



Illinois' Resilient Food Systems Infrastructure Asset Mapping Landscape Analysis

Table of Contents

Background	2
Project Overview	2
Landscape Analysis	3
What's been done outside of Illinois.....	4
The Island Food Network Good Food Map - Breton Island, Canada	4
King County Farm and Food System Map – King County, Washington	4
Sun Valley Institute for Resilience Food Asset and Needs Map – Idaho	5
Healthy Food Access Mapping Project– Upper Coastal Plain, North Carolina.....	6
Iowa RC&D Food in the Corridor – Linn and Johnson Counties	7
Community MapJams – Northeast Sustainable Agriculture Working Group	8
What's been done in Illinois	8
CF-MAP: Dr. Howard Rosing at DePaul University and Dr. Danny Block at Chicago State University.....	8
MarketMaker – Dar and Rich Knipe.....	10
Chicagoland Food Hub Feasibility Study – Dr. Weslyne Ashton at the Illinois Institute of Technology and Chicago Food Policy Action Council.....	12
Ritchie Wai – Farmers Rising	13
Next Steps/Recommendations	13
Bronze.....	14
Silver	14
Gold.....	15
Conclusion	16
References	18

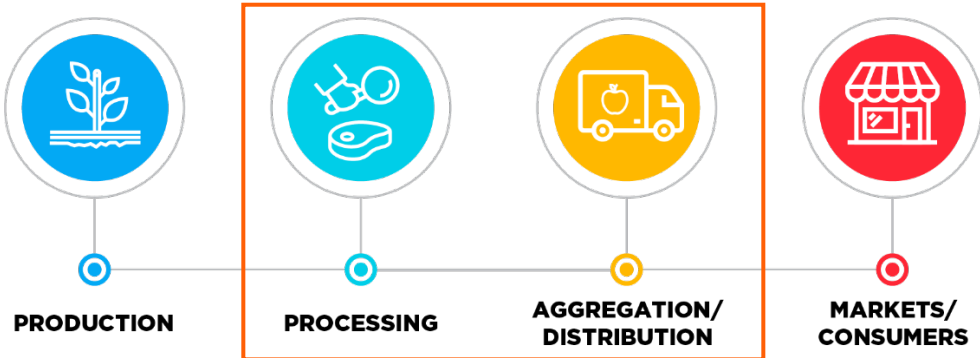
Background

In 2023, the United States Department of Agriculture (USDA) announced the Resilient Food Systems Infrastructure (RFSI) program. With funding from the American Rescue Plan, the USDA defined RFSI to build resilience in the middle of the supply chain, provide more and better markets to small farms and food businesses, and support the development of value-added products for consumers. Through RFSI, the Illinois Department of Agriculture (IDOA) received \$6.3 million in funding to invest in infrastructure in the middle of the food supply chain through competitive subawards, with a limited portion reserved for supply chain coordination efforts.

Illinois Extension is supporting IDOA with supply chain coordination. While providing technical assistance through the Local Food Purchase Assistance in the state, Extension collected community-centered knowledge on the current strengths and gaps in the Illinois food system from over 300 growers, producers, food system advocates, and employees at food access organizations, food hubs, and nonprofits. The need for infrastructure investments in Illinois was mentioned in nearly every listening session as a necessary step to improve the state’s food system. This clear gap in hard infrastructure and direct requests to map the state’s existing food system network of processing facilities, distributors, and other assets directly informed Illinois's supply chain coordination efforts.

Project Overview

Illinois Extension and IDOA propose to build a foundational understanding of the middle of the food supply chain in Illinois by identifying existing resources and gaps through asset mapping. The USDA has defined the middle of the supply chain as post-harvest and pre-consumer activities, which include aggregation, processing, manufacturing, storage, transportation, wholesaling, and distribution.



Graphic adapted from the USDA, <https://www.usda.gov/build-back-better>



Asset mapping is a research tool often utilized in community organizing to identify the assets, needs, and gaps in a particular field and is the first step to developing systems change campaigns and organizing strategies (Garcia et al., 2020). It is a valuable research tool for supporting community capacity building and community development (Soma et al., 2021).

An asset map could connect farmers to existing middle-of-the-supply-chain assets such as processors, manufacturers, cold storage, commercial kitchens, and aggregators. It could provide a baseline of information for planners, policymakers, and changemakers to make data-informed decisions to build a more resilient food system and a stronger middle of the supply chain by addressing gaps or building on existing strengths.



