

**University of New Mexico
Geospatial and Population Studies**



2017 Population Estimates and 2020 Census Developments

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Data Users Conference 2018

Outline

- **Population Estimates**
 - Background
 - 2000-2017 Estimates
 - San Juan County
 - Statewide Trends
- **2020 Census**
 - What's at Stake
 - Concerns
 - What can be done

Population Estimates

- *Observations* about current or past populations
- Inexpensive updates to costly census counts
- Methods are well-established with known biases
- Produced by the US Census Bureau, state and local agencies and private sector

Estimate Source Comparison

	US Census Bureau	UNM GPS
Migration Indicators	3	6+
Methods	1	3+
Smallest Geography	City/Town N=138	Census Tract N=499
Race Categories	6	4

GPS Estimates Methodologies

- **Cohort-Component**

- $Pop_{2017} = Pop_{2010} + Births - Deaths$
 $+ In\ Migration - Out\ Migration$

- **Housing Unit**

- **Ratio Correlation**

- **Cohort Change Ratios**

Population Estimates

Key Input Data

- **NM DOH Vital Records**
- **NM MVD Driver's Licenses**
- **NM PED School Enrollment**
- **NM SOS Voter Registrations**
- **CMS Medicare Enrollment**
- **IRS Migration Files**
- **Residential Building Permits**

GPS Estimates Methodology

Key Steps

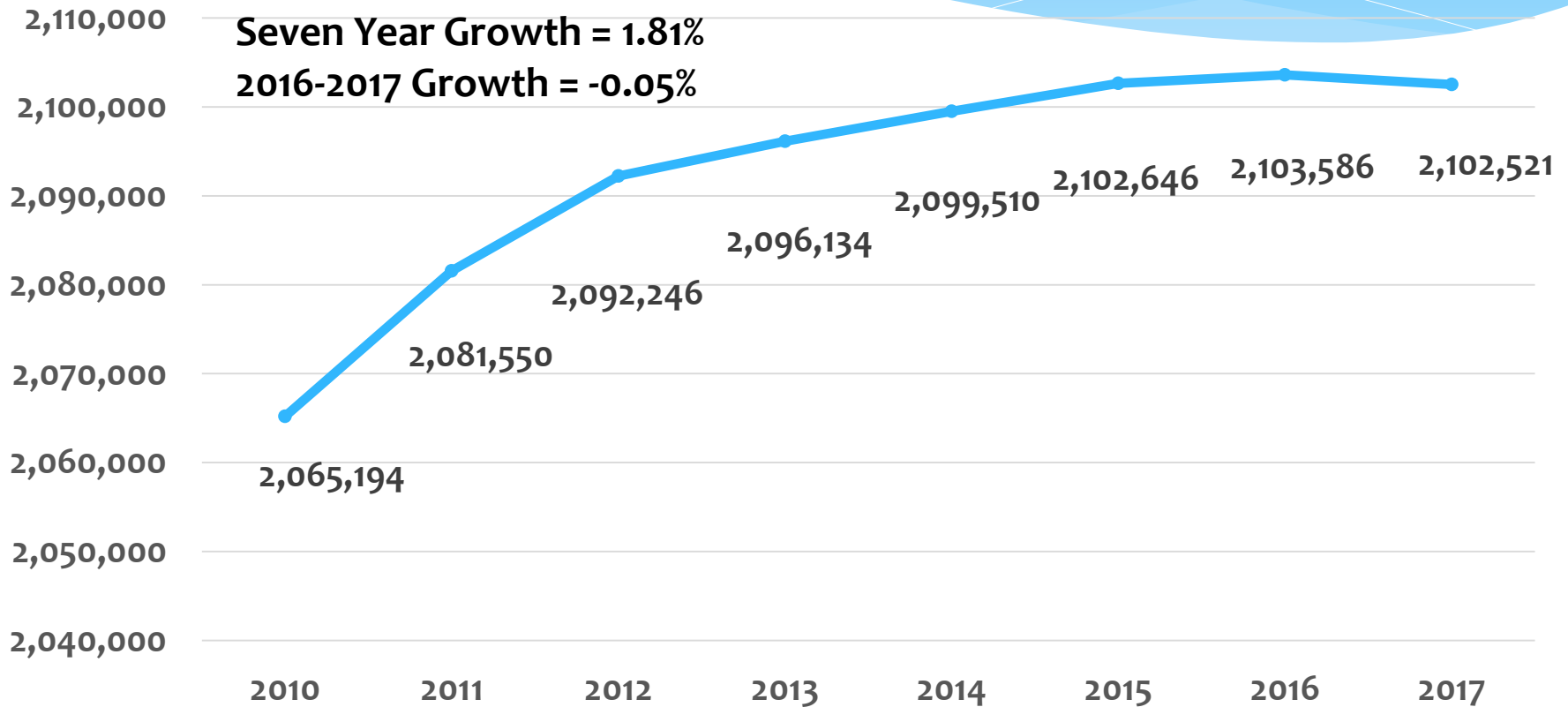
1. State Total
2. County Totals
3. Census Tract Totals
4. Characteristics
Age/Sex/Race/Ethnicity
5. Data Fitting

Estimates Uncertainty and Error

Increases:

- As Size of Population Decreases
- Further from the Last Census
- For Minority Populations
- On Tribal Lands
- As Populations Change

