

COMMUNITY FOOD SECURITY AND NUTRITION IN NORTH CENTRAL MA
MOVING UP THE FOOD SECURITY CONTINUUM FROM
EMERGENCY ASSISTANCE TO SELF-SUFFICIENCY
March 2022

Our food environment is no accident, it is perpetuated by the systemic and structural drivers that support our current food supply chain. In our existing food supply chain model, value is most based on price, scale, and efficiency. These aren't necessarily bad things, but when you factor in barriers that consumers who are trying to access food face including man-made food deserts and food swamps in our low-income communities, it makes it nearly impossible to access nutritious foods.

Growing Places was founded in 2001 to address the high rates of food insecurity and nutrition related chronic disease in North Central MA which includes the 27 communities in northern Worcester County. Per the MA Food is Medicine report by Harvard Public Law, North Central MA's communities are some of the unhealthiest in the state. They have high rates of nutrition related chronic disease, food insecurity, and significant access issues due to poor transportation. The median income is significantly lower in North Central MA and there are 7 low-income low-access tracts that qualify as USDA certified food deserts. With limited access to whole healthy food, it is not surprising that 66% of residents only eat 1-2 servings of fruits and vegetables each day (20% of recommendations). This is a strong predictor for poor health outcomes.

To better understand food insecurity in North Central MA, Growing Places and diverse partners that address public health (schools, healthcare, emergency food providers, farmers, anchor institutions, planning and more), conducted a comprehensive assessment of our regional food system. We found we have plenty of farmers. In fact, North Central MA supports 189 operating farms – most are small and medium size operations. The region is also home to 269,000+ residents. Unfortunately, there is no system to connect the food our local farms produce to the people who will eat it. Other key findings are that 23% of residents are getting their food at a dollar/convenience store or food pantry. We also learned that older adults struggle to prepare healthy meals (cooking for just one or have difficulty cutting) and that families either don't have time to prep a full meal or may not know what to do with certain food especially fruit and vegetables that are common crops in Massachusetts (like a parsnip or kohlrabi). Residents shared that a delivery service and prepared meals would help them to eat healthier.

Many residents must make critical decisions between paying for housing vs. utilities vs. food each month because of limited resources. To address the lack of resources, MA has a SNAP incentive program called the Healthy Incentive Program (HIP) which reimburses all SNAP households for local produce based on household size. We found that only 5-10% of these benefits are being utilized. This leaves \$1.9M of funding on the table in North Central MA each month that should be going to the local food economy. Even worse is the SNAP gap that ranges from 39% to 100% in North Central MA's communities. MIT estimates that

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\$6.5M is left on the table monthly in SNAP dollars that could be support local jobs in the food sector and help purchase nutritious foods for low-income households.

Given the complexity of the issue and need to expand our capacity to better tackle this immense problem, Growing Places hired a consultant who addresses these issues at the food system level.

With significant resident and food system stakeholder input we are redesigning the North Central MA food system based on the values that are important to our community with innovative strategies that connect the food system and engage all stakeholders. Strategies focus on the food system holistically from production to food waste and seek to move individuals up the food security continuum so individuals do not stay in emergency food assistance mode and rather move towards self-sufficiency as an active participant in their community food system.

Here are a few examples of what is underway in North Central MA:

Production

Growing Places roots are in gardening. We began by donating raised bed garden materials to low-income households in North Central MA to promote healthy eating 20 years ago. Over the years this work has expanded to supporting community, school, and institutional gardens throughout our region. Since the growing season is misaligned with the school year, it is challenging to maximize the benefits of traditional outdoor gardening during the school year. Not to mention, the broader challenge of growing most crops in New England during the many harsh months of winter. To supplement the important hands-on education that school gardens provide and support year-round growing for food security, we use indoor aeroponic tower gardens in schools and have a tower farm at our office. These soil free gardens grow a variety of crops from leafy greens to cucumbers to leeks. Our office engages high school and adult volunteer to support growing over 500 plants indoors each month. Crops are provided through our home delivered produce program that I'll speak more to in a moment. We also support other public facing institutions (libraries) with tower gardens and have set up five schools with tower gardens. Complementing this, we developed a STEM based Teaching Garden For Kids – STEM to Student Curriculum with how-to videos for the general public.

