditions would prevent an estimated 1.5 million hospitalizations and generate a net savings of $13.6 billion ($38.7 billion in healthcare savings compared to $24.8 billion in program costs).[261]

As with school meals, including a **local purchasing requirement** in any funds allocated for this program would ensure the policy supports local food systems, food security, and nutrition security simultaneously. These waivers have a significant number of requirements for application, implementation, and renewal, and as such often significant staffing and/or consulting is required to complete the application and implementation process.[262] As such, successfully pursuing a waiver would likely require the allocation of additional funds to the Department of Social Services to ensure adequate staffing and resources. However, such an investment would unlock a significant amount of federal resources for the food system and potential long-term savings for the state.

5. Create or expand regional community food hubs

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[259] *See*, KFF - Medicaid Waiver Tracker: Approved and Pending Section 1115 Waivers by State (https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/)

[260] *See*, Wang, L., Lauren, B. N., Hager, K., Fang Fang Zhang, Wong, J. B., Kim, D. D., & Dariush Mozaffarian. (2023). Health and Economic Impacts of Implementing Produce Prescription Programs for Diabetes in the United States: A Microsimulation Study. Journal of the American Heart Association, 12(15). https://doi.org/10.1161/jaha.122.029215

[261] *See*, Hager, K., Cudhea, F. P., Wong, J. B., Berkowitz, S. A., Downer, S., Lauren, B. N., & Mozaffarian, D. (2022). Association of National Expansion of Insurance Coverage of Medically Tailored Meals With Estimated Hospitalizations and Health Care Expenditures in the US. JAMA network open, 5(10), e2236898. https://doi.org/10.1001/jamanetworkopen.2022.36898

[262] *See*, Medicaid.gov - 1115 Application Process (https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-application-process/index.html)

As discussed in previous sections, limited infrastructure can reduce both the affordability and accessibility of food. Difficulties with storage, transportation, and processing can cause significant spoilage and food waste, reducing the supply of food available. Given the large number of farmers, grocers, pantries, and other food organizations across the state, it may not always be practical to provide costly equipment such as refrigerated trucks to every one of them. A complementary option would be to establish community food hubs in each of the Council of Government regions, either directly run by the state or region in areas where no food hub currently exists or done in partnership with existing organizations where one already does. Food hubs are generally defined as non-profit or for-profit institutions "that aggregate, distribute, and market local and regional food products," though they can also vary quite a bit in the range of functions each one performs.[263] However, state support and funding could ensure that each food hub is able to provide key infrastructure for the local food system, which could include space to aggregate and market local produce, storage and refrigeration for community food organizations, commercial kitchens and equipment that local producers can use to prepare their food, refrigerated trucks that could transport food to both organizations and households unable to go to food sources, nutrition education and benefit application resources, and a space to hold community events and discussions. As a way to build up resources most needed in each community, each food hub could receive a discretionary budget amount on top of their operating budget. How the discretionary amount is spent could be determined by **participatory budgeting** involving local residents.

Such infrastructure provided in one central location could ensure food is physically accessible and maximize affordability through economies of scale. Some studies have found food hubs are not only associated with more sales opportunities for farmers, but increased access to produce for consumers and increased use of local foods by schools, businesses, and restaurants.[264] Furthermore, this central site would not replace local organizations but instead provide opt-in support that makes it easier for them to function without impeding flexibility. One possible example of such support would be a program to pick up unsold food approaching its expiration date from local grocery stores and unharvested produce gleaned from local farms, aggregate it, then either donate it to soup kitchens, sell it at a discount, or freeze and store it ahead of a future donation. Such a program would allow the food to be cooked and served while still at peak freshness, reducing food waste without compromising the quality of food provided.

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[263] *See*, County Health Rankings and Roadmaps - What Works for Health: Food Hubs (https://www.countyhealthrankings.org/strategies-and-solutions/what-works-for-health/strategies/food-hubs)

[264] *See*, County Health Rankings and Roadmaps - What Works for Health: Food Hubs (https://www.countyhealthrankings.org/strategies-and-solutions/what-works-for-health/strategies/food-hubs)

Additionally, it could reduce logistical burdens on donor and recipient organizations, making more donations or sales possible. Overall, the goal of these food hubs would be to provide a central location for producers and consumers alike to access information and resources to improve efficiency and coordination in the food system.

6. Establish a state food business incubator program

Another policy that could help develop the infrastructure and capacity needed to improve access to food would be to open a food business incubator program. Such a program could be primarily targeted at individuals living in LILA areas hoping to start a locally owned grocery store, farm, or other food business where few currently exist. This program could include grants, no-interest loans, technical support, training with a cohort of peers, individual support from a mentor, and long-term tax credits. Within farming, there could be a special focus on **facilitating the creation of more greenhouse or hydroponic growing** to ensure there is enough year-round production to allow previously proposed local purchasing requirements to be met in the winter. Such a program could complement or build on a previous program that has proven effective, namely the Department of Agriculture's **Pilot BIPOC Apprenticeship/Mentor Program,** which provided funding for organizations to host and mentor a BIPOC apprentice for the 2023 growing season.[265] After the pilot ended, "evaluations by apprentices and mentors lauded the value of the program and the positive experiences it provided both groups."[266]

As for grocery stores, opening one in a LILA area, ideally in a spot on pre-existing public transportation routes, would likely remove the LILA classification from that census tract and significantly improve food access for residents.[267] A report on an existing grocery store tax abatement program created by Section 156(b) and 157 of Public Act 23-204 concluded that "it is difficult, if not impossible, to implement" the program because the tax credits are time-limited, a relatively small amount, and complex to award.[268] Specifically, it notes that "tax incentives that are limited and time sensitive generally do not induce the desired effect. Very often, in small business incentive programs,

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[265] *See*, Connecticut Department of Agriculture - Pilot BIPOC Apprenticeship/Mentor Program (https://portal.ct.gov/doag/adarc/adarc/grants/bipoc-apprenticeship-and-mentor-program)
[266] *See*, Connecticut Department of Agriculture - Farmland Access & Ownership: An Overview of Barriers, Models, and Actions to Increase Land Access for Connecticut's BIPOC Farmers (https://portal.ct.gov/-/media/doag/boards_commissions_councils/diversity-working-group/access-to-secure-land-tenure/ct-doag-farmland-access-and-ownership-final-march-2024.pdf)
[267] *See*, USDA ERS - Food Access Research Atlas: Documentation (https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/)
[268] *See*, CT Department of Economic and Community Development (in consultation with the CT Department of Agriculture) - Food Insecurity Strategic Plan

businesses must be seeded for two to five years in order to ensure sustainability."[269] Finally, the same report notes that instead of one-off tax abatements for opening a store, "providing funding for the purchase of equipment would reduce that up-front capital investment and may be a pathway to local ownership in an underserved community where initial capital is often an obstacle."[270]

In line with these findings, this incubator program would prioritize helping with startup costs and providing long-term, ongoing support. Grants and no-interest loans could provide startup capital, while ongoing technical support, mentorship, and access to equipment owned by a community food hub could help overcome many of the challenges listed in section three that make sustaining a food business difficult. One example of specific technical support would be helping new stores meet all the requirements to be able to **accept SNAP and WIC EBT**. In order to maximize long-term sustainability and food access, the state could also offer annual tax credits to these stores based on their operating expenses. Specifically, tax credits could reward expenses that benefit shoppers such as **offering delivery options** or benefit workers such as paying **employees at or above the ALICE Survival Budget level**.

In practice, this would be very similar to a program found to be "necessary, feasible, and implementable" in a study commissioned by the City of Chicago, where the government provides resources, support, and limits the liability for a private operator, ideally one led by residents of the LILA area where the store will operate.[271] A similar program has been implemented in New Jersey, known as the "Food Desert Relief Program" which provides up to $40 million per year in tax credits, loans, grants, and technical assistance to food stores that would open in areas identified as "food desert communities" and commit to accepting SNAP and WIC EBT.[272]

In addition to improving food access, creating locally owned food businesses could also help to provide economic benefits to the community. Additionally, food businesses owned by members of the local community could better understand the needs and preferences of that community for specific food items, and choose what to produce and sell accordingly.

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[269] *See*, CT Department of Economic and Community Development (in consultation with the CT Department of Agriculture) - Food Insecurity Strategic Plan
[270] *See*, CT Department of Economic and Community Development (in consultation with the CT Department of Agriculture) - Food Insecurity Strategic Plan
[271] *See*, Chicago Sun Times - Chicago could fill food desert with three-store network of city-owned grocery stores, consultant says (https://chicago.suntimes.com/city-hall/2024/08/07/city-owned-grocery-store-closings-consultant-study-food-deserts-insecurity-mayor-brandon-johnson)
[272] *See*, New Jersey Economic Development Authority - Food Desert Relief Program (https://www.njeda.gov/food-desert-relief-program/)

7. Double SNAP benefits for Connecticut-Grown Produce

In addition to expanding existing programs, there are new approaches that could be implemented to break down barriers to enrolling in government nutrition programs and using benefits. One such example is the doubling of SNAP benefits at Farmers Markets, Community Supported Agriculture (CSA) programs, and locally owned grocery stores that purchase a substantial share of their produce from Connecticut producers. It is worth noting that some farmers markets in Connecticut already double SNAP benefits under a program run by End Hunger Connecticut and funded through a federal GusNIP grant.[273] Furthermore, the Connecticut Department of Agriculture already implements the Farmers Market Nutrition Program (FMNP), which expands local produce access for seniors and recipients of WIC.[274] However, a state program to build on these programs by doubling SNAP at all farmers markets and locally owned grocery stores that purchase a significant portion of their produce locally would improve access to nutritious foods while also supporting the local food system.

