Status Update: 2020 Census Data Products

National Conference of Stata Legislatures (NCSL)

Michael Hawes
Cynthia Davis Hollingsworth
U.S Census Bureau

National Webinar
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Data Protection in the 2020 Census Products

- We are legally obligated to protect all data under US Code Title 13

- Technology and computing power has advanced to the point where new methods are needed that more strongly protect against disclosure

  o We have added a new tool, called **Differential Privacy (DP),** to our toolbox

  o We are using it in our 2020 Census data products to protect against disclosure

- DP inserts small differences into counts of people and households, making it very difficult to identify people

- Data users are concerned about how this approach will impact the usefulness of the data, especially at small levels of geography or small population groups

- We are working to make the data as useful as possible, within disclosure protection constraints

- To help us understand user needs, we have created "demonstration products" that show the proposed balance between data usefulness and protection

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2010 Demonstration Data Products

- Census Bureau applies the new disclosure avoidance protections to the 2010 Census tables

- Census Bureau produces measures of the differences from the 2010 Census tables (Detailed Summary Metrics)

- Release the demonstration tables and the measures of the differences

- Public analyzes the difference between the demonstration and 2010 Census data

- Public assesses the impact for different uses of the data and then provides feedback to the Census Bureau through 2020DAS@census.gov

2020 Census Data Products

Released

Apportionment
April 26, 2021

Redistricting File
(Public Law 94-171)
August 12, 2021
September 16, 2021

Demographic Profile
Demographic and
Housing Characteristics
File (DHC)
Planned May 2023

118th Congressional District File
Planned August 2023

Detailed DHC-A
Planned August 2023

Detailed DHC-B
Release Date TBD

Supplemental DHC (S-DHC)
Release Date TBD

Future Effort

Public Use Microdata
Sample (PUMS) File

Special Tabulations

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The Second DHC Demonstration Data Product

- The second DHC Demonstration Data product was released on **August 25, 2022**

- Includes tables and geographies added to the Demographic and Housing Characteristics (DHC) product

  o Lowered the proposed level of geography from state or county level to the census tract level for 16 tables and 63 iterated tables or tables repeated by race and ethnicity

  o Added a sex by single year of age table repeated by race and ethnicity at the tract level

- Increased accuracy across many topics

- Made enhancements to supporting material such as the 2020 Census Data Planning Crosswalk

- Released person and housing unit Summary Files at the same time

Public Feedback Request

- Analyze the differences between the demonstration data and the 2010 Census data

- If the numeric differences were the same in the 2020 Census tables as those in the 2010 demonstration data product:

  o Would there be specific tables or geographies where the differences would be **acceptable**?

  o Would there be specific tables or geographies where the differences would be **not acceptable**?

  o How would that impact your uses of the data?

- We look forward to your feedback and recommendations!

  o Public feedback is due **Monday, September 26 to** 2020DAS@census.gov

This is the last demonstration data product and opportunity to provide feedback before the disclosure avoidance settings for the DHC are finalized

Tentative Process for Detailed DHC-A, Detailed DHC-B, and S-DHC

- Identify tables to be included in proposal
- Create analysis tool to assess confidentiality and accuracy
- Develop proposal based on analysis of tool
- Develop the disclosure avoidance system algorithms
- <u>S-DHC only</u>: execute modeling experiments and update proposal
- Test the disclosure avoidance system
- Produce a proof of concept demonstration data product
- Additional development and testing based on public feedback
- Conduct final production and quality assurance

We engage with stakeholders and advisory committees throughout this process

2020 Census Data Products: Resources

About the 2020 Census Data Products:

https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/release/about-2020-data-products.html

Disclosure Avoidance Modernization:

https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/process/disclosure-avoidance.html

2020 Disclosure Avoidance Webinar Series:

https://www.census.gov/data/academy/webinars/series/disclosure-avoidance.html

Introductory Handbook on Disclosure Avoidance:

https://www.census.gov/library/publications/2021/decennial/2020-census-disclosure-avoidance-handbook.html
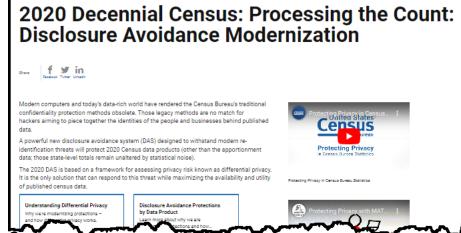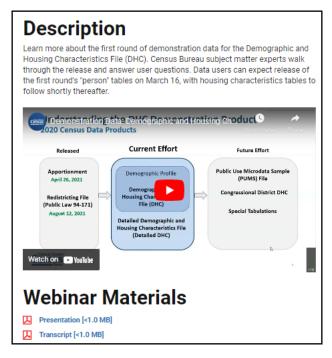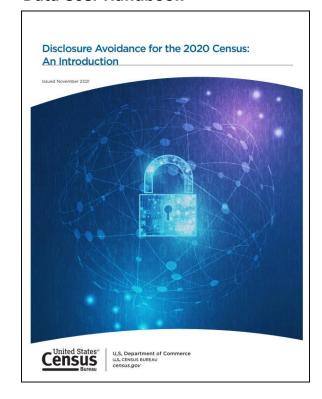
Resources

