



Census and Data for Experts

National Conference of State Legislature's Redistricting Seminar
July 15, 2021

James Whitehorne
Chief, Census Redistricting and Voting Rights Data Office

Shape
your future
START HERE >

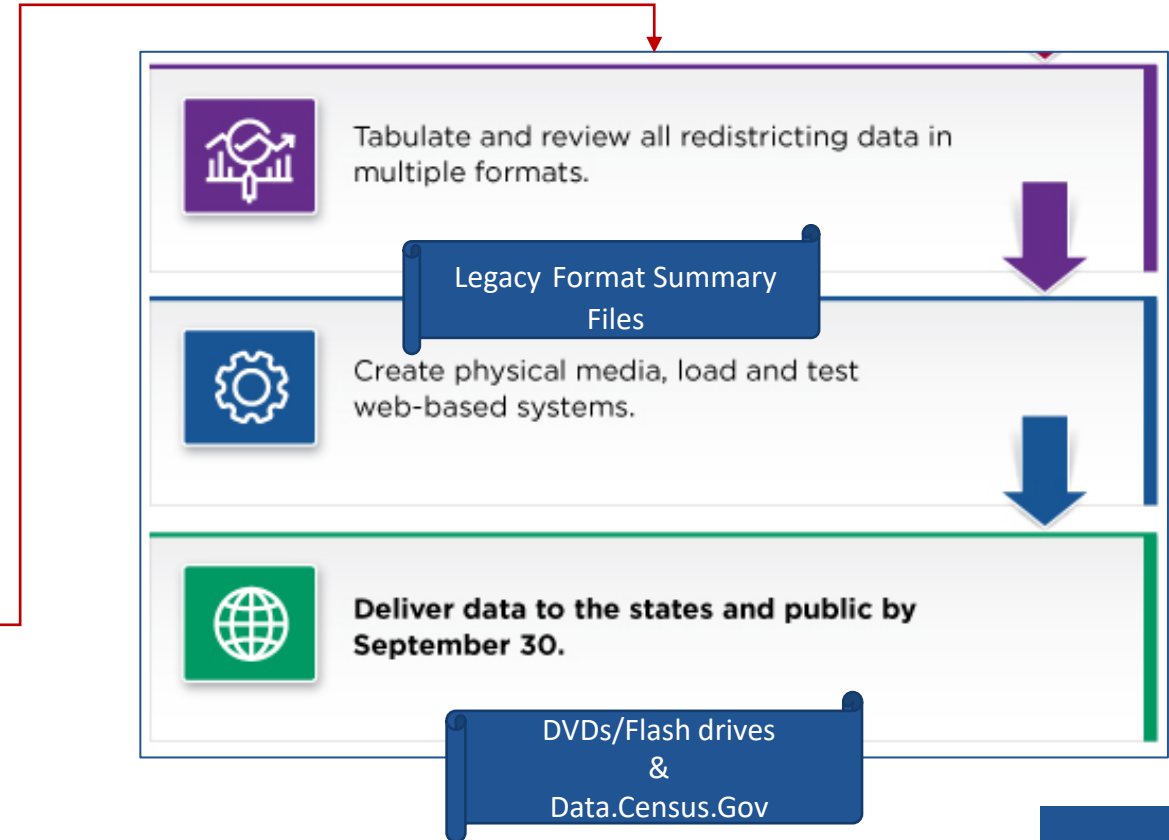
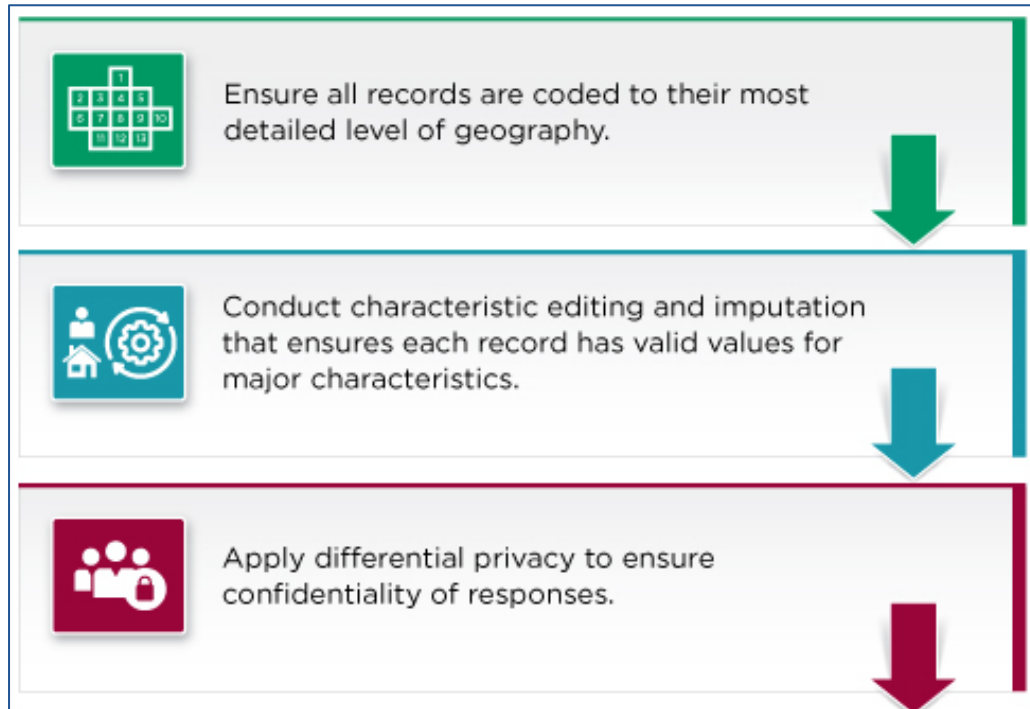
United States[®]
Census
2020



