New Mexico Census Preparations

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21st Annual New Mexico Data Users Conference
Nov. 14, 2019
Mentor, advocate and UNM director honored at memorial

Remembering Dely Alcántara

read more
At Stake for the 2020 Census:

- Congressional Apportionment
- State and Local Redistricting
- Data Quality
- Economic Development
- Nearly $1 Trillion in Annual Federal Funds
NEW MEXICO

In FY2016, New Mexico received

$7,816,466,854

through 55 federal spending programs
guided by data derived from the 2010 Census.

The Counting for Dollars 2020 Project aims to understand 1) the extent to which the federal government will rely on data from the 2020 Census to guide the distribution of federal funding to states, localities, and households across the nation and 2) the impact of the accuracy of the 2020 Census on the fair, equitable distribution of these funds.

https://gwip.nw.edu/sites/g/files/zaxdzs2181/f/downloads/IPP-1819-3%20CountingforDollars_NM.pdf
Examples of Census Impact to Federal Funding

- Medicaid Reimbursement to New Mexico -
  - Each New Mexican not counted in the 2010 Census would have cost the state $1,063 in Medicaid funding in FY2015
  - 1% undercount of New Mexico > $223,000,000 in lost Medicaid funding over 10 years

- Title I Grants to Local Education Agencies -
  - Each poor child in New Mexico ages 5-17 not counted in 2010 would have cost the state $1,700 per year
  - 5% undercount of poor children = $85,000,000 in lost Title 1 grants over 10 years

2020 Census Concerns

- Citizenship Question
- Distrust of the Federal Government
- Data Confidentiality (Real and Perceived)
- Information Technology Systems Readiness
- Low National Unemployment
- Privacy Protections Measures i.e. Differential Privacy
Citizenship Question

2019 Census Test:
- Designed to test impact of a potential citizenship question
- 480,000 households sampled
- Half received questionnaire with/without citizenship question

Preliminary Results:
- No significant difference in overall self-response rates
- 0.3% lower self-response among Hispanics who received citizenship question
- Test did not measure impact on Non-Response Follow Up or the impact a citizenship question would have had on overall quality of the 2020 Census
Low Unemployment

- The Census Bureau needs 400,000 - 500,000 enumerators to conduct the count
  - About 4,000 enumerators needed throughout New Mexico
- Low unemployment means the Census Bureau must attract a non-traditional workforce
  - U.S. Unemployment Rate - 3.6%
  - New Mexico Unemployment Rate - 4.9%
- Pay range for enumerators
  - $13.50-$30.00 per hour for U.S.
  - $13.50-$15.50 per hour for New Mexico
Census Bureau Privacy Protection

- Title 13 mandates that the Census Bureau protect the confidentiality of individual census responses.
- The Census Bureau only publishes summary statistics:
  - 7.7 Billion statistics after 2010
  - 25 data points per person
- Reconstructing individual census records with some degree of accuracy is now possible by combining census statistics with data from other sources.
- Therefore, the Census Bureau is taking greater steps to maintain privacy of census responses.
Privacy vs. Accuracy

Differential Privacy also allows policymakers to precisely calibrate where on the privacy/accuracy tradeoff curve the resulting data will be.
Differential Privacy

- The Census Bureau will not be releasing as many statistics based on the 2020 Census compared with the 2010 Census.
- Data released for the 2020 Census will be purposely inaccurate i.e. noise or false data will be incorporated into published tables.
- Smaller areas and more diverse populations will be more affected.
- Noisy or unpublished data could have profound impacts on:
  - State and local redistricting
  - Equitable distribution of resources
  - Emergency management planning
  - Social science research
  - Ability to independently evaluate or challenge the accuracy of the census.
Hardest to Count Communities

Most at Risk:
- Children 0-4
- Renters
- Immigrants
- Native Americans
- Hispanics
- African-Americans
- Impoverished
- Remote Areas
- Transients
- Non-Traditional Households

Ensuring an Accurate Census Count in New Mexico

There are three ways governments can partner with the Census Bureau to help ensure an accurate count:

1. Improve the Census Bureau’s address list
2. Motivate everyone to respond
3. Encourage people to apply for Census jobs
#1 Improve the Census Bureau’s Address List

- Local Update of Census Addresses Program (LUCA)
  - Governor Martinez appointed UNM-GPS as NM’s LUCA liaison in Nov. 2017
  - State appropriated $300,000 for LUCA in 2018 HB2
  - Collaborative effort involving UNM-GPS, UNM-BBER, UNM-EDAC, NMDFA, NMDoIT, NMTRD, NMDOH, NMSOS, and tribal and local governments throughout New Mexico
  - 63,918 New Mexico residential addresses were added to the Census Bureau’s Master Address File through LUCA
  - 2nd highest percentage of addresses added by state
#2 Motivate New Mexicans to Respond