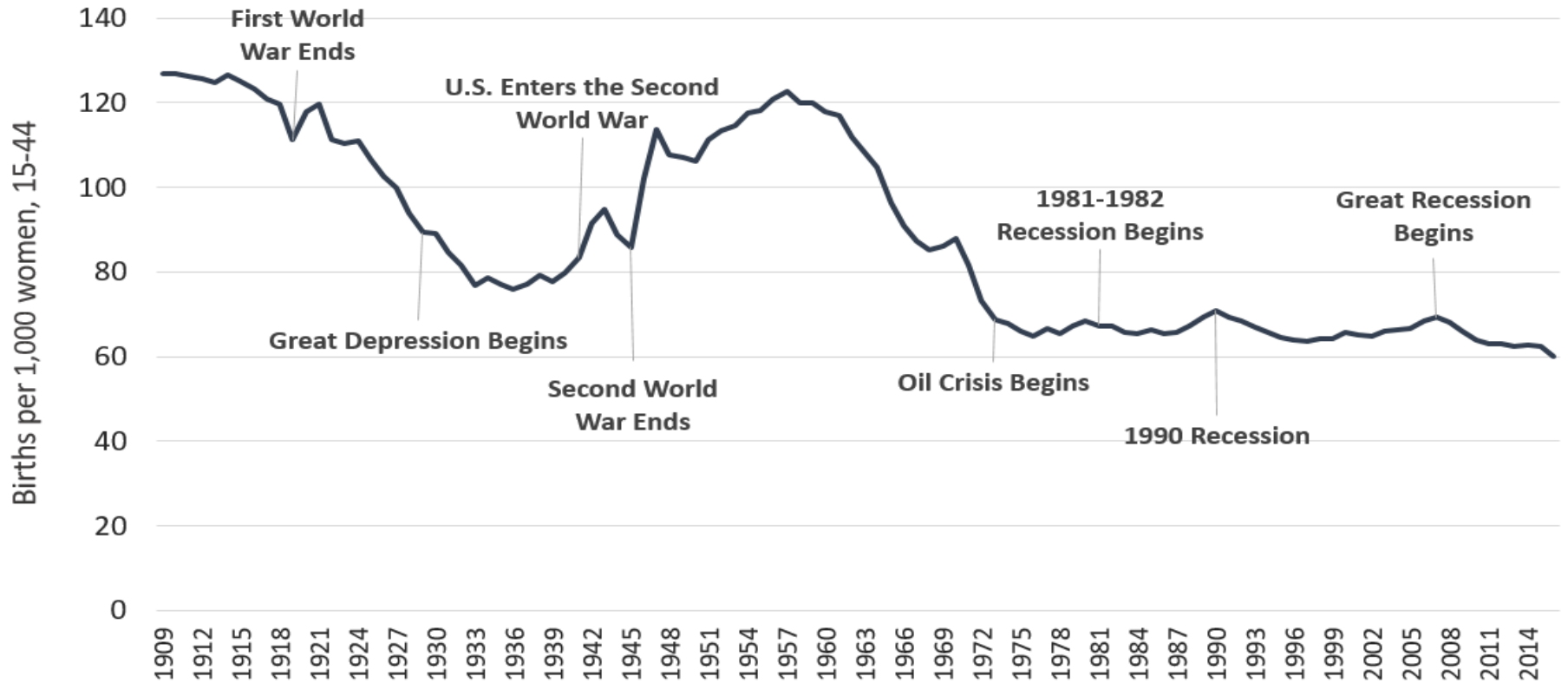
New Mexico Population Estimates 2010-2017



Why Flat Growth?

- * Births are Down
- * Deaths are Up
- * Migration is Out

Fertility Rate: United States, 1909-2016



Note: Fertility rate is number of births per 1,000 women 15-44 years of age. Data prior to 1960 have been adjusted by the U.S. Census Bureau for under-registration. Data for census years (starting with 1940) are based on population enumeration as of April 1 whereas enumeration for all other years is as of July 1. Data for 1951-1954 and 1956-1971 are based off a 50% sample of births. Data 1972-1984, some states reporting are based off a 50% sample of births.

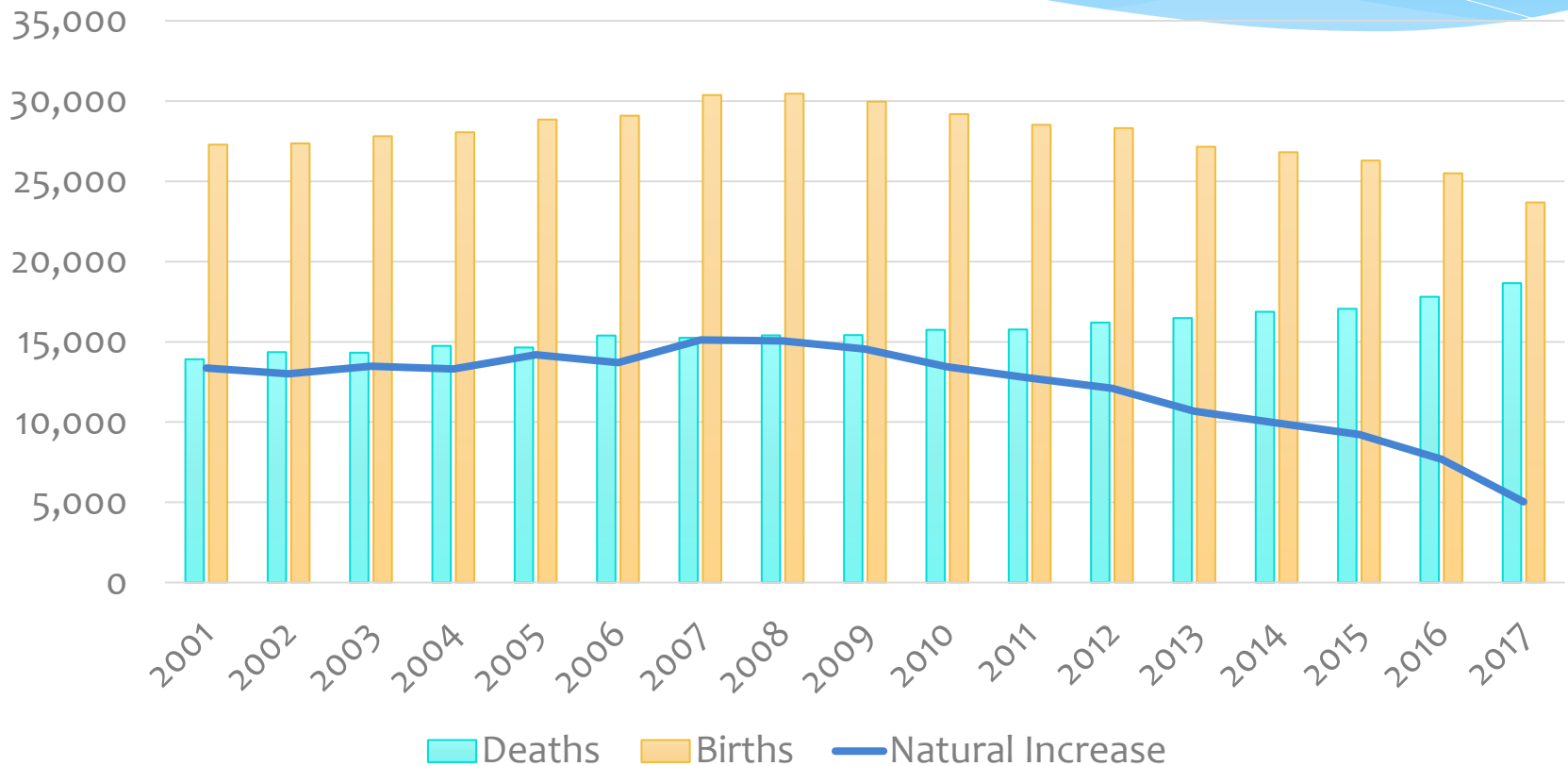
Source: NCHS, national vital statistics report, *vol 66, no 1* (for data 1960-2015). NCHS, *Vital Statistics of the United States, 2003, Volume I, Natality* (for data 1909-1960).