Redistricting Data

2020 Census Redistricting Data Program

Phase 3 – P.L. 94-171 Redistricting Data Processing



Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files – August Release

Legacy Format Summary Files

- Product was always part of the 2020 Census product plan
- Format produced and provided to the states since at least Census 2000
- Requires additional handling to properly extract data from this format
- Fully reviewed and cleared for publication by August 16, 2021
- The same data as what will be released in more user-friendly forms by September 30, 2021
 - Used as the source files for the DVD/Flash Drive creation

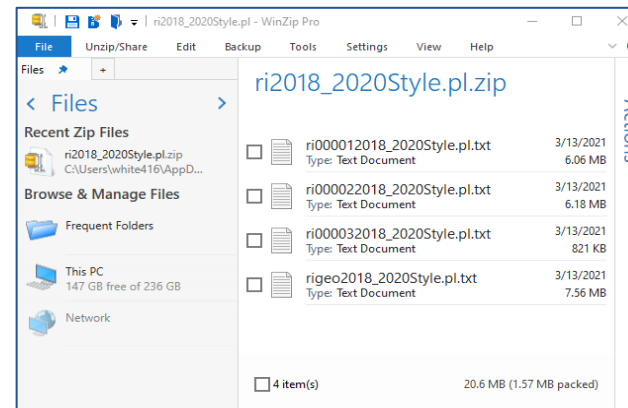
Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files – August Release

Physical description

- 2020 formatting is four pipe delimited text files per state contained in a single .ZIP file
 - Geoheader – contains all the geographic codes for the geography include in the redistricting dataset
 - Data Segment 1 – Table P1: Race & Table P2: Hispanic or Latino, and not Hispanic or Latino by Race
 - Data Segment 2 – Table P3: Race for the Population 18 Years and Over & Table P4: Hispanic or Latino, and not Hispanic or Latino by Race for the Population 18 and Over & Table H1 – Housing Status (Occupancy)
 - Data Segment 3 – Table P5: Group Quarters Population by Group Quarters Type
- The geoheader now contains a GEOCODE field so data can be easily joined to geography
- The geoheader must be used together with the data segments in order to access the data

