

Community Resources

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 and related community resources that can help researchers, practitioners, and policymakers better understand the diverse assets to which households and communities have access and how those assets can be leveraged to support food systems-led community economic development. In other words, the ability of a program, policy, or investment to be successful necessarily depends on the resources that are available to a particular community. Understanding these resources can support improved decision-making.

These data include:

- **Infrastructure data** such as physical, built, or produced capital, including but not limited to durable goods used by households for either production or consumption. Communities with well-managed, high-quality built capital are more likely to successfully sustain and attract economic development opportunities.
- **Community resource data** (cultural capital) includes the stock of practices that reflect values and identities rooted in place, class, and/or ethnicity. These resources can take either tangible forms, such as museums, libraries, heritage buildings, sports venues, and unique tourism attractions, or intangible forms, such as sets of ideas, practices, beliefs, traditions, and ethnicities. Community resources (social capital) also include the stock of trust, relationships, and networks that support civil society, with most definitions culminating around the formation of groups and other forms of collective civic activity.
- **Financial data** include the stock of money and other financial assets (net of liabilities) that can be readily converted to money. Financial capital is different from other types of capital in that it does not directly contribute to production or well-being. Rather, financial assets represent direct or indirect ownership of other capitals and can be allocated to consumption or investment in other capitals.
- **Population data** (human capital) includes resources embedded in people and includes knowledge as an input to increase productivity. Key components of human capital include the stock of education, skills, and physical and mental health.
- **Natural resource data** includes the stock of natural resources that yields a flow of valuable goods and services into the future. It includes both renewable resources, such as ecosystems, and nonrenewable resources, such as fossil fuels and mineral deposits.

Narrative Matters - Working towards equity

Not all communities have the same opportunities. One major limitation of our database of community resources is the implicit assumption that having more of a particular resource is better. However, we know that this is not the case. For example, some things categorized as community resources may undermine development outcomes.

Site users are encouraged to acknowledge the systemic factors that influence community resources. 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 the use of 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 Community Resources Measures

Topic Area	Variable	Data Source	Link
Agriculture	Farmland, percent of farmland acres designated as prime farmland	U.S. Department of Agriculture, Natural Resource Conservation Service (USDA NRCS). 2012. National Resources Inventory	https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/nra/nri/
Community Resources	Public libraries per 100,000 people	Kushner & Cohen, Local Arts Index (2018)	https://www.icpsr.umich.edu/web/NADAC/studies/36984/variables
Community Resources	Creative industry businesses per 100,000 population	Kushner & Cohen, Local Arts Index (2018)	https://www.icpsr.umich.edu/web/NADAC/studies/36984/variables
Community Resources	Museums per 100,000 people	Kushner & Cohen, Local Arts Index (2018)	https://www.icpsr.umich.edu/web/NADAC/studies/36984/variables
Community Resources	Cultural capital - Arts and diversity	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Community Resources	Cultural capital - Creative industries	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Community Resources	Primary care physicians per 10,000 population	Robert Wood Johnson Foundation, County Health Rankings	https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation/national-data-documentation-2010-2019
Community Resources	Social establishments per 1,000 population	Rupasingha, Goetz, and Freshwater (2006) and 2017 data updates	https://aese.psu.edu/nercrd/community/social-capital-resources
Community Resources	Nonprofit organizations per 1,000 population	Rupasingha, Goetz, and Freshwater (2006) and 2017 data updates	https://aese.psu.edu/nercrd/community/social-capital-resources
Community Resources	Social capital - Social establishments and nonprofits	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Financial	Cash and security holdings less government debt per capita	U.S. Census Bureau, Annual survey of state and local government finance. Historical data (formerly Special 60). File: “_IndFin_1967-2012”	https://www.census.gov/programs-surveys/gov-finances/data/historical-data.html
Financial	Bank deposits per capita at FDIC-insured institutions	FDIC, Deposit Market Share Reports - Summary of Deposits	https://www7.fdic.gov/sod/sodMarketBank.asp?barltem=2
Financial	Housing, owner-occupied units without a mortgage per capita	U.S. Census Bureau, American Community Survey, table S2507	https://www.census.gov/acs/www/data/data-tables-and-tools/subject-tables/
Financial	Financial capital - financial solvency	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Food Insecurity	Food secure, percent	Feeding America Map the Meal Gap	https://www.feedingamerica.org/research/map-the-meal-gap/by-county
Food Processors	Manufacturing, food & beverage manufacturing estab. per 10,000 people	U.S. Census Bureau, County Business Patterns	https://www.census.gov/data/datasets/2010/econ/cbp/2010-cbp.html ; https://www.census.gov/data/datasets/2010/econ/cbp/2015-cbp.html
Food Processors	Manufacturing, other manufacturing estab. per 10,000 people	U.S. Census Bureau, County Business Patterns	https://www.census.gov/data/datasets/2010/econ/cbp/2010-cbp.html ; https://www.census.gov/data/datasets/2010/econ/cbp/2015-cbp.html
Infrastructure	Built capital - manufacturing	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Infrastructure	Built capital - highway and broadband infrastructure	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks