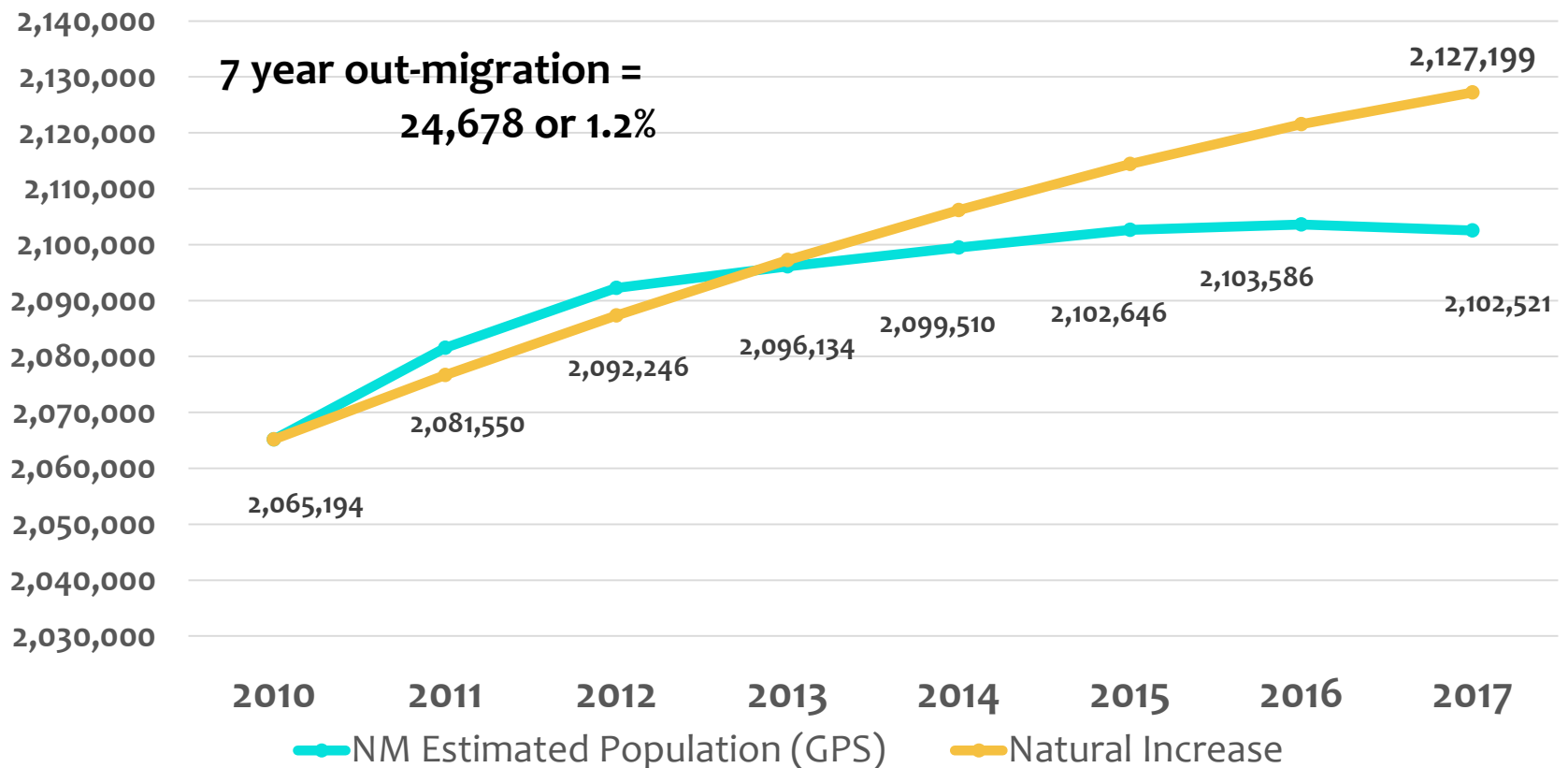
Mortality

- Total deaths increasing due to aging population
- Mortality rates up for some cohorts third year in a row

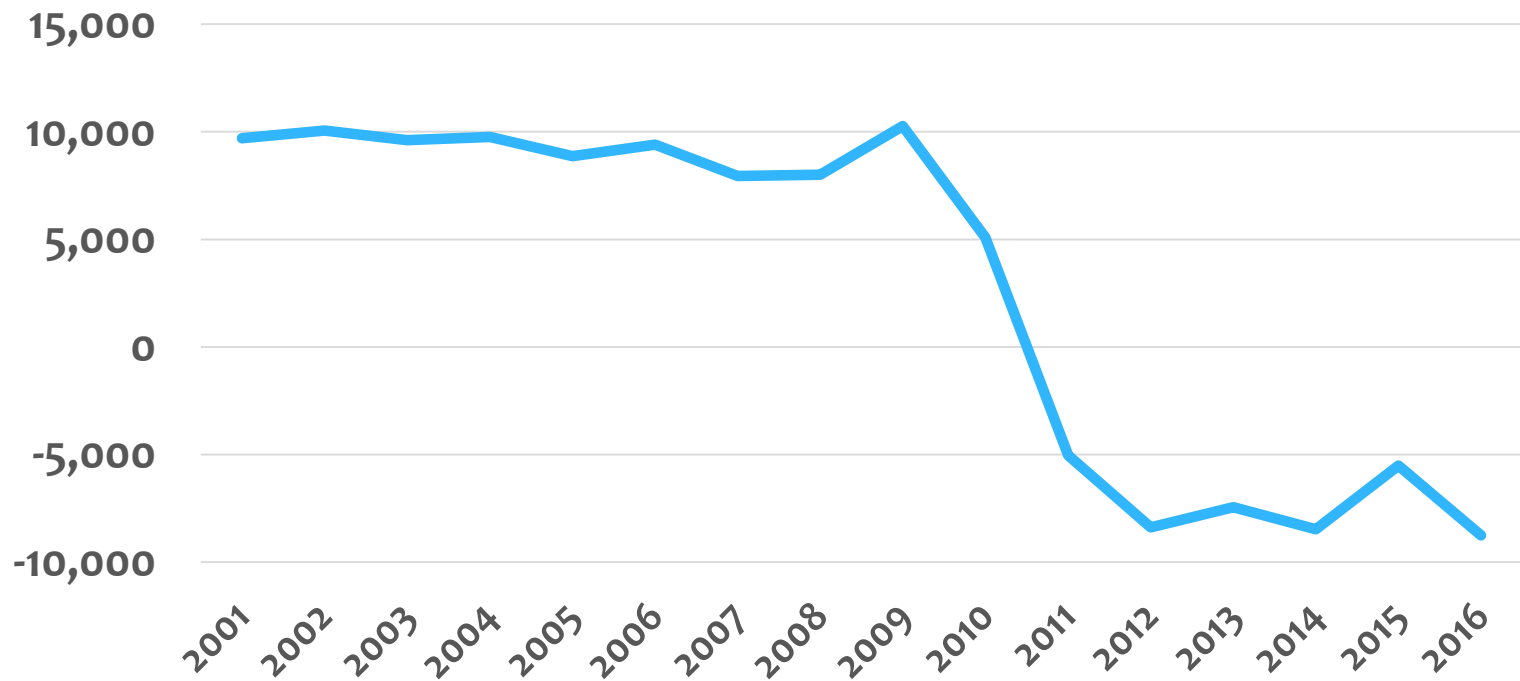
Births, Deaths, and Natural Increase in New Mexico 2001-2017