Aggregation

Through the community food assessment, we learned that the abundance of small and medium size farmers in our region lack aggregation and distribution systems to scale their businesses and become financially sustainable. To address this challenge, Growing Places, farmers, and anchor institutions are working together to create a connected and efficient community food system through a hub and spoke food distribution model. This will significantly impact the health of the community at the institutional, individual, and producer level. It allows farmers to increase their financial stability through bulk

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purchasing, institutions to acquire higher quality/more nutritious whole foods, and allows for more affordable pricing for individual consumers. Critical to this is infrastructure, transportation, marketing, technical support, and technology for ordering. In a discussion to pilot this system with one of our healthcare partners, the foodservice director shared how excited he was to provide locally sourced food not only to the staff and visitors in the hospital cafeteria, but also to include it on the patient menu.

Distribution and Equitable Access

To address declining farmers market participation and transportation barriers Growing Places built a mobile market using a retrofitted trailer. It looks like a tiny house on wheels. We also became certified to accept SNAP and the MA HIP program as a direct market and visits about 15 locations each month. We then decided to take it to next level and home deliver the produce through a state pilot program with the MA Department of Transition Assistance. 70 to 80% of the 200 customers we deliver to weekly use their SNAP/HIP benefits to purchase produce, so we know it's working.

Novel to food security and nutrition outside of healthcare walls, Growing Places staff's two Registered Dietitians. To address preparation and knowledge barriers around fresh produce, our Dietitians developed Fresh Chef Meal Kits. Similar to other home delivered meal kits, Fresh Chef include partially prepped produce (e.g., cubed squash, diced potatoes) with shelf-stable ingredients and recipes scaled to cooking skill level for our home delivery program. Unique to Growing Places, they can be purchased with SNAP and HIP so the program is equitable and stretches food dollars. Also unique, our participant intake/sign-up process allows us to customize foods for dietary constraints (e.g. no leafy greens for customers taking coumadin or less starchy veggies for diabetics).

These are just a few examples of how a small community-based organization with 10 staff can address community food security. Imagine what we can do together as a country.

