EXECUTIVE SUMMARY

GREATER CAPITAL REGION
Food System Assessment

[Images of a cow, a field, a truck, and fresh produce]
The Greater Capital Region Food System Assessment was made possible thanks to the farmers, food processors, local food buyers, regional distributors, consumers, and food system stakeholders who took time and energy to share their experiences with the Assessment Team and research partners.

We dedicate this project to those working to build equity and resilience in local food systems; it is our intention that this project aides you in your work.

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For questions or comments, email foodassessment@capitalroots.org

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This report serves to inform funders, policymakers, and food system leaders by identifying opportunities for regional development that builds equity and economic resilience for low-income consumers and small farm and food businesses.

The recommendations from this report, if executed, will build community food security and strengthen the local food economy by taking a holistic approach to solving sector-specific challenges in the regional food system.

Capital Roots, the lead organization for this project, is a non-profit serving the Capital Region with community gardens, a regional food hub, and retail markets serving low-income communities with healthy food access. Since 1975, Capital Roots has been working in the realms of local food production and community food security. It is from this perspective, and the many lessons learned over the organization’s decades of work, that the Greater Capital Region Food System Assessment was developed.
TOP RECOMMENDATIONS
Based on the Assessment’s Key Recommendations by Sector (pages 5-7) and Key Findings (presented by sector starting on page 9). The Assessment Team recommends the following top actions to build equity and economic resilience in the regional food system.

EQUITY
Build community food security by ensuring healthy food access at retail outlets for all residents.
In addition to interventions that support consumer’s access to retail outlets (such as fully funding SNAP and improving public transportation to supermarkets), our region needs to develop last-mile healthy food distribution to existing small, independent retail outlets in neighborhoods with low healthy food access.

ECONOMIC RESILIENCE
Grow the local food economy by building capacity in wholesale market channels in the region to purchase more local food.
This is accomplished by holistic policies and investments in the region: by farmers who want to scale up adopting Agriculture of the Middle practices and becoming GAP certified, by processors adopting Processor Supported Agriculture, by regional distributors adopting Distributor Supported Agriculture, and by buyers committing to working with producers and distributors to source local food.

OUR VISION FOR THE GREATER CAPITAL REGION FOOD SYSTEM

- Low-income residents will have consistent access to healthy and culturally important food and incomes that ensure food security.

- All farmers will have a viable place in direct-to-consumer and regional wholesale markets, regardless of size, and Black, Indigenous, and People of Color (BIPOC) farmers will have access to land and farm financing.

- Food-based businesses will easily be able to process their products to add-value and find steady regional markets while sourcing from local farmers.

- Local food will be distributed throughout the region in an equitable manner, and regional distributors will have investment and support as they are critical to the local food economy and community food security.
WHAT IS A FOOD SYSTEM ASSESSMENT?

A Food System Assessment is a research project focused on the flow of food, from farm to plate, in a defined area. These projects serve as a tool for planning, policy, and activism within food systems.

This project examines the regional food system functioning in the Greater Capital Region Foodshed and focuses on the food system sectors of consumption, distribution, processing, and production.

NAVIGATING THIS REPORT

This Executive Summary provides an overview of the Greater Capital Region Food System Assessment, which took place from 2016 to 2020.

The Summary begins with the key Recommendations based on our research, with links to Section Reports for each Food System Sector (pages 5-6).

Next, the Summary reviews each Section Report and the key findings, which informed our recommendations (pages 7-21).

Then, the Summary reflects on food system shocks of 2020, which occurred after the research was completed (pages 22-23).

Finally, the Summary presented how the Assessment was developed, who participated in the project, and our approach to Community-Based Research (pages 24-28).
Key Recommendations by Sector

**CONSUMPTION**

- Increase community food security and healthy food access based on these top priorities:
  - Healthy food distribution to existing small retail food outlets in low-income, low-supermarket access neighborhoods.
  - Fully funded food assistance programs that increase retail food access, namely SNAP and WIC, with effective outreach tools for social service providers to provide to their clients.
- Put to rest the notion that nutrition education is the key intervention to increasing community food security and healthy food access.
- Fund the purchase of healthy, local foods by food assistance programs.
- Prohibit the donation of low-quality produce and nutrient-poor foods to food assistance programs, and to reduce low-quality food donations, build capacity for regional composting services for large food scrap producers.

**DISTRIBUTION**

- Invest in regional distributors to build their capacity to source local food* through investment in Distributor Supported Agriculture and development of local food aggregation points.
- Allocate public funding for food hubs to organizations that demonstrate commitment to both:
  1. **Distributor Supported Agriculture** - helping local producers scale up to wholesale market channels and helping buyers incorporate more local food purchasing into their menus.
  2. **Serving underserved local markets** - like small independent retail stores in the region, as opposed to food hubs solely focused on increasing sales to upscale NYC markets.

* The number of GAP Certified farms needs to increase in the region in order to increase the amount of produce that can be sourced by regional distributors.
## Key Recommendations by Sector

### PROCESSING

- **Strengthen business supports for small food-based businesses** in the region to include business plan development, financing opportunities, and access to production and storage infrastructure for direct-to-consumer and regional wholesale market channels.

- **Invest in Processor Supported Agriculture** to increase the amount of food purchased from local farms by the region’s processing businesses, which, in addition to large commercial companies, include small food vendors, caterers, and restaurants.

- **Develop a regional strategic plan for each local food processing sector**: dairy, grain, meat, and produce. Initial recommendations for each sector are listed in detail in the Processing Section of this report.

### PRODUCTION

- **Develop regional wholesale market channels for local food** to build resilience for small producers and grow the local food economy.

  This is accomplished by the following actions:
  - Use the *Agriculture of the Middle* concept as a framework to support farms to decide when, if, and how to scale up.
  - Increase the number of GAP certified farms.
  - Help small and new meat producers better access regional meat processing facilities with technical training.
  - Support the transition of commodity dairy farms to other types of agriculture and strengthen fluid milk processing in the region to support existing commodity dairy farms.
  - Develop local food aggregation to serve regional distributors and food hubs in the Capital District.
  - Support the connection between direct-to-consumer farmers market producers and regional wholesale markets.

- **Coordinate agricultural economic development through regional planning**, including an annual 11-county food system planning meeting and a food system track at regional planning trainings.
### Key Recommendations by Sector

#### MULTI-SECTOR RECOMMENDATIONS

**GENERAL**
- Form a regional food policy council to carry out the recommendations of this Assessment and continue to engage in food system development at a regional level.

**FARM TO INSTITUTION**
- Invest in improving regional distributors’ capacity to source local food, through Distributor Supported Agriculture, developing Agriculture of the Middle, and increasing the number of GAP certified farms in the region.
- Support the re-establishment of full kitchens inside institutions to better handle and prepare local food and healthy meals.

**FARMERS’ MARKET NUTRITION PROGRAM (FMNP)**
- Develop strategic plan to increase FMNP redemption rates in the region, especially for WIC families.

**PRODUCE RECOVERY**
- Fund produce recovery efforts that prioritize regional coordination, reducing costs for farmers, and improving quality of donated produce.

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### DIVE DEEPER INTO THE RESEARCH

In addition to the Executive Summary, there are four Section Chapters of the Assessment. These chapters explore the history of each sector in the region, explain our research methods in more depth, present local case studies, and introduce abstracts for the Assessment’s Research Reports. The Section Chapters can be viewed and downloaded at [www.capitalroots.org/about-us/foodassessment](http://www.capitalroots.org/about-us/foodassessment) or with the following links:

- **CONSUMPTION**
- **DISTRIBUTION**
- **PROCESSING**
- **PRODUCTION**
Report on Consumption Research

**Research Goal** - Identify areas of need and opportunities for growth to inform future efforts to increase food security and healthy food access for low-income consumers.

**Research Objectives**
1. Identify gaps and overlaps of food outlets.
2. Identify the barriers to food security and healthy food access.
3. Identify successful models for increasing food security and healthy food access.
4. Understand consumer demand in Retail Food Outlets and Food Assistance Programs.
5. Identify opportunities for new and existing outlets.

**Research Projects**
A. Healthy Food Availability & Affordability Study
B. Community Food Security & Healthy Food Access
C. Consumer Demand of Healthy Food
D. Culturally Important Foods
E. Farmers Market Nutrition Program
F. Produce Recovery

Consumption research focused on challenging widely held perceptions about building food security and healthy food access and identifying models for building equitable healthy food access in the Capital District.