A similar policy, albeit limited to farmers markets and CSAs has been implemented in Massachusetts, called the Healthy Incentives Program (HIP).[275] A 2016 evaluation of this program found that not only did HIP increase users' consumption of fruit and vegetables, but reduced household financial hardship, supported local food producers by making CSA memberships more affordable than Instacart (in regions where that wasn't already the case), and provided nutritious food access in 58 of the state's 110 LILA areas.[276]

8. Fund Local Food Purchasing Agreement (LFPA) Programs at the state level

In addition to government programs, if the nonprofit emergency food system is to continue to play a significant role to prevent food insecurity, it will likely require direct support to build out the capacity and infrastructure to operate at these heightened levels. One way to bolster this support is to recreate an LFPA at the state-level to supplement or replace the federal program. As mentioned above, a portion of this local purchasing program could be built into school meals and food as medicine initiatives.

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[273] *See*, End Hunger Connecticut! - Farmers' Markets that DOUBLE SNAP Benefits (https://www.endhungerct.org/ctfreshmatch/#:~:text=Here's%20how%20it%20works%3A,value%20charged%20to%20your%20card.)
[274] *See*, CT Department of Agriculture - Farmers Market Nutrition Program (FMNP) Overview (https://portal.ct.gov/doag/adarc/adarc/farmers-market-nutrition-program)
[275] *See*, Mass.gov - Massachusetts Healthy Incentives Program (HIP) Frequently Asked Questions (https://www.mass.gov/info-details/massachusetts-healthy-incentives-program-hip-frequently-asked-questions)
[276] *See*, JSI Research & Training Institute - Evaluation of the Healthy Incentives Program (https://publications.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=22529&lid=3)

Another component that could be included in state-supported local purchasing is expanding the Connecticut Nutrition Assistance Program (**CT-NAP**). This program is run by the Department of Social Services and contracts with the Connecticut Food Bank (now part of CT Foodshare) to purchase nutritious food items to distribute to about 300 food pantries and other emergency food providers.[277] However, it is worth noting that CT Foodshare alone partners with more than 650 such organizations, suggesting there are more pantries needing food than the program is reaching.[278] Furthermore, there are a number of independent food banks, pantries, and other organizations that are providing critical resources, but not included in the 650 count. Part of this limitation may stem from the fact that the "nutrition assistance" line item in the state budget, which includes CT-NAP, is allocated $1 million for FY25.[279]

For comparison, the Massachusetts Emergency Food Assistance Program (MEFAP) had $42.3 million allocated to it under the "Emergency Food Assistance" line item in FY25.[280] The program distributes food to four different food banks in the state, who distribute it onward to a total of 894 organizations.[281] Furthermore, in 2022, 42% of the MEFAP funds were given to Massachusetts suppliers.[282]

To maximize the ability of the emergency food system to provide sufficient, nutritious food and support the local food system, additional support for CT-NAP could be paired with **a related program to provide grants for local food purchasing to smaller, independent organizations** that are not in the current CT-NAP distribution network and both could have a requirement that a portion of the funds be spent on local purchasing. Having predictable purchasers for local producers could help provide economic stability, lower risks, and allow them to confidently invest in expanding their production.

9. Expand Support for the Food Systems Capacity Building Grant

This policy option could work in tandem with community food hubs to provide more infrastructure to store, process, and distribute food. As mentioned in section one,

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[277] *See*, CT.gov - Nutrition Assistance Programs (https://portal.ct.gov/dss/snap/nutrition-assistance-programs/related-resources)
[278] *See*, Connecticut Foodshare - Home Page (https://www.ctfoodshare.org/#:~:text=650%2B,programs%2C%20and%20mobile%20distribution%20sites.)
[279] *See*, CT Office of Fiscal Analysis - Connecticut State Budget FY 24 - FY 25 (https://www.cga.ct.gov/ofa/Documents/year/BB/2023BB-20231005_FY%2024%20and%20FY%2025%20Connecticut%20Budget.pdf)
[280] *See*, Mass.gov - FY 25 Enacted Budget Line Item Summary (https://budget.digital.mass.gov/summary/fy25/line-item/)
[281] *See*, Mass.gov - Massachusetts Emergency Food Assistance Program (MEFAP) (https://www.mass.gov/info-details/massachusetts-emergency-food-assistance-program-mefap)
[282] *See*, The Farmlink Project - "The Hunger Cliff" and MEFAP Funding's Crucial Role (https://www.farmlinkproject.org/stories-and-features/the-hunger-cliff-and-mefap-fundings-crucial-role)

surveyed food pantries were almost as likely to cite refrigeration and storage as a challenge as a lack of food. One possible way to provide this support is to expand the existing Food Systems Capacity Building Grant, administered by the Connecticut Department of Agriculture on behalf of the CT Food Policy Council. This grant doesn't have a match requirement and awards up to $20,000, making it more accessible to smaller organizations, and already allows applicants to use funds for four categories of activities: creating or continuing a local food policy council, equipment, local food access, and food waste and recovery.[283] One food pantry and 2023 recipient of the grant summarized its importance by saying that "the new refrigeration capacity" the grant provided for them helped them to provide food to 29% more individuals and provide 20% more fresh food in each order.[284] It is worth noting that the funding for this grant "is provided through the Connecticut Food Policy Council under C.G.S. Sec. 22-456. The Food System Capacity Building Grant Program and any awards are subject to limitations of state funding."[285] With regards to funding, C.G.S. Sec. 22-456 simply states that "the [Food Policy] council may use such funds as may be available from federal, state or other sources."[286] In its 2023 Annual Report, the Food Policy Council states that the grant was created "utilizing accrued funds."[287]

Massachusetts has a roughly analogous program, albeit limited to "capital improvements" such as equipment and infrastructure, called the Food Security Infrastructure Grant.[288] This grant has a maximum award amount of $500,000, though it is worth noting a 25% match requirement applies to any grant awarding more than $25,000.[289] The state's FY25 budget allocated $10 million in state funds towards this grant, while the Governor vetoed an additional $5 million beyond that due to the

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[283] *See*, CT Department of Agriculture/CT Food Policy Council - Food System Capacity Building Grants (https://portal.ct.gov/-/media/doag/adarc/grants/food-system-capacity-building-grant/2024/2024-fpc-grant-guidance-12324.pdf)
[284] *See*, CT Food Policy Council - 2023 Annual Report (https://portal.ct.gov/-/media/doag/boards_commissions_councils/ct_food_policy_council/2024/2023-connecticut-food-policy-council-annual-report.pdf?rev=037384ee76de4dbdb0904140a8bcf7f3&hash=E94339842C281FE745EDD4653F84EBC7)
[285] *See*, CT Department of Agriculture - Food System Capacity Building Grant (https://portal.ct.gov/doag/adarc/adarc/grants/food-system-capacity-building-grant)
[286] *See*, CT General Statutes - CHAPTER 438d CONNECTICUT SEAFOOD DEVELOPMENT COUNCIL. CONNECTICUT FOOD POLICY COUNCIL (https://www.cga.ct.gov/2023/pub/chap_438d.htm#sec_22-456)
[287] *See*,
[288] *See*, Massachusetts Department of Agricultural Resources - Food Security Infrastructure Grant (https://www.mass.gov/doc/fy25-food-security-infrastructure-grant-fsig-request-for-response-rfr/download)
[289] *See*, Massachusetts Department of Agricultural Resources - Food Security Infrastructure Grant (https://www.mass.gov/doc/fy25-food-security-infrastructure-grant-fsig-request-for-response-rfr/download)

"Coronavirus State Fiscal Recovery Fund" (from ARPA) also allocating funds to this program.[290]

Establishing a line-item for this grant could enable an expansion of both the number of possible awards per year and the maximum award amount. This would build on the success the program has already had, help it reach more organizations, and better meet the need in the state. Furthermore, whenever possible sufficient state funding and legal flexibility should be provided to **increase accessibility to grant applications** through methods such as minimizing or eliminating matching funds requirements.

10. Partner with research institutions to fill gaps in the current data and recommend state goals for food security metrics

Finally, one way to be better able to fully address challenges in the food system would be to partner with research institutions to fill gaps in the current data. As mentioned throughout this report, several key concepts such as food insecurity have conflicting definitions and multiple different estimations, while others, such as nutrition insecurity, don't have any estimations at all. To remedy this, the state could convene a work group of experts and stakeholders throughout the state to develop or adopt official definitions for key terms such as food and nutrition insecurity as well as ways to measure each concept, before embarking on a process of collecting data for those measurements statewide. Additionally, this group could recommend numerical targets by which to measure the success of state efforts to ensure food security. These targets could eventually be adopted as part of a state plan to eliminate food insecurity.