By increasing efficiency, highlighting existing tools, and identifying collaboration and relationship-building opportunities, asset mapping can help funders determine the most impactful middle-of-the-supply chain investment opportunities. (Garcia et al., 2021) Additionally, a food asset map could provide the baseline of information to track changes in the agriculture and food sectors over time (Baker 2018).

Illinois Extension conducted a landscape analysis to determine potential asset mapping methods, analyze what has already been done in the space to avoid duplication of work, identify potential benefits and challenges, and propose the next steps with advising and support from IDOA. Information was collected through informal evaluation of existing food system maps and conversations with map builders.

Landscape Analysis

Based on the exploration conducted for this project, asset mapping is relatively new to the food system space. There are few food system asset maps locally, nationally, or internationally. Most food system asset maps are similar to [Find Food Illinois](#) and focus on food access sites, including food pantries, food banks, community meals, mobile markets, school nutrition programs, restaurants, farmers markets, grocery stores that accept SNAP, and more. Some maps, such as the [Tempe Arizona Food Asset Map](#), include local producers, community gardens, and compost sites. Others, like the Canada-based [Halifax Food Asset Map](#) and the [Niagara Service Map](#), included a mix of food production and food access sites.



Rather than mapping the entire state or province, most maps focused on assets in a priority county or group of counties. Nearly all maps were mapped using ArcGIS, except a few hosted on Google Maps. Landscaping efforts for this project focused on finding and exploring maps that contained some middle-of-the-supply chain elements.

What has been done outside of Illinois?

The Island Food Network Good Food Map - Breton Island, Canada

- Summary: A community co-created Google Map of the food system on Cape Breton Island from producer to seller
- Highlights: Community-centered approach, form for people to add new assets, glossary

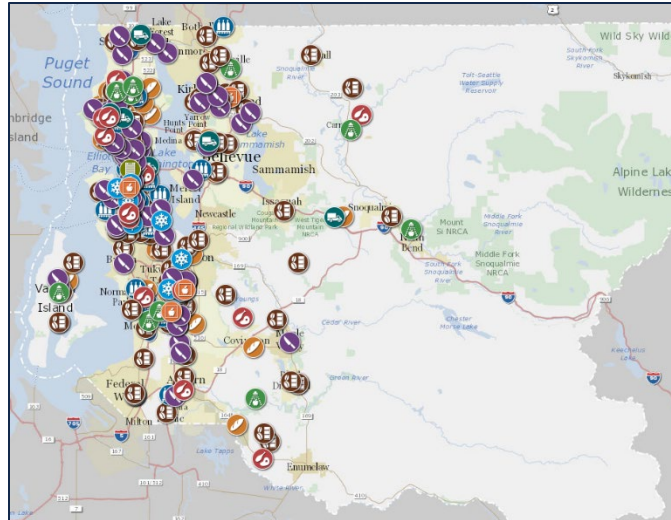
The Good Food Map was created by the Island Food Network and was mapped “by community, for community.” It includes data on “places where good food is being produced, gathered, prepared, shared, sold, or inspired on Cape Breton Island.” The Network held six asset mapping sessions around the island from 2016-2018 to explore food assets and community priorities. They created the map using Google Maps and included places to buy local food, producers, and community organizations. The middle of the supply chain assets includes meat and seafood processors, categorized as “producer resources.” Basic contact information and a description are available for each organization. The map includes a [glossary](#) of the terms on the map.

King County Farm and Food System Map – King County, Washington

- Summary: An ArcGIS map of King County featuring an impressive variety of middle-of-the-supply-chain assets
- Highlights: Variety of middle-of-supply chain assets, indicates if businesses will lease to farmers, data dashboard for food system goal tracking



The King County Farm and Food System Map is hosted on Farm King County's Food System Data Center. According to the [King County Local Food Initiative's 2020 Annual Report](#), the Food Systems Data Center was launched in 2018 to combine an "interactive mapping platform with information on local agriculture to tell the story of King County's farm and food system." The map features one of the most comprehensive middle-of-the-supply chain mapping efforts encountered in this analysis. It includes data on commercial kitchens, co-packer/wholesalers, meat/poultry processors, freezer/IQF, post-harvest handling (wash/dry, packing of products), distributors, storage facilities, and dryer/dehydrators. Basic contact information is provided for each business, including website, operational status, and whether the organization will lease to farmers. The method used to create the map is not clear.