The major misperceptions addressed by our research were:

- In order to increase healthy food access, more grocery stores need to be built in low-income, low-access neighborhoods.

- Low-income people struggle to eat healthy food because they do not know how to cook healthy food, as evidenced by clients expressing disinterest in certain produce (deemed ‘healthy’ by providers) or asking questions about how to cook produce at food pantries.

- Emergency feeding programs provide the majority of a person’s food and therefore the system requires more funding and expansion of services.

These misperceptions were addressed (1) through data collection and analysis of retail food environments in low-income neighborhoods in the Capital District and (2) through interviews with emergency feeding providers in a focus group setting, interviews with food pantry clients in rural, urban, and suburban communities, and interviews with other consumer groups, like ESL class participants, patients at a community health center, and college students.

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1 As defined by the USDA to designate ‘food deserts’. See page 5 of the Consumption Section Report to read about how we are re-thinking ‘food desert’ mapping.
KEY FINDING 1
Healthy food access can be increased by supporting healthy food distribution to existing retail food outlets in the majority of the Capital District.

While there are a few neighborhoods in the Capital District that only have one retail outlet, there are only two neighborhoods that do not have existing retail infrastructure: Rensselaerville and Preston-Potter Hollow in Albany County.

We approached mapping healthy food availability for low-income residents from an asset-based model, layering retail food outlets and community food resources to holistically understand community food security.

The retail outlet mapping categorized outlets by type and scored each outlet based on healthy food availability across food groups. This allowed for an analysis of the food environment in high and medium priority neighborhoods, which were determined by census tract and median poverty level.

Outcomes from our analysis determined four types of interventions to build community food security and healthy food access:

1. Independent Store Opportunity Zones – where independently owned retail outlets exist but do not carry healthy food across food groups. Interventions should focus on expanding healthy food distribution services.

Source: Availability & Affordability of Healthy Foods in Capital District Retail Food Outlets Research Report
2. **Chain Store Opportunity Zones** – where existing chain stores exist but do not carry healthy food across food groups. Interventions should focus on working with chain stores to change store policies.

3. **Food Access Resiliency Planning** – where there is only one healthy food outlet, making the community vulnerable to decreased food security if the business closes. Interventions should focus on diversifying retail access and maintaining existing retail operations.

4. **Infrastructure Barriers** – neighborhoods which have infrastructure barriers that decrease food access for residents of differing abilities and modes of transportation. Interventions should include improved public transportation and infrastructure.

**IN CONCLUSION**

The current retail food system in the Capital District has the capacity to support community food security, if it were to carry more healthy foods across the food groups. **The infrastructure exists, but the environments need to be enhanced.** Building new retail outlets, which is often the suggested intervention by food system funders in the region, is not necessarily the answer.

Interventions should support small independent retail businesses already established in neighborhoods to be able to better access financing and regional food distribution. Only after serious investment in the existing retail system to improve the food environment should building new retail outlets be considered.

These interventions not only build equity in the food system, but also economic resilience by **decentralizing healthy food access** from supermarkets (often in suburbs) to more and diverse types of food businesses existing within neighborhoods where low-income consumers live across the Capital District.

The points on the maps presented on the previous page show the opportunity zones for healthy food interventions in the City of Albany, as one example from our research. Figure 1 shows the neighborhoods where independent retail food outlets *could* carry healthy food options, given the proper access to distribution and infrastructure investments for their stores. Figure 2 shows which neighborhoods are ideal for chain store policy changes to carry healthy food options. **It should be noted that there are no neighborhoods in the City of Albany that are lacking existing retail infrastructure.**

The Research Report *Availability & Affordability of Healthy Foods in Capital District Retail Food Outlets* presents the maps showing retail outlets and recommended interventions to increase healthy food access in retail outlets in the Consumption study area: Albany, Rensselaer, Saratoga, and Schenectady Counties.
KEY FINDING 2

Most people at a food pantry setting do not have trouble cooking good\(^2\) food.

Their reported barriers to healthy food access were limited food budgets and lack of transportation to retail outlets, of which supermarkets were the most commonly reported outlet where people accessed ‘good’ food.

Nutrition education has been a key strategy to increase food security from public and private funders, and cooking classes are the common method to deliver nutrition education to people deemed ‘food insecure’. It is not uncommon to hear something along the lines of: “if only people knew what to do with healthy food, they would not suffer from diet-related diseases.”

The Assessment focused on addressing this misperception throughout the consumption research. We conducted focus groups with social service providers and interviews with emergency feeding program clients to understand what the barriers were to healthy food access, and also what programs were working to increase healthy food access.

Our findings show that low-income residents did not report having trouble cooking ‘good’ food (Figure 3). Rather, they faced challenges in accessing ‘good’ food due to limited food budgets and transportation to outlets that sell good food (Figure 3), with urban residents reporting transportation to be a challenge at a higher rate than rural and suburban consumers.

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\(^2\) ‘good’ food was asked instead of ‘healthy’ food to eliminate stigma that would prevent people from sharing about culturally important foods that are not deemed ‘healthy’ by nutritionists. When asked what ‘good’ food meant to them, 77% of respondents said it was healthy, fresh food, or vegetables.
The focus groups indicated that many social service providers working in the emergency feeding system view the challenge to healthy food access as a symptom of poverty (Figure 4). The following quote is from a food pantry provider in Schenectady. Based on their experience, they explained what was needed to increase their clients’ access to healthy food:

“Looking just at food is not a realistic solution; hunger is a symptom of the greater problem. Someone who is living in poverty is in a situation of trauma. They are stuck in habits dictated by the need to survive. Trauma, stress and fatigue prevent people from making good choices. They aren’t going to starve, but they are going to struggle to consistently access healthy food. We need to figure out how to improve access and also address the real problem: poverty.”

IN CONCLUSION

Nutrition education should not be the top priority to increasing community food security. Rather, interventions that focus on the consumers’ ability to realize healthy food access, like providing cooking tools and access to transportation, will be more successful in building community food security.

Interventions that both reestablish healthy retail environments and increase food budgets for consumers (either by increasing retail food assistance, by reducing other living expenses, or by increasing wages), will increase healthy food access for low-income residents and build community food security.
KEY FINDING 3
Most people buy most of their food at retail food outlets.
In order to increase healthy food access for low-income consumers, food assistance programs need to further support retail food access for low-income consumers and retail food outlets need to carry healthy food.

The Assessment research asked multiple consumer groups about their sources of ‘good’ or ‘healthy’ food. This research addresses another misperception about food access: that the emergency feeding system provides the majority of a low-income person’s food, and therefore an expansion of food pantries is needed to meet the communities food access needs.

Figure 5 shows the results from the Consumer Demand Report - which interviewed a dietitian’s patients at a community health center, students on a college campus, food pantry users, and WIC families – and indicate that most people source healthy food from retail food outlets. Figure 6 shows the results from the Cultural Food Interviews, which took place at English Language Classes in the City of Albany; again we see that most people are sourcing their food from retail food outlets.

IN CONCLUSION
Food pantries provide temporary food relief when low-income residents run out of their food budgets for the month. Interventions that help increase food budgets and improve retail food environments help build lasting community food security.

The importance of retail food access for low-income consumers is outlined in the Consumer Interview data, presented previously in Figure 3, and the Community Food Security & Healthy Food Access Research Report. Interventions to increase community food security need to address barriers to accessing healthy food in retail outlets, including the availability and affordability of healthy foods.
Report on Distribution Research

Food is distributed in the region through global, national, regional, and local networks. The larger-scale networks dominate the region’s wholesale markets, and the majority of locally grown food moves through direct-to-consumer markets, with the exception of dairy products. Supermarkets tend to have their own supply chains, and many institutions and chain restaurants are served by national corporate distributors, leaving regional distributors to service independent retail outlets, small restaurants and some institutions.

The Assessment team interviewed regional distributors to understand the current local food distribution networks in the region and explore opportunities for local food aggregation infrastructure in strategic locations. Our research explored how the local food system can better support regional distributors, who are adapting to the changing food system just as other small food businesses are. These local businesses hold the key to farms and processors looking to scale up to regional wholesale markets. But, these key actors have not seen the same level of investment as other actors in the regional food system.

Furthermore, our research identified opportunities to increase equitable food distribution in the region so that small, independent businesses have access to healthy food and so that all urban, rural, and suburban areas have healthy retail food environments. This cannot be achieved solely through the actions of distributors, but requires collaboration with communities in need of healthy food access and investment from food system funders and policy makers.

