Introduction

When most Americans think of the census, they think of the count of the population that happens every ten years. While the ten-year census is the Census Bureau's foundational program, it is actually part of an ecosystem of statistical programs that produce demographic, socioeconomic, housing, and business data on an ongoing basis. Most of this data is free and publicly available and is used to inform policy and research about all facets of American life. Libraries play key roles in assisting the Census Bureau with conducting these programs and help users access, understand, and apply census data to their work. Census data can be challenging to work with given its scope and complexity, and thus a variety of resources and tools have been created to make the data accessible to users with different needs and varying levels of technical skill.

This report provides a crash course on the census written for librarians who need a basic understanding of the data in order to help others. It will also be broadly useful to any student, researcher, or policy maker who is interested in using and understanding census data so they can apply it to their work. We will begin with an overview of the census: its role in American society in general and librarianship in particular, with an emphasis on its value as a free and open dataset. Then we will discuss three concepts that apply to all the census datasets, which are important to understand for both accessing data and analyzing it correctly: census geography, subject categories, and data tables. Given the large number of datasets, we will focus on the most frequently used series for general study of the population: the decennial census (DEC), the American Community Survey (ACS), Population Estimates, and two business datasets (Business Patterns and the Economic Census). With a basic understanding of concepts and datasets in place, we will explore some portals and tools for accessing data for

users with varying degrees of technical skill, with an emphasis on data.census.gov and the Census Bureau's application programming interfaces (APIs).

Beyond the basics, we'll summarize the advanced topics that many researchers are likely to delve into first: working with census data and boundary files in geographic information systems (GIS), considerations and sources for working with historical census data and making comparisons over time, and working with microdata, which is anonymized samples of individual responses to census questionnaires. In covering this last topic we'll introduce a final dataset, the Current Population Survey (CPS). We will conclude with a summary of the applications of census data to library and information science (LIS) from a practitioner and academic research perspective, for studying library user populations, siting new facilities, and measuring accessibility and equity of services.

In covering these topics, we will highlight a number of useful portals and tools for accessing and working with data, as well as resources for learning more about particular concepts or topics. Throughout this report, we will highlight some of the changes associated with the recent 2020 census. Readers who want either a fuller or briefer treatment of the census can consult my book, *Exploring the U.S. Census: Your Guide to America's Data* (Donnelly 2020a) or my data brief *Exploring U.S. Census Datasets: A Summary of Surveys and Sources* (Donnelly 2020b).

Before we begin, some notes about terminology, as the word *census* applies to many different things. In this report I will refer to the agency as the "Census Bureau" or simply the "Bureau" and to the ten-year census as the "ten-year census" or "decennial census," abbreviated as DEC, or to a specific iteration, such as the 2020 census. I will use the term *the census* to generally reference datasets and products produced by the Census Bureau.

References

Donnelly, Frank. 2020a. *Exploring the U.S. Census: Your Guide to America's Data*. Los Angeles: SAGE.

———. 2020b. *Exploring U.S. Census Datasets: A Summary of Surveys and Sources*. WCIB Occasional Paper Series, no. 20. New York: Weissman Center for International Business, Baruch College/CUNY, February. https://zicklin.baruch.cuny.edu/wp-content/uploads/sites/10/2020/02/OPS-20-Exploring-Census-Datasets.pdf.