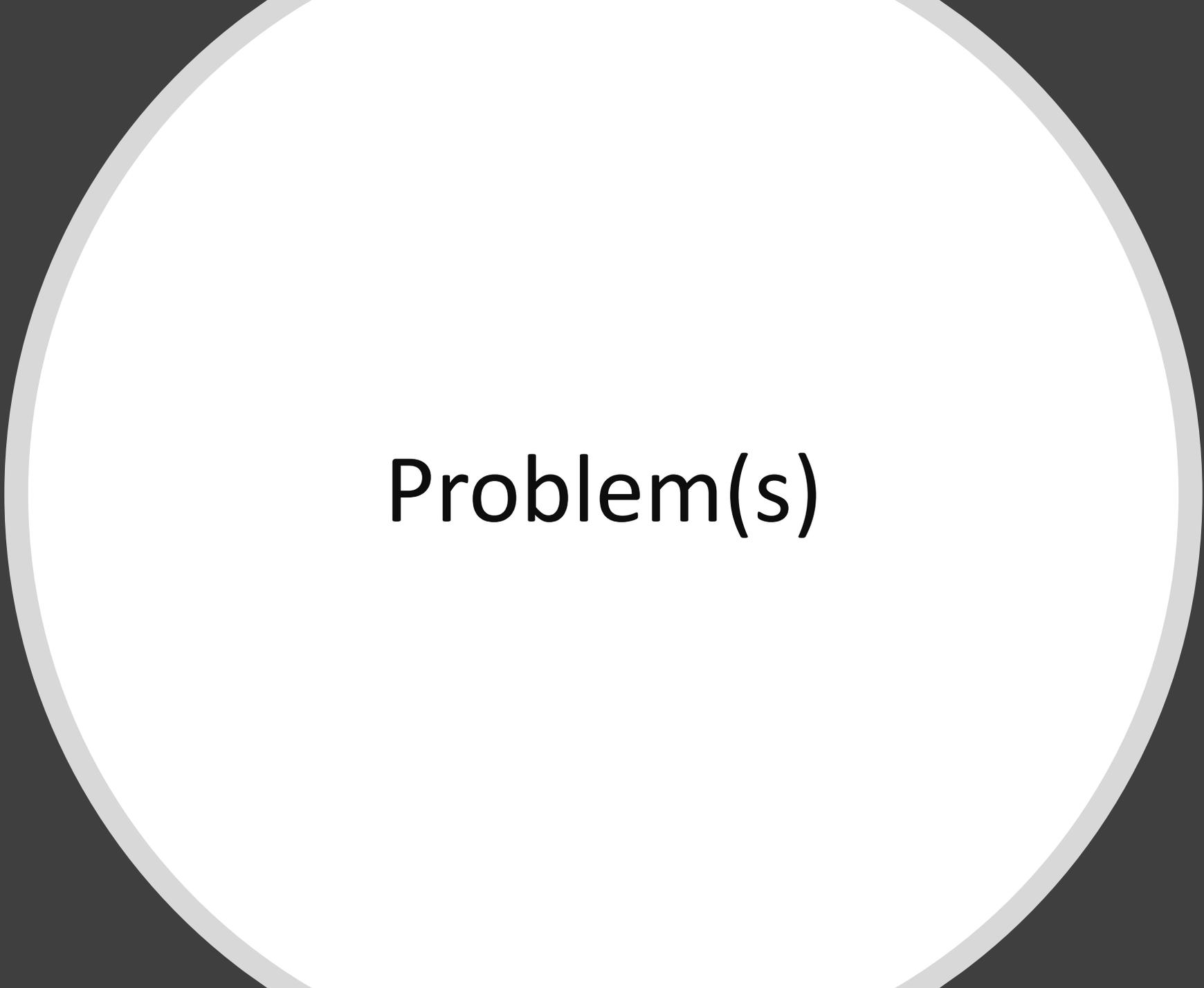
Thank You