Regional Distributors are small, family-run food distribution businesses based in the Greater Capital Region or with part of their service area in the region.

3 Regional Distributors are small, family-run food distribution businesses based in the Greater Capital Region or with part of their service area in the region.
The Greater Capital Region is unique because it still has a relatively large number of small, independent regional distributors, many of which have been in the family for a generation or two. Some are at risk of closure due to increasing costs and decreasing market opportunities. **Regional distributors hold the key to growing the local food economy:** they have existing infrastructure, product handling knowledge, relationships with producers and buyers, and a trained workforce.

The **local food system needs to help regional distributors** build capacity to source from local food producers and help local food producers scale-up to meet wholesale market standards and demand. **Funding for regional distributors to adopt and pilot Distributor Supported Agriculture** would support the growth of the local food economy and build food system resilience.

**Distributor Supported Agriculture** is a model where the regional distributor invests in communicating buyer demand to producers (farmers and processors) and communicating local food availability to buyers, effectively driving demand for local food.

**Aggregation of local food could help producers reach markets in the Capital District and help regional distributors (including food hubs) source more local product.** Aggregation points can include hard infrastructure, like cooler space, and soft infrastructure, like an online market where goods are exchanged in a parking lot.

As we see in Figure 7, many regional distributors are interested in having access to local food aggregation points in the region. Figure 8 identifies key points were local food aggregation would help both rural farmers and urban markets.
In addition to aggregation points identified by regional distributors in the north, west, and south of the Greater Capital Region, a point in Albany County was also identified in the interviews (red circle, Figure 8).

*The Capital District Regional Market* in Menands serves as a historical aggregation point for the region’s producers and buyers, but has not evolved with the changes in the food system to meet the current needs of the regional food system. **This market could be vital to the growth of the local food economy and open up regional wholesale market channels for local producers; it could keep regional distributors in business.**

**IN CONCLUSION**

In order to grow the local food economy and build community food security, regional distributors must be supported by the local food movement and the regional food system. **We must embrace for-profit regional distributors as an essential part of the local food system and create funding opportunities and policies that engage with regional distributors** to the same extent that funding supports farms, local food processors, regional food hubs, and local food purchasing initiatives.

Without regional distributors, the regional food system will not be able to grow to its fullest potential and would likely **remain dependent on direct-to-consumer markets for the sale of local food.**
KEY FINDING 2
New food hubs are not necessarily the answer to solving local food distribution challenges. Regional food hubs can facilitate local food sales in the absence of regional distributors, but the development of a new food hub does not guarantee a solution to the local food sourcing barriers faced by regional distributors, nor does a new food hub ensure increased community food security.

Figure 9 shows the major pathways, or market channels, through which food moves in a regional food system. There are direct pathways, where the producer sells to the entity that prepares the food for consumption. There are also non-direct paths where there is a middle entity responsible for the transportation and sales of the product. In the discussion of selling more food through regional wholesale market channels, it is important to understand the different wholesale market channels and understand the consequences of each path. Learn more in the Distribution Section Chapter.

Food Hubs are distribution centers focused on supplying locally produced foods at a wholesale scale to buyers and consumers. There are for-profit and non-profit models, each entity can have a distinct mission.

Recent food system funding has supported new food hub development, in recognition that more local food needs to be sold through wholesale pathways, but the creation of a new food hub does not guarantee an immediate resolution to the barriers small-scale producers face in supplying wholesale markets nor to the barriers buyers face in sourcing from smaller, local vendors.

Figure 9: Major Wholesale Market Channels in the Regional Food System

Source: Local Food Buyers Research Report
Before funding the construction of a food hub, the current distribution environment must be assessed:

- Who is moving local food through wholesale market channels? Are they small, family-run businesses or national companies?
- Are they serving all channels and geographic areas equitably? What types of businesses or locations are not being served?
- What is preventing the current distributors from buying and selling more local food? Where are the bottlenecks in the system?

If these questions are not asked, answered and resolved, (1) a new food hub runs the risk of experiencing the same challenges that the existing regional distributors face, and (2) a new food hub runs the risk of competing with an existing regional distributor, potentially hurting a small local business. Not to mention, a new food hub takes a few years to become fully operational as the learning curve for handling food is high and food hubs are often hiring non-food industry personnel, or at least people who don’t have the deep knowledge and relationships that an established regional food distributor would have.

Interviews conducted with regional distributors revealed that more work needs to be done to address the barriers they face to sourcing local food. Sufficient supply of product, GAP certified farms, and competitive pricing were all challenges identified by distributors.

“One of the biggest challenges in working with local producers is having them understanding what true market value is. The growers need to understand how their prices need to be in line with the commodity market. Squash is cheap in summer both locally and in Florida, and local growers need to stay competitive.”
- Vermont Distributor

Furthermore, 100% of distributors interviewed said they did not have access to sufficient labor, the highest response rate of any sector interviewed. Attention must be focused on building hiring pipelines for regional distributors.

**IN CONCLUSION**

Local food distribution investments should focus on supporting existing infrastructure and businesses in the region, addressing the barriers to sourcing local food, and developing stronger connections between regional distributors and residents seeking employment in the region.

The Greater Capital Region must be careful when funding the development of new food hubs to not compete with established businesses. New hubs also run the risk of experiencing the same sourcing challenges if there is not investment in addressing the barriers facing other sectors from supplying regional wholesale market channels with local food.
Greater Capital Region Food System Assessment – Executive Summary

Report on Processing Research

**Research Goal** - Identify opportunities to promote economic development within the local food processing industry to support regional farmers and create jobs for the underemployed residents of our region.

**Research Objectives**
1. Understand local food processing in the region.
2. Identify barriers and solutions to expanding local food processing.
3. Identify food in high demand that can be produced and processed regionally.
4. Identify regional markets for locally produced and processed food.
5. Identify opportunities and requirements for regional processors to expand markets.
6. Inventory food processing industry job training programs and identify successful models geared towards underemployed adults.

**Research Projects**
A. Local Food Processing Interviews
B. Local Food Buyer Interviews
C. Farm to Institution
D. Dairy Production & Processing

In the Greater Capital Region, there are three main scales of processing that are important to distinguish: home processing, commercial kitchen (20-C NYS License), and commercial/co-packing. Each scale requires different food safety regulations and infrastructure investments by the owner.

**Research focused on exploring how food processing can include more locally produced food.** The bottlenecks in local food processing are complex; federal, state, and county regulations must align, and sourcing and distribution must also be in place. We interviewed processors about sourcing and selling product, labor, regulations, and business planning supports.

**Building equity in the processing sector includes supporting BIPOC and woman-owned food businesses.** Supports include grants, financing, business planning and awards for BIPOC and woman-owned businesses.

**Local food processing is a strong job creation tool for unemployed residents in the region and an important market channel for local farms to find business growth,** both of which are important to building economic resilience in the region.
KEY FINDING 1
Processor Supported Agriculture, Distributor Supported Agriculture, Agriculture of the Middle will grow the local food economy.
As farms scale up and regional distributors build capacity to buy local food, processors will simultaneously be able to buy more locally grown food and find new markets for their products.

Just like growers in the region, many processors are small family-run businesses who rely on direct-to-consumer markets and often dabble in wholesale market channels (Figures 10 & 11).

Distributor Supported Agriculture and Agriculture of the Middle will improve processors ability to source local food. Additionally, local food processors should be supported in adopting Processor Supported Agriculture practices; the three models can work in tandem to increase the sale of local food.

“As processors, we need to be better about forecasting our needs to farmers, so that they are more likely to plant to meet our needs or be sure to bring specific ingredients to market each week.”
- Schenectady County Value-Added Processor

Processor Supported Agriculture is a model where the processor invests in working directly with regional distributors and local producers to communicate their demand and consistently source local raw ingredients to help create new and strengthen existing flows of local food through regional wholesale market channels.

IN CONCLUSION
Investing in local food processors who want to scale up to wholesale market channels will have a positive impact on these local food businesses and the growers they are sourcing from.
KEY FINDING 2
Processors in the region would benefit from small business supports, shared-use incubator spaces, and stronger connection to local food distribution.

With high startup costs and the failure rate high for new food-based businesses, shared-use spaces would provide affordable infrastructure (hard infrastructure) and create opportunities to build network connections (soft infrastructure) between processors and with other sectors (producers and buyers).

