



**GEOSPATIAL &
POPULATION STUDIES**

New Mexico 2020 Census Response

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22nd Annual New Mexico

Data User's Conference

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Outline

- 2020 Census Operations
- Response Rates
- Post-Processing Phase
 - Disclosure Avoidance/Differential Privacy
- Data Products and Evaluation

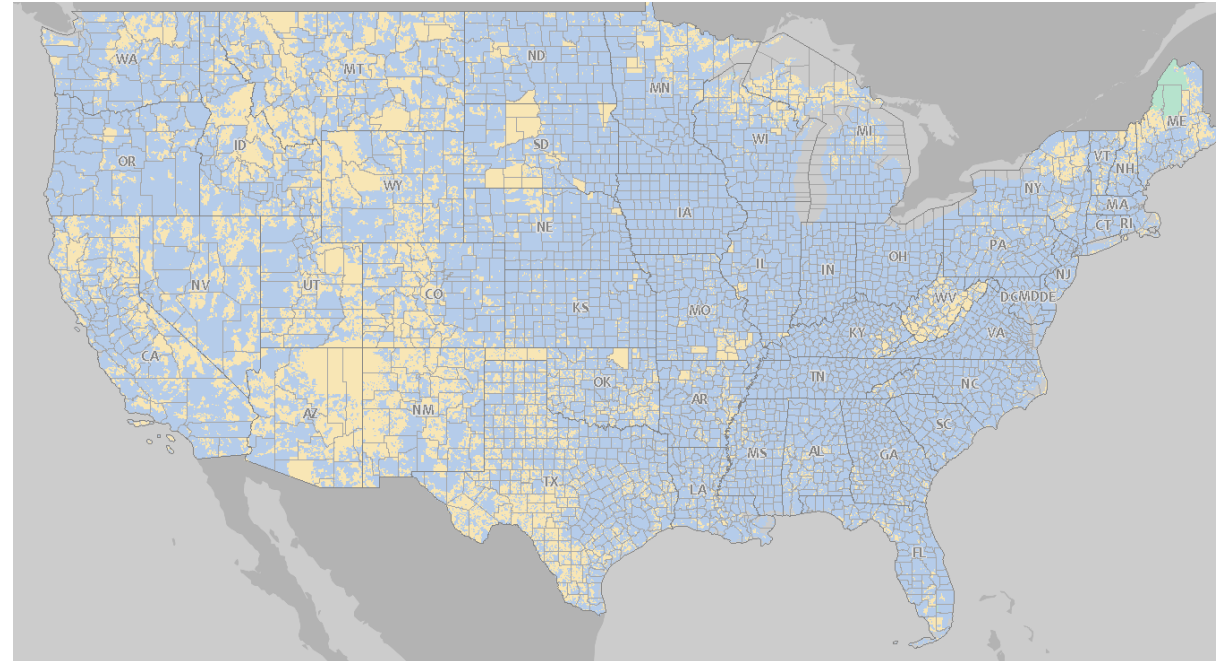
Lead Up to the 2020 Census

- A Good Foundation
 - Successful 2010 Count
 - Smart planning and innovations
 - Big investments from state and local partners
- A Few Big Challenges
 - Insufficient mid-decade funding
 - Master Address File
 - Privacy concerns, distrust of government and decreased survey participation
 - Proposed citizenship question



Covid Pandemic

- Required unprecedented timeline and operational adjustments
 - Update Leave Operation
 - Hand delivery of census packets to rural and tribal households
 - ~4.5% of US households
 - ~18% of NM households
- Population displacement
 - College towns
 - Dense cities with high Covid infection
 - Transient populations
 - Hurricanes in LA and wildfires in West
- Diminished national interest and media
- Confusion and uncertainty
- Rush to close cases as Oct. 15 response window approached



July 21, 2020 Presidential Memo

Memorandum on Excluding Illegal Aliens from the Apportionment Base Following the 2020 Census (<https://www.whitehouse.gov/presidential-actions/memorandum-excluding-illegal-aliens-apportionment-base-following-2020-census/>)

- Census Bureau tasked with providing data on number of citizens, non-citizens, and “illegal aliens”
- Oct. 30 - Citizen Voting Age Population (CVAP) Methodology (<https://www2.census.gov/ces/wp/2020/CES-WP-20-33.pdf>)

US Constitution, Amendment 14, Section 2

“Representatives shall be apportioned among the several states according to their respective numbers, counting the whole number of persons in each state...”