- 2010 formatting was different
 - 3 files in total: 1 geoheader and 2 data segments
 - Geoheader was a fixed width format
 - Data segments were comma delimited



Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files – August Release

FILEID	STUSAB	SUMLEV	GEOVAR	GEOCOMP	CHARITER	CIFSN	LOGRECNO	GEOID	GEOCODE	REGION	DIVISION	STATE	STATENS
PLST	RI	040	00	00	000	00	0000001	0400000US44	44	1	1	44	01219835
PLST	RI	050	00	00	000	00	0000002	0500000US44007	44007	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000003	0600000US4400711800	4400711800	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000004	0600000US4400714140	4400714140	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000005	0600000US4400719180	4400719180	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000006	0600000US4400720080	4400720080	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000007	0600000US4400722960	4400722960	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000008	0600000US4400727460	4400727460	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000009	0600000US4400730340	4400730340	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000010	0600000US4400737720	4400737720	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000011	0600000US4400741500	4400741500	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000012	0600000US4400751760	4400751760	1	1	44	01219835
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PLST	RI	060	00	00	000	00	0000014	0600000US4400754640	4400754640	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000015	0600000US4400759000	4400759000	1	1	44	01219835

Processing and
Extracting Data

Screenshot of
portion of
geoheader

Link the
tables on the
common
field

FILEID	STUSAB	CHARITER	CIFSN	LOGRECNO	P0010001	P0010002	P0010003	P0010004	P0010005
PLST	RI	000	01	0000001	614053	566407	410378	49589	4269
PLST	RI	000	01	0000002	614053	566407	410378	49589	4269
PLST	RI	000	01	0000003	16558	15627	14940	95	46
PLST	RI	000	01	0000004	17337	14497	6972	1065	38
PLST	RI	000	01	0000005	82619	76703	59720	4340	427
PLST	RI	000	01	0000006	34709	33271	30439	813	18
PLST	RI	000	01	0000007	45484	43068	36592	2762	72
PLST	RI	000	01	0000008	4550	4282	4202	32	5
PLST	RI	000	01	0000009	10135	9854	9468	236	1
PLST	RI	000	01	0000010	27889	26507	23965	646	30
PLST	RI	000	01	0000011	22130	21107	18900	533	403
PLST	RI	000	01	0000012	32664	30410	25408	2319	73
PLST	RI	000	01	0000013	12308	11780	11239	190	0
PLST	RI	000	01	0000014	70765	62475	41186	8770	626
PLST	RI	000	01	0000015	164341	149399	69996	24695	2302
PLST	RI	000	01	0000016	10489	10033	9687	155	0
PLST	RI	000	01	0000017	21740	20874	19697	345	140

Screenshot of
portion of data
segment 1

Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files – August Release

FILEID	STUSAB	SUMLEV	GEOVAR	GEOCOMP	CHARITER	CIFSN	LOGRECNO	GEOID	GEOCODE	REGION	DIVISION	STATE	STATENS
PLST	RI	040	00	00	000	00	0000001	0400000US44	44	1	1	44	01219835
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PLST	RI	060	00	00	000	00	0000004	0600000US4400714140	4400714140	1	1	44	01219835
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PLST	RI	060	00	00	000	00	0000014	0600000US4400754640	4400754640	1	1	44	01219835
PLST	RI	060	00	00	000	00	0000015	0600000US4400759000	4400759000	1	1	44	01219835

Screenshot of portion of geoheader

Q: I want total population for my townships in RI.