Currently, food processing businesses in the Capital Region do not necessarily process locally grown food. This can be because the primary products do not grow in this climate (like coffee or chocolate) or because the primary products are not in sufficient supply in the region (due to seasonality or sourcing barriers). In addition to inputs, processors have to pay for packaging, processing equipment, and infrastructure. These costs can be challenging to manage, especially in the start-up phase of a business.

There are very few options in the region for shared-use kitchens. Grassroots efforts in community spaces provide supports, but certainly do not meet demand; these spaces are often not a stable or long-term solution for processing businesses. Furthermore, the majority of processors interviewed stated that their current spaces do not meet their future needs (Figure 12).

IN CONCLUSION
Shared-use processing spaces can provide affordable infrastructure and equipment and also facilitate relationships and resource exchanges between processors. If a shared-use space is connected to a food hub or food distribution space, local food sourcing can be easily accomplished.

FIGURE 12: PROCESSOR INTERVIEWS

Source: Local Food Processing in the Greater Capital Region Research Report

“In terms of support, more is needed to help small producers understand what is the right market for them at certain points in time for their business development, especially if they are evolving from direct-to-consumer channels into new wholesale channels. I am not sure that distributors are offering that support, from a sales perspective. We try to offer it best we can as a buyer. But, I can see that a lot of small vendors do not have education and support in these areas.”

— Specialty Foods Buyer at Honest Weight Food Co-Op
KEY FINDING 3

Our region needs a strategic plan for each local food processing sector to guide development, funding, and policy.

In addition to regional farmland and agriculture economic development planning, better coordination at the regional level is needed to guide development of local food processing in the following key sectors: dairy, meat, produce, grains.

In order for the local food processing industry to grow in the region, sector-specific strategic planning is needed to coordinate the hard and soft infrastructure development.

**Hard infrastructure** development for local food processing involves county and local planning, and should be supported by planning at the regional level. The types of infrastructure projects proposed and approved should be based on data-driven proposals and ensure connection to both local food suppliers (i.e. farmers) and buyers (i.e. distributors, institutions and supermarkets).

**Soft infrastructure**, meaning the networks of people and entities involved, is critical to the success of building local food processing capacity in the region. While there are many local food networks working in the region, they would benefit from collective organizing, especially around sector-specific planning.

The Assessment recommends that regional planning leaders initiate sector-specific strategic planning to guide the current and future processing sector development projects in the region. Figure 14 shows the top priorities and regional partners for the key food sectors, developed from our research.

**FIGURE 13: LOCAL FOOD PROCESSING SECTORS & CHARACTERISTICS**

**FIGURE 14: KEY ACTIONS FOR REGIONAL PROCESSING DEVELOPMENT BY SECTOR**

**DAIRY**
Foster the artisanal dairy sector with skill sharing and mentorship program. Coordinate with commodity dairy farms and processors (including Stewart’s Shops, Chobani, Organic Valley, Agri-Mark and Garelick Farms) to strategically plan development, bring more farms into contracts, and create more efficient hauling routes.

**MEAT**
Train new and small farmers to better work with regional meat processors and determine the need for a new processing facility in the western part of the region.

**PRODUCE**
Connect Capital City Produce with regional job training programs. Determine need for co-packing facilities in the region and models for shared-use processing spaces.

**GRAIN**
Connect with CCE Ulster County and Hudson Valley Farm Hub about their grain trials and training for farmers to grow grains for human consumption. Develop regional grain processing capacity with the development of a mill.

Source: [Local Food Processing in the Greater Capital Region Research Report](#)
Report on Production Research

Research Goal - Identify opportunities for regional farmers to build economic resilience and to identify new markets, with a focus on exploring opportunities to serve low-income consumers.

Research Objectives

1. Understand food production in the greater context of farming.
2. Identify barriers and solutions to expanding production.
3. Identify food in high demand that can be produced regionally.
4. Identify unutilized or underutilized farmland and analyze opportunities to expand production on said land.
5. Identify labor issues and solutions in our region.
6. Identify local markets for regional farmers and identify underserved communities with purchasing capacity.
7. Identify opportunities and requirements for regional farmers to expand markets.
8. Inventory support for retiring and new/young farmers.

Research Projects

A. Regional Food Production Roundtable Discussions
B. County Farmland Protection & Ag. Economic Development Plans
C. NYC vs. Upstate Farmers Markets
D. Farm Labor Interviews
E. Produce Recovery
F. Farmers Market Nutrition Program
G. Local Food Buyer Interviews
H. Farm to Institution
I. Dairy Production & Processing

Production research focused on barriers to, and successful models for, business growth for farmers in the region. Research was conducted with farmers through a series of Roundtable Discussions, hosted by community leaders in each corner of the region, and through individual interviews with key actors supporting agriculture in the region.

The Assessment explored how small farmers can build economic resilience through wholesale market development in the Greater Capital Region. The key model for this regional food system development is Agriculture of Middle, which is described below.

Agriculture (Ag.) of the Middle is a model where farms are producing at a scale that is larger than direct-to-consumer markets and smaller than national or international commodity markets.

The primary markets for Ag. of the Middle farms are regional wholesale markets, like institutions, retail outlets, food hubs and distributors. These mid-scale farms are growing less diversity of crops than a small farm, whose primary markets are farmers markets or CSAs, and more diversity than the monoculture model we see on large-scale farms.

To learn more, visit www.ecotrust.org/project/ag-of-the-middle/
The Assessment conducted research at upstate and NYC farmers markets over two seasons to understand the difference in sales, in terms of price of product and volume sold, and the costs for vendors to attend markets. This research provided a unique perspective of profitability at direct-to-consumer farmers markets in the upper and mid-Hudson Valley and in New York City.

Research found that producers interviewed at NYC farmers markets were not increasing their price points compared to upstate markets and were not consistently selling more product in NYC. Furthermore, a cost analysis (Figure 15) showed significantly more costs to sell at NYC markets for upstate producers than to sell at regional markets. This research challenges the widespread perception that NYC farmers markets are going to save the upstate farm economy.

**KEY FINDING 1**

Direct-to-Consumer markets in large urban centers, like New York City, do not guarantee more profits for upstate producers. Regional market development could have a greater impact on the local food economy and should be viewed as just as important as further development of direct-to-consumer markets in NYC.

The main conclusion is that the further a producer is from their home-base, the higher their costs are to bring their product to market, and therefore they need to make up these costs, either by selling more product than they would at nearby markets and/or increasing their prices.

While this was a snapshot and does not necessarily reflect the situation for every producer or every farmers market, this research should encourage producers to conduct cost-benefit analyses of their markets. Additionally, after years of focusing on building direct-to-consumer farmers markets, efforts should focus on developing a diversity of markets in the region. To learn more about this research, read the NYC vs. Upstate Farmers Markets Study Research Report.
KEY FINDING 2
Farmers are struggling to find markets in the region, and food buyers are struggling to source local food through wholesale market channels. Small farms in the region are set up for their primary markets to be direct-to-consumer markets and wholesale buyers in the region are set up to buy from large-scale national and international producers. In order to grow the local food economy, both sides must re-adapt to doing business together.

Farmers interviewed by the Assessment Team expressed concerns about scaling up production and investing in more storage infrastructure because they did not have confidence that they would have new markets for their products. They are already struggling to find consistent markets for their existing products, especially through wholesale channels.

On the other hand, distributors, retail and institutional buyers, and processors reported not being able to source enough local product. Farmers and buyers are experiencing the same problem, from different perspectives.

Our research found that the main barriers to connecting local producers with wholesale market channels are the disconnect between regional distributors and local farmers, the lack of farms with GAP audits, the higher price for local food, and the limited supply or volume from small farms.

These barriers are due to the fact that many of the region’s farms have developed business models geared towards direct-to-consumer market channels, as shown in Figure 16. At the same time, wholesale markets have developed to source from large-scale agribusinesses at a national and international scale. The key to selling more local food through wholesale market channels in the region is to simultaneously invest in farmers to scale-up production and in wholesale buyers to source from small producers in the region.

FIGURE 16: PRODUCER INTERVIEWS

“Consolidation among food distributors and food retailers has made it difficult for small scale producers to get their products into traditional retail and food service markets.”
- Saratoga County Produce Farmer
When looking at the top wholesale market channels in Figure 17, the producers interviewed reported that they were predominately selling directly to wholesale buyers, as opposed to selling non-direct through a distributor. These direct sales to buyers allows for the producer to manage their own wholesale accounts, which may be perfect for their small scale production. But, it also leaves the producer with the responsibility of managing the marketing, sales, inventories, and distribution of product.