- Three federal courts have struck down this directive
- SCOTUS will hear oral arguments on Nov. 30

Census Bureau Political Appointees

- Deputy Director for Policy
- Deputy Director for Data

“Self-Response Rates”

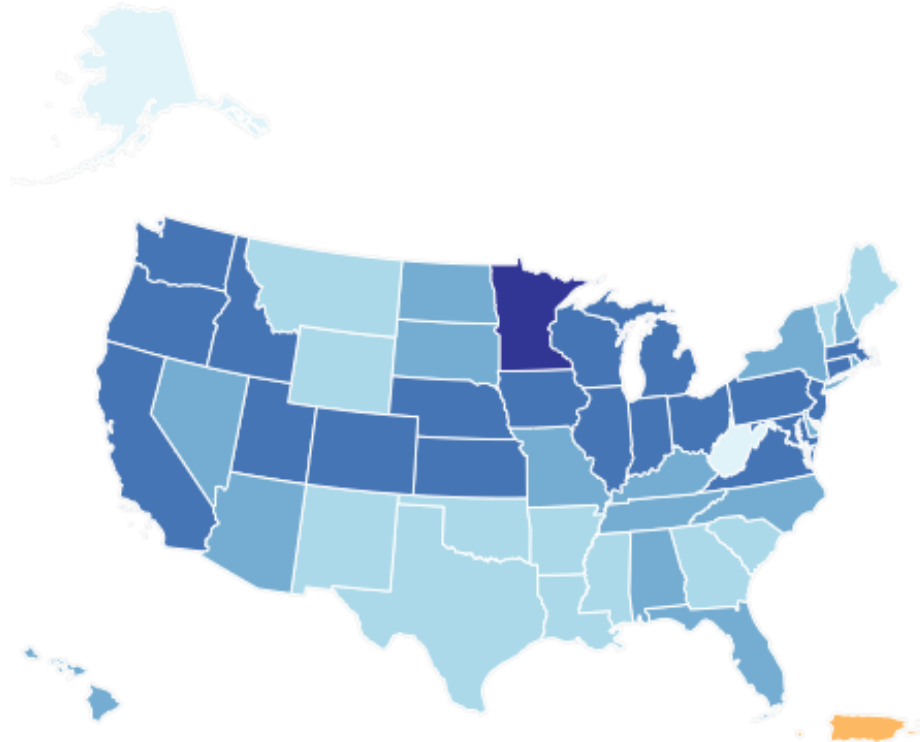
Responses received through: 10/27/2020

National
Self-Response

67.0%

New Mexico
Self-Response

58.7%



Total Self-Responded

43	Arkansas	60.6%	^
44	Vermont	60.5%	
45	Montana	60.4%	
45	Mississippi	60.4%	
45	Louisiana	60.4%	
48	New Mexico	58.7%	
49	Maine	58.2%	
50	West Virginia	56.2%	
51	Alaska	54.7%	
52	Puerto Rico	35.8%	v

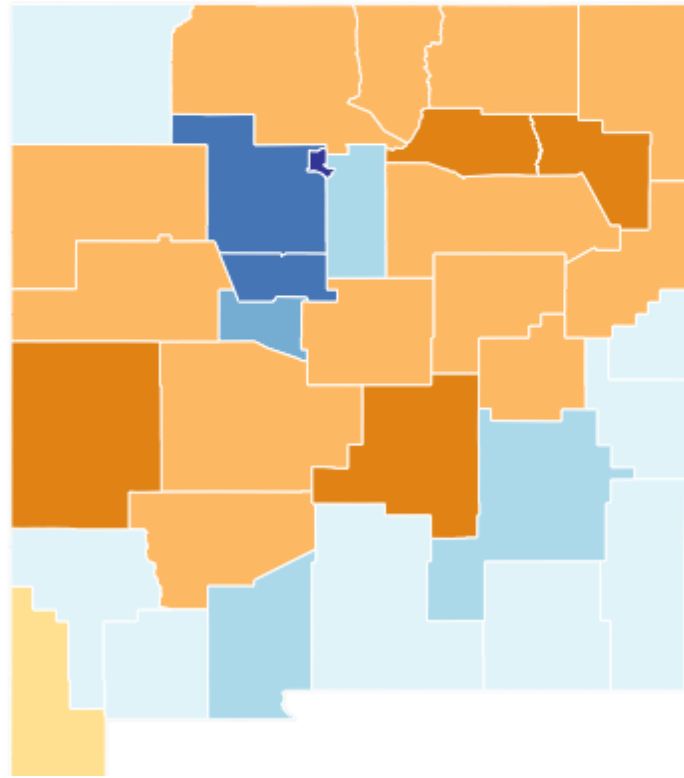
Self-Response Rate (%)

