USDA United States Department of Agriculture

Visualizing Nutrition Assistance Programs at the Food and Nutrition Service

USDA Agriculture Outlook Forum

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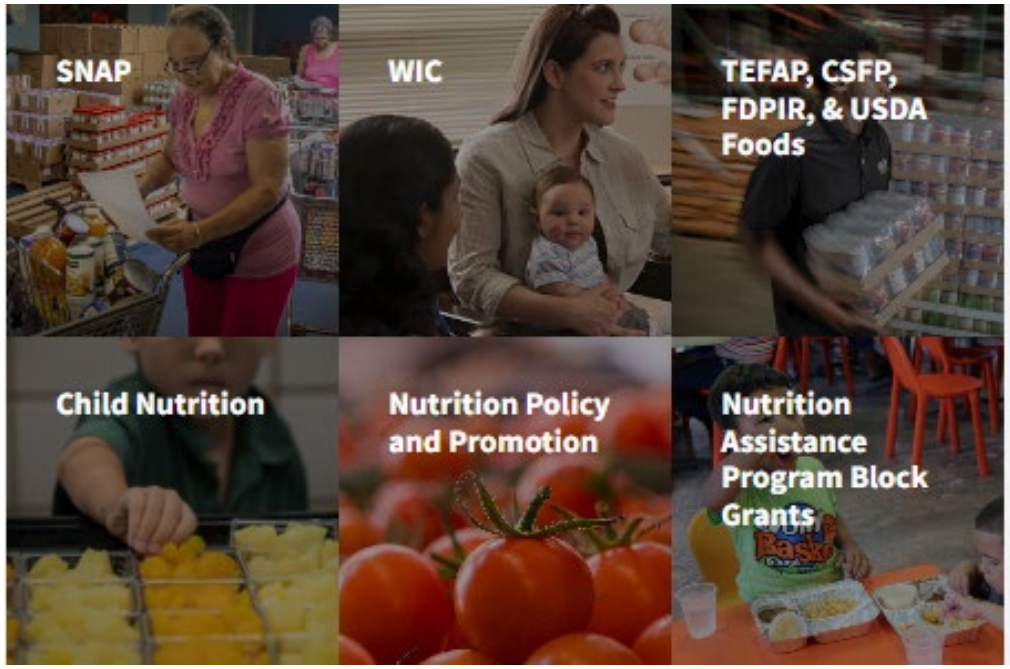
Food and Nutrition Service
U.S. DEPARTMENT OF AGRICULTURE

Food and Nutrition Service Mission

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.



https://www.fns.usda.gov/about-fns

FNS Agency Priorities and USDA Data Strategy

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**

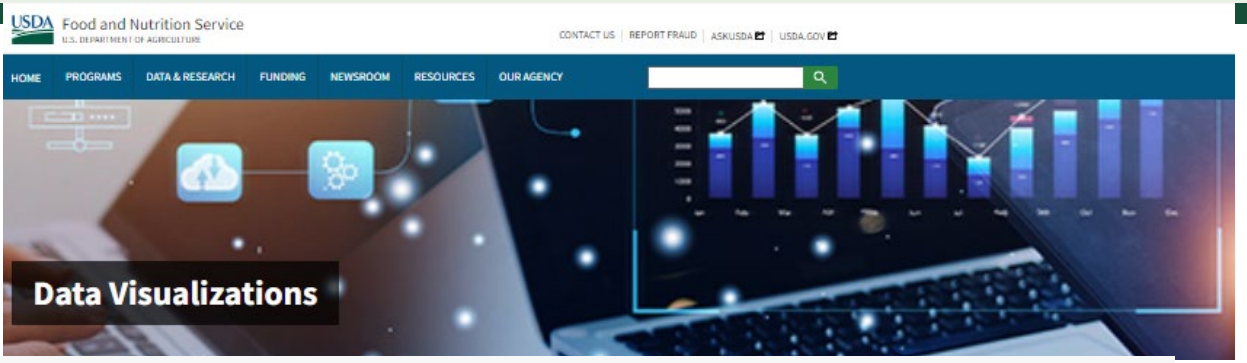
Skills development focused on data literacy, data science, visualization, Analytics, Data Engineering, and Data Visualization

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.