Local food growth in wholesale market channels looks like more farmers selling to non-direct market channels, namely regional distributors and food hubs, and to larger direct channels, like schools and retail markets.

One critical aspect of increasing local produce sales to larger wholesale buyers is having Good Agricultural Practice (GAP) certified farms. The GAP audit was designed to trace food-borne illness outbreaks (like E-Coli) to the exact field from which a product was harvested. This audit was designed for large monoculture farms, and is an example of how food safety rules designed for large-scale agribusiness can create barriers for small producers to access regional wholesale markets.

Efforts to get farms GAP certified have been largely unsuccessful in the Region (Figure 18), and our region’s farms are losing out on sales. But, there is interest in the audit (Figure 18); if farms want to successfully scale up to wholesale market channels, there needs to be renewed efforts to usher farmers through the GAP audit process. More details on this can be found in the Farm to Institution Research Report.
The Assessment also looked at challenges with local food sourcing from the perspective of the buyer. Through Interviews with Local Food Buyers, the Assessment research uncovered key challenges to sourcing from the region’s farmers and food producers. Figure 19 shows the biggest barriers to sourcing from local producers by the region’s largest retail food co-op, with supply related barriers being the top cited challenge. The data is reported by department at the co-op.

Barriers to sourcing local food from a buyer’s perspective is instructive to direct funding, investment, and training for the region’s farms and food sector.

IN CONCLUSION

The current state of the regional food system is at a turning point; direct-to-consumer market channels are at a climax or even starting to decline and wholesale market channels in the region are slowly starting to open up for regional farmers, but not at the rate or consistency needed to create sustainable change. Investment over the next 10 years, especially in response to the COVID-19 pandemic, will have an impact on how the regional food system operates for the next 50 years.

It is critical that this investment approaches funding the food system holistically (for production and distribution) and that direct-to-consumer and wholesale market channel development are funded equitably. With so much focus on selling local food through direct-to-consumer channels, it is time for the local food movement to focus on supporting the sale of local food through wholesale market channels, which includes helping small producers scale up to Agriculture of the Middle and helping regional distributors source locally with Distributor Supported Agriculture.
Farmland Protection Plans have been a key strategy by the State to support farmland protection at the county level since the formation of the Agricultural Protection Act in 1992. As plans are being updated in recent years, counties are placing greater emphasis on agricultural economic development. The understanding being that in order to keep the rural working landscapes, farming must be profitable. In order for the economic development recommendations to gain traction, regional collaboration is needed. County farmland protection plans speak to developing regional projects and creating regional networks and databases that don’t see county boundaries. Many plans share common recommendations. With these shared goals, counties can also learn from each other; some plans have proposed creative solutions for their county that could be of benefit to another.

**IN CONCLUSION**
Regional planning needs to better include the food system, and counties need support at a regional level to execute their plans and connect with neighboring counties to share resources and develop projects. Because there is currently no formal communication among those working with county farmland protection plans in the Greater Capital Region, we propose a facilitated annual meeting for the 11-counties about their farmland protection and agriculture economic development plans by the regional planning entity and a food system track added to the regular planning and zoning trainings. The action items developed by the Assessment can serve as a guiding tool for regional planning and can set the initial agenda for regional meetings with policymakers, economic developers, and county and local planners. Learn more about this topic in the Research Report [Unutilized and Underutilized Farmland](#), where we present research about the current state of farmland use from interviews...
KEY FINDING 4
The majority of the agriculture economy in the Greater Capital Region is related to the dairy sector.

But with declining demand for fluid milk, low milk prices, increasing costs for transportation, competition from other states, and increased pressure to develop farmland, the Greater Capital Region needs to come up with a game plan.

We can see from Figure 20 that the dairy sector, including crops grown for feed, is a large portion of the region’s agriculture economy. When talking about the regional food system, it is important to understand how dairy fits into the context of food production in the region and into the context of the state’s dairy sector.

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“Our county has a substantial agricultural base related to dairy products. We need research that will address how to identify how markets have changed and how to mitigate the effects these changes have had on the dairy economy. At the same time, other sectors need our attention as well.”
- Washington County Agricultural and Farmland Protection Board Member
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The Assessment’s Dairy Production & Processing Research Report documented different experiences of dairy businesses in the region; while many commodity dairy farmers are struggling with increased hauling costs, being dropped by buyers, and a lack of contracts, some specialty dairy farmers, who have their own processing spaces, are tapping into growing market opportunities in specialty products like cheese and yogurt.

IN CONCLUSION

The answer is not to simply empower every commodity farmer to build out their own processing facilities, but it is worth presenting a suite of options to accommodate farmers who are looking to transition or diversify their production. Strategic planning at a regional level is needed to most effectively support the region’s current dairy farms: both commodity milk producers and small-scale artisanal producers.

The Assessment’s dairy sector research and action items point to some key elements to guide planning for current dairy producers and begins to explore alternatives, including diversifying into other sectors such as grain for human consumption or attracting new dairy processing businesses to the region as an economic development strategy. With dairy such an important part of the agriculture economy, dairy sector planning must happen at a regional level and with urgency.
There are very few topics in food system research that neatly fit neatly into just one sector, but rather involve multiple sectors with layers of interdependence and complexity. Some research was so multi-sector in its approach and outcomes that it required a different approach than the sector-specific research reports.

The multi-sector research projects presented above are presented in each relevant Section Chapter and contribute to action items and key findings for each sector.

Because the Production Report already spoke to our dairy sector and local food buyer research, this section will report on the other three topics of our multi-sector research. To dive deeper into this data, you can reference the research reports (which are cited on the following pages) and you can read each Sector Chapter (links on page 7) to understand how these multi-sector reports relate specifically to each of the sectors studied by the Assessment.
Farm to Institution is an umbrella term for projects that increase local food sales to institutions, such as those listed in Figure 21. The goal of Farm to Institution is to **increase access to nutritious foods for employees and clients** served by institutions and to **increase sales of local food**.

Recently, Farm to Institution projects have received funding to develop new markets for the region’s producers. But, **many of these projects have struggled to fully achieve their goals because of gaps in regional food system infrastructure**. The following paragraphs explain common challenges to Farm to Institution in the region by sector.

**PRODUCTION**
- Because institutions serve large numbers of people, Farm to Institution requires **sufficient supply from local farms**, which we know from the [Local Food Buyer](#) and [Distributor Interviews](#) has been a challenge. This is why farms at the *Ag. of the Middle* scale is for the region’s growth in wholesale markets.
- Many Institutions have food safety standards that require **GAP certified produce**, which we know is a barrier for local farms from the [Producer Roundtables](#) and our NYS GAP Audit data analysis, shown in Figure 22. The Greater Capital Region lags behind other regions in terms of the **number of GAP certified farms** and also has **product gaps**, which can instructive to farmers interested in the GAP audit and selling through this market channel.

**FIGURE 21: INSTITUTIONS AND THEIR COMMON SUPPLIERS**

<table>
<thead>
<tr>
<th>Type</th>
<th>Require GAP Certification?</th>
<th>Primary Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Schools</td>
<td>Mostly yes</td>
<td>Distributors, some direct from farm</td>
</tr>
<tr>
<td>Colleges</td>
<td>Depends on Food Service Agency</td>
<td>Distributors, some direct from if independent food service agency</td>
</tr>
<tr>
<td>Health Care Facilities</td>
<td>Hospitals: Yes Nursing Homes: Depends</td>
<td>Distributors</td>
</tr>
<tr>
<td>Social Service Agencies</td>
<td>Mostly not needed</td>
<td>Often too small to buy from distributors, buy from Capital Roots Food Hub or bulk stores</td>
</tr>
</tbody>
</table>

Source: [Farm to Institution Research Report](#)

**FIGURE 22: REDUCE GAP AUDIT GAPS WITH HIGH DEMAND PRODCTS**

In 2018, there were **235 farms** with GAP Audits in New York but only **16 farms** with GAP Audits in the Greater Capital Region.

