

## Data Resources for Food Systems Assessments

Data exists in many different forms and can be used in various ways to assess and evaluate food systems. Due to the complex nature of food systems, there are numerous places to start regarding understanding existing conditions and needs within community food systems. Food systems also intertwine with our community. Community assets touch each of our individual lives as well as communities. Overall, these complex systems influence the potential benefits and challenges for food access, sovereignty, business viability and general food supply and consumption.

This resource is meant to support individuals and organizations conducting assessments, creating maps, and aggregating and analyzing data to understand local and regional food systems. The matrix is set up through community assets (built infrastructure, culture and wellness, diversity, equity and inclusion, economy and finance, governance and policy, knowledge and wisdom and natural environment) and sectors (cultivation and harvesting, processing and transformation, aggregation and distribution, purchasing and nourishment, and conservation and stewardship), shown in Figure 1. First, there is a review of quantitative data sources at the national, state and county levels and suggests place-based organizations that may be able to support in understanding your community food system. The second section offers ideas for qualitative data sources that can include both quantitative and qualitative methods.

The goal of this resource is to continue to highlight the breadth of data that is available as a starting point to understanding your community context. However, it is suggested that you also understand your community's desires, vision, and mission relating to your specific food system prior to starting. The amount of data available can be overwhelming, and the more this can be homed in, the more strategic data aggregation and analysis will be.



Figure 1: Food Systems Framework (Iowa State University Extension, 2023)

For additional information on the Food Systems Framework, visit the [Food Systems website](#) or view our [Community Food Systems Tactic Checklist](#).

If you have suggestions to additional resources, or questions regarding the tools shared in this resource, please reach out to:

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## Data Resources for Food Systems Assessments

The tables below identify national, regional and local areas to begin your research. In the resources and indicators column, you can find example reports as well as indicators that may be relevant to that area of research.

The first table indicates secondary data sources. Don't forget to also consider previous reports that may have been completed in local and regional areas. These types of reports are helpful to review and indicate in assessments, as well as respecting and highlighting the previous work that has been completed with community resources.

### Quantitative Data

#### Primary data collection options

- Surveys + Polls: develop specific questions related to the food system for particular populations- this might be useful for understanding consumer behaviors, priorities around food markets, changes or trends in habits, etc.

#### Secondary Data Collection:

	National	Regional	Local	Resources + Indicators
<b>Community Assets</b>				
<b>Built Infrastructure:</b> Developed buildings, roadways, and systems.	<ul style="list-style-type: none"> <li>• <a href="#">Data.gov</a></li> <li>• <a href="#">Farm Service Agency and Disaster Assistance</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> <li>• <a href="#">U.S. Energy Information Administration</a></li> <li>• <a href="#">Place (cities and towns)</a></li> <li>• <a href="#">MapGeo</a></li> <li>• <a href="#">Open Street Map</a></li> <li>• <a href="#">Opportunity Zones</a></li> <li>• <a href="#">U.S. Environmental Protection Agency</a></li> <li>• <a href="#">American Geosciences institute</a></li> </ul>	<ul style="list-style-type: none"> <li>• State Department of Housing and Urban Development</li> <li>• State Department of Transportation</li> <li>• State Department of Energy</li> <li>• Department of Public Health tracking programs</li> <li>• <a href="#">Example: Iowa</a></li> </ul>	<ul style="list-style-type: none"> <li>• County Extension</li> <li>• City and County Planning Office</li> <li>• Community Economic Development Offices</li> <li>• Utilities</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Movement and Place</a></li> <li>• <a href="#">City Futures: Healthy Built Environment Indicators</a></li> </ul>
<b>Culture and Wellness:</b> Individual and population health through traditional and western practices.	<ul style="list-style-type: none"> <li>• <a href="#">Health Data</a></li> <li>• <a href="#">World Health Organization</a></li> <li>• <a href="#">Center for Disease Control and Prevention</a></li> <li>• <a href="#">Choose My Plate</a></li> <li>• <a href="#">Food and Nutritional Service</a></li> <li>• <a href="#">USDA Food and Nutrition</a></li> <li>• <a href="#">USDA Census of Agriculture</a></li> <li>• <a href="#">USDA ERS</a></li> <li>• <a href="#">Healthy Food Access Portal</a></li> <li>• <a href="#">State of Childhood Obesity</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> <li>• <a href="#">USDA Food Access Research Atlas</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions; County Extension</li> <li>• State Department of Public Health</li> <li>• Department of Public Health tracking programs</li> <li>• <a href="#">Example: Iowa</a></li> <li>• <a href="#">Johns-Hopkins State Coronavirus</a></li> <li>• <a href="#">FEMA Disaster Declarations</a></li> <li>• State Public Health</li> <li>• State Department of Natural Resources</li> <li>• State Institutions and Research Organization</li> </ul>	<ul style="list-style-type: none"> <li>• Community hospitals/ public health needs assessments</li> <li>• County Extension</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Office of Disease Prevention and Health Promotion: Healthy People and Social Determinants of Health</a></li> <li>• <a href="#">Center for Disease Control Health Indicators</a></li> <li>• <a href="#">COVID-19 Economic Impact on Local Food Markets</a></li> </ul>

