

# Vermont Legislative Apportionment Board

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# Agenda

- 2020 Census Operations
- Redistricting Data Program
  - P.L. 94-171 Geographic Support Products
  - P.L. 94-171 Redistricting Data
- Other relevant data products

# 2020 Census Operations

Collection operations concluded 10/15/2020

## TOTAL RESPONSE

- Nationwide, 99.98% of all housing units and addresses were accounted for in the 2020 Census
- Resolved 152 million addresses (compared to 132 million in 2010 Census)
- All States, DC, and Puerto Rico reached at least a 99.0% total response rate
- All but one state (Louisiana) was at or above 99.9% total response rate

## SELF RESPONSE

- Final self-response rate for the 2020 Census was 67.0% (2010 rate was 66.5%)
  - 99 million self-responses
    - 79 million Internet
    - 18 million Paper
    - 1.83 million Phone

# 2020 Census Operations

## SELF RESPONSE (Continued)

- 28 States met or exceeded their self response rates from 2010
- Census Questionnaire Assistance Centers operated without interruption from March 12 through October 15<sup>th</sup>
- Internet Self-Response operated with zero downtime from March 12<sup>th</sup> through October 15<sup>th</sup>

## NONRESPONSE FOLLOWUP

- Nonresponse follow-up rate accounted for 32.9% of total response
- Challenges: Repeated hurricanes for the Gulf Coast states; Global pandemic – 42 million pieces of PPE; Wildfires & air quality issues; civil unrest
- Enumerator productivity of 1.92 cases per hour (1.01 cases per hour in paper 2010 environment)
- 9 million addresses self-responded after enumerators leaving a notice of visit

# 2020 Census Operations

## 2020 Census Nonresponse Followup metrics

- 5.6% of addresses nationwide were resolved by high-quality administrative records
  - Equates to 13.9% of the Nonresponse Followup Universe
- 24.1% of occupied housing units in the Nonresponse Followup Universe were enumerated by proxy (23.8% in 2010 Census)
- 99.77% of the Nonresponse workload on American Indian Alaska Native lands completed

## Data Quality Measures

- Two primary methods for evaluating quality
  - Comparing census results to others: Demographic Analysis
    - Published December 15, 2020
  - Evaluation of the process of conducting census work: Post-Enumeration Survey
    - November 2021 through February 2022

# 2020 Census Operations

- Analysis of how well the mobile devices worked for census takers, what percentage of households refused to participate in an interview with a census taker (refusal rates), a final proxy rate, etc.
- Additional information about responses by the different response modes, by demographic groups, by language, etc., once this information is available.
- Additional operational metrics related to data quality when we release data related to apportionment.
- We have also invited an independent group of scientists, collectively called JASON, to review our plans, processes, procedures, and proposed metrics around 2020 Census data quality.
- We also plan to work with the American Statistical Association and the National Academies of Sciences, Engineering, and Medicine on assessing data quality

# Redistricting Data Program

## Public Law 94-171

**Program Mission:** Provide states an opportunity to identify the geographic areas for which specific tabulations of population are needed for legislative redistricting and to deliver high quality data for those areas in a timely manner

Identified “geographic areas desired”:

- Census Tabulation Blocks
- Voting Districts (e.g. precincts, wards, etc.)
- Legislative and Congressional Districts

Requirements:

- Establish program criteria
- Identify required tabulations
- Conduct the program in a non-partisan manner
- Deliver the tabulations to the governor and the officers or public bodies having initial responsibility for the legislative apportionment or districting of each State no later than 1 year from Census Day (April 1, 2021)

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# 2020 Redistricting Data Program

## The Five Phases of the Program

- **Phase 1: Block Boundary Suggestion Project (BBSP) - Complete**
- **Phase 2: Voting District Project (VTD) - Complete**
- **Phase 3: Data Delivery**
  - P.L. 94-171 Redistricting Data Tabulations & Geographic Support Products
- **Phase 4: Collection of Post-2020 Census Redistricting Plans**
  - 118<sup>th</sup> Congressional District Plans
  - New State Legislative District Plans
- **Phase 5: Evaluation of the 2020 RDP ([View from the States](#))**
  - Recommendations from the States
  - Design for the 2030 Census Redistricting Data Program

# Redistricting Data Program

## Phase 3 – P.L. 94-171 Redistricting Data Products Delivery Timing

### Phase 3 – Prototype Data

Activity	Date
Prototype geographic support products	February 2019 (Complete)
Prototype P.L. 94-171 Redistricting Data	March 2019 (Complete)