0-15 16-30 31-40 41-50 51-56 57-62 63-68 69-74 75-85 86-100

NM County Self Response Rates

New Mexico
Self-Response
58.7%

Bernalillo
Self-Response
71.4%

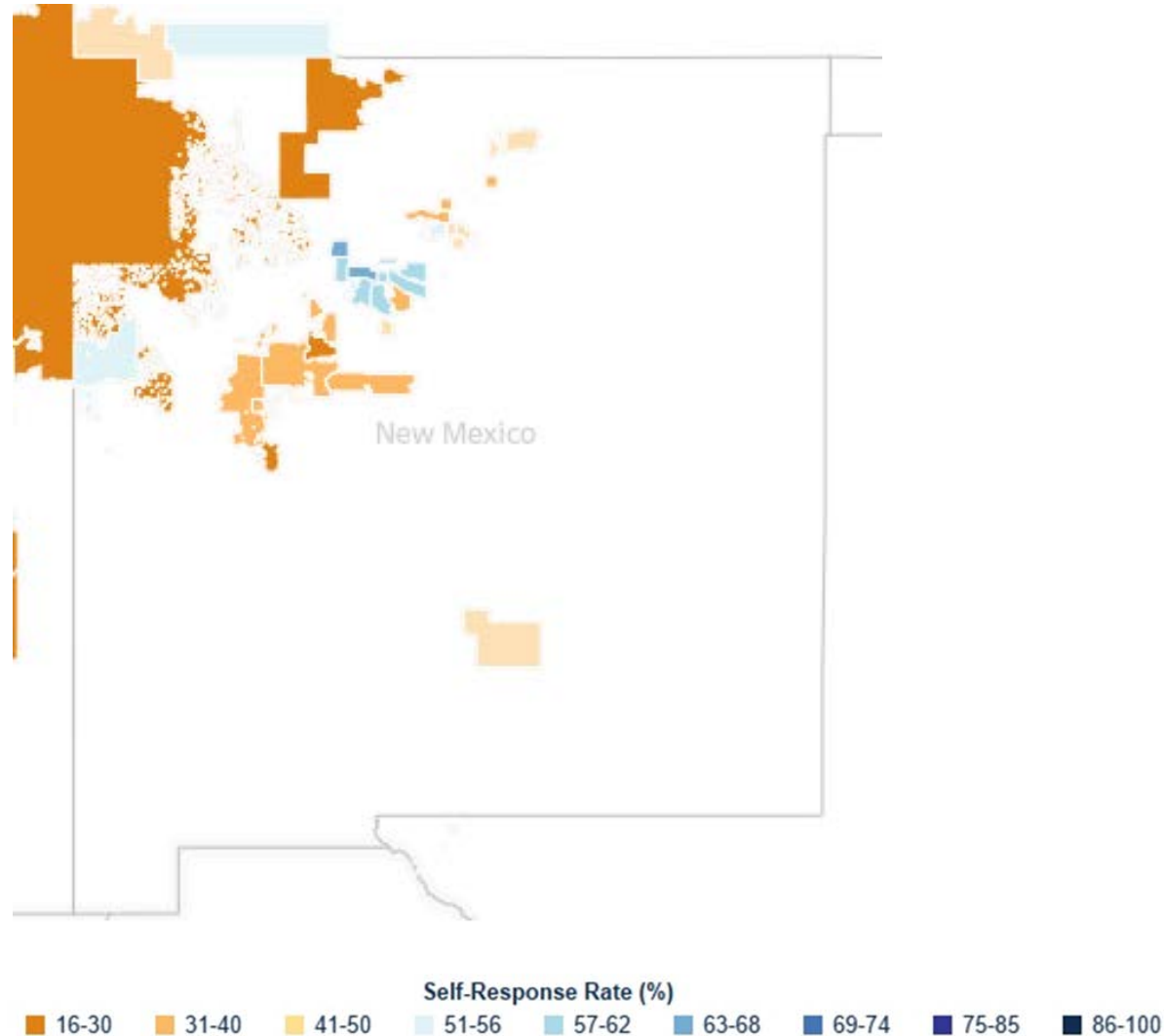


Self-Response Rate (%)

0-15 16-30 31-40 41-50 51-56 57-62 63-68 69-74 75-85 86-100

County	2020	2010	Update/Leave	Occupancy
Bernalillo	71.4%	67.7%	1.0%	6.4%
Catron	19.6%	22.5%	98.5%	45.7%
Chaves	62.7%	64.4%	2.2%	11.3%
Cibola	37.7%	48.6%	61.5%	20.2%
Colfax	37.4%	40.6%	55.6%	40.0%
Curry	56.0%	58.7%	2.2%	10.2%
De Baca	33.2%	47.2%	60.8%	32.1%
Doña Ana	61.1%	60.1%	6.2%	7.3%
Eddy	56.2%	61.9%	4.7%	9.6%
Grant	53.6%	49.9%	34.8%	14.3%
Guadalupe	36.8%	43.2%	43.6%	26.2%
Harding	30.6%	47.0%	78.0%	33.7%
Hidalgo	43.5%	54.3%	25.7%	19.1%
Lea	54.6%	60.8%	11.7%	10.8%
Lincoln	27.5%	35.2%	54.6%	47.4%
Los Alamos	83.8%	77.5%	0.8%	8.3%
Luna	55.7%	56.6%	7.9%	12.8%
McKinley	37.8%	54.5%	66.3%	14.9%
Mora	26.4%	42.4%	99.6%	34.6%
Otero	53.1%	49.9%	17.5%	21.1%
Quay	38.7%	46.8%	26.2%	26.9%
Rio Arriba	32.4%	41.9%	97.5%	19.7%
Roosevelt	54.1%	59.4%	4.6%	10.6%
Sandoval	69.1%	65.6%	14.9%	23.2%