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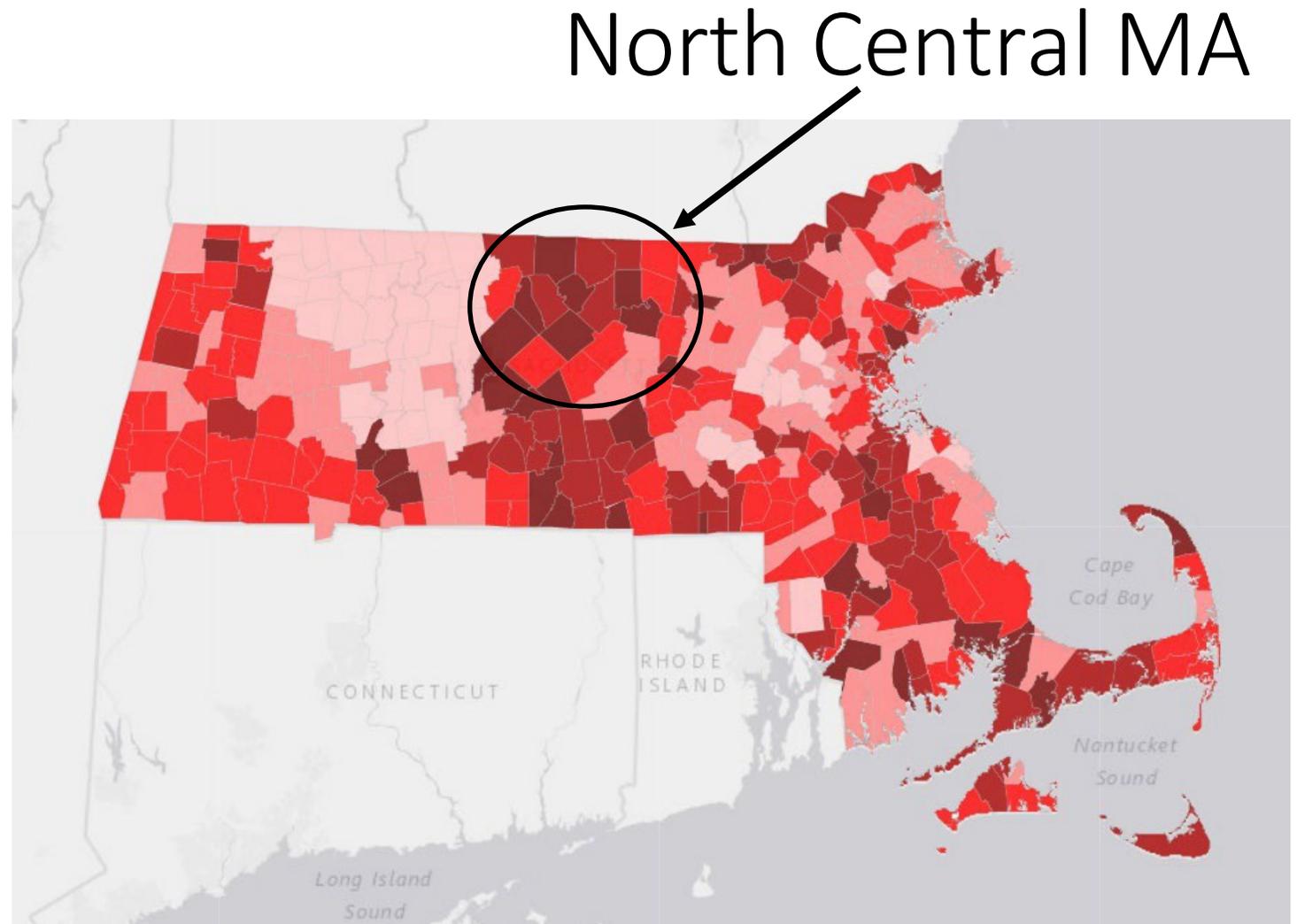