USDA Data Strategy https://www.usda.gov/topics/data

Launching the FNS Data Visualization Site



DATA & RESEARCH › DATA VISUALIZATIONS

Data & Research

- **Data Visualizations**
  - SNAP Replacement of Stolen Benefits Dashboard
  - Nutrition Education and Local Food Access Dashboard
  - SNAP Community Characteristics Dashboard Congressional District Explorer
  - SNAP Replacement of Stolen Benefits
  - SNAP Retailer Management Year End Summary Dashboard
- Research & Analysis
- Program Data

FNS regularly conducts research and data analysis to inform program or policy decisions and understand nutrition program outcomes. In addition, FNS seeks 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 report on outcomes.

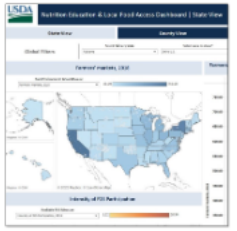
The below data visualization and analytics products bring together FNS, USDA, and other federal datasets to answer questions related to food security, nutrition assistance programs, and the systems that support them. Dashboards include "about" or "information" pages to answer questions about navigation,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

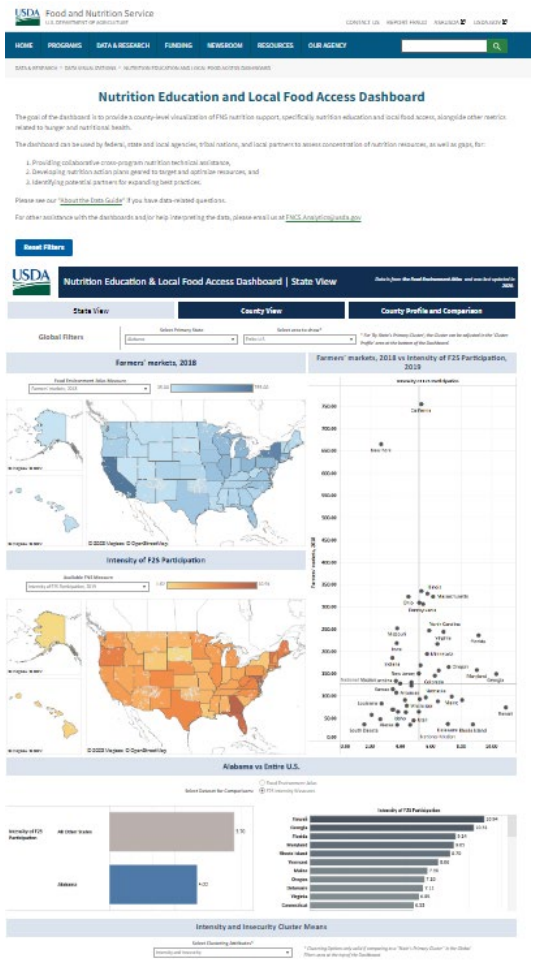
SNAP Replacement of Stolen Benefits Dashboard

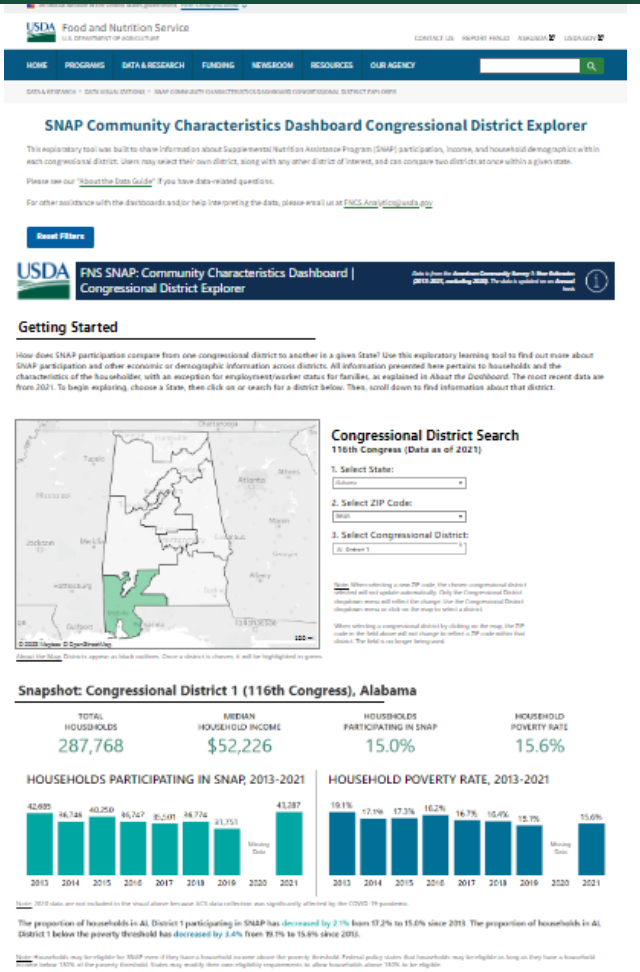
This dashboard displays state-reported data provided to FNS in accordance with the January 2023 guidance on the replacement of stolen EBT benefits with federal funds. All data provided to the FNS will be posted here quarterly, as soon as possible following receipt.