Screenshot of King County's Farm & Food System Map

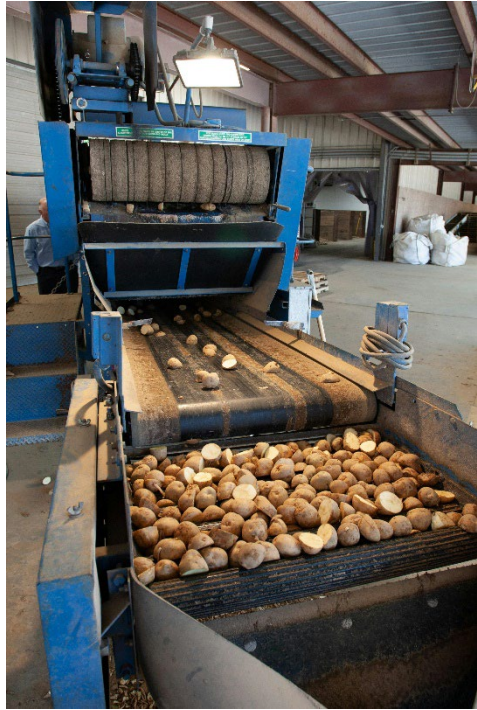
The map has additional farmland, markets, planning, administrative areas, and hydrography layers. The dashboard is worth noting, as it provides a clear, data-driven snapshot of the progress King County is making on its Local Food Initiatives.

Sun Valley Institute for Resilience Food Asset and Needs Map – Idaho

- Summary: An ArcGIS map featuring middle-of-the-supply-chain infrastructure in Idaho
- Highlights: Mapping entire state, insights into method and project goals

Started in 2023, the Food Asset and Needs Map is set to launch in early 2025 after two years of one full-time employee working on it part-time. The information provided is from a conversation on March 26, 2024, with Hannah Harris, a Program Coordinator at the Sun Valley Institute who is leading the mapping initiative. The Food Asset and Needs Map will include business assets that serve the regional food system, focusing initially on mapping middle-of-the-supply-chain infrastructure such as processing and manufacturing, distribution and transportation, warehousing and storage, rentable commercial kitchen spaces, and food access sites.





Eventually, the map will expand to include farmers, ranchers, and potential markets for producers such as restaurants and retailers. Environmental layers like roadways, electric lines, and watersheds will be included. The initial intention was to map just the “skillet” of Idaho, but after stakeholder feedback, the project expanded to map the entire state.

The Sun Valley Institute will gather data for the map using NAISC codes, Google inquiries and through the Institute’s internal network. The government uses NAISC codes to track existing businesses. Each business type has a unique NAISC code. NAISC code information is free and publicly available. The Institute used these codes to get a baseline estimate of the state’s assets. Google searches improve asset data quality, especially for organizations

without websites. The Institute intends to survey its internal network to get the most up-to-date and relevant information for each asset identified. This data will serve as the primary data source for their map, and the Institute will fill in additional information as needed. They plan to update the map every two years through additional surveys. Hannah acknowledged that their biggest challenge will be survey engagement and hopes to remedy this by building a repertoire with stakeholders, so they are motivated to keep their data current.

The Sun Valley Institute’s goal is for the map to build resiliency in Idaho’s food supply chain by mitigating risks from climate change, pandemics, economic shocks, including inflation, and other challenges. They hope the map will serve as a resource for researchers who study risk mitigation and for farmers to connect to local middle-of-the-supply-chain assets. Hannah advised creating clear goals on the “why,” scope, and intended audience to keep the project focused amid opinions from interested stakeholders. She also suggested working with an ArcGIS specialist.

Healthy Food Access Mapping Project– Upper Coastal Plain, North Carolina

- Summary: An ArcGIS asset map featuring some middle-of-supply-chain infrastructure and a comprehensive story map of the Upper Coastal Plain food system
- Highlights: Asset map and story map



The [Healthy Food Access Mapping Project](#) analyzes the current food system in five counties in northeast North Carolina called the Upper Coastal Plain. This project incorporated data from 400 stakeholders collected through virtual community engagement sessions, small group discussions, focus groups, an organization survey, and a consumer survey.