## Data Resources for Food Systems Assessments

	<ul style="list-style-type: none"> <li>• <a href="#">Office of Disease Prevention and Health Promotion: Healthy People Data</a></li> <li>• <a href="#">Johns Hopkins-Coronavirus Resource Center</a></li> <li>• <a href="#">World Health Organization: COVID-19</a></li> <li>• <a href="#">Track the Recovery</a></li> <li>• <a href="#">FEMA Disaster Information</a></li> <li>• <a href="#">Disaster Resource Center</a></li> </ul>			
<p><b>Diversity, Equity and Inclusion:</b> Same status and equal access to goods, services, and power.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Data.gov</a></li> <li>• <a href="#">American Fact Finder</a></li> <li>• <a href="#">USDA Food Access Research Atlas</a></li> <li>• <a href="#">Census</a></li> <li>• <a href="#">HUD – Housing Market Analysis</a></li> <li>• <a href="#">World Bank</a></li> <li>• <a href="#">Bureau of Labor Statistics</a></li> <li>• <a href="#">Feeding America</a></li> <li>• <a href="#">Food and Nutritional Service</a></li> <li>• <a href="#">Opportunity Zones</a></li> <li>• <a href="#">Climate and Economic Justice</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions</li> <li>• State Department of Housing</li> <li>• State Department of Justice</li> <li>• State Department of Labor</li> <li>• State Department of Health and Human Services</li> <li>• State Department of Cultural Affairs</li> </ul>	<ul style="list-style-type: none"> <li>• Local Municipality Zoning</li> <li>• Local Government Planning</li> <li>• County Extension</li> <li>• Civil Rights Committees</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Farm to School Equity Assessment Tool</a></li> <li>• <a href="#">MSW USC Diversity Toolkit</a></li> <li>• <a href="#">Building Movement: Sources of Power</a></li> <li>• <a href="#">Racial Equity Tools</a></li> <li>• <a href="#">Racial Equity Tools: Community Assessment</a></li> <li>• <a href="#">National Equity Atlas</a></li> </ul>
<p><b>Economy and Finance:</b> Community and individual wealth, finances, and resources.</p>	<ul style="list-style-type: none"> <li>• <a href="#">American Fact Finder</a></li> <li>• <a href="#">Census</a></li> <li>• <a href="#">Bureau of Economic Research (Department of Commerce)</a></li> <li>• <a href="#">Data.gov</a></li> <li>• <a href="#">World Bank</a></li> <li>• <a href="#">Bureau of Labor Statistics</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> <li>• <a href="#">Food and Agriculture Organization of United Nations</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions; County Extension</li> <li>• State Economic Indicators</li> <li>• State Rural Development Program</li> <li>• Department of Commerce</li> <li>• Economic Development Authority</li> <li>• Small Business Administration</li> <li>• Small Business Development Centers</li> </ul>	<ul style="list-style-type: none"> <li>• Local Government Community and Economic Development</li> <li>• County Extension</li> <li>• Previous Economic Studies</li> <li>• Community Foundations</li> <li>• Research Institutions/ Land Grant Colleges</li> <li>• <a href="#">Example. Iowa</a></li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Local Food Economics</a></li> <li>• <a href="#">Local Food Economics, Metrics</a></li> <li>• <a href="#">AgMrc Business Development</a></li> <li>• <a href="#">AgMrc Product Analysis</a></li> <li>• <a href="#">AgMrc Prices and Profitability Models</a></li> <li>• <a href="#">U.S. Small Business Administration</a></li> <li>• <a href="#">USDA Economic and Policy Analysis</a></li> <li>• <a href="#">North American Industry Classification System (NAICS)</a></li> </ul>
<p><b>Governance and Policy:</b> Democratic practices and principles or actions adopted by groups, communities, and government.</p>	<ul style="list-style-type: none"> <li>• <a href="#">HUD – Housing Market Analysis</a></li> <li>• <a href="#">Congress.gov</a></li> <li>• <a href="#">Farm Bill</a></li> <li>• <a href="#">Central Intelligence Agency, World Factbook</a></li> <li>• <a href="#">Healthy Food Access Portal</a></li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">State Legislature Websites</a></li> <li>• State Policies</li> <li>• State Department of Agriculture and Natural Resources</li> <li>• State Department of Public Health</li> </ul>	<ul style="list-style-type: none"> <li>• Local Municipality Zoning</li> <li>• Local Government</li> <li>• County Extension</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Farmland Trust: Laws by local, state and federal</a></li> <li>• <a href="#">Food Systems Policy</a></li> <li>• <a href="#">Municipal Zoning for Local Foods (In Iowa)</a></li> <li>• <a href="#">USDA Economic and Policy Analysis</a></li> </ul>