San Juan	51.6%	59.4%	24.9%	9.0%
San Miguel	38.8%	43.1%	48.9%	10.0%
Santa Fe	61.5%	60.7%	11.7%	13.1%
Sierra	39.1%	45.2%	49.2%	29.2%
Socorro	40.7%	49.2%	41.5%	13.0%
Taos	36.9%	41.7%	79.1%	26.9%
Torrance	40.9%	47.7%	69.0%	19.7%
Union	40.1%	49.2%	23.1%	26.5%
Valencia	64.1%	59.1%	4.0%	8.6%

NM Tribal Response Rates



Tribe	2020 Response Rate
Acoma	31.6%
Cochiti	57.3%
Isleta	40.2%
Jemez	64.4%
Jicarilla Apache	19.8%
Laguna	34.4%
Mescalero	44.4%
Nambe	48.4%
Navajo Nation	22.5%
Ohkay Owingeh	38.8%
Picuris	39.8%
Pojoaque	44.4%
Sandia	48.8%
San Felipe	39.9%
San Ildefonso	53.0%
Santa Ana	62.2%
Santa Clara	36.0%
Santo Domingo	57.0%
Taos	41.6%
Tesuque	43.0%
Zia	59.8%
Zuni	53.6%

NM Cities Response Rates

Higher response rates for larger cities

Self-Responded by City		
1	Bosque Farms, New Mexico	80.2%
2	Corrales, New Mexico	75.8%
3	Rio Rancho, New Mexico	75.7%
4	Rio Communities, New Mexi..	74.6%
5	Albuquerque, New Mexico	72.5%
6	Los Ranchos de Albuquerque..	71.7%
6	Los Lunas, New Mexico	71.7%
8	Santa Fe, New Mexico	67.3%
9	Las Cruces, New Mexico	66.9%
10	Peralta, New Mexico	66.6%