Township identifier is in Summary Level field as 060

Total Population field is in data segment 1 as field P0010001

FILEID	STUSAB	CHARITER	CIFSN	LOGRECNO	P0010001	P0010002	P0010003	P0010004	P0010005
PLST	RI	000	01	0000001	614053	566407	410378	49589	4269
PLST	RI	000	01	0000002	614053	566407	410378	49589	4269
PLST	RI	000	01	0000003	16558	15627	14940	95	46
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PLST	RI	000	01	0000013	12308	11780	11239	190	0
PLST	RI	000	01	0000014	70765	62475	41186	8770	626
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Screenshot of portion of data segment 1

Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files – August Release

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PLST	RI	040	00	00	000	00	0000001	0400000US44	44	1	1	44	01219835
PLST	RI	050	00	00	000	00	0000002	0500000US44007	44007	1	1	44	01219835
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PLST	RI	060	00	00	000	00	0000015	0600000US4400759000	4400759000	1	1	44	01219835

Screenshot of portion of geoheader

Q: I want total population
For my townships in RI.

Query: From the GEOHEADER
file give me records where
SUMLEV = 060. Output the
corresponding **GEOCODE**,
NAME (not shown on slide)
and **P0010001**

FILEID	STUSAB	CHARITER	CIFSN	LOGRECNO	P0010001	P0010002	P0010003	P0010004	P0010005
PLST	RI	000	01	0000001	614053	566407	410378	49589	4269
PLST	RI	000	01	0000002	614053	566407	410378	49589	4269
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PLST	RI	000	01	0000017	21740	20874	19697	345	140

Screenshot of portion of data segment 1

Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files – August Release

SUMLEV	GEOCODE	NAME	P0010001
060	4400711800	Burrillville town	16558
060	4400714140	Central Falls city	17337
060	4400719180	Cranston city	82619
060	4400720080	Cumberland town	34709
060	4400722960	East Providence city	45484
060	4400727460	Foster town	4550
060	4400730340	Glocester town	10135
060	4400737720	Johnston town	27889
060	4400741500	Lincoln town	22130
060	4400751760	North Providence town	32664
060	4400752480	North Smithfield town	12308
060	4400754640	Pawtucket city	70765
060	4400759000	Providence city	164341
060	4400764220	Scituate town	10489
060	4400766200	Smithfield town	21740
060	4400780780	Woonsocket city	40335

Screenshot of results

Query Results: From the GEOHEADER file give me records where SUMLEV = 060 and output the corresponding GEOCODE, NAME and P0010001

Redistricting Data Program

Public Law 94-171 Legacy Format Summary Files – August Release

Support

- Consultations with major software vendors, NCSL, and individual states
- 2020 Census State Redistricting (P.L. 94-171) Summary File Technical Documentation
- Prototype P.L. 94-171 Redistricting Data Summary File
 - Content from the 2018 End-to-End Census Test in Providence County, RI
 - In the format planned for the 2020 Census Legacy Format Summary Files
- Header File – Excel Format
 - Tabs for the header of each file which can be imported into other software or used within Excel
 - Tabs with plain English definition for the headers
- Microsoft Access database shell
 - Tables shells for each file
 - Example queries to demonstrate query logic and provide practice
 - Illustrated step-by-step guide on how to use the Microsoft Access database shell
- SAS script for import of the Legacy Format Summary File
- R Script for import of the Legacy Format Summary File

2020 Census Redistricting Data Program

Public Law 94-171 official tools and materials – September Release

The user-friendly tools and materials we intend to deliver in September are the DVDs and Flash Drive and our Data.census.gov Data Explorer platform.

- DVDs and Flash Drives – These are what we deliver to the official recipients with an integrated software browsing tool that allows intuitive browsing of the data. They also contain a custom extraction menu that allows for the extraction of large datasets from the device. Those extractions can then be imported easily into a Geographic Information System or database.
- Data Explorer web tool – The data.census.gov Data Explorer is our online data browsing tool for both the official recipients and the public. Users of the Data Explorer platform can access many different census datasets, including the redistricting data. It has custom filters that allow the user to filter on those geographic and characteristic data for which they are interested. For example, a State could filter the data and easily identify the number of voting-age residents by race or ethnicity in each and every block within a census tract, county, or even for the entire state. They can then view, map, and download these datasets once they have set the filters with their choices.