2020 Census Data Products Page
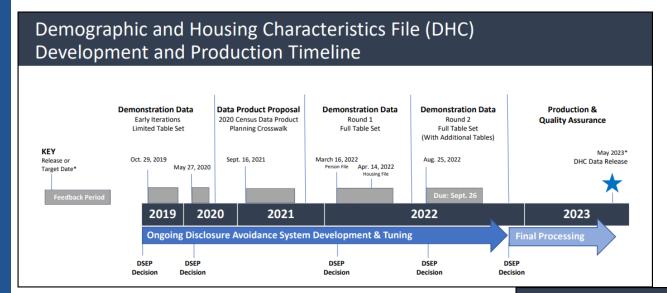

Disclosure Avoidance Modernization Web Page

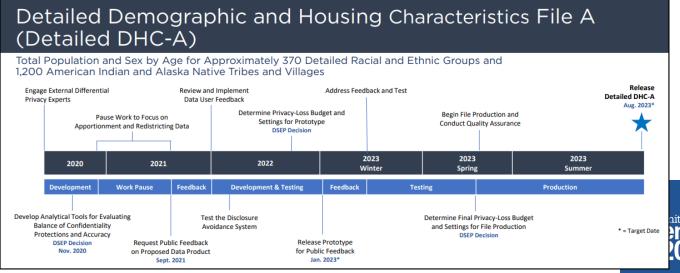**Webinars**

Data User Handbook

Resources
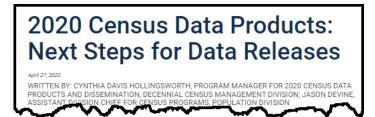

Product Development Timelines

Resources

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2020 Census Data Products: United States

Data will be released via data.census.gov and FTP download

Release date (as of 8/11/22)	2020 Census product	Selected Geographies[1] — Availability: ✓ = All tables ★ = Selected tables T = To be determined										
		Nation	State	County	Tract	Block group	Block	Urban/ Rural	Place/ MCD	ZCTA[2]	AIANNH[3]	PUMA[4]
April 26, 2021	**Apportionment** • The resident population of the 50 states, plus a count of the U.S. military personnel and federal civilian employees living outside the United States (and their dependents living with them) who can be allocated to a home state. The populations of the District of Columbia and Puerto Rico are not included in the apportionment population because they do not have voting seats in the U.S. House of Representatives. However, the District of Columbia and Puerto Rico are included in the resident population tables.	✓	✓									
August 12, 2021 and September 16, 2021[5]	**Census (P.L. 94-171) Redistricting Data Summary File** • Population counts for race and Hispanic or Latino categories. • Housing unit counts by occupancy status (occupied units, vacant units). • Group quarters population counts by major group quarters type.		✓	✓	✓	✓	✓		✓		✓	
	Census National Redistricting Data Summary File • Same content as the Census Redistricting Data (P.L. 94-171) Summary File above, but for the United States, regions, divisions, and American Indian, Alaska Native, and Native Hawaiian Areas.	✓	✓								✓	
May 2023	**Demographic and Housing Characteristics File (DHC)** • Selected demographic and housing characteristics about local communities. • Includes 5-year age groups, sex, race, Hispanic or Latino origin, household type, relationship to householder, group quarters population, housing occupancy, and housing tenure.	✓	✓	★	★	★	★	★	★	★	★	
	Demographic Profile • Selected population and housing characteristics. • Includes Congressional Districts of the 116th Congress.	✓	✓	✓	✓			✓	✓		✓	
August 2023	**Congressional District Summary Files** • Retabulation of selected summary levels from the DHC. • When changes to congressional districts are reported by any state, the Census Bureau retabulates data to the new boundaries. Following the 2020 Census, the first of these data products -- for the 118th Congress -- is planned as a re-tabulation of the DHC. • If additional boundary changes are reported for future congressional sessions (e.g. 119th, 120th, etc.), this product is regenerated to those new boundaries and reissued. If no changes for a future session are reported, the previously generated congressional district file is used as both its original and subsequent congressional session product and no re-tabulation is created.		✓	★	★				★		★	
August 2023	**Detailed Demographic and Housing Characteristics File A (Detailed DHC-A)[6]** • Population counts and sex and age statistics for approximately 370 detailed racial and ethnic groups and 1,200 American Indian and Alaska Native tribe and village population groups — such as German, Lebanese, Jamaican, Chinese, Native Hawaiian, Mexican, and the Navajo Nation.	★	★	★	T				T		★	
TBD	**Detailed Demographic and Housing Characteristics File B (Detailed DHC-B)[6]** • Household type and tenure information for approximately 370 detailed racial and ethnic groups and 1,200 American Indian and Alaska Native tribe and village population groups — such as German, Lebanese, Jamaican, Chinese, Native Hawaiian, Mexican, and the Navajo Nation.	★	★	★	T				T		★	
TBD	**Supplemental Demographic and Housing Characteristics File (S-DHC)** • Combined characteristics about households and the people living in them. For example, the count of people living in certain types of households and housing units. • Data on population in households, including average household size by age and tenure, average family size, household/family type of people under 18 years and total population in households by tenure. • These tables are also known as the person-household join tables.	✓	✓	✓	✓				★	★	★	

Questions?

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