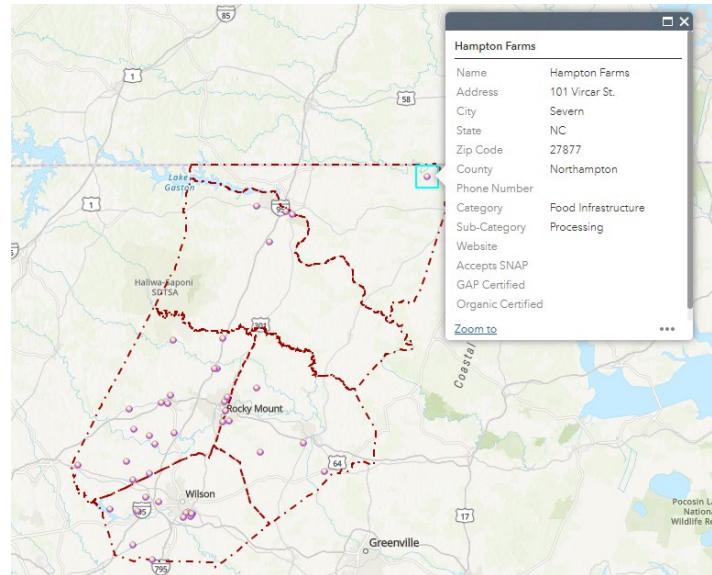
An Asset Map and a Story Map were created by a collaboration of North Carolina stakeholders to show assets, needs, and opportunities within the local food system. The [HFAM Asset Map](#) was developed using data from public sources and partner organizations and is a smaller piece of a larger project. The asset map includes farms, gardens, grocery and retail, institutional buyers, emergency food resources, and infrastructure. Infrastructure is divided into aggregation/distribution, milling, and processing subcategories. The map includes basic information for each organization.

The [HFAM Story Map](#) provides comprehensive information on the state of the Upper Coastal Plain food system from farm to consumer. It includes historical context, demographic information, economic distress, supply chain assets (farmers, processors, retailers, aggregators, etc.), percentage of households accepting SNAP, and case studies. The supply chain asset section includes features of local businesses.

Iowa RC&D Food in the Corridor – Linn and Johnson Counties

- Summary: A story map of growing, accessing, and cooking food in two counties in Iowa
- Highlights: Small scope, storytelling

In 2021, the Iowa RC&D created a story map to provide a snapshot of the food system in two counties in Iowa. The map is tiny in scale and has sections on growing, accessing, and cooking food. Each section features a map, general information, and features of local businesses doing relevant work. The method of creating this map is not clear.



The HFAM Asset Map displays the food infrastructure in the Upper Coastal Plain

Community Map Jams – Northeast Sustainable Agriculture Working Group

- Summary:
- Highlights: Community-organizing

Starting in August 2023, the Northeast Sustainable Agriculture Working Group (NESAWG) began using a community-led mapping approach called MapJam to create a map of the farm and food system of 12 states in the northeast region of the United States. NESAWG intends to use map Jams to "move the Northeast farm and food system from an extractive to a regenerative economy in a racially equitable and just way." MapJams, a concept created by [Shareable](#), is an easy-to-organize event where small groups gather to map as many sharing services in their city or town as possible. Shareable supports MapJams as a powerful organizing tool to facilitate collaborations between existing projects and foster ideas for projects to fill gaps. MapJams have been hosted all over the world.

Through the NESAWG website, organizations are encouraged to add themselves to the map through an online form and can sign up to host a 2–4-hour MapJam session, which will include mapping and a discussion on how to create food systems change. The current map was created on UMAP and [can be found here](#). Eventually, the data from the MapJams will be mapped and shared publicly as a resource for the region. Based on information from Shareable on existing maps, Chi Commons Cooperative and the Kola Nut Collaborative have hosted a MapJam to create [Chicago's Cooperative and Solidarity Map](#).

What has been done in Illinois?

CF-MAP: Dr. Howard Rosing (DePaul University) and Dr. Danny Block (Chicago State University)

The Chicagoland Food Shed Mapping Project (CF-MAP) was conceptualized to support the Good Food Purchasing Program (GFPP) efforts with the Chicago Food Policy Action Council. The following information is from a conversation on April 5, 2024, with Dr. Howard Rosing, a cultural anthropologist at DePaul University leading the mapping initiative. Through this mapping project, Howard and his team intend to map all growers and producers within 300 miles of Cook County to help CFPAC better understand and support buyer-supplier relationships, particularly for BIPOC growers.



Phase 1 of the project is focused on mapping growers in ArcGIS. Grower information was collected county by county using spatial analysis on Google Earth, crop data from the USDA,



and qualitative interviews. Qualitative interviews include questions that ask why the grower is farming, what they are growing, what market they sell to, and if they currently sell to institutions. The result will be a database in ArcGIS of all farmers within 300 miles of Chicago, complete with a map of their farm, satellite images, an indication of whether they are BIPOC farmers, and the qualitative information captured in interviews.

Currently, this database is not intended for the public due to potential privacy issues, but rather for CFPAC to have data to support increasing grower accessibility to institutional markets. Based on this conversation, a version of the map could potentially be made public but would require discussions with CFPAC.

