

Business Development & Food Infrastructure

Local and Regional Food Systems (LRFS) Data Warehouse Project



Overview

This document is one component in the creation of a Local and Regional Food Systems (LRFS) Data Warehouse to support thriving and informed local and regional food sectors. Teams of researchers and community partners reviewed and compiled available data using an equity lens into a single data warehouse to facilitate analysis and visualization.

Our LRFS Data Warehouse contains data indicators for business development and local food infrastructure that can help researchers, practitioners, and policymakers understand the resources available (and opportunities for resources) in the local food supply chain. We anticipate these data being most useful to organizations working to understand and increase capacity to process, store, distribute, and purchase more regional food. Access to these data will support stakeholders as they develop proposals for funding, communicate the importance and broader context of their work to stakeholders and policy makers, and establish evaluation protocols of their own.

These data include:

- **Food hubs data**, which include geographical data on the number and location of food hubs.
- **Meat and poultry data**, which document the number and location of USDA certified meat and poultry processors.
- **Storage data**, which include the number of public and private refrigerated warehouses.
- **Institutions data**, which include the number of school food authorities with edible gardens and serving local food, dollars spent on local food, and number and location of institutions and institutional buyers.

Narrative Matters - Working towards equity

There is a well-documented association between nutritious food availability and intake of those foods. Food stores differ in the amount of nutritious and fresh food they carry. Research shows that neighborhood racial composition and poverty levels are both associated with food store availability. Decades of discriminatory practices in real estate have led neighborhoods with high numbers of low-income residents, and neighborhoods made up predominantly of residents who are Black, Indigenous, and people of color, to have fewer high quality food stores and more low-quality food stores.

Additionally, it is important to acknowledge where consolidation exists along the supply chain and how it impacts consumers and producers. In the meat industry, for example, four processing firms control 55-85% of the market for beef, pork, and chicken. This kind of consolidation means that a few players have disproportionate power over what farmers receive for their product and what consumers pay for it. Larger food corporations also dominate grocery aisles by offering financial incentives to grocery stores for carrying their product.

Site users are encouraged to acknowledge the systemic factors that influence the geographic distribution of food markets and food infrastructure and to seek out opportunities to support policy and program changes that improve these inequities. When presenting data, we encourage disaggregation by individual race, ethnicity, and cultural group wherever possible. Aggregation of data can mask important differences that might be relevant for understanding needs and crafting adequate program and policy solutions. We also encourage practices that invite community members to help contextualize data, share their personal stories, and amplify community solutions.

The following data are included in the data warehouse. While there are certainly more data on this topic, these data sets are national in scope, complete, and publicly available. We expect that more data will be submitted and added to the warehouse upon its release.

LRFS Data Warehouse Business Development and Infrastructure Measures

Topic Area	Variable	Data Source	Link
Food hubs	Food hubs, count	USDA Local Food Directories	https://www.usdalocalfoodportal.com/fe/fdirectory_foodhub/?source=fe&directory=foodhub&location=&x=&y=
Food hubs	Food hubs, location	USDA Local Food Directories	https://www.usdalocalfoodportal.com/fe/fdirectory_foodhub/?source=fe&directory=foodhub&location=&x=&y=
Institutions	Colleges and universities, count	IES National Center for Education Statistics	https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?gotoreportid=7&fromlpeds=true&
Institutions	School food authorities serving local food, count	USDA Farm to School Census	https://data.nal.usda.gov/dataset/2019-farm-school-census-v2
Institutions	School food authorities with a school garden, count	USDA Farm to School Census	https://data.nal.usda.gov/dataset/2019-farm-school-census-v3
Institutions	School food authorities, dollars spent on local food	USDA Farm to School Census	https://data.nal.usda.gov/dataset/2019-farm-school-census-v4
Institutions	School food authorities with salad bars, count	USDA Farm to School Census	https://data.nal.usda.gov/dataset/2019-farm-school-census-v5
Institutions	School food authorities with salad bars serving local food, count	USDA Farm to School Census	https://data.nal.usda.gov/dataset/2019-farm-school-census-v6
Institutions	Colleges and universities, location	IES National Center for Education Statistics	https://nces.ed.gov/ipeds/datacenter/DataFiles.aspx?gotoreportid=7&fromlpeds=true&
Meat and Poultry	Meat processors, count	USDA Food Safety and Inspection Service, USDA	https://www.fsis.usda.gov/inspection/establishments/meat-poultry-and-egg-product-inspection-directory
Meat and Poultry	Meat processors, location	USDA Food Safety and Inspection Service, USDA	https://www.fsis.usda.gov/inspection/establishments/meat-poultry-and-egg-product-inspection-directory
Storage	Refrigerated warehouses, public, count	USDA, Economics, Statistics, and Market Information System, Capacity of Refrigerated Warehouses	https://usda.library.cornell.edu/concern/publications/x059c7329
Storage	Refrigerated warehouses, private and semi-private, count	USDA, Economics, Statistics, and Market Information System, Capacity of Refrigerated Warehouses	https://usda.library.cornell.edu/concern/publications/x059c7329

Additional Measures

Expanded access to data is important for understanding conditions related to business development and infrastructure. Data on certain actors in the middle of the supply chain, such as processors and distributors, are often proprietary and not readily available. This is especially true for sales and procurement of local and regional foods. The lack of data in this area becomes apparent when trying to find a directory or database of distributors and processors, like copackers. More transparent and reliable data systems need to be prioritized in the middle of the supply chain. Listed here are additional data indicators that are recommended for inclusion but are currently not available or require a subscription to access at the county-level. If these data become available, it is recommended that they be added to the data warehouse. Check out the project website for additional information about how to submit suggestions and additions to the warehouse.

Food processors and distribution

The number and location of co-packers, specialty distributors, and state-certified or exempt meat processors.

Institutions

Number of facilities and total dollars spent on food and local food for each of the following categories:

- Hospitals
- Colleges/universities
- Incarceration facilities
- Early childcare facilities

Business development data

Profitability/viability metrics

Related sources and referenced databases

Hobbs, Jill E. (2020). Food supply chain resilience and the COVID-19 pandemic: What have we learned?
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8250571/>

Thilmany et al. (2020). *Local Food Supply Chain Dynamics during COVID-19*. Applied Economics Perspectives and Policies.
<https://onlinelibrary.wiley.com/doi/10.1002/aep.13121>

U.S. Census Bureau (2022). Annual Business Survey (ABS) Program. <https://www.census.gov/programs-surveys/abs.html>

U.S. Census Bureau (2022). Annual Survey of Manufacturers (ASM). <https://www.census.gov/programs-surveys/asm.html>