Problem(s)

Food Security and Nutrition Related Chronic Disease

Darker Shading =

- A high level of food insecurity
- A high burden of chronic diseases associated with food insecurity
- A lack of accessible and reliable transportation.



MA Food is Medicine Map

ASSESSMENT

NORTH CENTRAL MA

CONSUMER SURVEY

- **Most Important Food Purchasing Factors (*top three*):** quality, low price, and local
- **Household Income:** almost half earn <50k per year
- **Income Spent on Food:** majority spend \$101-\$200/wk. on food, next tier 51-100/wk.
- **Transportation:** ~20% households walk or get a ride to access food
- **Make It Easier to Access Food:** closer to home, delivery service, pre-prepped produce, knowing how to prep food

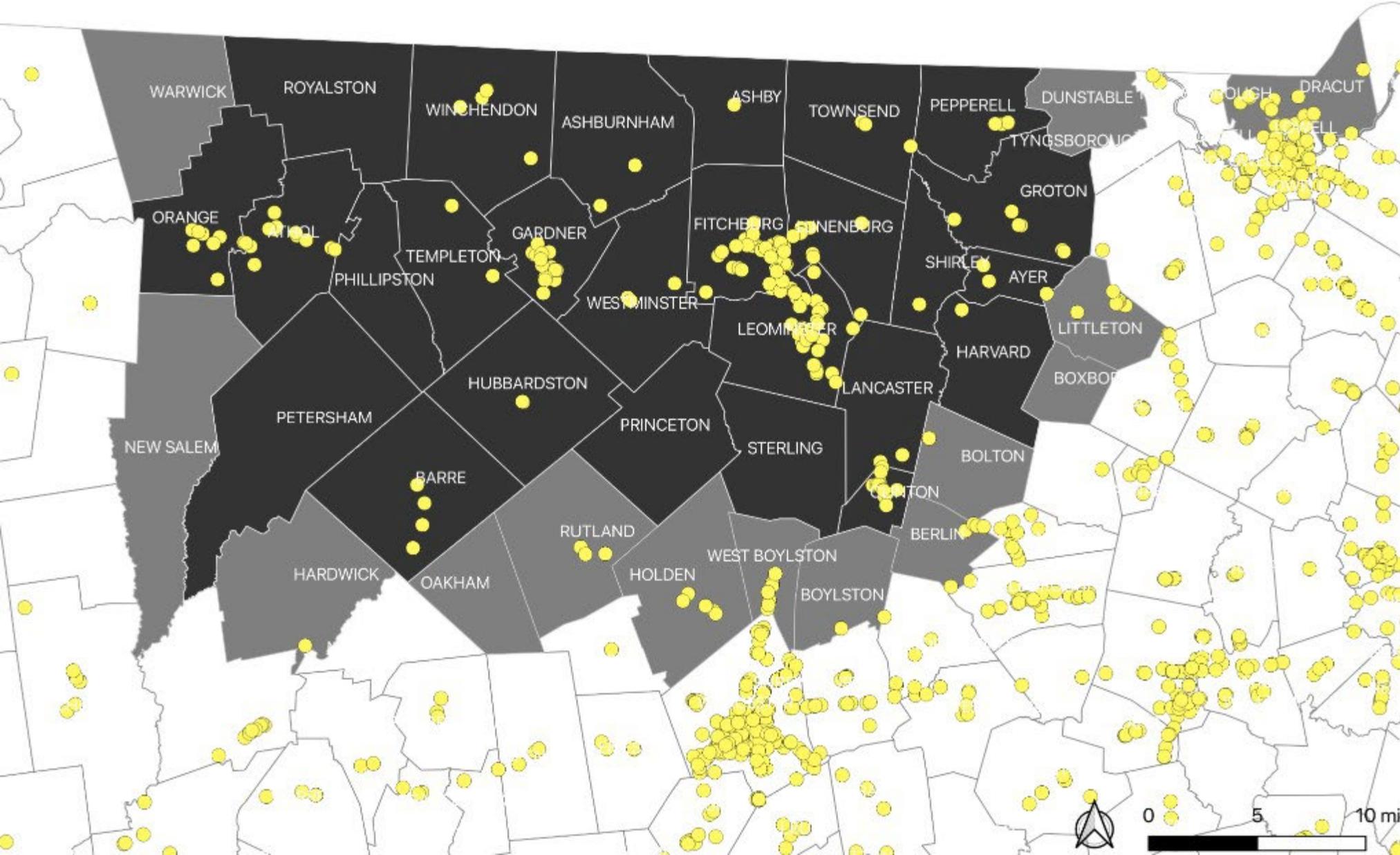
SNAP Gap by Town/Zip

City	Zip (Districts Shared)	Snapdv	SNAP Gap	SNAP Gap %
ASHBURNHAM	01430 (1)	400	563	58%
ASHBY	01431 (1)	211	325	61%
ATHOL	01331 (1)	2,870	1,869	39%
AYER	01432 (1)	686	696	50%
BALDWINVILLE	01436 (1)	510	331	39%
BERLIN	01503 (1)	165	244	60%
BOLTON	01740 (1)	77	227	75%
CLINTON	01510 (2)	1,969	1,693	46%
EAST TEMPLETON	01438 (1)	26	27	51%
FITCHBURG	01420 (1)	10,805	6,536	38%
GARDNER	01440 (1)	4,317	2,759	39%
GROTON	01450 (1)	269	524	66%
	01470 (1)	0	0	0%
	01471 (1)	0	0	0%
	01472 (1)	0	0	0%

HARVARD	01451 (1)	85	224	72%
	01467 (1)	0	31	100%
HUBBARDSTON	01452 (1)	264	291	52%
LANCASTER	01523 (1)	361	489	58%
LEOMINSTER	01453 (1)	6,628	5,434	45%
PEPPERELL	01463 (1)	682	917	57%
PRINCETON	01517 (1)	0	0	0%
	01541 (1)	106	172	62%
ROYALSTON	01368 (1)	114	142	55%
SHIRLEY	01464 (1)	504	520	51%
STERLING	01564 (1)	320	538	63%
TEMPLETON	01468 (1)	392	428	52%
TOWNSEND	01469 (1)	493	596	55%
WESTMINSTER	01441 (1)	0	0	0%
	01473 (1)	396	589	60%
WINCHENDON	01475 (1)	1,630	1,365	46%
	01477 (1)	0	0	0%

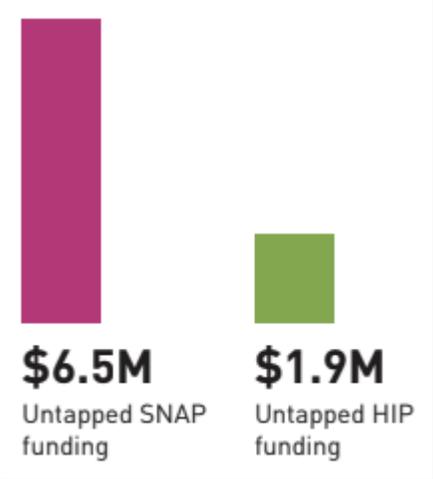
Location of food system assets in North Central MA