Additionally, Howard stated that the project is Chicago-centric and presumes that all growers want to sell into Chicago rather than other large metropolitan markets such as Milwaukee or St. Louis. Howard also acknowledged that mapping is a dynamic process, and the challenge with any map is keeping the information current. Staffing is needed to maintain the integrity of the map, which, for now, is supplied by graduate students at DePaul. He hopes that cultivating relationships with growers will help keep the data current. A report will be coming out for Phase 1 of the project soon.

Middle-of-the-supply chain mapping efforts will begin in Phase 2 of the project and will include mapping all distributors and food manufacturers within 300 miles of Chicago. Dr. Danny Block, geographer at Chicago State University, completed a mapping pilot for Phase 2. Danny and Howard shared more information about this pilot project in a conversation on May 3, 2024.

All distributors and food manufacturers were mapped for the pilot using NAISC codes, which provide business type and address information. This data was supplemented with Business Analyst data (local datasets available through ArcGIS) to help identify BIPOC business owners. While not used in his initial map, Danny suggested using state data, when possible, as it may be more accurate and public than NAISC code data. The state would likely have relevant data since some organizations, like meat processors, must be licensed.





Both researchers stated that NAISC codes served as a good starting point for mapping but required engaging with individual businesses to verify that the businesses were still open and that the business types were accurate. As Howard stated, the “middle of the supply chain is a gray zone; a lot of it has to be verified.” He suggested recruiting research assistants or students to support this verification.

When asked which assets they would prioritize mapping based on data they have collected, Howard suggested prioritizing cold storage and aggregation points, such as wholesalers and food hubs, for farmers interested in institutional supply chains. For smaller-scale farmers, mapping a network of potential buyers would be helpful.

Howard and Danny have data they would be willing to update and share from their middle-of-the-supply-chain mappings and are interested in supporting an Extension mapping project, as it would support Phase 2 of CF-MAP.

MarketMaker – Dar and Rich Knipe

MarketMaker was started 20 years ago and is run by Dar and Rich Knipe. It was initially started as an Illinois Extension project around the meat supply chain and then expanded to connect farmers to market opportunities. A meeting was held on April 3, 2024, with Dar and Rich Knipe and Elizabeth Wahle from Illinois Extension to discuss how MarketMaker could support middle-of-the-supply chain mapping efforts.

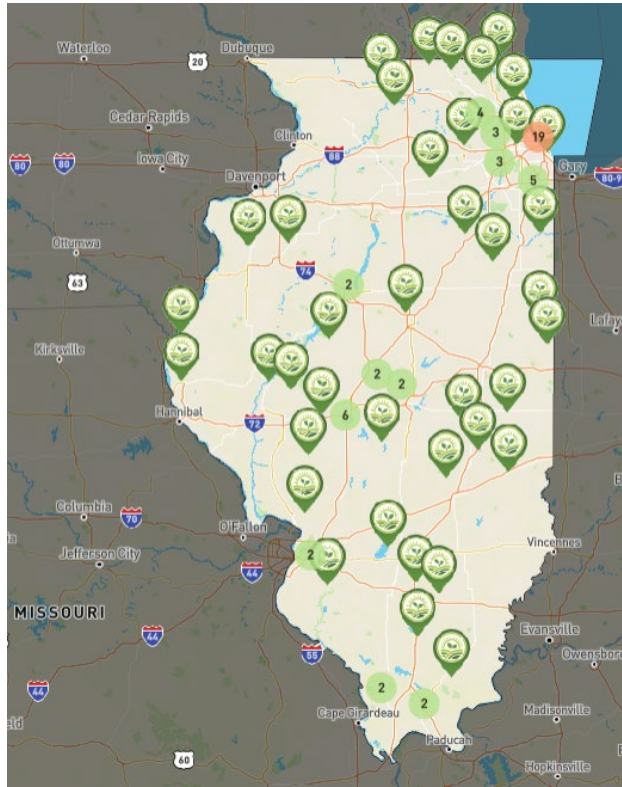
MarketMaker is an enormous database of primary and secondary data hosted on MapBox. Their primary data is directly collected from businesses or individuals, including their role in the supply chain, the crops they sell, and whether they participate in agritourism. The primary data, particularly in Illinois, is gathered through a hub and spoke system, meaning that food system data hosted in local directories such as Buy Fresh Buy Local, Illinois Farm to School, the Illinois Farmers Market Association, Illinois Department of Agriculture, Feeding Illinois, and more all feed into MarketMaker.