It is important to emphasize that this section is not meant to be an exhaustive list of every worthwhile policy or to assert that the proposed overall strategy is the only possible option. However, the above approach is an example of a strategy to address multiple causes of food and nutrition insecurity and one where each policy aids the implementation of the others, making overall success more likely.

Recommended Fiscal Approach: Create a Food & Nutrition Special Fund

One challenge for implementing nearly all of the recommendations mentioned above is that they would come with fiscal costs. Feeding America's Map the Meal Gap data estimates that in 2022, Connecticut households had a collective annual food budget

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[290] *See*, Mass.gov - FY2025 Enacted Budget Summary (https://budget.digital.mass.gov/summary/fy25/enacted/energy-and-environmental-affairs/agricultural-resources/25110111/)

shortfall of just over $375 million.[291] This does not necessarily mean that the programs recommended would add up to that amount, and some would require more funds than others. Nevertheless, the recommended policies would collectively require a sizable and consistent investment. As such, additional state-level funding may be necessary.

One way to accomplish this would be to establish a non-lapsing special fund within the state budget with dedicated revenue sources that can be spent on food and nutrition security initiatives. An example of such a fund that currently exists in Connecticut is the Tourism Fund, which is a special fund separate from the General Fund that invests in initiatives to boost state tourism and receives the proceeds of an occupancy tax on hotel stays.[292] There are several other special funds in the state's budget that are listed separately from the General Fund, including a Banking Fund, an Insurance Fund, a Cannabis Social Equity and Innovation Fund, and others.[293] Several states have also created some type of fund dedicated to investing in food and nutrition security initiatives. For example, Maine has created a non-lapsing "Meals for Students Fund" dedicated to paying for school meals for all, though instead of dedicating specific revenue sources the statute specifies that the fund may "receive money from any available state, federal or private source."[294] In New Jersey, the Office of the Food Security Advocate worked with private foundations to create the Food Security Access Fund which provided resources to organizations to build their capacity and maximize their ability to secure federal funding.[295] However, in this public-private partnership, it appears that a majority of the funding has come from private entities thus far.[296] Finally, the Fund for a Healthy Nevada (FHN) receives dedicated revenue from the state's tobacco settlement and gives money to the Nevada Office of Food Security (OFS) "to support initiatives and programming aimed to reduce hunger throughout Nevada."[297] It is however worth noting

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[291] *See*, Feeding America - Food Insecurity among the Overall Population in Connecticut (https://map.feedingamerica.org/county/2022/overall/connecticut)
[292] *See*, Cultural Coalition Serving Southeastern and Northeastern CT - Tourism Fund (https://culturesect.org/tourism-fund)
[293] *See*, Connecticut Office of Fiscal Analysis - (Pages 395-398) (https://cga.ct.gov/ofa/Documents/year/BB/2023BB-20231005_FY%2024%20and%20FY%2025%20Connecticut%20Budget.pdf)
[294] *See*, Maine Legislature - Maine Revised Statutes, Title 20-A, Chapter 223, Subchapter 7, §6602-1K (https://legislature.maine.gov/statutes/20-A/title20-Asec6602.html#:~:text=The%20Meals%20for%20Students%20Fund,price%20of%20a%20breakfast%20or)
[295] *See*, NJ Office of the Food Security Advocate and the Tepper Foundation - New Food Security Access Fund Announces First-Ever Grant Recipients (https://tepperfoundation.org/posts/2024-04-10-new-food-security-access-fund-announces-first-ever-grant-recipients/)
[296] *See*, NJ Office of the Food Security Advocate and the Tepper Foundation - New Food Security Access Fund Announces First-Ever Grant Recipients (https://tepperfoundation.org/posts/2024-04-10-new-food-security-access-fund-announces-first-ever-grant-recipients/)
[297] *See*, Nevada Department of Health and Human Services - Office of Food Security (https://dpbh.nv.gov/Programs/OFS/Home_-_Office_of_Food_Security/)

that the OFS appears to not be the sole recipient of the FHN. While the proposed special fund would not be identical to current initiatives in Connecticut or in other states, it also would not stray far from existing precedent.

While there are many other important policy areas and initiatives that are effectively supported out of the General Fund, there are a few factors that may make food and nutrition insecurity an ideal candidate for a special fund. The first is the relative fragmentation of food programs in Connecticut. There are 14 federal food and nutrition support programs administered by the USDA that have a listed state-level contact in Connecticut, but those programs are split between four different agencies at the state level.[298] This is a common practice for states, and in the region Connecticut has more involved agencies than Maine (3), Massachusetts (3), New Hampshire (3), and New Jersey (2), the same number as New York, and less than Vermont (5) and Rhode Island (6).[299]

Furthermore, there are two Connecticut state agencies, the Department of Economic and Community Development (DECD) and the Department of Energy and Environmental Protection (DEEP), that do not administer any listed USDA program but are responsible for at least one food system related item discussed in this report as well as at least one food related program included in the state budget.[300] Additionally, the Senior Nutrition Program, funded through the Older Americans Act and federally administered by the Department of Health and Human Services is administered at the state level by the Department of Aging and Disability Services (ADS).[301] In total, this means there are at least seven state agencies involved in the food system.

Similarly, the General Assembly does not have any committee explicitly responsible for food security, meaning that in 2024 food system related bills were introduced to at least four different Committees, namely the Committees on Public Health, Appropriations, Environment, and Human Services.[302] This is not necessarily the case in every state, as the Vermont General Assembly has a Committee on Agriculture, Food Resiliency, and

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[298] *See*, USDA FNS - FNS Contacts (https://www.fns.usda.gov/fns-contacts?keywords=&sort_bef_combine=title_fulltext_ASC&f%5B0%5D=fns_contact_state%3A285)
[299] *See*, USDA FNS - FNS Contacts (https://www.fns.usda.gov/fns-contacts?keywords=&sort_bef_combine=title_fulltext_ASC&f%5B0%5D=fns_contact_state%3A285)
[300] *See,* CT Office of Fiscal Analysis - Connecticut State Budget FY 24-25 (https://cga.ct.gov/ofa/Documents/year/BB/2023BB-20231005_FY%2024%20and%20FY%2025%20Connecticut%20Budget.pdf)
[301] *See*, Connecticut State Department of Aging and Disability Services - Senior Nutrition Program (https://portal.ct.gov/aginganddisability/content-pages/programs/senior-nutrition-program#:~:text=The%20Senior%20Nutrition%20Program%20)
[302] *See*, CGA - Connecticut General Assembly Document Search Results (https://search.cga.state.ct.us/r/adv/)

Forestry and the New Jersey Assembly has a Committee on Children, Families, and Food Security.[303] [304] By contrast, some issue areas, such as housing, have a dedicated Connecticut state agency and General Assembly committee which can coordinate policy recommendations for that issue area. In the absence of those offices, a special food fund would create a structure that enables both the Executive and Legislative branches to establish a central plan for food and nutrition security spending while still distributing the funds to the various implementing agencies.

Another factor that could make a special food and nutrition fund necessary is the foundational role of food insecurity in contributing to challenges in other policy areas. As discussed in previous sections, food and nutrition insecurity are linked to increased healthcare issues and costs, decreased child development and academic achievement, increased risk of housing insecurity, increased mental health challenges, and increased missed time at work. All of these effects suggest that addressing food insecurity is necessary to maximize policies designed to address other issue areas. Furthermore, the data cited in section one suggests that food insecurity is currently becoming more widespread, meaning that the negative impact in those other policy areas are likely to grow larger without policy interventions. As such, state investments in food security could help have positive effects on other policy initiatives.

Furthermore, a special food and nutrition fund could help meet the need for predictable, long-term investments to maximize the positive impacts of food and nutrition programs. As previously discussed, food and nutrition security are associated with significant savings in healthcare costs, which could lead to state savings on HUSKY expenditures. However, many nutrition related diseases develop over time and would require sustained interventions. For example, it takes roughly five years for prediabetes to develop into Type 2 Diabetes.[305]

By contrast, funds from the federal government or private funding sources can often be unstable or time limited. The Farm Bill, which authorizes federal food and nutrition support programs such as SNAP, WIC, and school meals, is supposed to be replaced every five years, but in 2002, 2008, and 2023, Congress failed to do so, leading to short term extensions, which the Congressional Research Service described as “historically atypical.”[306]

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[303] *See*, Vermont General Assembly - House Committee on Agriculture, Food Resiliency, and Forestry (https://legislature.vermont.gov/committee/detail/2024/8)
[304] *See*, New Jersey Legislature - Assembly Committees (https://www.njleg.state.nj.us/committees/assembly-committees)
[305] *See*, Scripps - What are the Early Signs of Type 2 Diabetes? (https://www.scripps.org/news_items/4260-what-are-the-early-signs-of-type-2-diabetes)
[306] *See*, Congressional Research Service - Expiration of the 2018 Farm Bill and

The failure of Congress to pass a 5-year Farm Bill on time and the post-COVID reductions to various federal nutrition programs suggest that federal funds are sometimes too unpredictable to allow for necessary long-term planning. A special fund with dedicated revenue sources that are reliable year after year would allow for food and nutrition interventions to continue long enough for the maximum health and fiscal benefits to be realized.