● Retail supporting SNAP



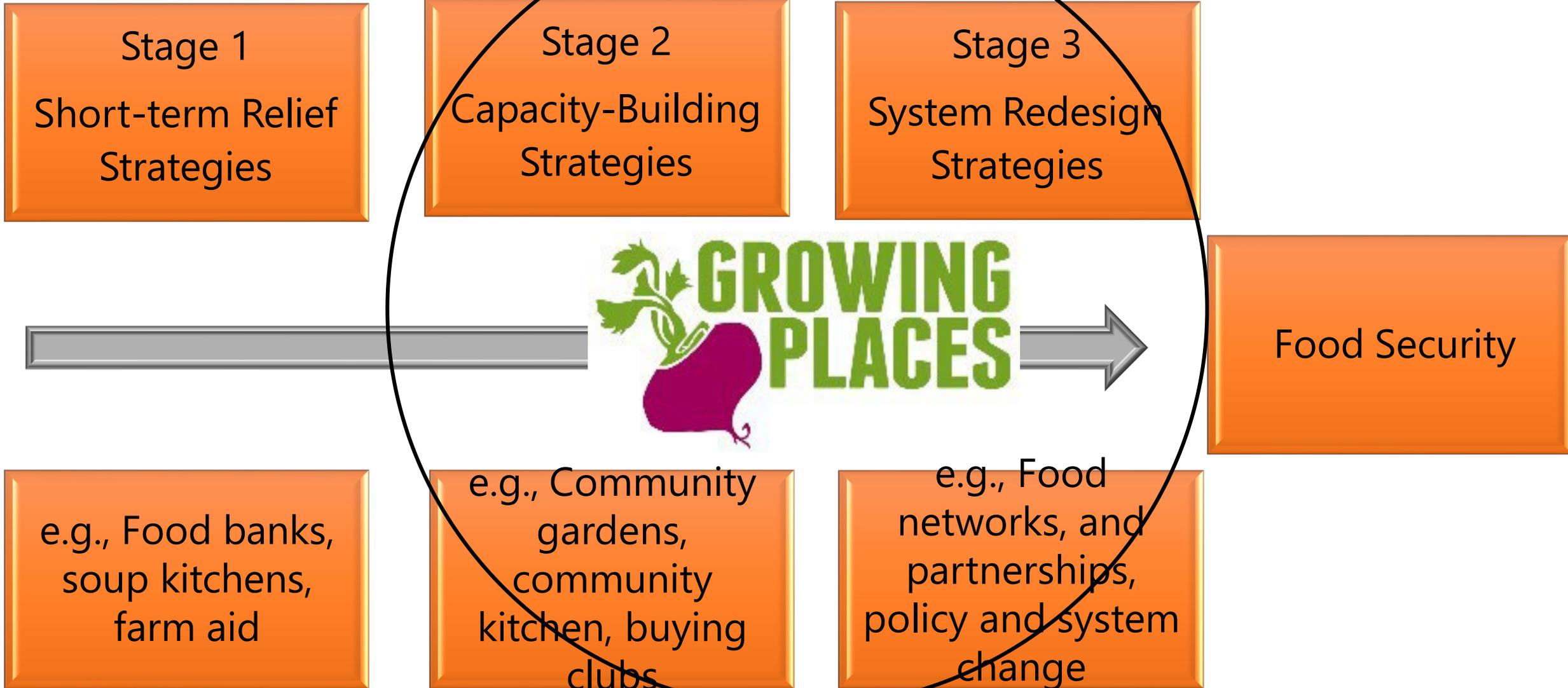
SNAP:

- large amount of untapped SNAP/HIP funding in the region



Solution(s)