Nutrition Education and Local Food Access Dashboard

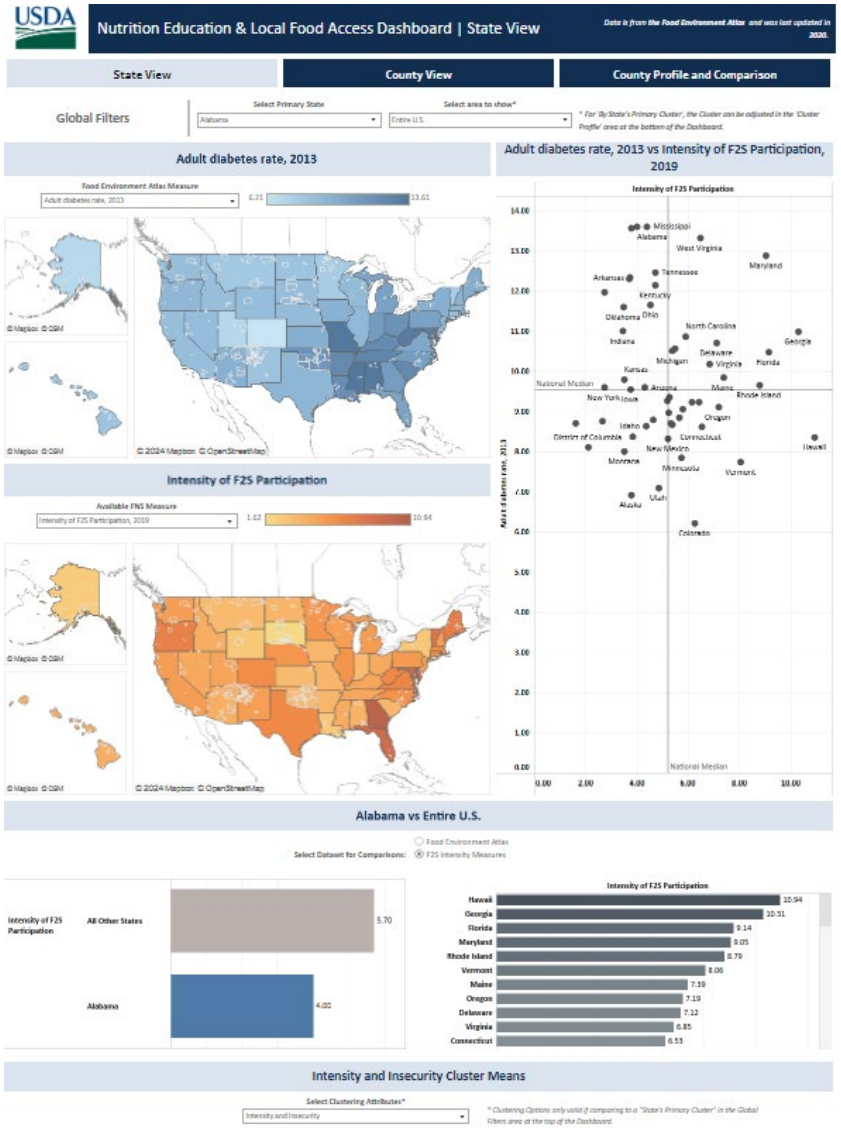
The Nutrition Education and Local Food Access Dashboard provides state and county-level insights into nutrition assistance programs and their relationships with other measures related to hunger and nutritional health. By bringing together USDA's Food Environment Atlas with farm to school intensity measures 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 Data Visualization https://www.fns.usda.gov/data-research/data-visualization