NM State Total Vs. Natural Increase 2010-2017



Approximate Net Migration 2001-2016



2010 - 2016 Re-series

- San Juan County only significant adjustment

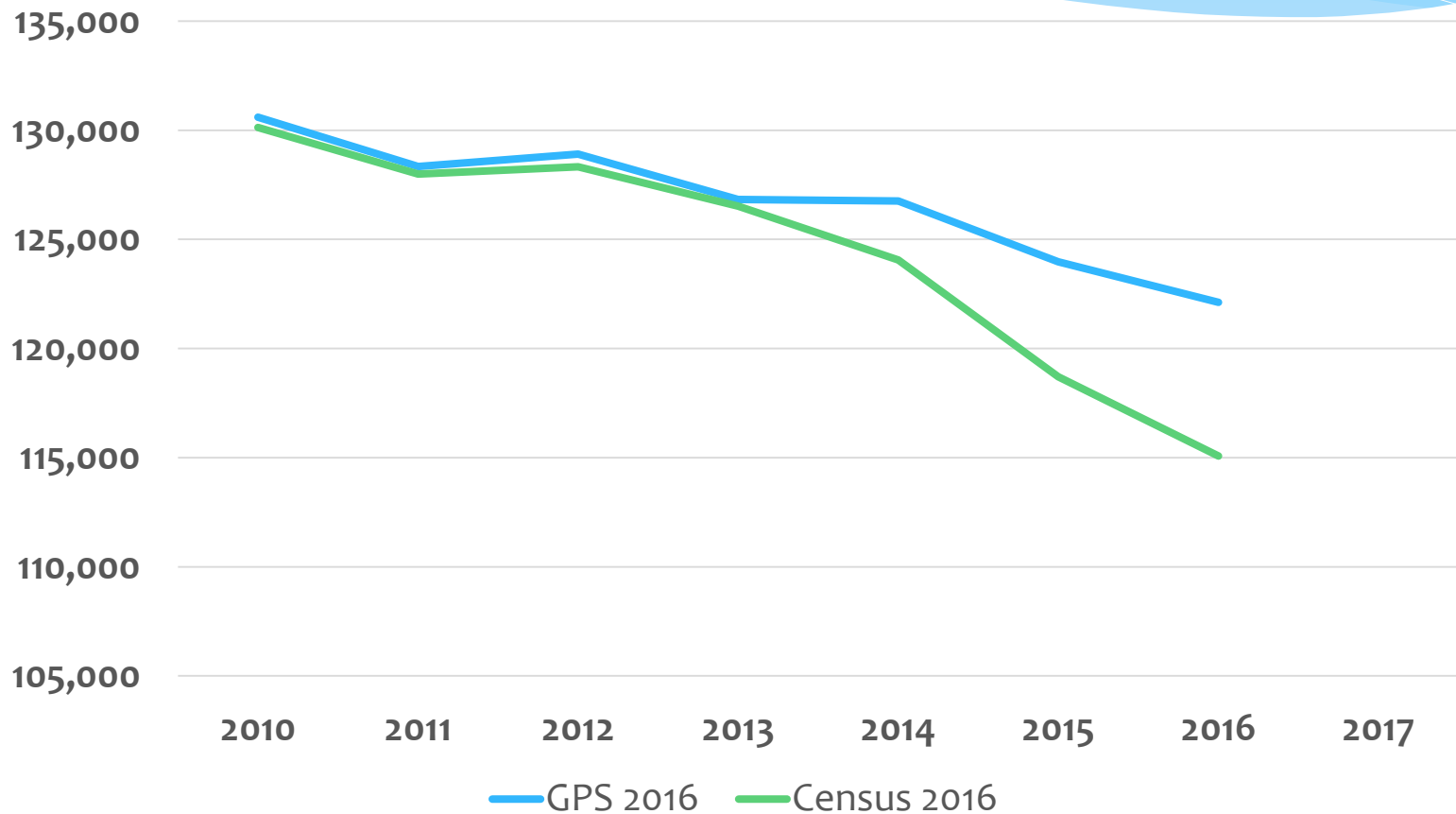
However

- All other counties slightly adjusted
- Characteristics slightly adjusted

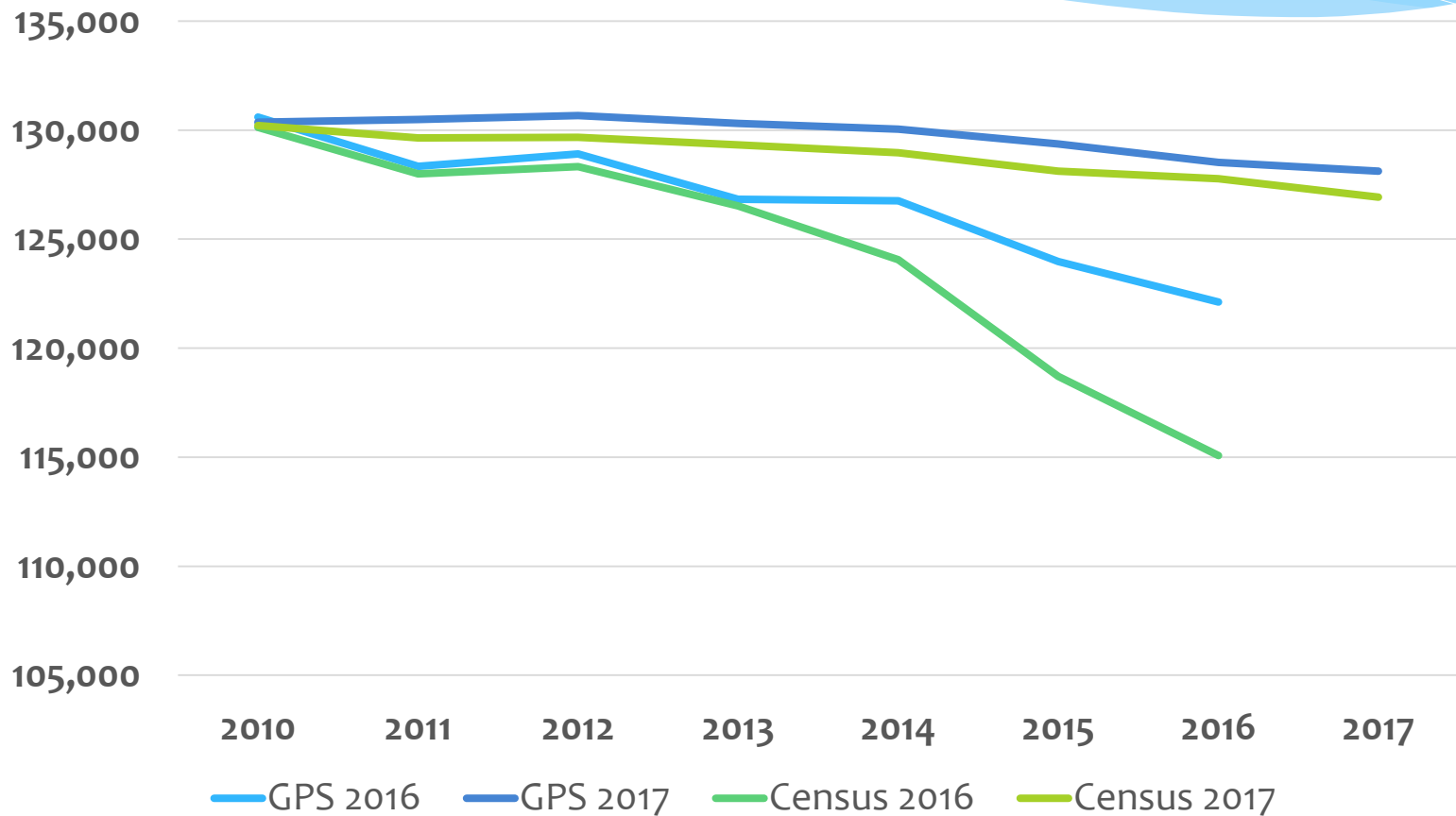
Census Estimate San Juan County

2010 Census Count	130,000
2016 Census Estimate	115,000
6 Year Decrease	15,000
6 Year Natural Increase	5,500
6 Year Out Migration	20,500