<table>
<thead>
<tr>
<th>Product</th>
<th>In high demand at institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Onions*</td>
<td>- Beets</td>
</tr>
<tr>
<td>- Lettuce</td>
<td>- Blueberries*</td>
</tr>
<tr>
<td>- Kale</td>
<td>- Garlic</td>
</tr>
<tr>
<td>- Broccoli</td>
<td>- Strawberries*</td>
</tr>
<tr>
<td>- Cauliflower</td>
<td>- Carrots</td>
</tr>
<tr>
<td>- Peaches*</td>
<td>- Carrots</td>
</tr>
<tr>
<td>- Pears*</td>
<td>- Peaches*</td>
</tr>
<tr>
<td>- Radishes*</td>
<td>- Radishes*</td>
</tr>
<tr>
<td>- Cilantro</td>
<td>- Cilantro</td>
</tr>
<tr>
<td>- Parsley</td>
<td>- Parsley</td>
</tr>
</tbody>
</table>

*The bold items are in high demand at institutions.*

Source: [Farm to Institution Research Report](#)
PROCESSING
- In order to save on labor costs and due to a lack of full-kitchens, the trend in recent years has been for institutions to purchase primary processed products, such as peeled garlic, sliced onions, and cut potatoes. In order for this product to be from local farms, there must be food processors in the region who are connected to the region’s farmers (likely through regional distributors), and the product likely needs to be GAP certified.

- Institutions can work directly with farms to purchase local food, so long as the facility has the processing space, equipment, and staff to prepare the food. With many institutions, especially school districts, outsourcing their food prep, there are fewer institutions with full kitchens. Supporting projects that maintain or re-establish local food processing and meal prep at institutions is important to Farm to Institution.

- Another challenge when working with local food is translating buyer’s demand to a farmer’s supply. The partial purchasing analysis from a local school district in 2017 was able to create an initial translation. Figure 23 shows one part of the analysis found in the Farm to Institution Research Report. This is instructive to farmers to gauge how much they would have to plant and harvest to fulfill a partial or full school district’s order. It also points to where processing would be needed; in this case in order for baby carrots to be local, carrots would need to be sourced locally, processed into baby carrots, and then bagged into individual portions that align with the school’s nutrition standards.

DISTRIBUTION
- For institutions that have the capacity, ordering direct from farms can be great for both parties: the farmer gets paid a higher markup than they would selling wholesale to a distributor, and the buyer is able to build a direct relationship with their producer. But, the majority of institutions are already juggling ordering and invoicing from multiple distributors, and this is why regional distributors and food hubs can play a key role in Farm to Institution by connecting large volumes of local food to institutions.

- Regional processors also tend to source product through distributors (as opposed to direct from farmers), meaning that regional distributors can also play a key role in Farm to Institution by connecting farmers to processors to institutions.

IN CONCLUSION
Distributor Supported Agriculture and other supports to increase local food distribution will help address the current barriers to Farm to Institution. Additionally, institutions can source more local food is there are more GAP certified farms and more Ag. of the Middle farms in the region. Investments in Farm to Institution in the region should focus on these priority areas.
Greater Capital Region Food System Assessment – Executive Summary

Farmers’ Market Nutrition Program (FMNP) Key Finding 1
In the Greater Capital Region, farmers and low-income consumers are missing out on significant supports from the FMNP.

Low redemption rates, especially for WIC users, means that FMNP farmers are losing out on potential earnings and low-income consumers are not redeeming their food assistance benefits for fresh produce.

The FMNP is a state-wide food assistance program which derives from federal funding and is administered by NYS Agriculture and Markets. The goal of FMNP is to simultaneously support local farms with produce sales and to increase healthy food access for low-income seniors and families receiving the Women, Infants, and Children (WIC) supplemental nutrition program. The program is administered in $4 checks that are given in batches to participants by local Office of Aging and WIC office. The checks can be redeemed at participating farmers markets, farm stands, and on mobile markets.

Our research found that FMNP check redemption rates in the Capital District were low, especially for WIC families (Figure 24). This means that participants are not accessing healthy food through this supplemental nutrition program and farmers are not receiving the intended income from this program.

Diving Deeper into the 2016 Capital District Data
- 20,961 FMNP checks ($83,845) were redeemed.
  - The Senior FMNP redemption rate was 64%.
  - The WIC FMNP redemption rate was 33%.
- More than $92,000 worth of FMNP checks were not redeemed.

→ What if WIC redemption rate equaled the Senior redemption rate?
- 7,297 more WIC FMNP checks ($29,186) would be redeemed, sending more income to regional farmers and more fresh produce to low-income families.

The Assessment Team interviewed social service providers who issue the checks and program participants from each Capital District county about the barriers to redeeming FMNP checks. Figure 25 presents the top barriers, which are instructive to developing interventions to increase FMNP check redemption, especially for WIC families.
Farmers’ Market Nutrition Program (FMNP) Key Finding 2
Alternative local food markets have higher FMNP redemption rates than the major farmers markets in the Capital District.

Greater access, increased hours of operation and more affordable prices could be why alternative local food markets see higher FMNP redemption than farmers markets in the Capital District.

The Assessment Team conducted research on FMNP check redemption at major markets in the Capital District. This level of data is not currently tracked by NYS Agriculture and Markets (and therefore not available via a FOIL request), so the Assessment Team had to create a data collection methodology, for each FMNP farm at the major Capital District farmers markets and alternative local food markets, which are Capital Roots’ Mobile Markets and Produce Market (Figure 26).

Due to limited capacity, the research team was only able to record redemption for one month and recommends that this data is recorded by NYS Agriculture and Markets in the future in order to better target interventions to boost FMNP redemption.

The high number of FMNP checks received by these alternative local food markets can be attributed to the following:

- **Location of Markets**: Capital Roots’ Produce Market and Mobile Markets serve customers in low-income neighborhoods and apartment buildings in the Capital District, including in small urban centers and through pop-ups in rural communities. Farmers markets tend to be in city-centers and where FMNP participants live.

- **Hours of Operation**: Farmers Markets in the region tend to take place in the mornings for five hours on weekends, whereas the Produce Market is open 5-days a week and the Mobile Markets make regular weekly stops, giving people multiple opportunities to shop.

- **Affordability of Produce**: the alternative markets sell local produce at wholesale prices, making the $4 FMNP check stretch further than retail prices at farmers markets.

**IN CONCLUSION**

Strategic planning in the region is needed to increase FMNP redemption rates with participation by all parties involved in the program. Interventions to increase FMNP redemption, and build community food security in general, need to address the barriers cited by consumers, such as the FMNP barriers presented in Figure 25 as well as the healthy food access barriers presented in Figures 3 and 4.
Produce Recovery Key Finding
Better coordination in the Greater Capital Region Produce Recovery System is needed between donors, aggregators, and food assistance programs. The lack of coordination leads to increased food waste and unnecessary burdens on farmers and food assistance programs.

The Produce Recovery & Redistribution System involves the donation of surplus and seconds (or ‘ugly’) produce to food pantries, soup kitchens, and shelters. Figure 27 outlines the major donors and how most produce moves through the system.

Ten years ago, it was unusual to find a food pantry consistently stocked with fresh produce. Now, it is the norm in most communities, as long as the pantry has the space and cold storage capacity. This change in the system can be attributed to the increase in demand for produce in food assistance programs, thanks to community leaders advocating for more healthy food in the emergency feeding system.

Due to the short shelf-life of most produce, coordination between donors, intermediaries, and food assistance programs is necessary to reduce food waste and prevent undue burdens on farmers and food assistance programs. It costs farmers time and money to harvest and pack produce that they donate. On the other hand, it costs food assistance programs time and money to sort through and dispose of low-quality produce donations or to find a new home for surplus produce donations. Therefore, it is critical that the produce recovery and redistribution system coordinates efforts to efficiently collect, expertly store, and swiftly distribute produce, with care not to overstock one food assistance program and understock another.

Our research focused on how to better serve food and farm businesses in the region and how to improve the quality of produce being delivered to food assistance programs; after all, spoiled or almost-spilled produce does not help improve healthy food access for clients at food assistance programs.
It is important to understand that surplus produce is part of the business models of modern farms. In the field, planting for surpluses serves as a form of insurance in the event of pests, bad weather, or failed crops. At markets, surpluses can happen if fewer customers attend a farmers market due to inclement weather or if a buyer backs out of a handshake deal. Seconds produce, an inevitable part of farming, don’t have much customer appeal when displayed next to prettier versions of itself. With the proper marketing and distribution infrastructure, seconds produce can find a happy home in the kitchen, whether at a restaurant, institution, processor, or even someone’s home for processing and cooking.

In a strong regional food system, surplus and seconds produce would have multiple market opportunities before the farmer chose to donate the product. The Assessment Team developed a Produce Surplus Hierarchy (Figure 28) based on the EPA’s Food Recovery Hierarchy to outline some of the most preferred ways that the food system could absorb surplus produce to the benefit of farm businesses. In the event that a farm is donating produce, or an organization is soliciting donations, it is important to understand how the costs for the farmer can be reduced, which is presented in our Produce Donation Hierarchy (Figure 29).