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	<ul style="list-style-type: none"> <li>• <a href="#">State of Childhood Obesity- policy</a></li> <li>• <a href="#">Local Government Food Policy Database</a></li> <li>• <a href="#">Farm Bill</a></li> <li>• <a href="#">Food and Agriculture Organization of United Nations</a></li> <li>• <a href="#">Food and Agriculture Organization of the United Nations Database</a></li> <li>• <a href="#">U.S. Environmental Protection Agency</a></li> </ul>			
<p><b>Knowledge and Wisdom:</b> Experiences, formal education, and historical knowledge.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Data.gov</a></li> <li>• <a href="#">WorldBank Education Statistics</a></li> <li>• <a href="#">National Center for Educational Statistics</a></li> <li>• <a href="#">U.S. Department of Education</a></li> <li>• <a href="#">Education Data Portal</a></li> <li>• <a href="#">Common Core of Data: American Public Schools</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions; County Extension</li> <li>• State Department of Education</li> </ul>	<ul style="list-style-type: none"> <li>• County Extension</li> <li>• Local Private and Public Schools (K-12) / community college/ university reports</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Farm to School Census</a></li> <li>• <a href="#">Educational indicators from OECD</a></li> </ul>
<p><b>Natural Environment:</b> Interactions of climate, living species, weather, and our natural resources.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Data.gov</a></li> <li>• <a href="#">Farm Service Agency and Disaster Assistance</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> <li>• <a href="#">U.S. Energy Information Administration</a></li> <li>• <a href="#">USDA Natural Resources Conservation Service</a></li> <li>• <a href="#">NOAA Fisheries Place (cities and towns)</a></li> <li>• <a href="#">MapGeo</a></li> <li>• <a href="#">Open Street Map</a></li> <li>• <a href="#">National Oceanic and Atmospheric Administration</a></li> <li>• <a href="#">Opportunity Zones</a></li> <li>• <a href="#">Farmland Protection</a></li> <li>• <a href="#">U.S. Environmental Protection Agency</a></li> <li>• <a href="#">Climate and Economic Justice</a></li> </ul>	<ul style="list-style-type: none"> <li>• State Department of Natural Resources</li> <li>• State Department of Agriculture</li> <li>• State Department of Housing and Urban Development</li> <li>• State Department of Transportation</li> <li>• State Department of Energy</li> <li>• Farm Service Agencies</li> <li>• Department of Public Health tracking programs</li> <li>• <a href="#">Example: Iowa</a></li> </ul>	<ul style="list-style-type: none"> <li>• Local Government Parks and Recreation; Planning Departments</li> <li>• County Extension</li> <li>• County Resource and Conservation</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">USDA Disaster Reference Guide- Farmers, Ranchers and Communities</a></li> <li>• <a href="#">USDA Conservation Programs</a></li> <li>• <a href="#">US EPA: Environmental Indicators in environmental justice screening</a></li> </ul>
<p><b>Food System Sectors:</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Food Systems Dashboard</a></li> <li>• <a href="#">Food Systems Indicators</a></li> <li>• <a href="#">USDA AMS Local and Regional Foods</a> <ul style="list-style-type: none"> <li>• <a href="#">Maps</a></li> </ul> </li> </ul>				