One final factor that could make a food and nutrition fund particularly effective is that many of the programs it would invest in, especially the ones likely to carry the largest fiscal notes, have proven effective already. As mentioned throughout this report, the federal government invested in a number of food security policies during the COVID Public Health Emergency, including universal free school meals, LFPAs, and expanded SNAP benefits. As also mentioned throughout the report, many of these programs proved to be effective, with some studies or reports finding that policies kept thousands food sufficient or food secure. Many of these programs have seen their federal funding lapse, but a special fund would allow the state to keep them going and invest in evidence-supported interventions.

Potential Dedicated Revenue Sources:

There are a number of different possible sources for dedicated revenue for the proposed fund. This report will not attempt to provide an exhaustive list of options, but rather identify a few that have been used in other jurisdictions, are directly related to food and nutrition security, or both. These options were selected in an attempt to mirror existing precedent with special funds. For example, the tourism fund gets revenue from taxes on hotels, which are part of the tourism industry. In the same way, all of these options would generate revenue from the food system to support initiatives within the food system. These options are also not meant to be mutually exclusive, and could be used in combination with each other or options not listed in this report.

Option 1: Transfers from Other Funds or Private Sources

This option would cause the least change to current revenue structures but also provide the lowest level of long-term stability and reliability. This option would see the fund adopt similar statutory language to Maine's Meals for Students Fund, which says the

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Extension for 2024 (https://crsreports.congress.gov/product/pdf/R/R47659#:~:text=118%2D22%2C%20Division%20B%2C,for%20the%202024%20crop%20year.)

fund “may receive money from any available state, federal or private source.”[307] This provision allowed the state to transfer $10 million from the General Fund to cover costs for the 22-23 school year.[308] Such an option could allow for supplemental support when needed and possibly attract private donations to help fund initiatives, but unless paired with a more stable source, it would not be able to guarantee consistent funding.

Option 2: Dedicate the Revenue from the 1% “prepared meals” surcharge

This option would avoid raising any new revenues, but would dedicate revenue currently coming from the food system to support initiatives within food and nutrition security. As of 2019, there is a 1% surcharge added to the standard sales tax rate of 6.35% for prepared meals and certain beverages in Connecticut, for a total tax rate of 7.35%.[309] In the 2nd quarter of 2024 (April-June), the Department of Revenue Services (DRS) reported that sales and use taxes at the 7.35% rate generated a total of just over $208 million.[310] In the 1st quarter (January-March), the amount was just over $179 million, adding up to a total of slightly over $387 million in the first half of the year.[311] Given that meals and certain beverages are the only items listed as taxable at 7.35% by DRS, it could then be inferred that this was the amount of revenue generated by taxes on paid meals in those quarters.[312] The surcharge accounts for approximately 13.6% of the total sales and use tax rate, meaning that of that $387 million, approximately $52.6 million was generated by the surcharge, or **$105.2 million** over the course of the year if the revenue is the same in the 2nd half of the year. Given that sales will fluctuate from quarter to quarter this should not be treated as an exact figure, but a loose approximation of the amount the surcharge can be expected to generate annually. Some benefits of this approach are that it would not require raising any new revenue and it would keep the money raised from this surcharge within the food system. A drawback would be that the amounts would be removed from the General Fund, and likely need to be replaced to avoid shortfalls elsewhere.

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[307] *See*, Maine Legislature - Maine Revised Statutes, Title 20-A, Chapter 223, Subchapter 7, §6602-1K (https://legislature.maine.gov/statutes/20-A/title20-Asec6602.html#:~:text=The%20Meals%20for%20Students%20Fund,price%20of%20a%20breakfast%20or)

[308] *See*, Maine Legislature - Disposition of bills and summaries of all laws enacted or finally passed (https://legislature.maine.gov/doc/7763)

[309] *See*, Connecticut Department of Revenue Services - Sales and Use Tax on Meals (https://portal.ct.gov/-/media/drs/publications/pubsps/2019/ps-2019(5).pdf)

[310] *See*, Connecticut Department of Revenue Services - Q2 2024 Sales and Use Tax Report (https://portal.ct.gov/-/media/drs/sales-tax/2024q2-sut-report.pdf)

[311] *See*, Connecticut Department of Revenue Services - Q1 2024 Sales and Use Tax Report (https://portal.ct.gov/-/media/drs/sales-tax/2024q1-sut-report.pdf)

[312] *See*, Connecticut Department of Revenue Services - Sales and Use Tax Information (https://portal.ct.gov/drs/sales-tax/tax-information#:~:text=However%2C%20see%20Special%20Sales%20Tax,by%20local%20jurisdictions%20in%20Connecticut.&text=While%20the%20general%20sales%20and,1%25)

Option 3: Expand the Luxury Tax to Cover High-Value Food and Drink Items

This option is the first that would be raising new revenues. Similar to the prepared meals surcharge, the "luxury tax" is a 1.4% surcharge that is currently applied to most motor vehicles priced above $50,000, items of jewelry priced above $5,000, and clothing, footwear, handbags, luggage, umbrellas, wallets, or watches priced above $1000, bringing the total tax rate on these items to 7.75%.[313] This option could see the same surcharge applied to food and drink items, both prepared and unprepared, valued above a certain threshold. Assigning this revenue to a special fund would be consistent with current precedent, as the luxury tax revenue from motor vehicles is deposited into the Special Transportation Fund.[314] Some food items are currently exempt from sales tax, and as such a related option would be to remove that exemption from items priced above the luxury threshold.[315]

The exact revenue amount would vary greatly depending on the threshold set and the amount of luxury food and drink items purchased across the state. As a point of comparison, goods taxed at the 7.75% rate generated just over $49 million in revenue in the 2nd quarter, less than 25% of the revenues generated by the 7.35% rate in the same time period.[316] The benefits of this option would be that it would not divert existing revenue away from other programs and, assuming the threshold is higher than the cost of all daily staples, the surcharge would likely not apply to most Connecticut residents most of the time. The main drawbacks are that this option would most likely generate less revenue than the other options and that many luxury items in restaurants would be hit with the prepared meal and luxury surcharges simultaneously.

Option 4: Establish an Excise Tax on the Most Unhealthy Food and/or Beverage Items

This option would be the largest break from current revenue structures of those listed in this report, as it is the only tax option that is not already being used in some form in Connecticut. This is an approach that is being implemented in other states and cities within the US, as well as other countries. The core concept is to apply a per-ounce tax,

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[313] *See*, Connecticut Department of Revenue Services - Sales and Use Tax Information (https://portal.ct.gov/drs/sales-tax/tax-information#:~:text=However%2C%20see%20Special%20Sales%20Tax,by%20local%20jurisdictions%20in%20Connecticut.&text=While%20the%20general%20sales%20and,1%25)

[314] *See*, Connecticut General Statutes - Sec. 12-408 Subdivision (H) and (M)(VI) (https://www.cga.ct.gov/2021/pub/chap_219.htm#sec_12-408)

[315] *See*, Connecticut Department of Revenue Services - Statutory Exemptions for Certain Sales (https://portal.ct.gov/drs/sales-tax/exemptions-from-sales-and-use-taxes)

[316] *See*, Connecticut Department of Revenue Services - Q2 2024 Sales and Use Tax Report (https://portal.ct.gov/-/media/drs/sales-tax/2024q2-sut-report.pdf)

to be paid by distributors, to any item that contains or exceeds certain limits for nutritionally detrimental ingredients such as added sugars or sodium.