Dar noted that primary data is the most challenging to maintain but that farmers get a lot of market exposure by keeping their information current due to the hub and spoke system, thus contributing to the data integrity of MarketMaker. Their secondary data is comprised of USDA data, NAISC codes, and some purchased data as well. Dar stated that secondary data would help map middle-of-the-food-supply chain assets. In total, they estimate to have around 2.5 million data points on the food supply chain. MarketMaker has been used by planners who have tried to identify gaps in infrastructure within a specific region for grant proposals, technical assistance, and supporting rural development.

To maintain data, the MarketMaker team advised building a value proposition to motivate individuals to keep their data current. Many supporting organizations do mass mailing campaigns to prompt folks to update their profile. In some cases, MarketMaker attends events so that individuals can update their data on the spot. Additionally, they utilize information on inactive profiles for targeted outreach. Another challenge they highlighted was creating a user-friendly application that is used. As Dar put it, “Adoption is not a foregone conclusion.” They recommended partnering with people who will help “spider it out.”

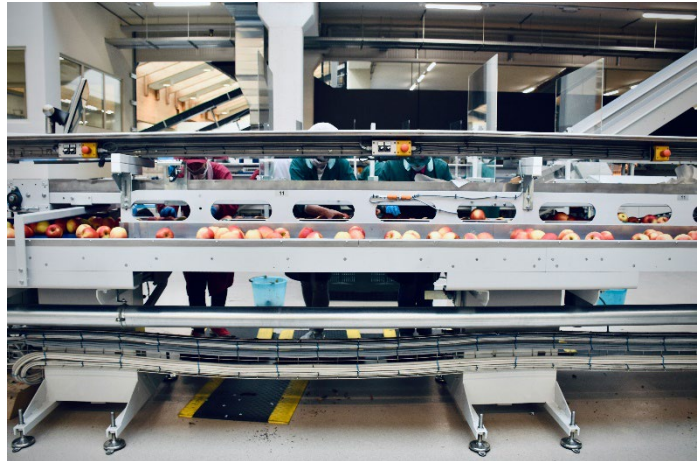
Dar and Rich were confident they could build a custom map to fit our needs using their existing data. They are currently supporting a similar, product-specific project with the Economic Research Service to create a supply chain map of citrus. Mapping data on the specific stops of the supply chain that the ERS wanted to capture, the resulting map includes symbols for registered citrus farmers, citrus groves, orange groves, frozen fruit and vegetable manufacturers, juice manufacturers, and more. Similarly, Dar and Rich support Michigan State's supply chain resilience project to map beef, dairy, apples, tomatoes, and wheat supply chains.



A MarketMaker map showcasing aggregators, wholesalers, and distributors in Illinois.

For the RFSI project, MarketMaker would create a dashboard plotting the assets we requested to be mapped, and we would bring in extra data points as needed to support the goal of our map. They advised thinking strategically about which data points we wanted to include. The map could consist of base map layers such as demographics, food deserts, or education level and could be hosted on any website we choose. They anticipated that their end of project could be completed in 2-8 months, depending on the project scope and their workload. To proceed, we would need to meet for more scoping and looping in Raghela at the Illinois Farm Bureau, which oversees MarketMaker.

In a personal exploration of MarketMaker, the Illinois map seemed to lack middle-of-the-supply chain data relevant to small farmers. Data from the national business directory includes fruit and vegetable canning, refrigerated warehousing and storage, dairy processors, frozen fruit and vegetable processors, grain milling, and more. While there is a lot of data, much is irrelevant due to the operation's size (either too small or too big). It would require a lot of directly reaching out to businesses to get the information relevant to our purposes (e.g., does the entity work with local farmers).



Chicagoland Food Hub Feasibility Study - Dr. Weslynn Ashton

(Illinois Institute of Technology and Chicago Food Policy Action Council)

The Chicagoland Food Hub Feasibility study was conducted to identify and explore ways food hubs could support Chicagoland food producers, particularly those identifying as BIPOC, in selling to institutions. It offers a framework for developing future food hubs or partnering with existing hubs. Both quantitative and qualitative data were collected to support the project. Quantitative data relevant to middle-of-supply-chain mapping efforts include statistical analyses of the USDA National Food Hub data and business profile data from Mergent Intellect and the statistical analysis of producers within a 300-mile radius of Chicago conducted by Dr. Howard Rosing as part of CF-MAP. Qualitative data included in-depth interviews with food distributors, aggregators, and food service providers, workshop sessions with stakeholders, and research and trend analysis of food hubs and cooperative business models.