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<ul style="list-style-type: none"> <li>• <a href="#">Community Commons Maps</a></li> <li>• <a href="#">ATTRA. NCAT Local Food Systems</a></li> <li>• <a href="#">Healthy Foods, Healthy Lives Institute Indicator Maps</a></li> </ul>				
<p><b>Cultivation and Harvesting:</b> Practice of science, art, or occupation that involves cultivating land, raising livestock, hunting, foraging, fishing, and other maritime practices.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Data.gov</a></li> <li>• <a href="#">USDA Census of Agriculture</a></li> <li>• <a href="#">AgMrc Food Searcher Tool</a></li> <li>• <a href="#">Food Safety.gov</a></li> <li>• <a href="#">Farm Service Agency</a></li> <li>• <a href="#">USDA</a></li> <li>• <a href="#">USDA Open Data Catalog</a></li> <li>• <a href="#">USDA AMS Farmers and Ranchers</a></li> <li>• <a href="#">Market Maker</a></li> <li>• <a href="#">USDA Food Directories</a></li> <li>• <a href="#">Cooperative Statistics</a></li> <li>• <a href="#">USDA ERS</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> <li>• <a href="#">Farmland Protection</a></li> <li>• <a href="#">Food and Agriculture Organization of United Nations</a></li> <li>• <a href="#">NOAA Fisheries</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions; County Extension</li> <li>• State Department of Agriculture</li> <li>• <a href="#">State Food Safety guidelines</a></li> <li>• Department of Natural Resources</li> <li>• State Market Maker</li> <li>• Farm Service Agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Local food directories</li> <li>• Local city and county planning offices</li> <li>• Master gardener programs</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Cooperative Feasibility Study Guide</a></li> <li>• <a href="#">Farmland Trust: Laws by local, state and federal</a></li> <li>• <a href="#">Food Safety Modernization Act</a></li> <li>• <a href="#">North Central Region Center for FSMA</a></li> <li>• <a href="#">AgMrc Product Analysis</a></li> <li>• <a href="#">ATTRA. NCAT Sustainable Agriculture Podcasts</a></li> </ul>
<p><b>Processing and Transformation:</b> Change of raw ingredients through physical alteration or marketing practices into a new product.</p>	<ul style="list-style-type: none"> <li>• <a href="#">USDA</a></li> <li>• <a href="#">USDA Open Data Catalog</a></li> <li>• <a href="#">Market Maker</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions; County Extension</li> <li>• State Department of Agriculture</li> <li>• <a href="#">State Food Safety guidelines</a></li> <li>• Department of Natural Resources</li> <li>• State Market Maker</li> <li>• Farm Service Agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Local processing businesses (specialty crops/ dairy/ meat)</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Food Safety Modernization Act</a></li> <li>• <a href="#">North Central Region Center for FSMA</a></li> <li>• <a href="#">Niche Meat Processing</a></li> </ul>
<p><b>Aggregation and Distribution:</b> Movement of products, including the gathering and delivery, to markets and buyers.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Market Maker</a></li> <li>• <a href="#">Farm to School Census</a></li> <li>• <a href="#">USDA AMS Aggregating and Distribution:</a></li> <li>• <a href="#">USDA ERS</a></li> <li>• <a href="#">USDA AMS Directories</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions; County Extension</li> <li>• State Department of Agriculture</li> <li>• <a href="#">State Food Safety guidelines</a></li> <li>• Department of Natural Resources</li> <li>• State Market Maker</li> <li>• Farm Service Agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Local food hub/ CSA/ and other directories</li> <li>• Regional distributors</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Food Safety Modernization Act</a></li> <li>• <a href="#">North Central Region Center for FSMA</a></li> <li>• <a href="#">New England Farm to Institution Metrics Dashboard</a></li> </ul>
<p><b>Purchasing and Nourishment:</b> Use of foods including individual purchase, culinary activities and programming for</p>	<ul style="list-style-type: none"> <li>• <a href="#">Food and Nutritional Service</a></li> <li>• <a href="#">USDA Community Tools</a></li> <li>• <a href="#">Farm to School Census</a></li> <li>• <a href="#">USDA ERS</a></li> <li>• <a href="#">USDA ERS: Food Environment Atlas</a></li> <li>• <a href="#">USDA Food Access Research Atlas</a></li> </ul>	<ul style="list-style-type: none"> <li>• Research Institutions; County Extension</li> <li>• State Department of Public Health</li> <li>• State WIC/ SNAP/ and food assistance programs</li> </ul>	<ul style="list-style-type: none"> <li>• Local restaurant/ business directories</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">USDA Community Food Systems</a></li> <li>• <a href="#">Farm to School Network</a></li> </ul>