In the US, the most common form of this is a tax on sugar sweetened beverages. Tennessee imposes a 1.9% tax on gross receipts generated by bottling, importing, or selling “soft drinks,” though that rate is slated to drop to 1.5% in 2028.[317] Arkansas has a similar law that imposes a tax of $1.26 per gallon on soft drink syrups, 20.6 cents per gallon on bottled or canned soft drink products or products produced by soft drink powders.[318] Virginia also has a similar law, with the amount taxed based on gross receipt amounts, with a minimum of $50 and a maximum of $33,000.[319] West Virginia had a similar law, but it was repealed effective June 30, 2024.[320]

While these laws tend to define soft drinks very broadly and with no regard to nutritional content, some US cities have created taxes specifically targeted at ones based on their levels of added sugar. Philadelphia imposes a 1.5 cent per ounce tax on distributors of beverages with added sugar sweeteners such as sucrose, glucose, high fructose corn syrup, stevia, or aspartame among others.[321] San Francisco has a similar tax, although it is lower at one cent per ounce and narrower as it only applies to beverages with “caloric” sweeteners and more than 25 calories per fluid ounce.[322] This means that San Francisco does not tax some drinks containing zero calorie artificial sweeteners such as diet sodas, which are taxed in Philadelphia. It is worth noting that San Francisco has committed a portion of the revenue from this tax to “expanding access to healthy food, water, and oral health” through measures such as healthy food vouchers and investing in school kitchen facility improvements.[323] Seattle’s version of this tax levies a 1.75 cent per ounce charge on sugar sweetened beverages. Similarly to San Francisco, Seattle excludes diet sodas and similar drinks from its tax and also commits a substantial

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[317] *See*, Tennessee Department of Revenue - Gross Receipts Bottlers Tax Manual (https://www.tn.gov/content/dam/tn/revenue/documents/tax_manuals/march-2022/Gross-Receipts-Bottlers-Tax.pdf)
[318] *See,* Arkansas Department of Finance & Administration - Soft Drink (https://www.dfa.arkansas.gov/office/taxes/excise-tax-administration/miscellaneous-tax/arkansas-miscellaneous-tax-laws/soft-drink/)
[319] *See*, Code of Virginia - Miscellaneous Taxes (https://law.lis.virginia.gov/vacodepopularnames/miscellaneous-taxes/)
[320] *See*, West Virginia Tax Division - Soft Drink Tax (https://tax.wv.gov/Business/ExciseTax/SoftDrinkTax/Pages/SoftDrinkTaxForms.aspx)
[321] *See*, City of Philadelphia - Philadelphia Beverage Tax (PBT) (https://www.phila.gov/services/payments-assistance-taxes/taxes/business-taxes/business-taxes-by-type/philadelphia-beverage-tax-pbt/#:~:text=How%20much%20is%20it%3F,of%20raw%20syrup%20or%20concentrate.)
[322] *See*, San Francisco Department of Public Health - SF Sugary Drinks Distributor Tax Advisory Committee (https://www.sf.gov/sites/default/files/2023-04/SDDT%20New%20Member%20Orientation_03292023.pdf)
[323] *See*, City of San Francisco - San Francisco Sugary Drink Distributor Tax Evaluation Report 2021-2022 (https://www.sf.gov/sites/default/files/2023-03/21-22_SDDT_EvalReport_final_2_28_23.pdf)

portion of the revenue to “food access” programs.[324] Boulder’s tax is two cents per ounce and limits taxable drinks to those with at least five grams of added sugars from caloric sweeteners per 12 fluid ounces.[325] Finally, Oakland’s version of the tax levied a one cent per ounce charge and used its revenue to support initiatives such as school kitchen upgrades, the summer meal program, a food card program to assist with grocery purchases, and creating food hubs.[326]

In the United States, taxes on unhealthy food items are much less common than taxes on unhealthy drinks, but they are not completely unprecedented. The Navajo Nation has a “junk food tax” which levies a 2% tax on gross receipts for all purchases of sugar sweetened beverages, “sweets” containing added sugars such as candy, and nearly all varieties of chips.[327] Additionally, a few countries around the world have imposed taxes on unhealthy food items. For example, Colombia has an excise tax on “ultra-processed food products” that exceed set limits for sodium, sugar, and saturated fat and Mexico has a tax on “non-essential foods” that exceed 275 calories per 100 grams.[328]

As with the luxury tax, the amount of revenue generated by this type of tax would vary significantly based on the items included, the thresholds set, and per ounce tax rate. However, existing research can provide a rough estimate for possible revenue levels. The UConn Rudd Center developed a Sugary Drink Tax Calculator that estimates the amount of revenue based on the state, year, per-ounce tax, and percent of the tax passed on to consumers (pass through). Using the most recent year (2023) and the default settings (70% pass through, 1.5 cents per ounce), it estimates that Connecticut would generate **$133.6 million** in total revenue.[329] Increasing the tax rate to two cents generates $163 million while decreasing it to one cent generates $96 million. Conversely, increasing the pass through rate to 90% (while keeping the rate at 1.5 cents) decreases projected revenue to $124 million while decreasing it to 50% increases it to $142 million.

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[324] *See*, City of Seattle - Sweetened Beverage Tax (https://www.seattle.gov/documents/Departments/SweetenedBeverageTaxCommAdvisoryBoard/FactSheets/SweetenedBeverageTax_FactSheet_2019.pdf)
[325] *See*, City of Boulder - Sugar Sweetened Beverage Tax (https://bouldercolorado.gov/services/sugar-sweetened-beverage-tax)
[326] *See*, City of Oakland - Sugar Sweetened Beverage Community Advisory Board Funding Recommendations (https://cao-94612.s3.us-west-2.amazonaws.com/documents/SSB-informational-report.pdf)
[327] *See*, The Navajo Nation - Healthy Dine Nation Act of 2014 (https://tax.navajo-nsn.gov/Navajo%20Taxes/Memo%20Unhealthy%20Food%203-23-15.pdf)
[328] *See*, Global Food Research Program at UNC Chapel Hill - Fiscal Policies (https://www.globalfoodresearchprogram.org/policy-research/fiscal-policies/)
[329] *See*, UConn Rudd Center for Food Policy and Health - Sugary Drink Tax Calculator (https://uconnruddcenter.org/tax-calculator/)

Another factor that would affect the amount of revenue would be which items are taxable and which items are not. To use an example, Philadelphia included non-caloric sweeteners in their tax, and generated $76.9 million in revenue in FY19. By contrast, Seattle excluded those sweeteners from their tax and in 2019 generated $18.3 million. Adjusting both into per-capita terms using the 2020 census data, Philadelphia's tax generated approximately $47.14 per resident compared to Seattle's $24.83.[330] This is not meant to say that the entire gap between Seattle and Philadelphia is caused by the latter including non-caloric sweeteners but it is certainly a major factor. The gap is especially noteworthy considering that Seattle's per ounce tax rate (1.75 cents) is actually slightly higher than Philadelphia's (1.5 cents).

The benefits of this option would be the substantial amount of revenue raised and the potential to reduce overconsumption of items tied to nutrition insecurity and negative health outcomes. A study by the University of Washington found that indeed an effect of Seattle's sugar-sweetened beverage tax had this effect.[331] Similarly, another study examined all five cities named in this report, finding that consumption did decline by an average of 33% across all five compared to neighboring areas without any evidence of an increase in cross-border shopping.[332] The University of Washington study also found that BMI outcomes improved in Seattle compared to neighboring towns after the tax was passed, which in turn reduces risks for many nutrition-related diseases.[333]

One drawback to this approach is that if the tax does succeed in reducing consumption the revenue generated by the tax would decline over time, as the studies cited above show has happened elsewhere. Another potential drawback is reducing sales and profits at the businesses selling these products. However, it is worth noting that the University of Washington found no evidence of this happening after Seattle passed its tax, instead finding that Seattle convenience stores actually saw their revenue increase

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[330] *See*, US Census Bureau - QuickFacts Seattle city, Washington; Philadelphia city, Pennsylvania (https://www.census.gov/quickfacts/fact/table/seattlecitywashington,philadelphiacitypennsylvania/PST045223)

[331] *See*, University of Washington School of Public Health - Seattle's Sugar-Sweetened Beverage Tax Results in Improved Public Health Outcomes (https://sph.washington.edu/news-events/sph-blog/sugar-sweetened-beverage-tax-results-in-improved-public-health)

[332] *See*, Kaplan, S., White, J. S., Madsen, K. A., Basu, S., Villas-Boas, S. B., & Schillinger, D. (2024). Evaluation of Changes in Prices and Purchases Following Implementation of Sugar-Sweetened Beverage Taxes Across the US. JAMA health forum, 5(1), e234737. https://doi.org/10.1001/jamahealthforum.2023.4737

[333] *See*, University of Washington School of Public Health - Seattle's Sugar-Sweetened Beverage Tax Results in Improved Public Health Outcomes (https://sph.washington.edu/news-events/sph-blog/sugar-sweetened-beverage-tax-results-in-improved-public-health)

slightly in year two of the tax compared to neighboring towns.[334] Another potential drawback is the possibility of consumers leaving the state to buy these items. There is conflicting evidence on this, with the study cited above, conducted by researchers at the University of California-Berkeley, finding no evidence of cross-border shopping.[335] However, a University of Georgia study found that almost 40% of the decrease in sugar sweetened beverage consumption in Philadelphia was offset by increased purchases in surrounding towns.[336] However, it is worth noting that the researcher in the UGA study concludes that sugar sweetened beverage taxes could work "only if you enact a policy at broader levels of government, such as at the state or national level," which implementing a statewide tax would accomplish.[337]

Another potential drawback mentioned in the same research is that these taxes would disproportionately impact low-income individuals.[338] The CDC confirms that low-income individuals tend to have a higher intake of sugar sweetened beverages compared to national averages.[339] As such, it would be necessary to dedicate the revenue of this tax to programs that could offset these costs by providing significant savings to those same low-income households elsewhere. The University of Georgia researcher who studied Philadelphia's tax comes to a similar conclusion, noting that "if we were to subsidize healthier options, especially for these [low-income] groups, the tax might work better."[340]

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[334] *See*, University of Washington School of Public Health - Seattle's Sugar-Sweetened Beverage Tax Results in Improved Public Health Outcomes (https://sph.washington.edu/news-events/sph-blog/sugar-sweetened-beverage-tax-results-in-improved-public-health)

[335] *See*, University of California, Berkeley - Taxes on sugar-sweetened drinks drive decline in consumption (https://publichealth.berkeley.edu/news-media/research-highlights/taxes-on-sugar-sweetened-drinks-drive-decline-in-consumption#:~:text=A%20new%20study%20by%20researchers,steadily%20across%20five%20American%20cities.)

