Visualizing Nutrition Assistance Programs at the Food and Nutrition Service

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Food and Nutrition Service
U.S. DEPARTMENT OF AGRICULTURE
FNS’s mission is to increase food security and reduce hunger in partnership with cooperating organizations by providing children and low-income people access to food, a healthy diet, and nutrition education in a manner that supports American agriculture and inspires public confidence.
At FNS, we aim to:

Improve results and program performance through innovation and analytics.

- Improve Data Governance
- Support Data-Informed Decision Making
- Enable Data Sharing

Skills development focused on data literacy, data science, visualization, Analytics, Data Engineering, and Data Visualization

**Goal 4: Open Data**

USDA will enable effective data sharing, underpinned by the FAIR principles, to provide internal and external stakeholders with deeper insights, value, and transparency.

**Vision, Goals, & Objectives:**

To realize the full potential of USDA’s data and workforce to make better decisions, maximize the impact of citizen-facing programs, and provide the public with easier access to data that can solve national problems and spark innovation.

**Goals**

1. Data Governance & Leadership
   - 1.1. Evolve the USDA data governance structure.
   - 1.2. Measure and maximize the organized and value of data & analytics at USDA.
   - 1.3. Minimize the ACOD role.
   - 1.4. Promote cross-departmental/government data & artificial intelligence collaboration.

2. Data & Analytics Workforce
   - 2.1. Expand our ability to recruit & retain the USDA federal workforce.
   - 2.2. Promote USDA-wide workforce training & upskilling initiatives.
   - 2.3. Support central and analytical teams to handle future challenges.
   - 2.4. Skill the USDA to support advanced analytics & artificial intelligence (AI).

3. Common Data & Analytics Toolset
   - 3.1. Modernize EDAPT in a cost-effective manner.
   - 3.2. Advance an enterprise data architecture that promotes data integration, standardization, & security.
   - 3.3. Improve governance of data capabilities & integrations.
   - 3.4. Where applicable, reduce the cost & complexity of the data & analytics tool ecosystem.

4. Open Data
   - 4.1. Centerize & catalog data assets.
   - 4.2. Improve access to data across USDA.
   - 4.3. Maintain transparent open data assets.
   - 4.4. Identify data to bring into EDAPT.

5. Analytics for a Purpose
   - 5.1. Further integrate data visualization & advanced analytics into USDA’s culture of decision making.
   - 5.2. Develop principles & best practices for analytics & artificial intelligence (AI).
   - 5.3. Promote data & artificial intelligence (AI) ethics, responsible use, & transparency.
   - 5.4. Increase number of enterprise analytics tools in EDAPT.

**USDA Data Strategy** [https://www.usda.gov/topics/data](https://www.usda.gov/topics/data)
Launching the FNS Data Visualization Site

**Data Visualizations**

FNS regularly conducts research and data analysis to inform program or policy decisions and understand nutrition program outcomes. In addition, FNS works to make data accessible to state and local agencies, service providers, and the public by developing data visualization and analytics tools that can be used to support nutrition program delivery or input on outcomes.

The below data visualization and analytics products bring together FNS, USDA, and other federal datasets to answer questions related to food security, nutrition assistance programs, and the systems that support them. Dashboards include "about" or "information" pages to answer questions about navigation, interactive functionality, data sources, and the data transformations that have been applied.

**Data Visualizations**

Click on any of the images below to explore an interactive data visualization:

**SNAP Replacement of Stolen Benefits Dashboard**

This dashboard displays state reported data provided to FNS in accordance with the January 2023 passage on the replacement of stolen EBT benefits with federal funds. All data provided to the FNS will be posted here quarterly, as soon as possible following receipt.

**Nutrition Education and Local Food Access Dashboard**

The Nutrition Education and Local Food Access Dashboard provides state and county-level insights into nutrition assistance programs and their relationships with other measures related to hunger and nutritional health. By bringing together USDA’s Food Environment Social Measures with state to school intensity measures in one robust tool, this dashboard allows state and local governments, tribal leaders, policymakers, researchers, practitioners and many more to inform cross-program nutrition technical assistance and support states’ nutrition action planning.

FNS would like to gratefully acknowledge the contributions and research from dozens of stakeholders both within and outside the federal government, without which this dashboard would not have been possible.