Self-Responded by City		
11	Roswell, New Mexico	65.9%
11	Farmington, New Mexico	65.9%
11	Alamogordo, New Mexico	65.9%
14	Silver City, New Mexico	61.8%
14	Hurley, New Mexico	61.8%
16	Artesia, New Mexico	61.6%
17	Deming, New Mexico	61.5%
17	Aztec, New Mexico	61.5%
19	Kirtland, New Mexico	61.3%
20	Sunland Park, New Mexico	61.2%

Lower response rates for smaller cities in rural counties and places with high seasonal occupancy

Self-Responded by City		
86	House, New Mexico	32.9%
87	Melrose, New Mexico	32.8%
88	Columbus, New Mexico	31.6%
89	Cuba, New Mexico	31.2%
90	Williamsburg, New Mexico	30.4%
91	Ruidoso, New Mexico	29.1%
92	Mosquero, New Mexico	28.9%
93	Roy, New Mexico	28.7%
94	Corona, New Mexico	28.3%
95	Grenville, New Mexico	26.5%

Self-Responded by City		
96	Logan, New Mexico	25.8%
97	Eagle Nest, New Mexico	25.1%
98	Cloudcroft, New Mexico	22.7%
99	Reserve, New Mexico	22.6%
100	Ruidoso Downs, New Mexico	20.6%
101	Red River, New Mexico	19.9%
102	Chama, New Mexico	19.5%
103	Angel Fire, New Mexico	18.5%
104	Folsom, New Mexico	10.8%
105	Taos Ski Valley, New Mexico	6.0%

“Total Enumeration Rate”

- Measures operational progress
 - 100% means all *cases* have been *completed*
 - Does not necessarily mean *households* have been *enumerated*.
- “...the percent of completed cases dos not suffice to draw conclusions about data quality.”*
- Data collected during the door-knocking operation (NRFU) are less reliable than self-responses and require more information to evaluate accuracy.

Total Enumerated		
1	Alabama	99.9%
1	Alaska	99.9%
1	Arizona	99.9%
1	Arkansas	99.9%
1	California	99.9%
1	Colorado	99.9%
1	Connecticut	99.9%
1	Delaware	99.9%
1	District of Columbia	99.9%
1	Florida	99.9%

Total Enumerated		
1	Montana	99.9%
1	Nebraska	99.9%
1	Nevada	99.9%
1	New Hampshire	99.9%
1	New Jersey	99.9%
1	New Mexico	99.9%
1	New York	99.9%
1	North Carolina	99.9%
1	North Dakota	99.9%
1	Ohio	99.9%

Total Enumerated		
1	Utah	99.9%
1	Vermont	99.9%
1	Virginia	99.9%
1	Washington	99.9%
1	West Virginia	99.9%
1	Wisconsin	99.9%
1	Wyoming	99.9%
1	South Dakota	99.9%
1	Mississippi	99.9%
52	Louisiana	99.0%

Sources: *[2020 Census Quality Indicators, A Report from American Statistical Association, Oct. 2020](#);

<https://public.tableau.com/profile/us.census.bureau#!/vizhome/2020CensusSelf-ResponseRankings/RankingsDashboard>



State Complete Count Commission

- April 2019, Governor Michelle Lujan Grisham issued Executive Order 2019-007
 - Established Statewide Complete Count Commission to promote and advertise the 2020 Census
 - Focus resources on hard-to-count areas and populations
 - Ensure the highest participation rate possible
 - Support and coordinate with Local Complete Count Committees (LCCCs)
- Composed of Cabinet Secretaries, Local Government, Tribal Community, Business Community, Non-Profit, Philanthropy
- \$11.5 Million state investment (see chart)
- 33/33 Counties entered grant agreement