[336] *See*, Lozano-Rojas, F., & Carlin, P. (2022). The effect of soda taxes beyond beverages in Philadelphia. Health economics, 31(11), 2381–2410. https://doi.org/10.1002/hec.4586

[337] *See*, UGA Today - City-based soda pop taxes don't effectively reduce sugar consumption (https://news.uga.edu/soda-pop-taxes-dont-reduce-sugar-consumption/?&utm_source=google&utm_medium=ad&utm_campaign=aba_nationwide_persuasion_102816_google_20240620-20240630_search-na-na_na_17sXX_&gad_source=1&gclid=CjwKCAjwnK60BhA9EiwAmpHZwwlcsOUr6ZqTqWLv2Y7jd9ce5bmlbOx4gknLH3eOb3ij4_vBNZ0eDxoCQS0QAvD_BwE)

[338] *See*, UGA Today - City-based soda pop taxes don't effectively reduce sugar consumption (https://news.uga.edu/soda-pop-taxes-dont-reduce-sugar-consumption/?&utm_source=google&utm_medium=ad&utm_campaign=aba_nationwide_persuasion_102816_google_20240620-20240630_search-na-na_na_17sXX_&gad_source=1&gclid=CjwKCAjwnK60BhA9EiwAmpHZwwlcsOUr6ZqTqWLv2Y7jd9ce5bmlbOx4gknLH3eOb3ij4_vBNZ0eDxoCQS0QAvD_BwE)

[339] *See*, CDC - Get the Facts: Sugar-Sweetened Beverages and Consumption (https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html)

[340] *See*, UGA Today - City-based soda pop taxes don't effectively reduce sugar consumption (https://news.uga.edu/soda-pop-taxes-dont-reduce-sugar-consumption/?&utm_source=google&utm_medium=ad&utm_campaign=aba_nationwide_persuasion_102816_google_20240620-20240630_search-na-na_na_17sXX_&gad_source=1&gclid=CjwKCAjwnK60BhA9EiwAmpHZwwlcsOUr6ZqTqWLv2Y7jd9ce5bmlbOx4gknLH3eOb3ij4_vBNZ0eDxoCQS0QAvD_BwE)

Conclusion

While this report has endeavored to provide a comprehensive analysis of the state of food and nutrition insecurity in Connecticut, the complex and multifaceted nature of these challenges means that one report cannot capture every nuance. Many of the individual barriers briefly discussed in this report could have entire sections dedicated to their analysis, and there are almost certainly other barriers not identified here. The goal of this report is to provide an overview of the state of key factors in food insecurity, identify the most widespread barriers, and offer potential strategies to combat those barriers. Future iterations of this report will endeavor to provide a more in-depth look at specific barriers and components of food and nutrition insecurity.

The overall conclusion is that food and nutrition insecurity in Connecticut are widespread, persistent, and having a significant negative impact on lives and communities across the state. Furthermore, available evidence suggests that without a significant policy intervention or a major change in circumstances the situation is more likely to get worse than it is to get better. There is innovative and effective work being done by state agencies, local communities, nonprofits, and others, but it is ultimately not enough to fully address the current challenges. The impact of these organizations' work is being limited by insufficient resources and the lack of a clear statewide strategy for how to eliminate food and nutrition insecurity. While the strategy offered in section four of this report is by no means the only option, it is imperative that the state adopt a clear strategy with measurable targets and a combination of policies to meet those targets. With thousands of organizations operating in different parts of the food system, this strategy could provide clarity for how each organization's work fits into the larger whole. The goal would not be to take away flexibility or autonomy from any organization, but to open up opportunities for coordination and collaboration.

The other central conclusion of this report is that food insecurity is not only a food issue, but a healthcare issue, an education issue, a housing issue, an economic issue, and more. The impacts of food insecurity touch on many if not most of the areas that the state government has responsibility for. In order to get the best outcomes in these other areas, remaining challenges with foundational issues such as food and nutrition security need to be resolved as well.

Food is a necessity, medicine, opportunity, and more. When a person has to go without food, harm is caused to them, their community, and the entire state. While there are many challenges to ensuring that doesn't happen anywhere in this state, there are also many opportunities. These opportunities, if realized, could improve the quality of life for hundreds of thousands of residents while also benefiting Connecticut as a whole.

Appendix

Appendix A: USDA Levels of Food Security and Insecurity (https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/definitions-of-food-security/)

Food Security

- High food security (old label = Food security): no reported indications of food-access problems or limitations.
- Marginal food security (old label = Food security): one or two reported indications — typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.

Food Insecurity

- Low food security (old label = Food insecurity without hunger): reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- Very low food security (old label = Food insecurity with hunger): reports of multiple indications of disrupted eating patterns and reduced food intake.

Appendix B: USDA Levels of Low Access for defining LILA areas (https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/)

Three measures of food access based on distance to a supermarket are provided in the Atlas:

- Low-income census tracts where a significant number (at least 500 people) or share (at least 33 percent) of the population is greater than one-half mile from the nearest supermarket, supercenter, or large grocery store for an urban area or greater than 10 miles for a rural area. Using this measure, an estimated 53.6 million people, or 17.4 percent of the U.S. population, live in tracts that are low-income and low access and are more than one-half mile or 10 miles from the nearest supermarket.
- Low-income census tracts where a significant number (at least 500 people) or share (at least 33 percent) of the population is greater than 1 mile from the nearest supermarket, supercenter, or large grocery store for an urban area or greater than 10 miles for a rural area. This measure shows that an estimated 18.8 million people, or 6.1 percent of the U.S. population, live in low-income and low access tracts and are more than 1 mile or 10 miles from a supermarket.
- Low-income census tracts where a significant number (at least 500 people) or share (at least 33 percent) of the population is greater than 1 mile from the nearest supermarket, supercenter, or large grocery store for an urban area or greater than 20 miles for a rural area. Under this measure, an estimated 17.1 million people, or 5.6 percent of the U.S. population, live in low-income and low access tracts and are more than 1 mile or 20 miles from a supermarket.

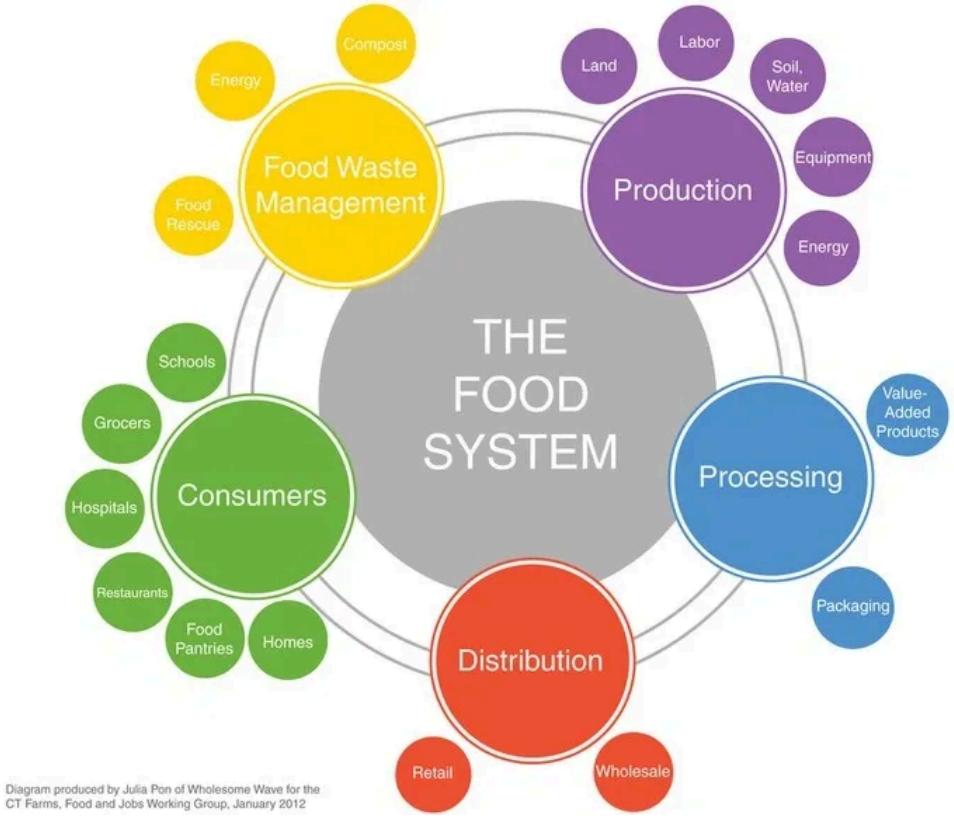
Additional tract-level indicators of access