- Colorado State University (CSU) Food Systems Team
- Partnership for a Healthy America
- HHS Centers for Disease Control (CDC)
- HHS Food and Drug Administration (FDA)
- HHS Administration for Community Living (ACL)
- HHS Office of the Assistant Secretary for Health (OASH)
- USDA Agricultural Marketing Service (AMS)
- USDA Agricultural Research Service (ARS)
- USDA Economic Research Service (ERS)
- USDA Food and Nutrition Service: colleagues from the Center for Nutrition and Policy Promotion (CNPP), Office of Community Food Systems (OCFS), Office of Policy Support (OPS), and Regional Office Staff

FNS Nutrition Education and Local Food Access Dashboard

3 Views
Global Filters
Select Food Environment Atlas variables
Select F2S Intensity variables
Tribal Nations mapped

Compare across selected geographic areas or state clusters

About the Data Guide

NUTRITION EDUCATION AND LOCAL FOOD ACCESS DASHBOARD

About the Dashboard
The Nutrition Education and Local Food Access Dashboard is comprised of public data. The goal of the Dashboard is to provide a county-level visualization of FNS nutrition support, specifically nutrition education and local food access, along with other metrics related to hunger and nutritional health. The Dashboard can be used by Federal, State and Local Agencies, Tribal Nations, and local partners to assess concentration of nutrition resources, as well as gaps for:
1. Providing collaborative cross-program nutrition technical assistance.
2. Developing nutrition action plans geared to target and optimize resources, and
3. Identifying potential partners for expanding best practices.

Data Sources
ERS Food Environment Atlas - Data included in the ERS Food Environment Atlas comes from a multitude of sources including the Centers for Disease Control and Prevention, the U.S. Census Bureau, USDA Agricultural Marketing Service, USDA Food and Nutrition Service, Bridging the Gap Program, and Feeding America. Data is collected at the county, state, and regional level. ERS Food Environment Atlas - https://www.ers.usda.gov/data-products/food-environment-atlas/

For more information on the Food Environment Atlas data, see the documentation:

Farm to School Intensity Measures - Data for the Farm to School Intensity Measures are from the 2016-18 school year via the 2019 USDA Farm-to-School Census. Data regarding the number of students in a county comes from the NCES Common Core of Data. As a note, this dataset is missing some counties, those counties are represented by black spaces on the map.

For more information on the Farm to School Intensity Measures, see the documentation:
https://nces.ed.gov/cocd/

The Tribal Nations included in this dashboard are mapped using the US Census American Indian, Alaska Native, and Native Hawaiian area geography and attribute files from 2022 available here: https://www.census.gov/geographies/programs/gatsa/datasets/tribaldata/tribaldata.pdf and documentation is available here: https://www.census.gov/geographies/programs/gatsa/datasets/tribaldata/tribaldata_2019/THETA_F2S_TECHDOC_FINAL.pdf

FNS understands that this file may not represent the historical and geographical accuracy of all Tribal Nations and would appreciate any feedback on a better data source. The boundary information in the Tribal Nations Shapefile is for statistical data collection and tabulation purposes only. Their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement and are not legal land descriptions. The maps and data included in the Nutrition Education and Local Food Access Dashboard are for informational purposes only and are not legal documents, nor are they intended to be used as such.

Updated: June 21, 2023

USDA is an equal opportunity employer, provider, and lender.

A state cluster is a set of states created using a computational algorithm that sorts the states based on a given set of state characteristics.

When clustering is applied, states that are most alike are grouped into collections called clusters.

Users can filter to view clusters of states that share commonalities.

<table>
<thead>
<tr>
<th>Intensity and Size Factors</th>
<th>Intensity Profile</th>
<th>School Size Profile</th>
<th>2010 ERI Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2S Intensity</td>
<td>F2S Intensity</td>
<td>Students in State</td>
<td>Percent American Indian or Alaska Native</td>
</tr>
<tr>
<td>Intensity of Procurement</td>
<td>Intensity of Procurement</td>
<td>Schools in State</td>
<td>Percent Asian</td>
</tr>
<tr>
<td>Intensity of Education Activities</td>
<td>Intensity of Education Activities</td>
<td></td>
<td>Percent Black</td>
</tr>
<tr>
<td>Students in State</td>
<td></td>
<td></td>
<td>Percent Hawaiian or Pacific Islander</td>
</tr>
<tr>
<td>Schools in State</td>
<td></td>
<td></td>
<td>Percent Hispanic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Percent White</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Participation</th>
<th>Intensity and Fresh Food Access</th>
<th>Intensity and Insecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNAP participants as a percentage of the eligible population in 2016</td>
<td>F2S Intensity</td>
<td>F2S Intensity</td>
</tr>
<tr>
<td>Percent of children that were School Breakfast Program Participants in 2017</td>
<td>Direct Farm Sales per Capita in 2012</td>
<td>Percent of population with low access to stores in 2015</td>
</tr>
<tr>
<td>Percent of children that were National School Lunch Program Participants in 2017</td>
<td>Farmers Markets per 1,000 population in 2018</td>
<td>Percent of households experiencing food insecurity (2015-2017 three-year average)</td>
</tr>
<tr>
<td>Percent of population that were WIC participants in 2017</td>
<td>Grocery Stores per 1,000 population in 2016</td>
<td></td>
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</tbody>
</table>
Next Steps

1. Update and maintain the dashboard as new Food Environment Atlas and Farm to School Census datasets are published.
2. Continue meeting with partners to identify other relevant county-level data for the dashboard.

For any questions, please contact us at fncs.analytics@usda.gov
Thank you!!