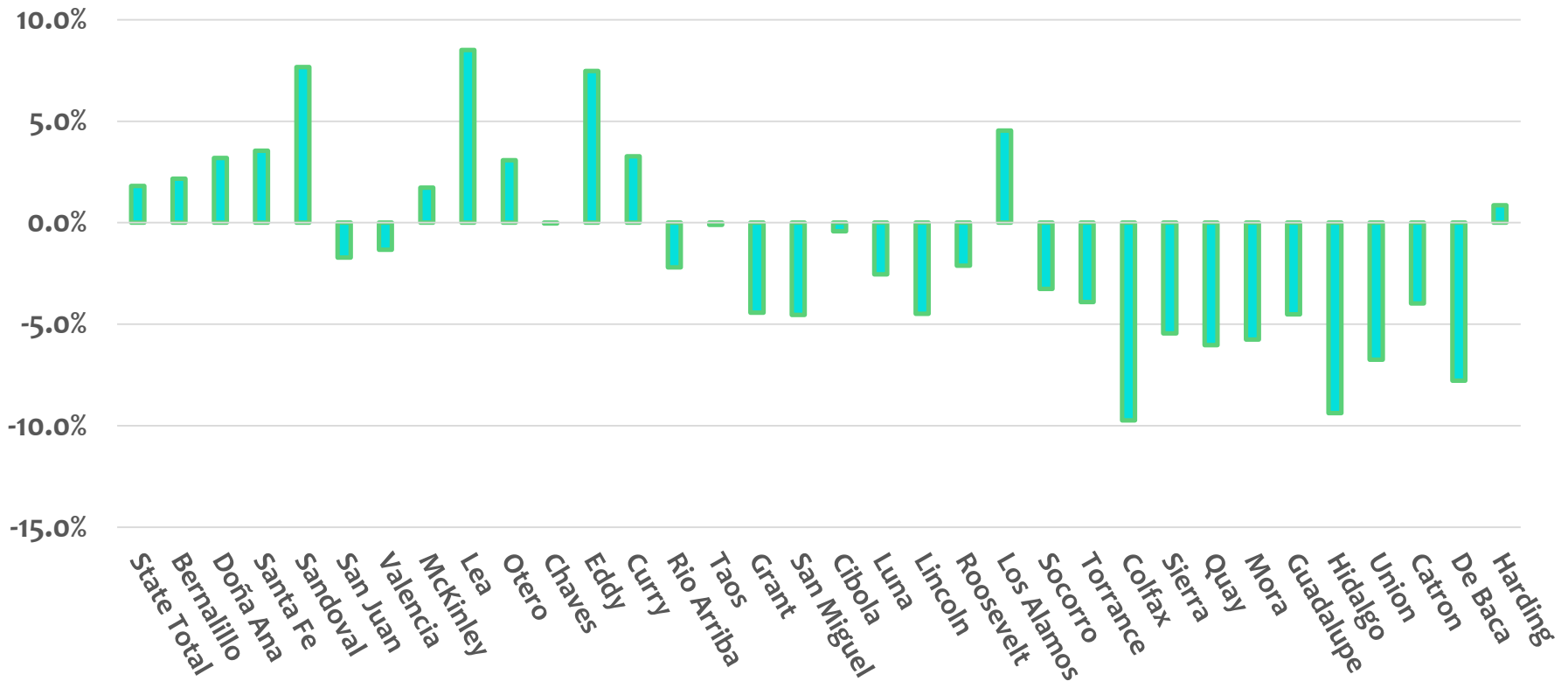
San Juan County Estimates Vintage 2016



San Juan County Estimates Vintage 2017



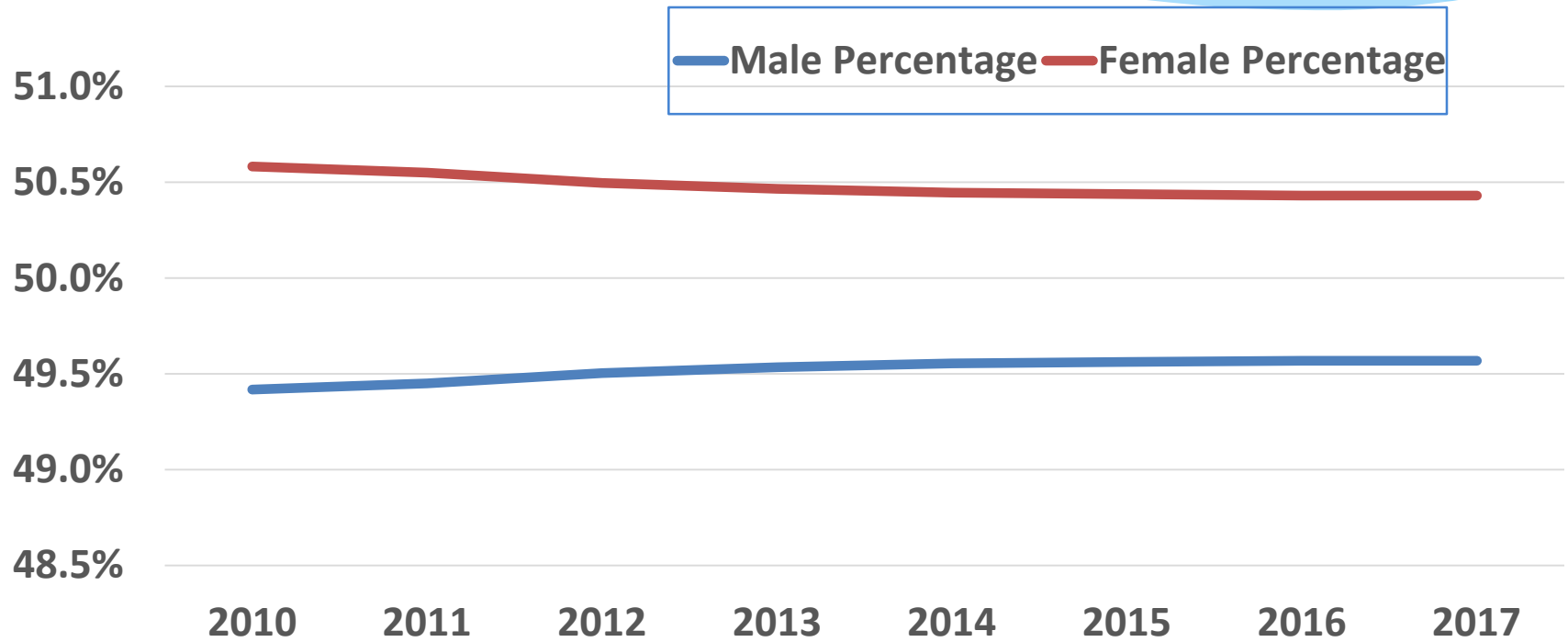
