SNAP and WIC State Administrative Data

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Disclaimer: This research is released to inform interested parties and to encourage discussion. The views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

State SNAP and WIC data

- The U.S. Census Bureau acquires data from states on participants of two food nutrition assistance programs
 - Supplemental Nutrition Assistance Programs (SNAP)
 - Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
- SNAP and WIC data for some states may be accessible for approved researchers through Federal Statistical Research Data Centers (FSRDCs)



Quick overview: SNAP

SNAP is the largest program aimed at reducing domestic hunger by providing low-income households with benefits than can be used to purchase food at authorized retailers







Source: SNAP National Data Bank estimates available from USDA

Quick overview: WIC

- WIC provides food, nutrition education, breastfeeding promotion and support, and referrals to health care and social services to nutritionally at-risk, lowincome pregnant women, new mothers, infants, and children up to age 5
- In Fiscal Year 2021:
 - 1.4 million women
 - 1.5 million infants
 - 3.4 million children



Source: SNAP National Data Bank estimates available from USDA



State data available

WIC

State	Years
Colorado	2017-2020
Connecticut	2016-2021
Illinois	2017-2019
Kansas	2013-2020
Maine	2009-2020
Montana	2012-2020
South Dakota	2015-2020

SNAP

Years
2017-2020
2004-2015
2017
2011-2020
2017-2019
2012-2020
2018-2020
2017-2020
2014-2020
2004-2020
2015-2020
2004-2020



Guides to variables

- "Guide to variables" documents available through the ERS grants website provides a list of variables available for each state for an example year.
- Note that number and types of files, variables, and documentation varies by state and the variables shown may not be the same for all years



Unique identifiers in SNAP and WIC data

- The Census Bureau uses personally identifiable information in the state data (name, date of birth, Social Security Number, address, etc) to assign unique person and address identifiers
 - Person identifiers: Protected Identification Keys (PIKs)
 - Address identifiers: MAFIDs
- PIKs and MAFIDs allow for linkages to other Census Bureau data sources
- See Wagner and Layne (2014) for more information <u>https://www.census.gov/content/dam/Census/library/working-papers/2014/adrm/carra-wp-2014-01.pdf</u>



State SNAP data

- Case- versus client-level
 - Case-level files contain information for the SNAP case
 - Client-level files contain information for individuals in the SNAP case
 - Files often have case and client identification numbers
- Other variables may include
 - Benefit month and monthly benefit amount
 - Information collected to determine eligibility (income, deductions)
 - · Household size and relationship to primary participant
 - Demographic information on participants
 - Certification time periods, denial information
- Some files are combined with information on Temporary Assistance for Needy Families (TANF) recipients



State WIC data

- Usually 1 file with variables from state and 1 file with Census unique identifier information
- Variables may include:
 - Client and household identification numbers
 - Benefit month, monthly benefits received and/or benefits redeemed
 - Information collected to determine eligibility (income amounts and sources)
 - Relationship to householder
 - Demographic information on participants
 - Category of recipient: Infant, child, pregnant, or breastfeeding



After receiving data access

- Talk to FSRDC administrators about whether additional data documentation exists
- Comparisons to publicly available counts of monthly WIC and SNAP participants can be useful to make sure you are defining participants correctly
 - SNAP: <u>https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap</u>
 - WIC: <u>https://www.fns.usda.gov/pd/wic-program</u>



Product reviews

- All statistical results derived from the SNAP and WIC data must follow Census Bureau disclosure avoidance guidelines and are subject to disclosure review
- Prior to public release, any papers or presentations are subject to review by the state SNAP and WIC agency



Examples of previous uses of the data

- Linkages of state SNAP data to survey data to evaluate survey response of SNAP program receipt
 - <u>https://www.census.gov/content/dam/Census/library/working-papers/2014/adrm/carra-wp-2014-05.pdf</u>
 - <u>https://www.census.gov/content/dam/Census/library/working-papers/2017/demo/SEHSD-WP2017-03.pdf</u>
- Linkages of state SNAP data to survey data to better understand poverty measurement
 - <u>https://www.census.gov/content/dam/Census/newsroom/press-kits/2022/assa/assa-jan2022-paper-fixing%20errors-in-a-snap.pdf</u>
 - <u>https://www.census.gov/content/dam/Census/library/working-papers/2017/demo/SEHSD-WP2017-49.pdf</u>
 - <u>https://www.nber.org/system/files/working_papers/w25907/w25907.pdf</u>
- Assessment of quality of state SNAP administrative records
 - <u>https://www.mathematica.org/publications/assessment-of-the-quality-of-state-snap-administrative-data</u>



Estimates of SNAP and WIC eligibility and access

- FNS estimates of eligibility and participation among eligible for SNAP and WIC
 - SNAP: <u>https://www.fns.usda.gov/snap/reaching-those-need-estimates-state-2018</u>
 - WIC: <u>https://fns-prod.azureedge.net/sites/default/files/resource-files/WICEligibles2019-Volume1.pdf</u>
- Building on the work of Newman and Scherpf (2013), the Census Bureau links state SNAP data to American Community Survey data to estimate eligibility and access
 - <u>https://www.ers.usda.gov/publications/pub-details/?pubid=45139</u>



SNAP data visualization

- County-level eligibility and access rates, by characteristics
- Characteristics of participants and nonparticipants



Characteristics of Eligible Participants and Nonparticipants

Though the U.S. Department of Agriculture's Food and Nutrition Service devotes considerable attention to customer service, a significant share of those eligible for SNAP benefits do not participate. Improving access at he local level requires an understanding of who participates and who does not. The graphics below detail the distribution of the SNAP-eligible population across several socio-demographic characteristics. Use the map and the drop-down menus below to see estimates for specific counties and toggle between estimates for participants and nonparticipants.



Source: https://www.census.gov/library/visualizations/interactive/snap-eligibility-access.html



WIC data visualization

- WIC eligibility and participation among infants/children
- WIC participation among women (not shown in visualization)







Thank you!