The report identifies nine food hub models, highlights the importance of food hubs, and discusses the challenges facing farmers selling to institutional markets and institutional



buyers sourcing from small, local food suppliers. It describes each of the eight entities in Chicagoland, classified as food hubs by the USDA, and ten organizations that operate like a food hub but are not formally identified. The resources section of the report offers some direct links to resources for refrigerated and non-refrigerated truck rentals, warehouses, and storage.

Ritchie Wai – Farmers Rising

Ritchie Wai of Farmers Rising first expressed his interest in a community-driven mapping project at the Illinois Food Infrastructure Collaborative meeting at the 2024 Everything Local Conference. The information below is from a comprehensive email in which Ritchie laid out his thoughts and progress thus far.

Ritchie is interested in a community-driven, open-access, data sovereign mapping project that would be managed and updated by a decentralized community of users. A map of this nature



would center on transparency, open access, and consent to display data as guiding principles. The map would be hosted on open-source software such as QGIS, uMAP, or OpenStreetMap to avoid subscription barriers, particularly for individuals outside of institutions. His approach was heavily informed by the MapJam efforts underway by the [Northeast Sustainable Agriculture Working Group](#), described above.

He planned to cross reference market data sets such as the [USDA Local Food Directories](#), the [ILFMA Farmers Market Map](#), [Illinois Extension’s Find Food Illinois](#), the [FSIS Meat, Poultry, and Egg Product Inspection Directory](#), and the [IDOA Meat and Poultry Brokers Licensee Look-up](#). The map would also include information on entities in the middle of the supply chain, food system supporting organizations, political boundaries for advocacy support, and businesses relevant to farmers, such as equipment manufacturers, relevant repair shops, lumber yards, seed production, and farmland rent or cost data. As Ritchie himself put it, “I wanted it all.”

Recommendations

The size and scope of the middle-of-the-supply chain asset mapping project are dependent on stakeholder interest, collaborative efforts, funding, and time. The core supply chain coordination team participated in a brainstorming session using what was learned from this landscape analysis. The brainstorming session results are summarized in three potential



pathways for asset mapping that range in smaller to larger size and scope. Regardless of which path is selected, there is a need to determine which organization will host and maintain the map.

Bronze

- Summary: A map of priority resources in targeted regions of the state with minimal community-led mapping and engagement with existing stakeholders as needed.

A bronze version of the asset map is narrow in size and scope. Efforts would focus on mapping specific assets in priority areas of the state. Based on the information from the landscape analysis, high-priority assets include cold storage, processors, and aggregators. Priority areas of the state could consist of counties or regions with a higher percentage of specialty crop growers or historically marginalized growers.

Most bronze asset map data would leverage existing data, such as NAISC codes and data from Dr. Rosing's and Dr. Block's CF-MAP project. Data would be minimally refined through Google searches and direct outreach. Some data would be contributed to a few communities MapJams, at existing food system events such as the Chicago Food Justice Summit or Everything Local. The map would be hosted on ArcGIS.

Existing stakeholder groups like the IL-EATS Advisory Committee, Community Food Navigator, Chicago Food Policy Action Council, and the Ag Equity Commission would be engaged and informed as needed to help shape the direction of the map.

Silver

- Summary: A map of defined priority resources in the entire state with community-led mapping sessions in every region of Illinois. Establishment of a separate steering committee with a paid farmer representative.

The silver version of the asset map broadens in size and scope. Mapping efforts would expand to mapping high-priority assets throughout the entire state. More time and intention would be taken to determine which assets are high priority. A brainstorming and prioritization session would be held with stakeholders to select and define the high-priority assets and choose the most beneficial information for map users. (e.g., business hours, phone number, openness to working with farmers, etc.) For example, rather than just mapping "processors," the group would define the scope of processing assets for this map (e.g., would the map include commercial kitchens, small manufacturing facilities, meat processing plants, or all three?).



The silver asset map would build on the bronze map with more data refinement through Google and direct outreach, potentially with the support of student workers. Community MapJams would be held in every region of the state. The map would be hosted on open-source software to increase accessibility.

A separate steering committee would be established to guide mapping efforts. The committee would include at least one farmer representative, who would receive a stipend for their participation. Existing stakeholder groups such as Regional Food Councils, the Urban Agriculture Committee, and the Illinois Food Systems Infrastructure Collaborative would be consulted or informed as needed to guide the project.

Gold

- Summary: An asset map of all middle-of-the-supply chain assets across the regional food system and a story map. Collaboration with the USDA Regional Food Business Center. Establishment of a long-standing food system advisory committee and concrete food system goals for Illinois.