- NM Counts 2020



Category	Budget	Percent
County Grants	\$4,800,000	41.7%
Traditional Media	\$3,749,559	32.6%
Community Based Organizations	\$950,418	8.3%
Indian Affairs Department	\$800,000	7.0%
Operating Costs	\$364,995	3.2%
Social Media	\$330,162	2.9%
Public Education Department	\$300,000	2.6%
Small Grants and Contracts	\$204,866	1.8%
Total	\$11,500,000	100.0%

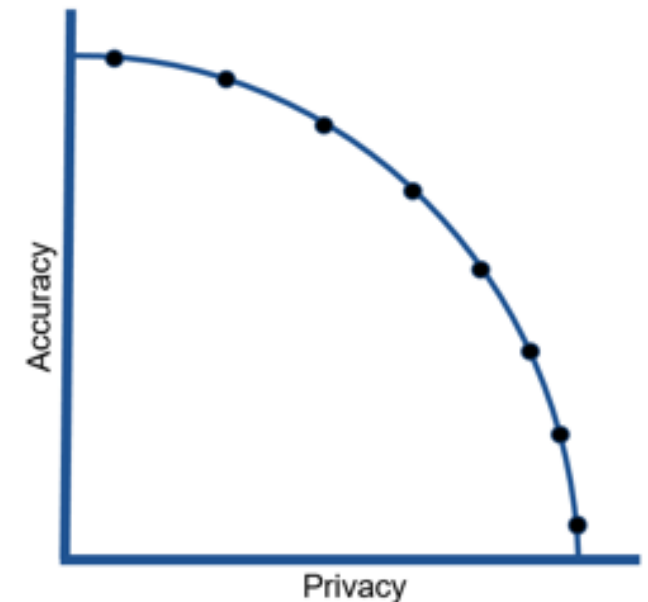
Census Data Collection Post-Processing

Partial list of post-processing steps

- Scan paper questionnaires
- Non-ID response processing
- Merge online, phone, paper, Non-Response Follow Up (NRFU) responses, Group Quarters and overseas military response
- Identify inconsistent or potentially fraudulent responses
- Identify and remove duplicate responses
- Add missing persons using administrative records
- Impute remaining persons
- Impute missing characteristics (Age, Sex, Race, Ethnicity)
- Run Quality Control checks
- **Apply Disclosure Avoidance System still under development**
- ❖ **All under a compressed timeline**
 - **2020 - 11 weeks of post-processing for population of 330 million**
 - **2010 – 21 weeks post-processing for population of 309 million**

Disclosure Avoidance

- Census Bureau has dual mandate to publish accurate statistics and protect respondent privacy
- An innovative Disclosure Avoidance System based on Differential Privacy remains under development*
- Compared with the 2010 Census will not be releasing as many (accurate) statistics post 2020 Census
- A to-be-determined degree of noise will be incorporated into published tables
- Smaller areas and more diverse populations will be more affected
- Noisy or unpublished census data could have profound impacts on all downstream uses of population data:
 - State and local redistricting
 - Equitable distribution of tax dollars and resources
 - Epidemiology
 - Emergency management planning
 - Economic indicators
 - Social science research
 - **Independent evaluation or challenges to the census**



2020 Census Data Products

Statutory Release Dates

- December 31 – State apportionment totals to the White House
- March 31 – P.L. 94-171 Redistricting Files to state and local governments
- Congress could extend these deadlines or the Census Bureau may fail to meet them

Other Data Products

- What data products will be released and when is TBD(?)
- E.g. 2010 Summary File 1, 2010 American Indian Alaska Native Summary File, 2010 PUMS data

Quality Indicators

- Census Bureau should follow recommendations of American Statistical Association and Census Scientific Advisory Committee*
- Census Bureau should maintain transparency and promptly release paradata for assessment of the quality of 2020 Census

What's Next?

- Evaluation of data products
 - Compare counts to other data sources
 - Demographic Analysis (December 2020)
 - 2020 Census Estimates (December 2020?)
 - State and private estimates
 - Post-Enumeration Survey (2022)
 - Quality indicators
 - NRFU Proxy rates
 - Administrative Records/Imputation rates
 - Housing unit counts
- Biden Transition
- Count Question Resolution (https://www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/memo-series/2020-memo-2020_02.html)
- Litigation
- 2030 Planning
- Follow NPR's @hansilowang for latest updates