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Topic Area	Variable	Data Source	Link
Infrastructure	Broadband, percent of population with access to fixed advanced telecomm	FCC (2016)	https://www.fcc.gov/reports-research/maps/connect2health/background.html
Infrastructure	Broadband, percent of population with access to fixed terrestrial broadband	Derived from NTIA State Broadband Initiative (2011) data	https://www2.ntia.doc.gov/Jun-2011-datasets
Infrastructure	Interstate highway	Dicken et al. (2011)	
Natural	Natural Amenities Scale	McGranahan, D., 1999. Natural Amenities Scale. U.S. Department of Agriculture, Economic Research Service	https://www.ers.usda.gov/data-products/natural-amenities-scale/
Natural	Conservation easement, percent of total acres	National Conservation Easement Database (NCED), 2016.	https://www.conservationeasement.us/
Natural	Conservation-related programs and woodlands, percent of total acres	U.S. Department of Agriculture, Farm Service Agency (USDA FSA). 2017. FSA Crop Acreage Data	https://www.fsa.usda.gov/news-room/efoia/electronic-reading-room/frequently-requested-information/crop-acreage-data/index
Natural	National Forests, percent of total acres	U.S. Forest Service (USFS). 2017. Land areas of the National Forest System. FS-383.	https://www.fs.fed.us/land/staff/lar/LAR2017/LAR_Book_FY2017.pdf
Natural	Natural capital - natural amenity scale and share of acres in National Forest	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Natural	Natural capital - prime farmland	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Population	Workers, percent of workforce employed in the arts	USDA Economic Research Service, Creative Class Codes	https://www.ers.usda.gov/data-products/creative-class-county-codes.aspx
Population	Racial diversity index	U.S. Census Bureau, Modified Race Data (2010)	https://www.census.gov/data/datasets/2010/demo/popest/modified-race-data-2010.html
Population	Education, percent of adult population with at least a Bachelor's degree	U.S. Census Bureau, American Community Survey, table S1501	https://www.census.gov/acs/www/data/data-tables-and-tools/subject-tables/
Population	Health Factors Z-Score	Robert Wood Johnson Foundation, County Health Rankings	https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation/national-data-documentation-2010-2019
Population	Health Outcome Z-Score	Robert Wood Johnson Foundation, County Health Rankings	https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation/national-data-documentation-2010-2019
Population	Insured, percent	Robert Wood Johnson Foundation, County Health Rankings	https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation/national-data-documentation-2010-2019
Population	Human capital – health-related aspects	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Population	Human capital – food and health security	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks
Population	Voting, percent of eligible voters that voted	Rupasingha, Goetz, and Freshwater (2006) and 2017 data updates	https://aese.psu.edu/nercrd/community/social-capital-resources
Population	U.S. Population Census response rate, percent	Rupasingha, Goetz, and Freshwater (2006) and 2017 data updates	https://aese.psu.edu/nercrd/community/social-capital-resources

LRFS Data Warehouse Community Resources Measures

Topic Area	Variable	Data Source	Link
Population	Social capital - Public voice and participation	Derived in Schmitt et al. (2021)	https://github.com/schmi-ny/County-Level-Community-Capital-Stocks

Related sources and referenced databases

Flora C.B., and J. Flora. 2008. Rural Communities: Legacy and Change (3rd ed.). San Francisco: Westview Press.

Pender J.L., A. Marré, and R. Reeder. 2012. Rural wealth creation: Concepts, strategies, and measures. Available from https://www.ers.usda.gov/webdocs/publications/44957/16573_err131_1.pdf?v=41056.

Pender J.L., B.A. Weber, T.G. Johnson, and J.M. Fannin (eds.). 2014. Rural Wealth Creation. New York: Routledge.

Rupasingha A., S.J. Goetz, and D. Freshwater. 2006, with updates. The production of social capital in US counties. The Journal of Socio-economics 35(1): 83-10. Updated data available at: <https://aese.psu.edu/nercrd/community/social-capital-resources>

Schmit, T.M., B.B.R. Jablonski, A. Bonanno, and T. Johnson. 2021. Measuring stocks of community wealth and its association with food systems efforts in rural and urban places. Food Policy 102. <https://doi.org/10.1016/j.foodpol.2021.102119>

U.S. Environmental Protection Agency (US EPA). 2021. Supporting environmental justice through EPA brownfields and land revitalization. <https://www.epa.gov/brownfields/supporting-environmental-justice-through-epa-brownfields-and-land-revitalization>