<https://www.census.gov/programs-surveys/decennial-census/about/rdo/program-management.html#P3>

### Phase 3 – Official Data

Activity	Original Planned Dates	New Planned Date
Geographic support products	Nov. 20, 2020 – Feb. 1, 2021	Jan 22, 2021 through Feb 28, 2021
P.L. 94-171 Redistricting Data	Feb. 18, 2021 – March 31, 2021	TBD*

\* Statutory deadline April 1, 2021

# Redistricting Data Program

## Phase 3 – P.L. 94-171 Redistricting Data Geographic Products

### 2020 Census P.L. 94-171 Redistricting Data Geographic Products

Product Type	Census Web Address
Shapefiles	<a href="https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html">https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html</a>
Maps	<a href="https://www.census.gov/geographies/reference-maps.html">https://www.census.gov/geographies/reference-maps.html</a>
Block Assignment Files	<a href="https://www.census.gov/geographies/reference-files.html">https://www.census.gov/geographies/reference-files.html</a>
Block to Block Relationship Files	<a href="https://www.census.gov/geographies/reference-files/time-series/geo/relationship-files.html">https://www.census.gov/geographies/reference-files/time-series/geo/relationship-files.html</a>

- Shapefiles – geographic information system geometry files
- Maps (PDF only) – County Block; State Legislative with Voting District; Tract; School District
- Block Assignment Files – tables identifying the blocks used to build different geographic entities
- Block to Block Relationship Files – Crosswalk of 2010 blocks to 2020 blocks

# Redistricting Data Program

## Phase 3 – P.L. 94-171 Redistricting Data Shapefiles

### State-based Shapefile

- American Indian/Alaska Native/Native Hawaiian Area
- American Indian Tribal Subdivision
- Alaska Native Regional Corporation
- State and Equivalent
- Block
- Block Group
- Census Tract
- 113th Congressional District
- 116th Congressional District
- Consolidated City
- County and Equivalent
- County Subdivision
- Place
- Elementary School District
- Secondary School District
- Unified School District
- State Legislative District Lower Chamber
- State Legislative District Upper Chamber
- Subbarrio (Subminor Civil Division)
- Voting District
- Urban Growth Area
- Primary and Secondary Roads

### County-based Shapefile

- Block
- Block Group
- Census Tract
- County Subdivision
- Voting District
- All Lines
- All Roads
- Area Hydrography
- Linear Water
- Area Landmark
- Point Landmark
- Topological Faces (Polygons With All Geocodes)

### County-based Relational Tables

- County-based Relationship File
- Address Range-Feature Name
- Address Ranges
- Feature Names
- Topological Faces-Area Landmark
- Topological Faces-Area Hydrography

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# Redistricting Data Program

## Phase 3 – P.L. 94-171 Redistricting Data Tabulation Product

### 2020 Census P.L. 94-171 Redistricting Data Tabulations

Table P1 – Race

Table P2 – Race for the Population 18 Years and Over

Table P3 – Hispanic or Latino, and not Hispanic or Latino by Race

Table P4 – Hispanic or Latino, and not Hispanic or Latino by Race for the Population 18 and Over

Table H1 – Occupancy Status (Housing)

### New Table

Table P5 – Group Quarters Population by Group Quarters Type

- All tables produced at multiple geographies including census block
- Group Quarter types: Correctional Institutions for Adults, Juvenile Facilities, Nursing Facilities/Skilled Nursing, Other Institutional, College/University Student Housing, Military quarters, and other non-institutional
- Group quarters is total population only, no demographic breakdown

# Redistricting Data Program

## P.L. 94-171 Redistricting Data Tabulation Product

### Table P1 – Race

Universe: Total Population

### Table P3 – Race for the Population 18 Years and Over

Universe: Total population 18 years and over

RACE [71]
Universe: Total population
Total:
Population of one race:
White alone
Black or African American alone
American Indian and Alaska Native alone
Asian alone
Native Hawaiian and Other Pacific Islander alone
Some Other Race alone
Two or More Races:
Population of two races:
White; Black or African American
White; American Indian and Alaska Native
White; Asian
White; Native Hawaiian and Other Pacific Islander
White; Some Other Race
Black or African American; American Indian and Alaska Native
Black or African American; Asian
Black or African American; Native Hawaiian and Other Pacific Islander
Black or African American; Some Other Race
American Indian and Alaska Native; Asian
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
American Indian and Alaska Native; Some Other Race
Asian; Native Hawaiian and Other Pacific Islander
Asian; Some Other Race
Native Hawaiian and Other Pacific Islander; Some Other Race
Population of six races:
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race