FOOD SECURITY CONTINUUM



Connect and Expand the Community Food System



Equity and Sustainability

Production



Community-School-Institutional Gardens



Indoor Aeroponic Gardens

Aggregation

- *Create regional nutrition hubs with local and non-local foods*

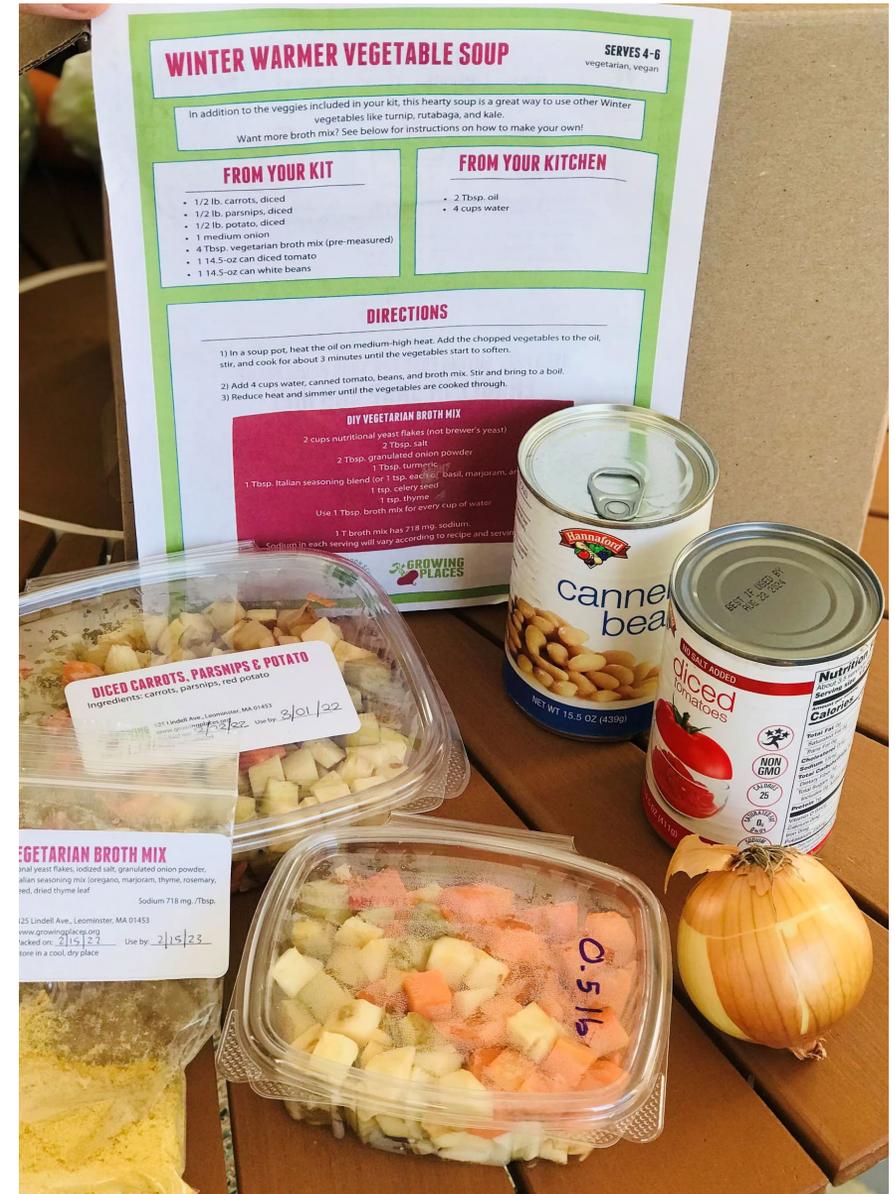


Access



Fresh. Canned. Dried. Frozen.
It's **KIP** to be healthy!

State Local Produce Incentives



Fresh Chef Meal Kits

Distribution



Home Delivery



Mobile Farmers Market

NORTH CENTRAL MA FOOD CENTER



A Community Food Center is:

A facility or group of facilities where multiple types of food enterprises co-locate, each with a distinct, dedicated space, to enjoy enterprise-level benefits from naturally-occurring synergies and offer benefits to the community.



PRODUCTION

Where is the food coming from?

Local Farmers & Producers
Home & Community Gardeners
Bulk Purchases from Anchor Institutions

What support systems are needed?

Infrastructure for Production
Environmental and Food Justice
Education
Land Preservation for Agricultural Use
Small Enterprise Training
Promotion for Producers
Connection with Education

WRAPAROUND SERVICES

What is needed to make the hub work

Aggregation & Distribution Software
Equipment (food processor, trucks, etc.)
Food Processing & Packaging
Community Education
Commercial Kitchen
Personnel
Retail component in Winchendon
Communication Systems
Marketing/Promotion
Hub Network Participation
Non-food Microenterprises
Space for community events (teen center, outdoor space)

**Smaller distribution systems within the NCMA hub / connected to larger distribution networks*

CONSUMPTION

Using a phased-in approach:

Healthcare Institutions
Farmers & Mobile Markets
Food Pantries & Backpack Programs
Retail & Restaurants
Collaboration with Neighbors Helping Neighbors (volunteer driver program)

NORTH CENTRAL MA FOOD CENTER COMPONENTS