The gold asset map would expand to include the regional food system, particularly areas in other states near the Illinois border. All aggregation, processing, manufacturing, storage, transportation, wholesaling, and distribution assets would be mapped. Community MapJams would be held regionally and with major stakeholder groups such as the Illinois Food Systems Infrastructure Collaborative, the Community Food Navigator, and M-CERF. A story map would be created alongside the asset map to capture the human elements of mapping that quantitative data cannot capture. The map would be built in collaboration with the USDA Regional Food Business Center and serve as a gold standard for other states interested in similar mapping projects.

A long-standing food systems advisory committee in Illinois would be formally established to inform mapping efforts. The committee would help steer projects and policies with high potential for positively impacting the Illinois food system and set concrete food system goals and timelines for the state to work towards. The asset map and a dashboard would be created to support tracking these goals.



Conclusion

An asset map would support the food systems change work that is gaining momentum with the influx of federal funding by providing a complete picture of the Illinois food system's assets, needs, and gaps. The map could connect individuals to existing infrastructure and support planners, policymakers, and changemakers with the data they need to address the gaps strategically. As one of the first in the United States, it could create a framework for other states interested in making similar maps, inform a statewide food systems strategy, and serve as a benchmark for tracking shifts in the Illinois food system over time.

While more food systems maps are emerging, few focus on mapping middle-of-the-supply-chain infrastructure. Most maps include data on farmers or food access and are built with primarily quantitative data. The quantitative data typically comprises publicly available data sets such as NAISC codes, but in some cases, they are purchased. This data set is refined further through Google searches or direct outreach through written or verbal surveys. Existing maps in the state are focused on Chicago and the surrounding areas, are not publicly available, or do not provide a complete, user-friendly picture of the middle-of-the-supply chain assets accessible to small farms.



Qualitative data can support mapping efforts through the creation of story maps – a multimedia map that combines geography, narrative text, and pictures – such as those created by HFAM and Iowa RC&D. It can create a more holistic understanding of the food system players beyond just quantitative data, as is the case for Dr. Rosing and CF-MAP. For NESWAG and Shareable, community-led mapping can be a powerful way to build collective organizing power. For Illinois's RFSI, it is recommended that qualitative and quantitative data be collected to capture the benefits of both.

While mapping is the focus of this landscape analysis, it represents just one phase of the RFSI supply chain coordination project. An asset map would lay critical groundwork for launching the resource toolkit/curriculum and supply chain coordination pop-up events envisioned in



the subsequent phases. Mapping any degree of the middle-of-the-supply-chain infrastructure in Illinois is the foundational work needed to transform Illinois's food system – through the Resilient Food Systems Infrastructure supply chain coordination efforts and beyond.

Next Steps

The report will be shared with stakeholders interested in or participating in mapping efforts in Illinois. Illinois Extension will continue to explore potential synergies with the Illinois Food Systems Infrastructure Collaborative, the Illinois Grocery Initiative, the USDA Regional Food Business Center, and MarketMaker. Additionally, Extension will explore broader RFSI supply chain coordination efforts by connecting with the Wisconsin RFSI team and the Wallace Center. Extension hopes to leverage application data from the Local Food Infrastructure Grant and the Resilient Food Systems Infrastructure program to understand current food system infrastructure gaps better. Information such as the types of infrastructure requested (cold storage, commercial kitchens, food hubs, etc.) and the general location of these requests is of particular interest. In July, IDOA and Extension will convene to set goals for the RFSI supply chain coordination efforts in Illinois and discuss the possible launch of an RFSI steering committee and a broader Illinois food systems advisory group.

This report was prepared by Makala Bach, Illinois Extension, with guidance from Dr. Jennifer McCaffrey, Illinois Extension, and Dakarai Howard, Illinois Department of Agriculture. Questions or comments may be directed to bachmak@illinois.edu.



References

Baker, L. (2018). Food asset mapping in Toronto and Greater Golden Horseshoe region. *Integrating food into urban planning*, 264-275.

https://muse.jhu.edu/pub/354/edited_volume/chapter/2772168/pdf

García, J. J., Grills, C., Villanueva, S., Lane, K. A., Takada-Rooks, C., & Hill, C. D. (2020). Analyzing the Landscape: Community Organizing and Health Equity. *Journal of Participatory Research Methods*, 1(1). <https://doi.org/10.35844/001c.13196>

Soma, T., Shulman, T., Li, B., Bulkan, J., & Curtis, M. (2021). Food assets for whom? Community perspectives on food asset mapping in Canada. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability*, 15(3), 322–339.

<https://doi.org/10.1080/17549175.2021.1918750>

