Finding Rhode Island Census Data

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https://libguides.brown.edu/gis_data_tutorials/census

Data for which areas?

The Census Bureau publishes data for a variety of legal areas (which have governments and boundaries defined by law) and statistical areas (created for reporting data). This guide will assist you in selecting areas and census data within Rhode Island, but is also relevant for finding census data throughout the US. Some common census geographies are listed below.



Counties - Counties are the legal subdivisions of states, although in Rhode Island, CT, and parts of MA they have no legal function. A lot of government data is published at the county-level. The population size of counties varies considerably; 80% of Americans live in just 20% of the counties. Counties with less than 65k people are omitted from the 1-year ACS (including Bristol Co in RI).

Dataset availability: 2020 Census, 1-year (partial) & 5-year ACS



PUMAs (Public Use Microdata Areas) - Statistical areas created by the Census Bureau to have approximately 100k residents; they're created by aggregating census blocks and they fit within states. PUMAs are useful for studying large geographic areas that are roughly equivalent in population size. They are identified by 5-digit numbers and names that denote the area they cover.

Dataset availability: 1 and 5-year ACS



County Subdivisions - In states that have municipal civil divisions (includes all New England states), county subdivisions represent legal areas below the county level such as cities and towns. In states that lack municipalities, the Census Bureau creates statistical subdivisions. County subdivisions are built from census blocks and fit within counties. In Rhode Island they carry meaning as areas of governance.

Dataset availability: 2020 Census and 5-year ACS



ZCTAs (ZIP Code Tabulation Areas) - Statistical areas created by the Census Bureau to approximate USPS ZIP Code delivery areas. The Census Bureau creates ZCTAs by aggregating census blocks based on the predominate ZIP Code of addresses within the blocks. ZCTAs and ZIP Codes are not strictly equivalent, as not all ZIPs are assigned an area. ZCTAs do not correspond with any other census geography and they vary widely in area, shape, and population.

Dataset availability: 2020 Census and 5-year ACS



Census Tracts - Statistical areas created by the Census Bureau to have approximately 4,000 residents (with a range of 1,200 to 8,000). Tracts fit within counties and can be subdivided into block groups. Within cities, census tracts are often aggregated to create areas that represent neighborhoods. They are ideal for studying population distributions within counties and large cities. Tract data published in the 5-year ACS can often have a large margin of error.

Dataset availability: 2020 Census and 5-year ACS

Which census data?

There are many census datasets but there are two primary ones you'll likely use: the decennial census (i.e. 2020 Census, 2010 Census, etc.) and the American Community Survey (ACS). The collection method, frequency of data, number and type of statistics, and geographic coverage varies for each dataset.

Decennial Census: a 100% count of the population taken every ten years. The number of variables is limited to basic demographic characteristics of the population: race, sex, age, households, family relations, housing units, housing occupancy, and tenure (owner versus renter occupied). Decennial census data is available for practically all geographic areas. The primary series for the 2020 census is the Demographic and Housing Characteristics (DHC) file.

American Community Survey (ACS): an on-going survey of the population that's published annually, with values representing estimates at a 90% confidence level with margins of error for 1-year and 5-year periods. Margins of error for the 5-year series are lower, as the estimates are based on a larger sample. The ACS is more extensive than the decennial census, and beyond the basic demographic characteristics it includes socio-economic data on citizenship, educational attainment, income, occupation, home value, and much more. Geographically the data is more limited; geographic areas with 65k residents or more are published annually, and areas with less than 65k residents down to census block groups are published as 5-year averages.

Where can I find data?

Census data is available from several sources; sources at the top of this list are the easiest to use but provide a limited amount of data. Sources further down the list provide a fuller range of data and give you the flexibility to create your own extracts, but you'll have to spend time learning how to effectively navigate and use them. Except for the Social Explorer, these resources are publicly accessible.

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Maps in the US Census Data Research Guide

https://libguides.brown.edu/census/rhodeisland

The maps embedded in this research guide provide a convenient way for accessing the most recent demographic profiles for several geographic areas in RI. Click on an area to open a profile from the Census Bureau or the Missouri Census Data Center. Data is from the 5-year ACS and decennial census and includes the most common variables.



Missouri Census Data Center

https://mcdc.missouri.edu/

Provides data for the entire United States (not just Missouri). On the Data tab choose ACS Profiles or a decennial census profile, and in a few clicks you can obtain a summary for one to four areas. Graphs and charts are available for many variables, and data can be downloaded as spreadsheets or documents. There are also Trends applications for making recent historical comparisons. The profiles cover just a portion of the total amount of available data.



Social Explorer Access via the list of library databases at https://libguides.brown.edu/az.php

This library database provides historical decennial census and ACS data via a user-friendly mapping interface. Choose the geography, dataset, and variables, click on places of interest, and download census reports that include data for each place and a summary total. It's easy to use for constructing your own neighborhoods out of tracts, and you have the ability to make attractive maps. A *serious* downside is that the margins of error for ACS data are *not* included, which limits your ability to interpret how precise the data is. To get full access to the database you MUST connect via the Brown Library's databases page. **PolicyMap** is an alternative product that focuses on current datasets.



US Census Bureau data.census.gov

https://data.census.gov/

This is the Census Bureau's primary portal for accessing and downloading all of its current tables and datasets as soon as they're released, making it the ultimate source. There are no pre-compiled tables for point and click download; you must query the database to retrieve profiles and comparison tables. Given the enormity of this resource, learning to use it can be a challenge. For an introduction see *data.census.gov: A Brief Demonstration* that's available in US Census Guide at the Brown Library.

Is there census data for businesses?

The Business Patterns dataset is compiled annually from a government register. The total number of business establishments with paid employees is classified by type of business, with summary data on number of employees and payroll. The data is published for counties and ZIP Codes. It can be downloaded via data.census.gov or from the Business Patterns website at: http://www.census.gov/programs-surveys/cbp.html.

Other Resources

- **Census Reporter**: this resource was designed for journalists to provide an easy way to explore, visualize, and download the latest data from the American Community Survey: https://censusreporter.org/
- **PolicyMap**: like the Social Explorer, this is an interactive web mapping database that the Brown Library subscribes to (not publicly accessible). Compared to the Social Explorer, PolicyMap focuses just on contemporary data but includes a broader array of datasets beyond the census, and possesses a number of analytic capabilities: https://libguides.brown.edu/az.php
- **NHGIS**: from the IPUMS project at the University of Minnesota Population Center, this is the source for downloading all historic census data back to 1790. Users must register but registration is free for non-commercial, non-profit, and educational use: https://www.nhgis.org/
- Longitudinal Tract Database: this resource from the Brown University Diversity and Disparities Project provides crosswalks and a pre-compiled set of normalized census tract data from 1970 to 2020. The data from the past has been processed and allocated to fit within present tract boundaries to facilitate the study of change over time (tract boundaries are revised every ten years): https://s4.ad.brown.edu/Projects/Diversity/Researcher/LTDB.htm
- Rhode Island Div of Statewide Planning: publishes census briefs and summary data, and provides links for other geographic and demographic data sources:

 https://planning.ri.gov/planning-areas/data-center/ri-data-center-census-data

To Learn More

- Brown University Libraries' US Census Research Guide: https://libguides.brown.edu/census/
- The Census Bureau's glossary for terminology: https://www.census.gov/glossary/
- The Census Bureau's geographic glossary: https://www.census.gov/programs-surveys/geography/about/glossary.html