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personal and community sustenance.				
<p><b>Conservation and Stewardship:</b> Care of natural resources to ensure continuation of energy, food and water.</p>	<ul style="list-style-type: none"> <li>• <a href="#">Data.gov</a></li> <li>• <a href="#">Feeding America</a></li> <li>• <a href="#">Farmland Protection</a></li> <li>• <a href="#">NOAA Fisheries</a></li> </ul>	<ul style="list-style-type: none"> <li>• State Waste Management Authorities</li> <li>• State Energy Agencies</li> <li>• State Conservation Programs and Department of Natural Resources</li> </ul>	<ul style="list-style-type: none"> <li>• Landfills</li> <li>• Waste Management and compost programs</li> <li>• Energy Businesses</li> <li>• County Resource and Conservation</li> <li>• Food Donation businesses</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Food Waste Reduction Alliance</a></li> </ul>

# Data Resources for Food Systems Assessments

## Qualitative Data

### Primary Data Collection

- Coalition notes/ feedback
- Network analysis
  - [Department of Health: Force Field Analysis](#)
- Focus groups
- Interviews (track various responses through a spreadsheet similar to below)
  - *If you are interested in social networks/ trust building- consider network analysis mapping and surveying coalitions on trust developed and various areas of connection.*

*Suggestion: Create a table and make a matrix of who to reach out to in communities*

Community Asset Areas					
Business Name	Contact Name	Email	Phone	Address	Notes
<b>Built Infrastructure</b>					
<b>Culture and Wellness</b>					
<b>Diversity, Equity, and Inclusion</b>					
<b>Economy and Finance</b>					
<b>Governance and Policy</b>					
<b>Knowledge and Wisdom</b>					
<b>Natural Environment</b>					

## Data Resources for Food Systems Assessments

<b>Food System Sectors</b>					
<b>Business Name</b>	<b>Contact Name</b>	<b>Email</b>	<b>Phone</b>	<b>Address</b>	<b>Notes</b>
<b>Cultivation and Harvesting</b>					
<b>Processing and Transformation</b>					
<b>Aggregation and Distribution</b>					
<b>Purchasing and Nourishment</b>					
<b>Conservation and Stewardship</b>					