# Redistricting Data Program

## P.L. 94-171 Redistricting Data Tabulation Product

**Table P2** – Hispanic or Latino, and Not Hispanic or Latino by Race

**Universe:** Total population

**Table P4** – Hispanic or Latino, and Not Hispanic or Latino by Race for the Population 18 Years and Over

**Universe:** Total population 18 years and over

HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE [73]
Universe: <i>Total population</i>
Total:
Hispanic or Latino
Not Hispanic or Latino:
Population of one race:
White alone
Black or African American alone
American Indian and Alaska Native alone
Asian alone
Native Hawaiian and Other Pacific Islander alone
Some Other Race alone
Two or More Races:
Population of two races:
White; Black or African American
White; American Indian and Alaska Native
White; Asian
White; Native Hawaiian and Other Pacific Islander
White; Some Other Race
Black or African American; American Indian and Alaska Native
Black or African American; Asian
Black or African American; Native Hawaiian and Other Pacific Islander
Black or African American; Some Other Race
American Indian and Alaska Native; Asian
American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander
American Indian and Alaska Native; Some Other Race
Asian; Native Hawaiian and Other Pacific Islander
Asian; Some Other Race
Native Hawaiian and Other Pacific Islander; Some Other Race
Population of six races:
White; Black or African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Some Other Race



# Redistricting Data Program

## P.L. 94-171 Redistricting Data Tabulation Product

### **Table H1 – Occupancy Status**

**Universe:** Housing Units

- Total
  - Occupied
  - Vacant

### **Table P5 - Group Quarters Population by Group Quarters Type**

**Universe:** Total Population in Group Quarters

- Total
  - Institutionalized population
    - Correctional facilities for adults
    - Juvenile facilities
    - Nursing facilities/Skilled-nursing facilities
    - Other institutional facilities
  - Noninstitutionalized population
    - College/University student housing
    - Military quarters
    - Other non-institutional facilities

# Redistricting Data Program

## P.L. 94-171 Redistricting Data Tabulations Official Delivery Method

### Official Recipients:

- Governors
- Legislative leadership
- Redistricting Commissions (if they exist and have commissioners named)

### Method of delivery

- Physical media – DVD/Flash Drive
- Embargoed access to [data.census.gov](https://data.census.gov)
  - Requires pre-registration
- Confirmation of data's receipt
  - Web monitoring + Phone Call
  - Mail Tracking + Phone Call

# Redistricting Data Program

## P.L. 94-171 Redistricting Data Tabulations Public Delivery Method

- Public Release
  - Census Data Explorer – [data.census.gov](https://data.census.gov)
    - Full Data Explorer functionality
    - Large data download
  - FTP
    - Expert users
    - Full P.L. 94-171 Redistricting Data Summary File
    - Relational tables
      - Geoheader + three data segments
        - Geoheader
        - File 01 (P1 & P2)
        - File 02 (P3, P4 & H1)
        - File 03 (P5)
      - All stored as pipe-delimited text files (including the geoheader)

# Redistricting Data Program

## Citizen Voting Age Population by Race and Ethnicity (CVAP)

- Annual Tabulation using the American Community Survey 5-year estimates for 2011 through 2020 publications
  - Typically released in the 1<sup>st</sup> week of February each year
- 2020 Census CVAP Special Tabulation
  - Calculated using administrative records and the 2020 Census

Content
Total:
Hispanic or Latino
Not Hispanic or Latino:
White alone
Black or African American alone
American Indian and Alaska Native alone
Asian alone
Native Hawaiian and Other Pacific Islander alone
<b>Some Other Race alone*</b>
Black or African American and White
American Indian and Alaska Native and White
Asian and White
American Indian and Alaska Native and Black or African American
Remainder of Two or More Race Responses

Geography
Nation
State
Congressional District
State Legislative District, Upper Chamber
State Legislative District, Lower Chamber
County
Minor Civil Division (for CT, MA, ME, MI, MN, NH, NJ, NY, PA, RI, VT, and WI)
Tract
Block Group
<b>Block*</b>

\* only for the 2020 Census Special Tabulation

# Thank You

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More information on the 2020 Census:  
<http://www.census.gov/2020Census>



More information on the 2020 Census Self-Response Rates:  
<https://www.2020census.gov/en/response-rates/self-response.html>



More information on the 2020 Census Nonresponse Followup Completion Rates:  
<https://www.2020census.gov/response-rates/nrfu-completion.html>



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