- **New Mexico 2020 Statewide Complete Count Commission**
  - Established by Governor Lujan Grisham in April 2019 through Executive Order 2019-007
  - 40 appointees including Cabinet Secretaries, State Legislators, Congressional Delegation, Tribal Representatives, Business Community, Philanthropy, Non-Profits
  - Leveraging statewide networks to deliver census messaging
  - Appropriated $3.5 Million in 2019 HB2
    - $2.4 million is being granted to counties - 30 counties have already executed grant agreements
    - $400,000 granted to NM Indian Affairs Department
    - $300,000 granted to NM Public Education Department

- **Local Complete Count Committees are being established in communities throughout New Mexico**
#3 Encourage New Mexicans to Apply for Census jobs

- The most effective enumerators live in the communities they are counting
- Encourage retirees, students, second job seekers, and New Mexicans who live in hard-to-count communities to apply
- Work is centered around April - June, 2020
- Full-Time, Part-Time, Flexible Schedules
Questions???
Preliminary Observations of 2010 Differential Privacy File

Alaska demonstrates the effects of DP on the population of smaller communities

<table>
<thead>
<tr>
<th>Population</th>
<th>Mean % Difference</th>
<th>N</th>
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<tbody>
<tr>
<td>0-100</td>
<td>131.4%</td>
<td>107</td>
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<tr>
<td>101-500</td>
<td>15.0%</td>
<td>127</td>
</tr>
<tr>
<td>501-1,000</td>
<td>6.2%</td>
<td>53</td>
</tr>
<tr>
<td>1,001-5,000</td>
<td>2.5%</td>
<td>43</td>
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<tr>
<td>5,001-10,000</td>
<td>0.9%</td>
<td>16</td>
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<tr>
<td>10,000+</td>
<td>0.6%</td>
<td>6</td>
</tr>
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</table>
## Preliminary Observations of 2010 Differential Privacy File

Nevada demonstrates the effects of DP on household occupancy rates

<table>
<thead>
<tr>
<th>County</th>
<th>Total Housing Units</th>
<th>Percent Occupied in SF1</th>
<th>Percent Occupied under DP</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>10,826</td>
<td>89.3%</td>
<td>95.9%</td>
<td>6.6%</td>
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<tr>
<td>Clark</td>
<td>840,343</td>
<td>85.1%</td>
<td>84.2%</td>
<td>-1.0%</td>
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<tr>
<td>Douglas</td>
<td>23,671</td>
<td>83.0%</td>
<td>88.8%</td>
<td>5.8%</td>
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<tr>
<td>Elko</td>
<td>19,566</td>
<td>89.1%</td>
<td>93.0%</td>
<td>3.8%</td>
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<tr>
<td>Esmeralda</td>
<td>850</td>
<td>45.8%</td>
<td>99.9%</td>
<td>54.1%</td>
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<tr>
<td>Eureka</td>
<td>1,076</td>
<td>77.7%</td>
<td>100.0%</td>
<td>22.3%</td>
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<tr>
<td>Humboldt</td>
<td>7,123</td>
<td>88.3%</td>
<td>100.0%</td>
<td>11.7%</td>
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<tr>
<td>Lander</td>
<td>2,575</td>
<td>85.9%</td>
<td>99.8%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Lincoln</td>
<td>2,730</td>
<td>72.8%</td>
<td>100.0%</td>
<td>27.2%</td>
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<tr>
<td>Lyon</td>
<td>22,547</td>
<td>87.9%</td>
<td>92.5%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Mineral</td>
<td>2,830</td>
<td>79.2%</td>
<td>99.9%</td>
<td>20.7%</td>
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<td>Nye</td>
<td>22,350</td>
<td>80.7%</td>
<td>85.4%</td>
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<td>Pershing</td>
<td>2,464</td>
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<td>Storey</td>
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<td>87.5%</td>
<td>100.0%</td>
<td>12.5%</td>
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<tr>
<td>Washoe</td>
<td>184,841</td>
<td>88.4%</td>
<td>86.7%</td>
<td>-1.7%</td>
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<tr>
<td>White Pine</td>
<td>4,498</td>
<td>82.4%</td>
<td>99.8%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Carson City</td>
<td>23,534</td>
<td>91.0%</td>
<td>94.8%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
Preliminary Observations of 2010 Differential Privacy File

Tompkins County, NY demonstrates the effects of DP on Age Structure
Preliminary Observations of 2010 Differential Privacy File

Tompkins County, NY demonstrates the effects of DP on Age and Sex Structure