Redistricting Data Program

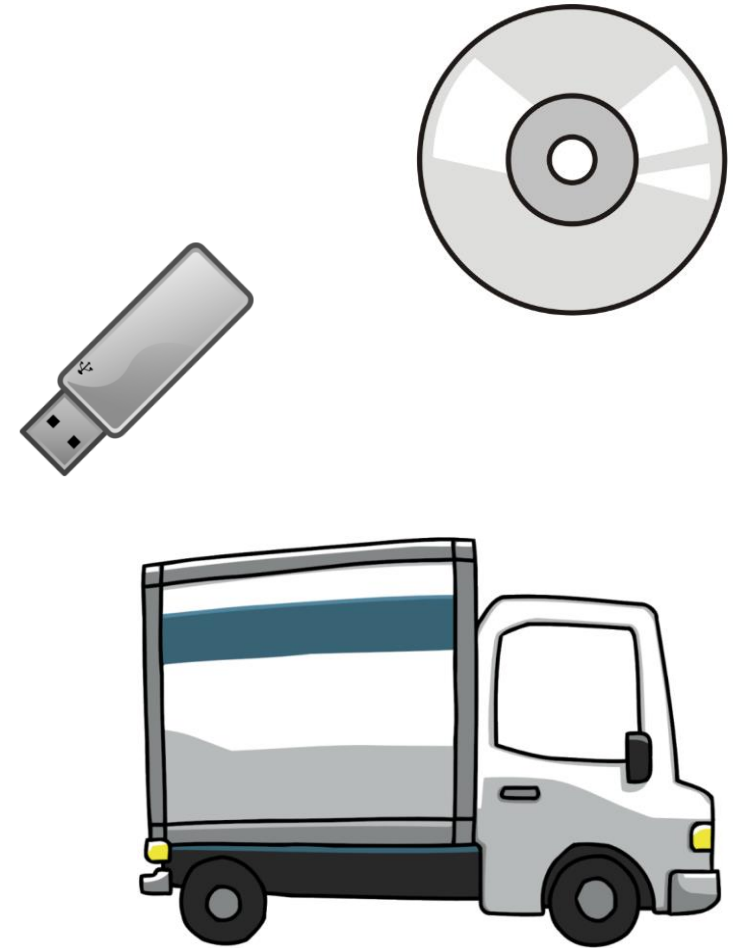
Public Law 94-171 Legacy Format Summary Files - Access