IN CONCLUSION

It is important that food system funders and key actors coordinate efforts to reduce the costs and burdens in the Produce Recovery and Redistribution System so that small farms and food assistance programs can be better supported by the donation of produce, and ultimately so that low-income consumers can better access top-quality, healthy, fresh produce at food assistance programs.
Experiencing Shocks and Flexing Resilience in 2020

The Assessment development, research, and synthesis all took place before March 2020, when the COVID-19 pandemic forced shutdowns. This report was finalized in fall 2020, after the initial shock of COVID-19 passed in New York, but the virus was still very much present. Furthermore, the wildfires on the west coast of the U.S. were spreading at unprecedented rates, while farm workers (who were already facing risks from COVID-19) were also working in dangerously low air-quality. These two events and their consequences have exposed existing vulnerabilities in our food, health care, education, housing and transportation systems, at a national, state, and regional level. As we approach the end of 2020, we hope that this year is a catalyst for change and that our leaders can learn from the gaps and failures of our systems, exposed by COVID-19 and the wildfires, so that we build stronger systems and so that essential workers are better protected when the next shocks come.

The shutdowns during COVID-19 showed how the multiple food systems operating in the Greater Capital Region have different strengths and weaknesses. While supermarkets stayed open, thanks to the essential food workers, shelves were empty of food items as different national systems were disrupted. While demand soared in the retail market sector, other wholesale market channels essentially dried up, like restaurants and institutions. This left regional distributors scrambling to move their current inventory and bracing for bumpy waters in the coming months.

FARMS & Farmers Markets
Meanwhile, direct-to-consumer markets experienced different shocks. Farmers markets were deemed essential businesses by NY Governor Cuomo, but because county health departments had their own rules, many farmers markets were delayed in opening as they developed plans to comply with new protocols. This left many small farms without their main market channel at the beginning of the growing season with little assurance as to when markets would open. Many farms pivoted to online markets, renewed energy in their CSA memberships, and some formed cooperatives to join forces to create their own markets. This approach worked for many, with local farms selling out of their CSA shares for the first time in years and online markets providing holdovers until farmers markets reopened. Now, as we prepare for the winter, when most farmers markets typically move indoors, local producers are left with the difficult decision of how to best prepare for the winter season, to plan for the 2021 season, and if, or how, to proceed with newly formed markets and partnerships.

In addition to unpredictable markets, farm labor was in question at the onset of the pandemic. Our region’s farmers were able to have H-2A employees travel (in our region, mostly from Jamaica) this spring to work for the season. There have been reported cases of PPE or access to doctors not being provided to farm workers across the country, but currently no reports from the Greater Capital Region. Research about how Greater Capital Region farmers kept farm workers safe during the 2020 season should be conducted to prepare for the 2021 season.

4 CSA is an acronym for ‘Community Supported Agriculture’, in which a customer invests at the beginning of the season in the food production and is then given weekly shares throughout the growing season, allowing the customer to share the risk of food production with the farmer. The concept was developed by Dr. Booker T. Whatley, an agriculture professor at Tuskegee University, pioneer of regenerative agriculture, and leader in the black agrarian movement. Source: https://www.farmproject.org/blog/2017/2/4/hikqys8iqw0bo368acao3mrb1rv7d1
LOCAL FOOD PROCESSING
National meat processing has been in the spotlight for putting frontline workers at risk to contracting COVID. Plant shutdowns have caused bottlenecks, leaving farmers without a processor and consumers without meat in the grocery stores. **Regional meat processing in the Greater Capital Region, however, has remained relatively stable.** There were a few bottlenecks at the beginning of the pandemic, but farmers are selling at higher rates than previous years and the slaughter houses in the region seem to be able to keep pace. This is not the case for other regions, where local meat processing infrastructure is virtually non-existent and farmers have come up with creative solutions through newly formed cooperatives and mobile processing units. Overall, the local processing sector is performing at its maximum capacity and could support more products if the financing was in place to fund the infrastructure development. There is also a lack of commercial kitchen space available for small farmers and food businesses to process local foods into value-added products. **The existing food processors in the region who have not had serious loss of markets have likely seen an increase in demand, in line with the overall increase in local food demand by consumers.**

FOOD ACCESS & FOOD SECURITY
Consumers have faced a myriad of hardships during the pandemic, tied to employment status and income. Food access for vulnerable populations and children have been supported by existing and new food assistance programs and the school meal program. There are two main stories that we will reflect on for consumers during the pandemic.

1. **SNAP users were all eligible to receive the maximum benefits** from April through August 2020 through an order by NY’s governor. This had a tremendously positive impact on low-income consumers’ access to food through retail outlets, namely grocery stores, and is a great example of the government funding existing benefits program, whose infrastructure is already in place and functioning with a high degree of success. **Additional food assistance support from federal and state governments should focus on building upon existing programs**, as opposed to creating entirely new programs, which require more capacity to implement, sometimes at the expense of existing programs.

2. **The emergency food system received an influx of donations and funding**, which at times was more than some providers could handle. The Nourish NY program provided $25 million, and then an additional $10 million, across the state to have food banks and food assistance programs purchase food from NYS producers. **In the Greater Capital Region, this significantly altered the produce recovery programs** to focus on spending the full benefits of this funding, even in the face of supply challenges from producers and limited capacity at emergency feeding programs.

**Nourish NY has created a new paradigm for the local food redistribution system**, where farmers get paid fair market rate for product they used to donate and emergency feeding programs consistently receive top quality product. While this is an important shift in the
short term (and some would rightfully argue how the emergency feeding system should always function), some questions about the future arise:

- What happens when the Nourish NY funding ends?
- Will farmers go back to donating large quantities of product?
- Will emergency feeding program return to receiving large quantities of low-quality product, much of which has to be picked through by staff and volunteers and disposed of at the expense of the non-profit?
- How effective was Nourish NY funding in supporting small farms and small food businesses?
- How can we ensure that additional funding of this nature is kept in the regional foodshed, as opposed to supporting larger producers outside of the region?

While COVID-19 has certainly shocked and changed how people access food, how producers sell food, and how governments fund the food system, the pandemic has created very few new problems.

Even though the research conducted by the Assessment occurred in a pre-COVID world, the action items for research to build equity and economic resilience apply today, perhaps with even greater urgency.

We have an opportunity to shift our approach to food systems on a national, state, and regional level. To learn more about how people are working to rebuild food systems to better serve the environment and the people who live within it, visit the World Economic Forum’s article How to reimagine our food systems for a post-COVID world.
DEFINING THE FOODSHED
The Assessment Team began by determining which counties would be included in the study. This was challenging because New York’s Capital District, or Capital Region, is not consistently defined by government agencies and regional organizations. The Assessment Team decided to define the *Greater Capital Region Foodshed* as the eight counties of the Capital Region defined by New York Governor Cuomo’s Regional Economic Development Councils plus Fulton, Montgomery, and Schoharie counties (three counties in the Mohawk Valley Region) due to their rural agricultural economies and proximity to the Capital Region’s urban centers.

While these geographic boundaries were set to define the study area of the Assessment, we did not draw hard boundaries, and welcomed participation from participants outside of the region; a few farm and food businesses from neighboring counties participated in research discussions because they found markets for their products within our study area and a distributor from Vermont was interviewed as their service area includes part of the Greater Capital Region.

CONVENING THE STEERING COMMITTEE
With the study area defined, the Assessment Team began to conduct a literature review of Food Assessments in other communities and to develop a list of Steering Committee members to guide the research, provide sector-specific expertise, and facilitate connections with key actors in the region’s food system. It was important that the Steering Committee was representative of as many sectors of the food system as possible and not too heavily weighted towards one sector or another. Not every member of the initial Steering Committee was present throughout the entire process, due to members leaving their positions, and are listed on contributors to the project.