FNS Nutrition Education and Local Food Access Dashboard



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

https://www.fns.usda.gov/data/nutrition-education-and-local-food-access-dashboard

FNS Nutrition Education and Local Food Access Dashboard

3 Views

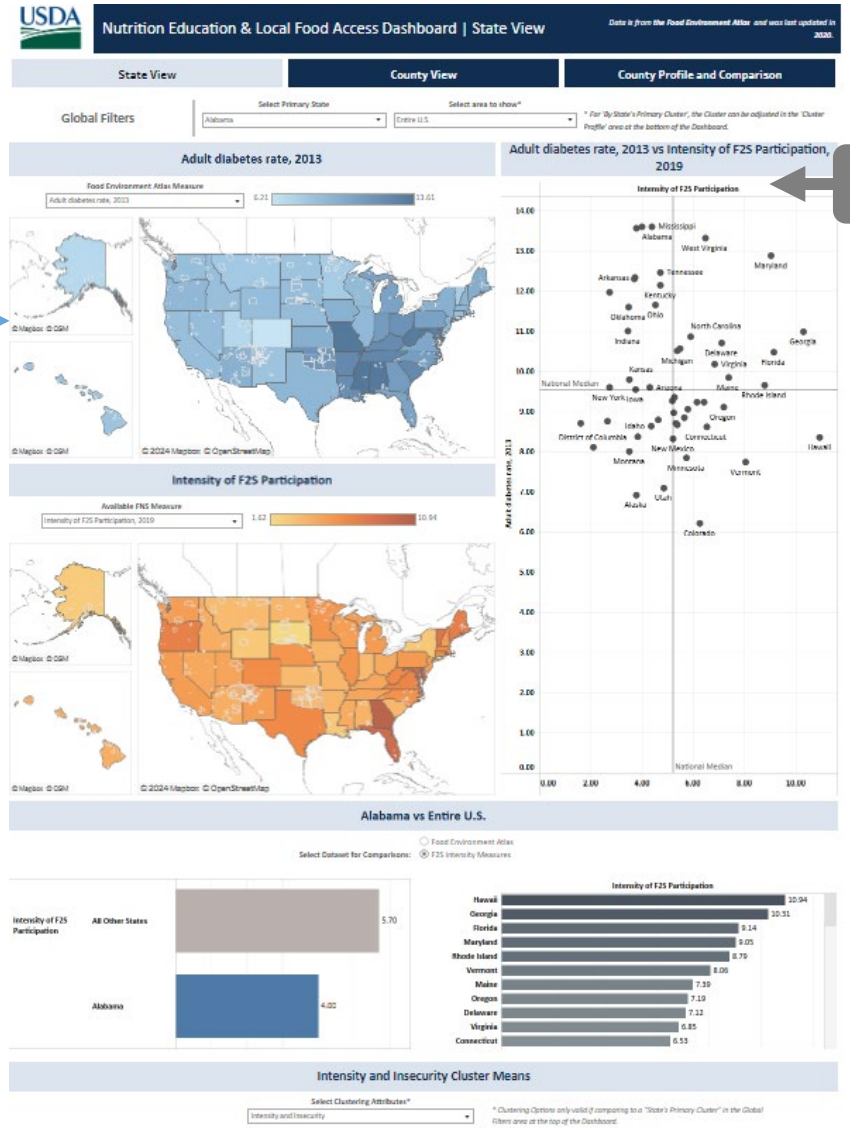
Global Filters

Select Food Environment Atlas variables

Select F2S Intensity variables

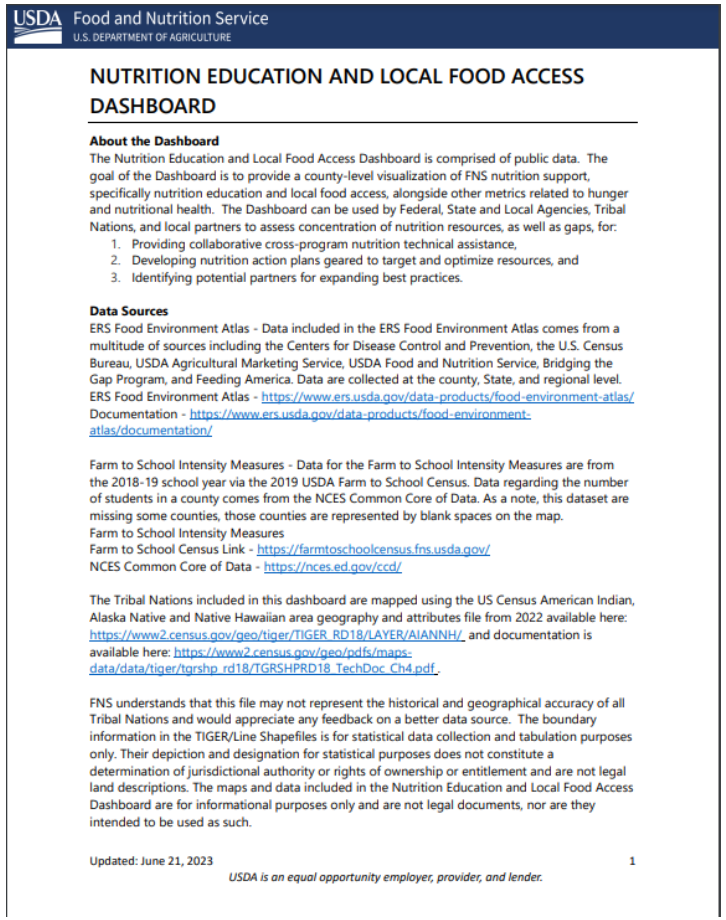
Tribal Nations mapped

Compare across selected geographic areas or state clusters



Scatterplot

About the Data Guide



USDA Food and Nutrition Service
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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, alongside 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 are collected at the county, State, and regional level.
ERS Food Environment Atlas - https://www.ers.usda.gov/data-products/food-environment-atlas/
Documentation - https://www.ers.usda.gov/data-products/food-environment-atlas/documentation/

Farm to School Intensity Measures - Data for the Farm to School Intensity Measures are from the 2018-19 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 are missing some counties, those counties are represented by blank spaces on the map.
Farm to School Intensity Measures
Farm to School Census Link - https://farmtoschoolcensus.fns.usda.gov/
NCES Common Core of Data - https://nces.ed.gov/ccd/

The Tribal Nations included in this dashboard are mapped using the US Census American Indian, Alaska Native and Native Hawaiian area geography and attributes file from 2022 available here: https://www2.census.gov/geo/tiger/TIGER_RD18/LAYER/AIANNH/ and documentation is available here: https://www2.census.gov/geo/pdfs/maps-data/data/tiger/tgrshp_rd18/TGRSHPRD18_TechDoc_Ch4.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 TIGER/Line Shapefiles 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 1