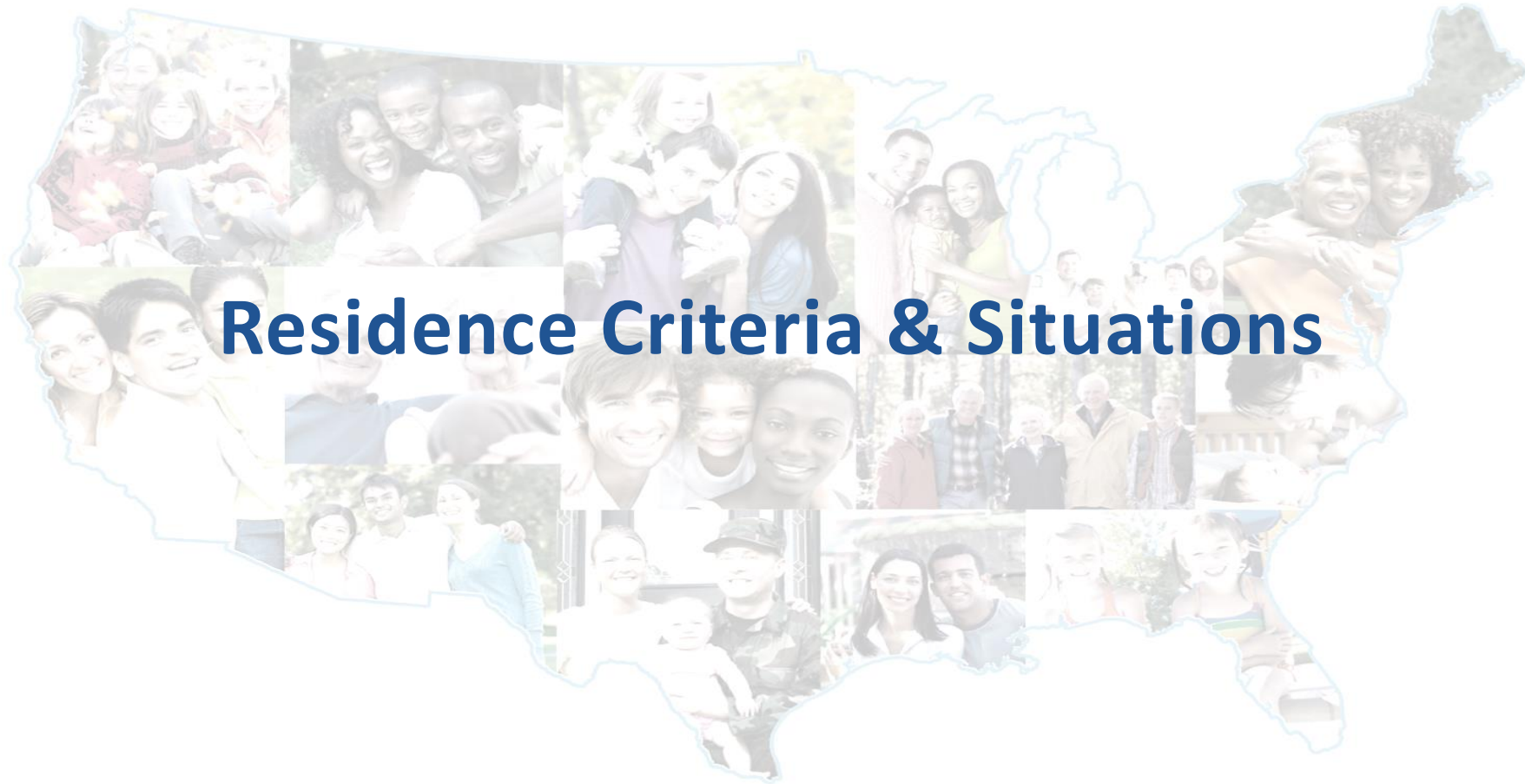
Legacy Format Summary Files – by August 16

- Release files to states and public on Public File Transfer Protocol (Public FTP) site by August 16, 2021.

User-Friendly Redistricting Data Files – by September 30

- Provide files to official state recipients on physical media (DVD/Flash Drive) by overnight mail
 - Governors
 - Majority and Minority Legislative Leadership
 - Redistricting Commissions (if established)
 - Non-partisan State Liaisons
- Release to states and public via the Data Explorer web tool <data.census.gov>





Residence Criteria & Situations

2020 Census

2020 Residence Criteria and Residence Situations

Juveniles in non-correctional treatment centers

- At their usual home address (previously counted at facility)
- At the facility if no usual home address

Religious Group Quarters

- At the facility (previously counted at home address)