Vehicle availability

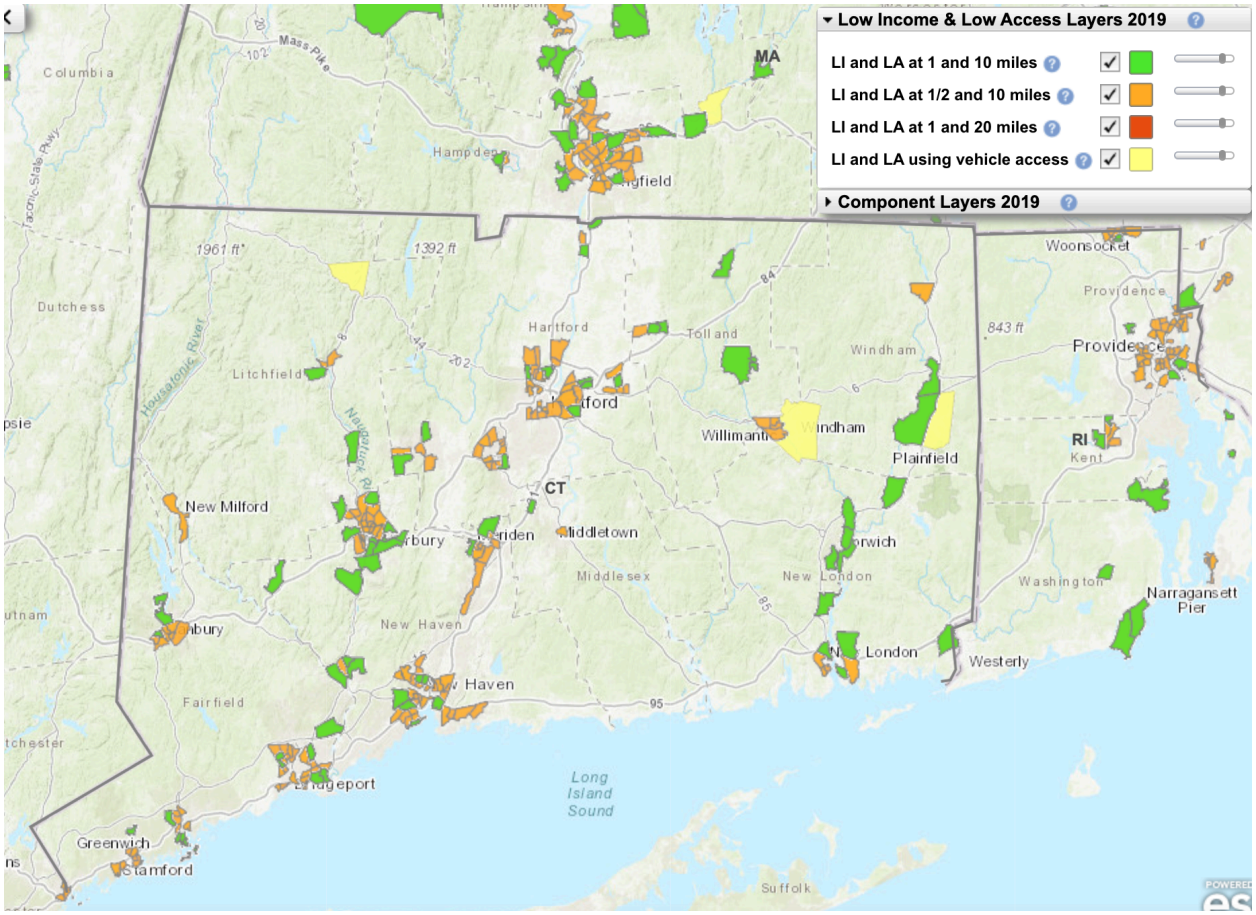
If a vehicle is available to a household for private use is an important additional indicator of access to healthy and affordable food. For households living far from a supermarket or large grocery store, access to a private vehicle may make getting to these retailers easier than relying on public or alternative means of transportation.

A tract is identified as having low-vehicle availability if more than 100 households in the tract report having no vehicle available and are more than one-half mile from the nearest supermarket. This corresponds closely to the 80^{th} percentile of the distribution of the number of housing units in a census tract without vehicles at least one-half mile from a supermarket (the 80^{th} percentile value was 108 housing units). This means that about 20 percent of all census tracts had more than 100 housing units that were one-half mile from a supermarket and without a vehicle. This indicator was applied to both urban and rural census tracts.

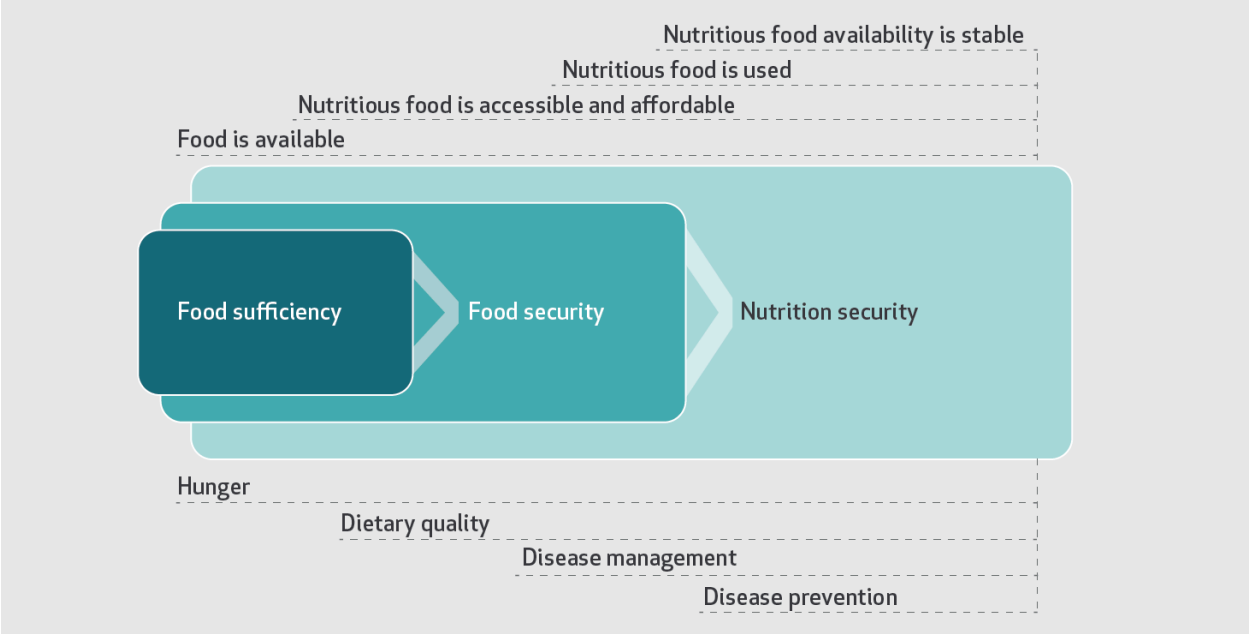
Appendix C: Food System Diagram used by the CT Food Policy Council (https://ctfoodpolicy.com/ct-food-system)



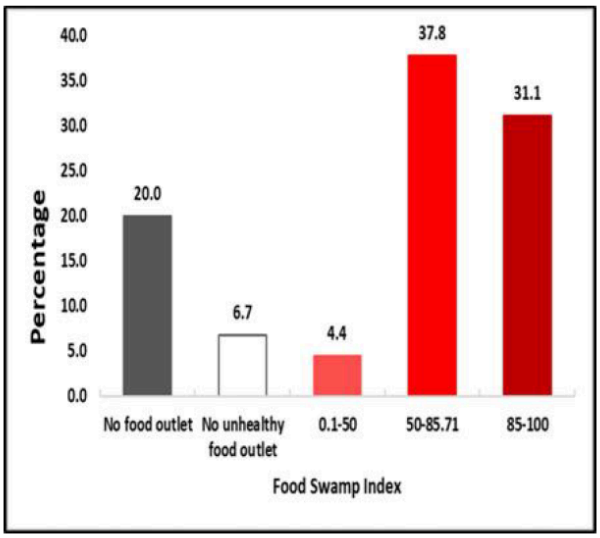
Appendix D: Map of LILA Areas in Connecticut
(https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/)