Population Change by County 2010-2017



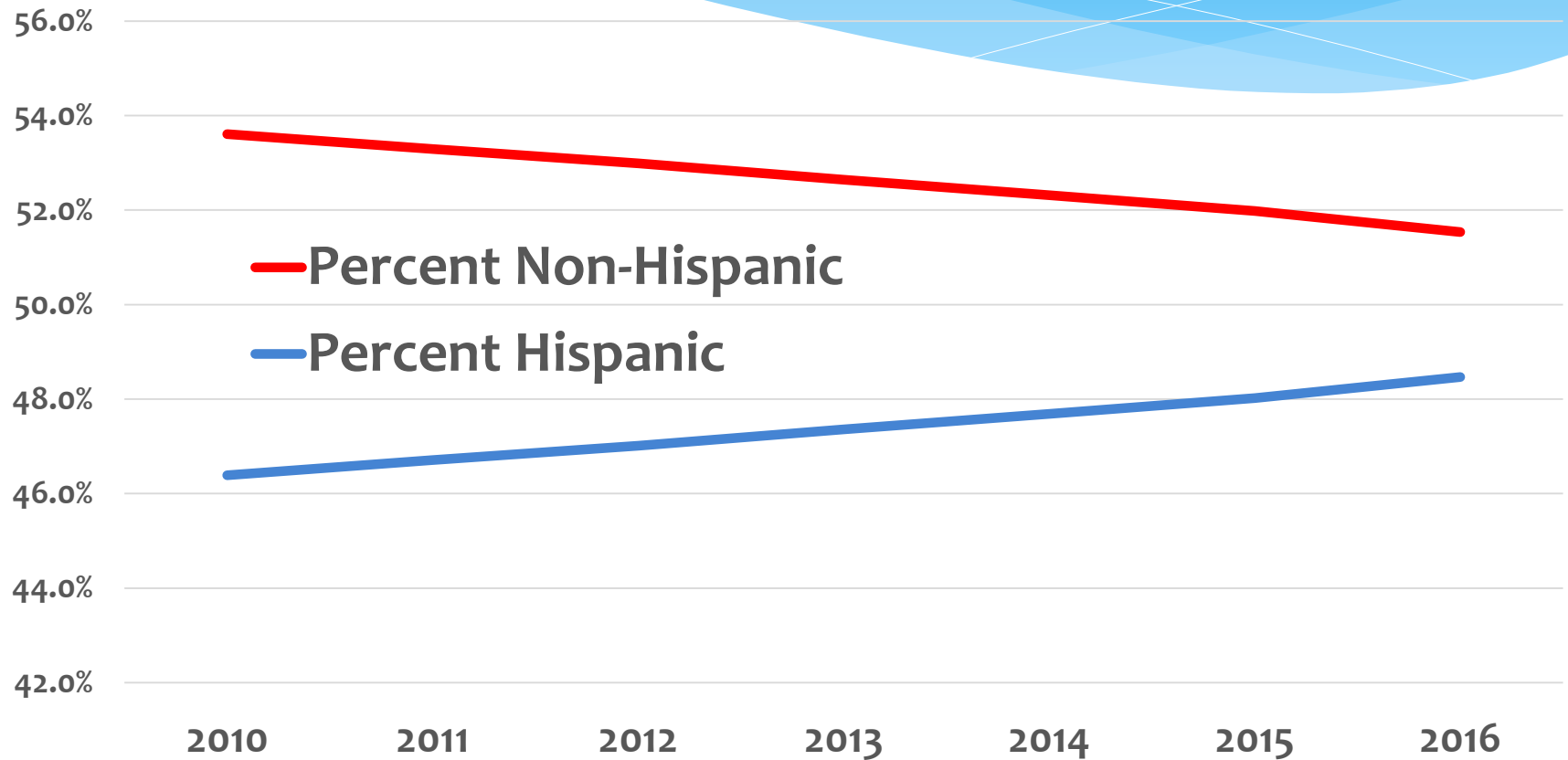
Note: Counties are listed from largest to smallest.