U.S. flagged maritime or merchant vessels between U.S. and foreign ports

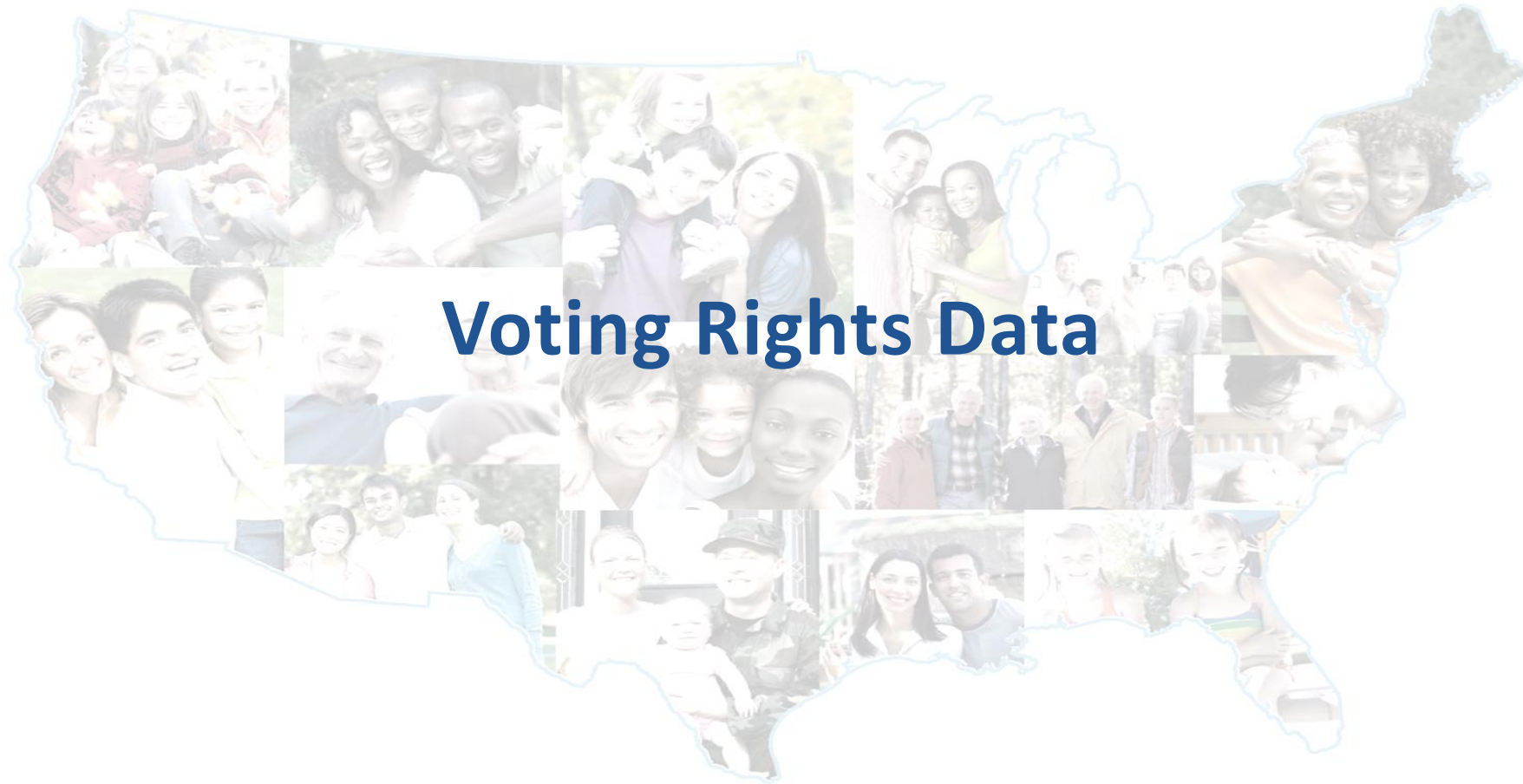
- At usual home address (previously not counted)
- At port if no usual home address (previously not counted)

Federally Affiliated Count Overseas

- Military Deployed/Stationed

Prisoners at Correctional Facilities

- Counted at facility (as before)
 - Addition of Group Quarters to P.L. 94-171 Data
 - Geocoding Tool https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files/2020/GQAssistance_CensusGeocoder.html



Voting Rights Data

Citizen Voting Age Population by Race and Ethnicity (CVAP)

