## 2020 Census: Stakeholder Update

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### 2020 Census Post Data Collection Processing Flow

Geographic **Processing** 

DRF1

(Decennial Response File 1)

The DRF1 is the first

file produced after

data is collected.

DRF2

(Decennial Response File 2)

**CUF** 

(Census Unedited File)

The 2020 Census **Geographic Processing** is based on the decades of work by the Census Bureau

foundation ever -

Master Address

Coding and

Referencing

File/Topologically

Integrated Geographic

(MAF/TIGER) System.

Over 152 million

addresses were included in the 2020

Census Final enumeration universe.

It contains all and our Partners to response data produce the most including duplicate accurate and responses. complete geographic

> The complete inventory of every residential address in the nation is linked to every response we received during data collection.

The Primary Selection Algorithm selects which data from the DRF1 should represent a housing unit on the CUF.

Count imputation is applied to unresolved cases in DRF2.

The CUF contains the final universe of addresses. enumeration status, and population count.

COMPLETE

**CEF** 

Census Edited File)

0

0

**Editing** and imputation are applied to missing and erroneous values for all items.

The CEF then contains complete data for all items.

Disclosure Avoidance/ Microdata Detail File

**TAB** 

**Tabulation** 

Т

C

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Confidentiality protection and recodes are applied using the Disclosure Avoidance System (DAS)

The DAS creates the Microdata **Detail File** (MDF) which is used for tabulation to full precision.

**Tabulation** geography is added for the TabMDF, which is used for tabulation and data dissemination

**Today's Status** 

Shape your future **START HERE >** 

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## 2020 Census Apportionment and Redistricting – Key Milestones

Processing Step	Start	Finish
Decennial Response File 1 (DRF1)	10/29/2020	12/26/2020
Decennial Response File 2 (DRF2)	12/26/2020	2/24/2021
Census Unedited File (CUF)	2/25/2021	3/10/2021
Apportionment Preparation and Release	3/12/2021	4/30/2021
Census Edited File (CEF)	4/20/2021	6/23/2021
Disclosure Avoidance Application/Microdata Detail File	6/24/2021	7/18/2021
Tabulation File Processing	7/19/2021	8/16/2021
Redistricting Preparation and Release	8/17/2021	9/30/2021



# 2020 Census Data Quality External Expert Engagement Efforts

Asking outside experts to review our work is standard operating procedure at the U.S. Census Bureau. It underscores our commitment to quality and transparency.

- Engaging with the National Academy of Sciences (NAS) Committee on National Statistics, American Statistical Association Quality Indicators Task Force, and JASON. These three groups will tackle different aspects of assessing the Census Bureau's work. Their reports will advise the Census Bureau on improving future censuses and will help the public understand the quality of the 2020 Census data.
  - Quick turnaround feedback on our processes, procedures and metrics from JASON. We shared their final report publicly back in February.
  - A real-time assessment by a team of experts from the American Statistical Association on quality indicators.
     The ASA shares regular updates on its website to keep stakeholders up to date <u>Updates on the 2020 Census</u>
     Quality Indicators (amstat.org)
  - For a longer term assessment, we are in the process of establishing a consensus panel with the Committee on National Statistics that will conduct an evaluation of the quality of the data from the 2020 Census. We held our kick-off meeting on May 3 and it is anticipated that the study will take 18-24 months.





# 2020 Census Upcoming 2020 Census Tools, Assessments and Evaluations

#### Milestones for Release of Data Quality Assessment Metrics:

- Release of Demographic Analysis Results: Released December 15, 2020
- Release of 2020 Census Operational Quality Metrics to accompany Resident Population Counts: April 26, 2021, and May 28, 2021
- Release of 2020 Census Operational Quality Metrics to accompany Redistricting Data Products: August/September 2021
- Release of Initial 2020 Post Enumeration Survey Results: Early 2022

**Assessments** are designed to document final volumes, rates, and costs for individual operations or processes using data from production files and activities and information collected from debriefings and lessons learned. 54 Operational Assessments on the 2020 Census will be published, beginning in Fall 2021.

**Evaluations** are designed to analyze, interpret, and synthesize the effectiveness and efficiencies of census components and their impact on data quality and coverage. A total of 14 Evaluations on the 2020 Census will be published, beginning in Fall 2021.

### 2020 Census Accessing the 2020 Census Data Quality Page

Current Population Survey (CPS)



1. Go to www.census.gov

Select **SURVEYS/PROGRAMS** (at the top of the page) and **2020 Census** 

American Housing Survey (AHS)

2. Then select <u>2020 Census</u> Data Quality



Population Projections

All surveys and programs

**2020 Census Data Quality** 

#### On this webpage you'll find:

- Operational Quality Metrics
- An interactive Operational Quality Metrics tool
- Comparisons to population benchmarks
- Outside expert reviews
- Operational assessments and evaluations
- Technical documentation, FAQs, and more!





### 2020 Census Setting Privacy Loss Budget

FOR IMMEDIATE RELEASE: WEDNESDAY, JUNE 09, 2021

# Census Bureau Sets Key Parameters to Protect Privacy in 2020 Census Results

JUNE 09, 2021 RELEASE NUMBER CB21-CN.42









JUNE 9, 2021 —The U.S. Census Bureau's Data Stewardship Executive Policy Committee (DSEP) announced it has selected the settings and parameters for the Disclosure Avoidance System (DAS) for the 2020 Census redistricting data (PL-94-171). The DAS uses a mathematical algorithm to ensure that the privacy of



#### 2020 Census Stakeholder Feedback

We received a substantial amount of invaluable feedback on the April 2021 Demonstration Data.

#### Major themes included:

- Accuracy for AIAN tribal areas and other "off-spine" geographies
- Accuracy for places, Minor Civil Divisions, and tract-level data
- Bias (geographic and characteristic)
- Race and Ethnicity statistics
- Occupancy rates





### 2020 Census Key Parameters and Improvements

Privacy-loss Budget (PLB) of ε=19.61

```
\varepsilon= 17.14 for persons \varepsilon=2.47 for units
```

- Improvements to the optimized geographic post-processing hierarchy
- Extra PLB allocated to Population counts
- Extra PLB allocated to Race and Ethnicity statistics
- Extra PLB allocated to occupancy rates at the block-group level and above





# 2020 Census Upcoming Information and Events

- Additional details of parameters, settings, and impacts on accuracy
- Production code release
- "Production Settings" 2010 demonstration data



### 2020 Census Release of Redistricting Data

Release of redistricting data by August 16, 2021

- Release in legacy format to help states with redistricting deadlines
- Same exact data will be released in September in a more user-friendly format
- Race/ethnicity, Voting Age, Housing Unit and GQ information

Release of additional data quality metrics shortly after August 16



## Questions?