The Steering Committee formed in June 2016 and included members from twenty organizations in the Greater Capital Region. The Committee was tasked with guiding the development of the research mission, goals, objectives, and strategies to achieve the research in the monthly meetings that took place in 2016. Through active participation and input from these key actors and guidance by the Assessment Team, the research priorities relevant to the region’s food system leaders were developed, laying a blueprint for the project along with a timeline to conduct, synthesize, and publish the report. In total, the Steering Committee met twenty times to support the Food Assessment through its planning, research, and synthesis phases. The final review of the report was completed virtually due to COVID-19 meeting restrictions.
DEVELOPING THE RESEARCH MISSION, GOALS, OBJECTIVES & STRATEGIES
The Assessment Team conducted a literature review consisting of 10 food system assessments and 15 food system related articles to inform the development of this project’s mission, goals, objectives, and strategies for research. The most influential works used to shape the Assessment are as follows:

- USDA Community Food Security Assessment Toolkit, 2002
- USDA Economics of Local Food Systems Toolkit, 2016
- Vermont Farm to Plate Strategic Plan, 2013
- Food Security and Choice: Poughkeepsie Plenty Community Food Security Assessment, 2013
- Hudson Valley Food Hubs Initiative, 2013

Each work referenced above provided insight into how communities should consider research - in the case of the toolkits - or have conducted research. The literature review focused on this Assessment’s two priority areas: community food security and the local food economy. The Assessment Team developed the project’s mission to center these priority areas and two key actors in our food system: low-income consumers and small farms and food businesses.

RESEARCH & RECOMMENDATIONS FROM BIPOC FOOD SYSTEM LEADERS
The literature review also included work by BIPOC food system leaders. The Assessment Team encourages you to learn about how to build food sovereignty and food justice in regional and national food systems. The following resources are a great place to start (listed alphabetically):

- Food Chain Workers Alliance, especially No Piece of the Pie: U.S. Food Workers in 2016
- HEAL Food Alliance, especially their Messaging Guide Rooted, Ready & Resilient
- Northeast Farmers of Color Land Trust
- Soul Fire Farm, especially Action Steps and Policy Platform for Food Sovereignty
- Workers Center of New York and Worker Justice Center of New York, especially Milked: Immigrant Diary Farmworkers in New York State
Envisioning Equity & Economic Resilience

In order to align each step of the Assessment process (planning, research, synthesis, publication) with the project’s mission, the Assessment Team researched models for building food system equity and economic resilience.

**Equity** in the food system means just and fair inclusion of all consumers, food producers, and workers, and that everyone can access and afford a healthy diet. (Sources: Center for Social Inclusion and PolicyLink) Equity throughout the food system include issues of wages and working conditions for food workers, land access and funding for new food businesses, fair rents and access to incubator kitchens for food producers, and healthy food environments and food-secure incomes.

**Economic resilience** is the ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner. (Sources: Food and Agriculture Organization of the United Nations and the Center for Agriculture and Food Systems authors Harris and Spiegel. This includes local food businesses and consumers in the region.

**USING THESE CONCEPTS IN THE ASSESSMENT**

This report serves to inform policymakers, funders, and food system leaders by identifying opportunities for regional development that builds equity and economic resilience for low-income consumers and small food businesses. It provides action items to build community food security and strengthen the local food economy by understanding barriers to, and opportunities for, local food flows in direct-to-consumer and wholesale market channels, including food assistance programs, across the Greater Capital Region. It also provides the broader food system community a greater understanding of how interconnected local food production, processing, distribution, and consumption are and how a holistic approach to solving sector-specific challenges is necessary for sustainable and equitable development.

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5 *low-income consumers* - any individual or family whose income and resource constraints prevent them for accessing the healthy foods they want to and need to consume.

6 *small food businesses* - there is not an agreed upon definition for small food business. The FDA defines a “small produce farm business” as one that generates less than $500,000 annually in produce sales and “small businesses” as one with less than 500 employees. The Source: National Sustainable Agriculture Coalition

7 *community food security* is a condition in which all community residents obtain a safe, culturally appropriate, nutritionally sound diet through an economically and environmentally sustainable food system that promotes community self-reliance and social justice. Source: WhyHunger.org

8 *local food economy* encompasses the wealth and resources of a region, in terms of the production and consumption of local foods and goods and services that contribute to the production and consumption of said local food. Local food is defined as food that is produced within the region of study.

9 *direct-to-consumer markets* - the producer sells directly to consumers. Generally these transactions occur via on-farm sales, farmers markets, CSAs, etc. Source: VT Report

10 *wholesale markets* - the selling of goods in large quantities to be retailed or prepared and sold by others, including distributor-serviced and direct wholesale. Source: VT Report

11 *food assistance programs* - government supports that help low-income consumers access food in retail food outlets, like SNAP and WIC, and emergency feeding programs that temporarily provide free food to residents.

12 *sustainable development* In the case of a food system, means developing the regional infrastructure to support the delivery of food security for all in such a way that the economic, social and environmental basis to generate food security for future generations are not compromised. Source: Food and Agriculture Organization of the UN

13 *equitable (food-oriented) development* is a model that dismantles the social and financial systems that perpetuate poverty, racism, and poor health that prevent the development of local and inclusive food economies. Source: Mandela Partners
Practicing Community-Based Research

DEFINING THE RESEARCH METHOD
The methods used by the Assessment Team are based on community-based research, an academic model where all research partners are equitably involved in the project, and the topic of research is of importance to the community where the research is taking place. The Assessment Team shaped the research project and topics to the expressed needs of the Greater Capital Region food system stakeholders (non-profits, policy makers, planners, funders) and key actors (consumers, farmers, processors, distributors). The Assessment Team had the flexibility to combine research methods and guidance provided by the Team’s academic partners with the practical needs of the non-profit organizations of the Steering Committee and the expressed needs of community members being interviewed during the three years of research.

WHAT DOES THE ASSESSMENT’S COMMUNITY-BASED RESEARCH LOOK LIKE?
- The Assessment Team presented research topics to the Steering Committee to determine priority areas of research through a consensus building process.
- Research methods blended academic and non-academic principals to provide quantifiable data and build relationships between those being interviewed and project partners.
- Secondary datasets were used to meet the Assessment’s research objectives, and primary data was only collected when necessary.
- The Assessment team piloted interview questions and reviewed them for effectiveness. Changes to interviews are made to best meet the needs of the groups being interviewed; questions are added or eliminated accordingly. Second rounds of interviews or new research projects are developed in response to the results from the first round of primary data collection.
- Interviews were conducted where people are at and where they were least inconvenienced. The Assessment Team rarely used surveys, in favor of in-person conversations.
- Interviewees and focus group attendees were recruited through personal phone calls, personal email invitations, and in-person outreach.
- Interviews ranged from 5 minutes in length to one-hour, depending on the people being interviewed, with the utmost respect for their time and contribution to the project.
- Students, volunteers, non-profit partners, Steering Committee members, and the Assessment Team conducted interviews. Building relationships between researchers, service providers, and community members.
- Research results were analyzed and presented with the intention of serving key actors and stakeholders with tangible immediate and future action items, in clear, concise language and were made publically available.
We conclude this Executive Summary with some information about how to build a regional food policy council in the Greater Capital Region. Growing the local food economy and building community food security requires holistic food system development at a regional level, and the action items developed by the Assessment are a roadmap for a regional food policy council.

The New York State Council on Hunger and Food Policy works at the state level to advance policy needs in the same way that a regional food policy council would work at the municipal, county, and state level to advance food policy to regional food system build equity and economic resilience.

There are many models that can be used to create the Greater Capital Region Food Policy Council and the resources available at the John’s Hopkins Center for a Livable Future Food Policy Networks project should be used to develop the policy council’s structure.

Without a Regional Food Policy Council, we lack the organizing force and space to collaborate to coordinate positive change in the regional food system. Furthermore, this Assessment would remain a snapshot in time, as opposed to the launching point for ongoing regional research and collaborative food system development.

The graphic to the right is a model for the priorities undertaken by food policy leaders in the European Union. There are many aspects of this model that would have a positive impact on a regional level, for both humans and the environment.

Greater Capital Region Food System Assessment – Executive Summary
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- Hamilton College
- Hobart and William Smith Colleges
- Hudson Valley Community College
- Ithaca College
- New York University
- Rensselaer Polytechnic Institute
- Siena College
- Skidmore College
- SUNY Albany
- SUNY Albany School of Public Health
- SUNY Cobleskill
- Syracuse University
- The New School
- The Sage Colleges
- Union College
- University of Rochester

### Community Partners
- Albany Community Action Partnership
- Captain Youth and Family Services
- Commission on Economic Opportunity
- Columbia-Greene Community College
- Comfort Food Community
- Hilltowns Community Resource Center
- Honest Weight Food Co-op
- Hoosick Area Church Association
- Mechanicville Area Community Services Center

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- The Capital District Regional Market
- Unity House
- Washington County Fairgrounds

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