- CVAP was initially created from the Census 2000 long form data and published in 2002.
- After the 2010 Census, in February of 2011, the Census Bureau started publishing annual CVAP estimates using the American Community Survey 5-year estimates at the request of the Department of Justice.
- The CVAP file contains data aggregations (summarized racial and ethnic categories) based on OMB guidance of aggregation for civil rights enforcement.
- Added Congressional and State Legislative Districts for 2018 and future releases.
- Typically released in the 1st week of February each year
 - LATEST : 2015-2019 CVAP estimates were released on 2/1/21 using the 2010 Census Geography as its base
 - NEXT : 2016-2020 CVAP estimates to be released around 2/1/22 using the 2020 Census Geography as its base
- CVAP URL: <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.2019.html>

Voting Rights Data

Section 203 Language Determinations

- Language groups covered by Section 203
 - Alaska Native
 - American Indian
 - Asian
 - Spanish/Hispanic/Latino
- New language determinations are published every 5 years
- Determines counties or townships where language assistance is needed for voting
- Calculated using the American Community Survey 5-year estimates and other census data
- Last published in the Federal Register 12/5/2016
- Next publication estimated 12/2021

87536 Federal Register / Vol. 81, No. 233 / Monday, December 5, 2016 / Notices

COVERED AREAS FOR VOTING RIGHTS BILINGUAL ELECTION MATERIALS—2015—Continued

State and political subdivision	Language minority group
New Mexico:	
Bernalillo County	American Indian (Navajo).
Bernalillo County	Hispanic.
Chaves County	Hispanic.
Cibola County	American Indian (Navajo).
Doña Ana County	Hispanic.
Guadalupe County	Hispanic.
Hidalgo County	Hispanic.
Lea County	Hispanic.
Lincoln County	American Indian (Apache).
Luna County	Hispanic.
McKinley County	American Indian (Navajo).
Mora County	Hispanic.
Otero County	American Indian (Apache).
Rio Arriba County	American Indian (Navajo).
San Juan County	American Indian (Navajo).
San Juan County	American Indian (Ute).
San Miguel County	Hispanic.
Sandoval County	American Indian (Navajo).
Sandoval County	American Indian (Pueblo).
Santa Fe County	American Indian (Pueblo).
Socorro County	American Indian (Navajo).
Socorro County	Hispanic.
Union County	Hispanic.
Yunke County	Hispanic.

Redistricting Data Program

Where to get the data.

WWW.CENSUS.GOV/RDO

Voting Rights Data
(Section 203 & CVAP)

Decennial Census of Population and Housing

About the Decennial Census
Why a Census?
History of the Census
Census in the Constitution
Decennial and the American Community Survey (ACS)
Coverage Measurement
Local Update of Census Addresses Operation (LUCA)
New Construction Program
Participant Statistical Areas Program (PSAP)
Redistricting
Voting Rights
Related Sites
Information for Respondents
By Decade

Redistricting Data Program
REDISTRICTING & VOTING RIGHTS DATA OFFICE (RDO@CENSUS.GOV OR 301-763-4039)

MAY 05, 2017
Redistricting Data Program Congressional Districts
Guidance and access to information about congressional districts and congressional district products.

MAY 08, 2017
Redistricting Data Program State Legislative Districts
Guidance and access to information about state legislative districts and state legislative district products.

MAY 08, 2017
Decennial Census P.L. 94-171 Redistricting Data Summary Files
Guidance and documentation to assist in accessing P.L. 94-171 Redistricting Data

Redistricting Data Program Management
Guidance about and for participation in the Redistricting Data Program for the current and past Decennial Censuses.

Prototype Data

Thank You

James Whitehorne

Chief - Census Redistricting & Voting Rights Data Office

Email: rdo@census.gov

Phone: 1-301-763-4039

Web: www.census.gov/rdo

U.S. Department of Commerce

U.S. Census Bureau

4600 Silver Hill Rd.

Suitland, Maryland 20746