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https://www.fns.usda.gov/data/nutrition-education-and-local-food-access-dashboard

FNS Nutrition Education and Local Food Access Dashboard

About Clustering Attributes

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

Intensity and Size Factors	Intensity Profile	School Size Profile	2010 ERI Demographics
F2S Intensity Intensity of Procurement Intensity of Education Activities Students in State Schools in State	F2S Intensity Intensity of Procurement Intensity of Education Activities	Students in State Schools in State	Percent American Indian or Alaska Native Percent Asian Percent Black Percent Hawaiian or Pacific Islander Percent Hispanic Percent White
Program Participation	**Intensity and Fresh Food Access**	**Intensity and Insecurity**	
SNAP participants as a percentage of the eligible population in 2016 Percent of children that were School Breakfast Program Participants in 2017 Percent of children that were National School Lunch Program Participants in 2017 Percent of population that were WIC participants in 2017	F2S Intensity Direct Farm Sales per Capita in 2012 Farmers Markets per 1,000 population in 2018 Grocery Stores per 1,000 population in 2016 Percent of population with low access to stores in 2015	F2S Intensity Percent of population with low access to stores in 2015 Percent of households experiencing food insecurity (2015-2017 three-year average)	

FNS Nutrition Education and Local Food Access Dashboard

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!!

FNS Central Analytics Team