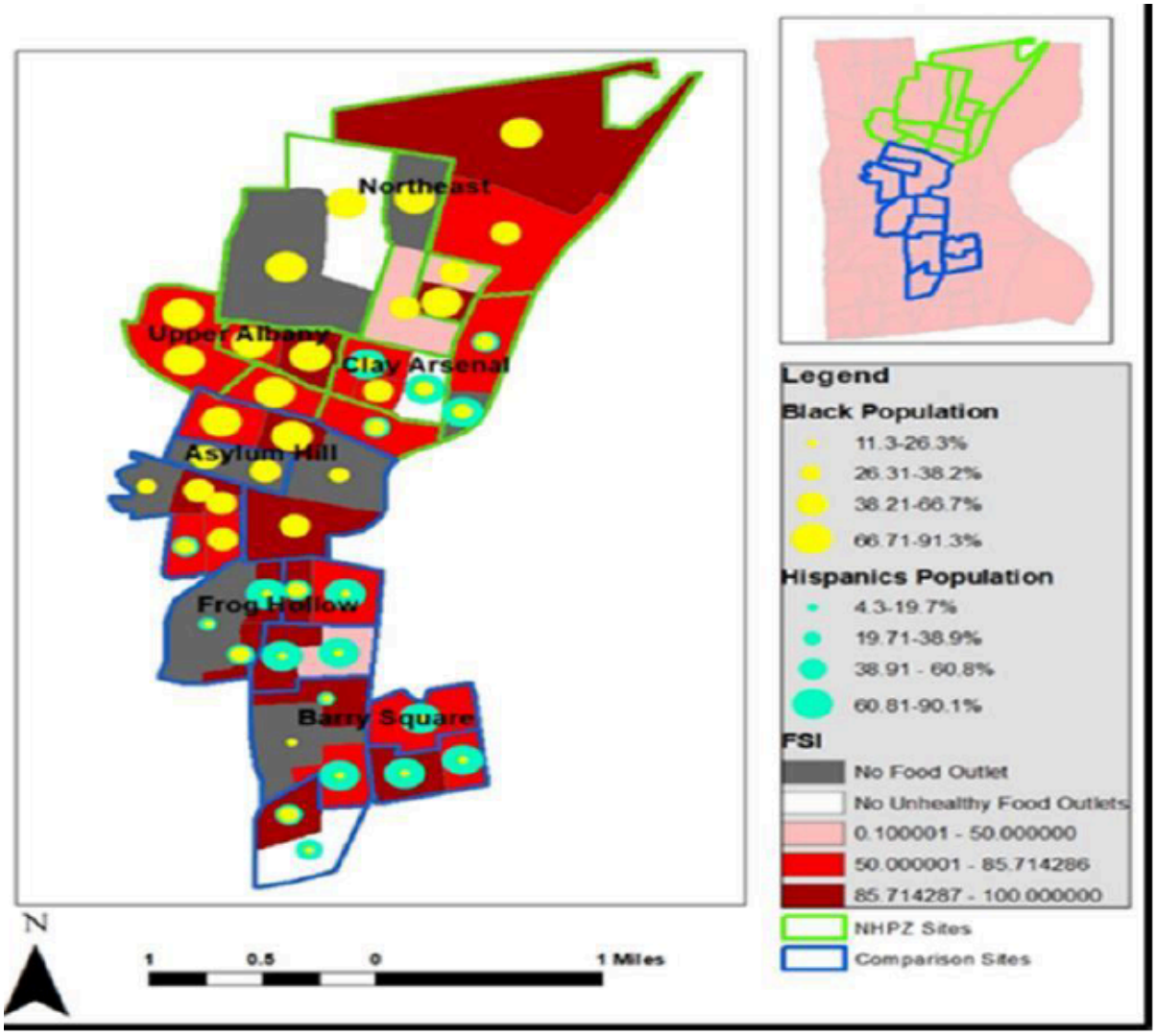
Appendix E: The Relationship between Food Sufficiency, Food Security, and Nutrition Security (“Measuring And Addressing Nutrition Security To Achieve Health And Health Equity, " Health Affairs Health Policy Brief, March 30, 2023. DOI: 10.1377/hpb20230216.926558) (https://www.healthaffairs.org/content/briefs/measuring-and-addressing-nutrition-security-achieve-health-and-health-equity)



Appendix F: Distribution of Food Swamp Index scores in North Hartford Promise Zone and comparison sites using food audit data (Overview of Phase 1 CBPR NHPZ Research 2020-2022, K. Cooksey Stowers)



Appendix G: Pattern of food swamp exposure in North Hartford Promise Zone and comparison sites using food audit data and racial composition (Overview of Phase 1 CBPR NHPZ Research 2020-2022, K. Cooksey Stowers)



Appendix H: Food System Jobs sorted by median hourly wage as of May 2023 (bolded lines are categories rather than specific occupations) (https://www.bls.gov/oes/2023/may/oes_ct.htm#35-0000)

State	OCC_CODE	Title	# of Jobs	Median Hourly Wage	Median Annual Wage
Connecticut	19-1012	Food Scientists and Technologists	30	39.96	83,120
Connecticut	11-9051	Food Service Managers	1,100	37.17	77,320
Connecticut	35-1011	Chefs and Head Cooks	3,490	29.12	60,570
Connecticut	**00-0000**	**All Occupations (Not All Food Related)**	**1,660,330**	**26.98**	**56,130**
Connecticut	45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	100	26.38	54,860
Connecticut	**51-0000**	**Production Occupations (Not All Food Related)**	**87,910**	**23.03**	**47,900**
Connecticut	35-1012	First-Line Supervisors of Food Preparation and Serving Workers	10,660	21.76	45,250
Connecticut	35-2012	Cooks, Institution and Cafeteria	3,910	21.55	44,820
Connecticut	51-3093	Food Cooking Machine Operators and Tenders	190	20.31	42,250
Connecticut	51-3021	Butchers and Meat Cutters	860	19.33	40,210
Connecticut	51-3099	Food Processing Workers, All Other	90	18.68	38,850
Connecticut	51-3091	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	70	18.41	38,280
Connecticut	35-2019	Cooks, All Other	290	18.23	37,910
Connecticut	35-2015	Cooks, Short Order	130	18.20	37,860
Connecticut	35-9099	Food Preparation and Serving Related Workers, All Other	220	17.96	37,350
Connecticut	51-3011	Bakers	2,170	17.88	37,180
Connecticut	**41-0000**	**Sales and Related Occupations (Not All Food Related)**	**137,770**	**17.73**	**36,870**
Connecticut	35-2014	Cooks, Restaurant	14,430	17.71	36,830
Connecticut	51-3092	Food Batchmakers	1,080	17.71	36,840
Connecticut	35-3031	Waiters and Waitresses	22,150	17.08	35,530
Connecticut	**45-0000**	**Farming, Fishing, and Forestry Occupations**	**880**	**17.00**	**35,350**
Connecticut	35-3041	Food Servers, Nonrestaurant	4,290	16.89	35,130
Connecticut	**35-0000**	**Food Preparation and Serving Related Occupations**	**127,800**	**16.71**	**34,750**
Connecticut	35-2021	Food Preparation Workers	10,740	16.68	34,690
Connecticut	35-2011	Cooks, Fast Food	2,250	16.63	34,590
Connecticut	45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	190	16.34	33,990
Connecticut	51-3023	Slaughterers and Meat Packers	60	16.29	33,890
Connecticut	45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	460	15.75	32,750
Connecticut	51-3022	Meat, Poultry, and Fish Cutters and Trimmers	380	15.63	32,510
Connecticut	35-3011	Bartenders	8,450	15.62	32,500
Connecticut	35-9021	Dishwashers	6,940	15.17	31,560
Connecticut	35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	4,450	15.02	31,240
Connecticut	41-2011	Cashiers	36,340	15.01	31,230
Connecticut	35-3023	Fast Food and Counter Workers	29,310	14.97	31,130
Connecticut	35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	6,070	14.92	31,030

Appendix I: Counts and Percentages of the State's Population and LILA Tracts by County (Population figures: https://portal.ct.gov/sots/register-manual/section-vii/population-of-connecticut-by-counties)

Area	Population (2021 estimate)	Population (% of state total)	# of LILA Tracts (.5 mi urban/10 mi rural)	LILA Tracts (% of state total)
Fairfield	959768	26.6%	48	23.2%
Hartford	896854	24.9%	52	25.1%
Litchfield	185000	5.1%	6	2.9%
Middlesex	164759	4.6%	2	1.0%
New Haven	863700	24.0%	72	34.8%
New London	268605	7.4%	14	6.8%
Tolland	150293	4.2%	6	2.9%
Windham	116418	3.2%	7	3.4%
Statewide	3605597	100.0%	207	100.0%

Appendix J: CWCSEO Food Database and Needs Survey Overview

Public Act 23-204 requires the Commission to compile “a database... listing food recovery organizations, food insecurity programs, supermarket locations and agricultural producers of food available for sale directly to the public.” As part of this effort, the Commission created and distributed an opt-in form. This form included a number of questions about challenges the organizations had experienced in the last year and needs they have moving forward. A convenience sampling method was used, and as such the results should not be interpreted as being representative of the entire population. The sample size is **162 organizations**, which includes the following categories (respondents could select multiple categories or “other” so the numbers will not add up to 162):

- 68 food banks, food pantries, or other providers of food to communities free of charge
- 32 farms, community gardens, or other food producers
- 29 food insecurity prevention programs
- 17 farmers markets, community supported agriculture (CSAs), or other producers of food selling directly to the public
- 14 healthcare and/or food as medicine providers
- 14 advocacy organizations and/or registered lobbyists
- 13 food recovery organizations
- 11 academic or research institutions
- 9 restaurants, food trucks, or other providers of cooked food
- 3 grocery stores, supermarkets, or other brick and mortar food stores