Source: UNM Geospatial and Population Studies (gps.unm.edu)

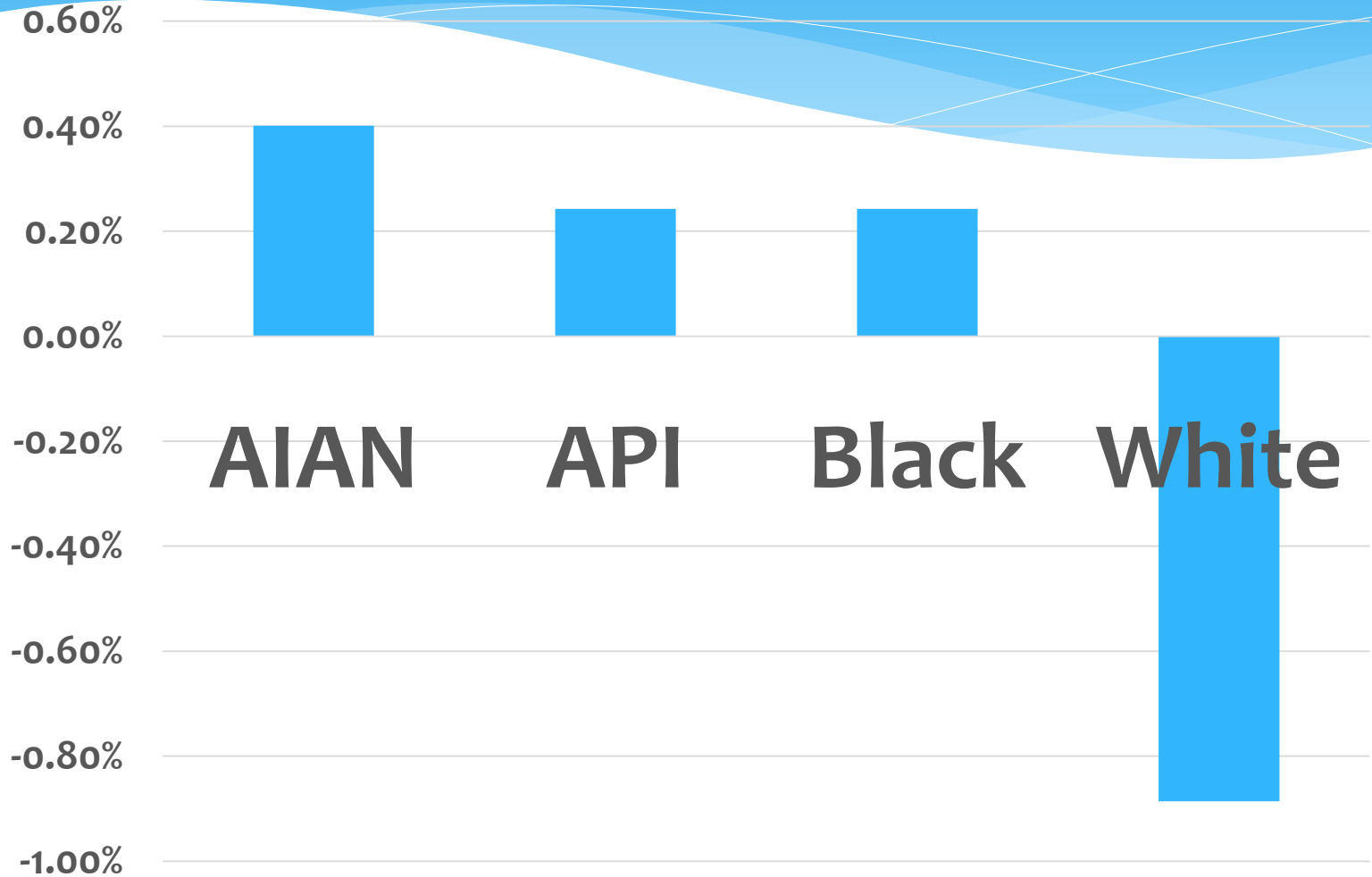
Male/Female Population



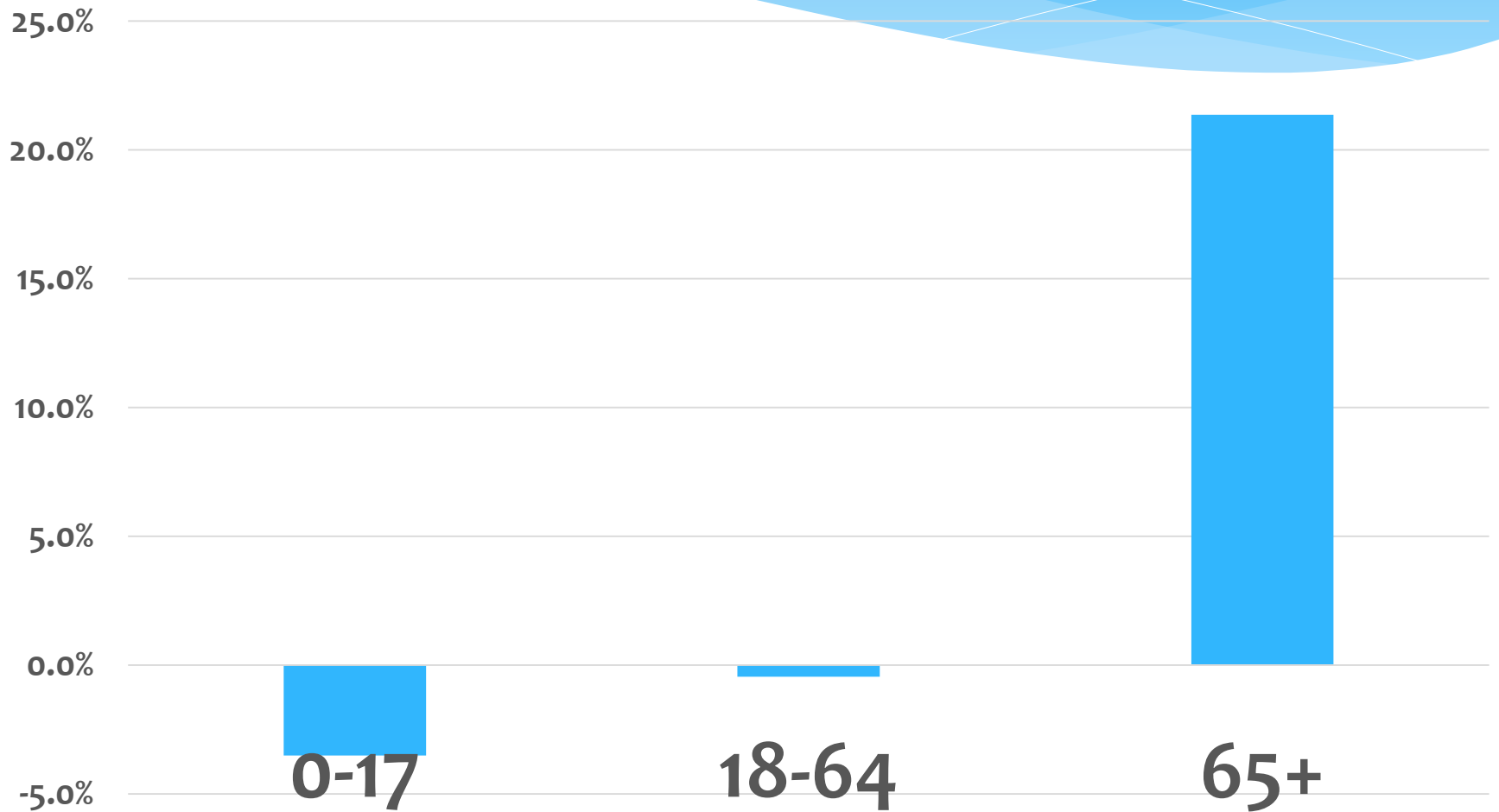
Hispanic/Non-Hispanic Population



Six Year Growth By Race



Six Year Growth By Age



Census 2020

- *What's at stake?
- *Concerns
- *What can be done?

Census 2020

At Stake:

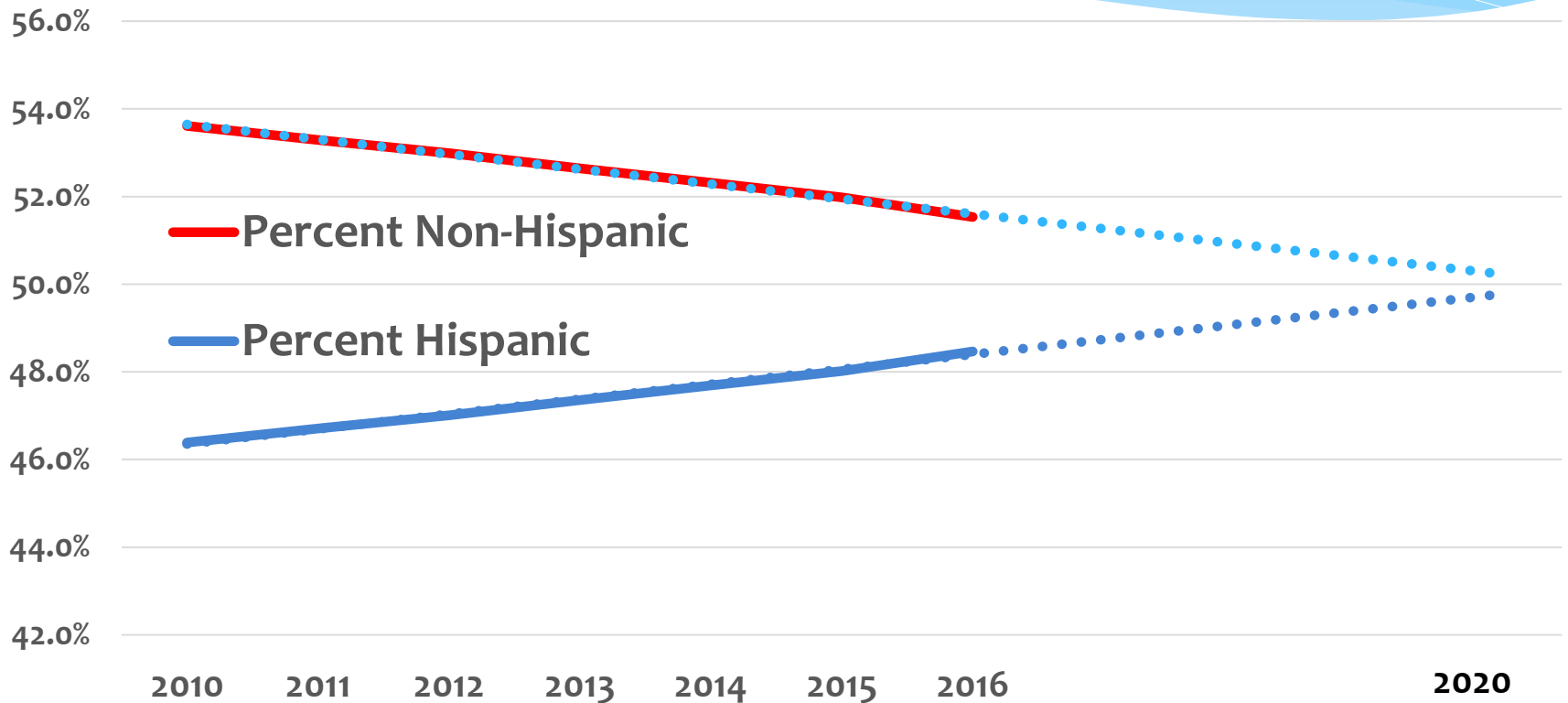
- * Congressional Apportionment
- * Redistricting
- * Economic Development
- * **Data Quality**
- * **Hundreds of Billions of Dollars**

Census 2020

Data Quality:

- * Census counts are the foundation for 10 years of demographic data
- * Accurate census counts are critical for evaluating and improving estimates

Hispanic/Non-Hispanic Population



Cen\$u\$ 2020

- * **Used to allocate \$600 Billion in annual federal funds**
- * **Over \$6 Billion annually for New Mexico**
 - * Medicaid, Education, Transportation, Housing, Block Grants, etc.
- * **Almost \$3,000 per New Mexico resident**
- * **Estimated Cost of 1% undercount:**
 - 20,000 people X
 - \$3,000 X
 - 10 years
 - =\$600,000,000**

THE GEORGE WASHINGTON UNIVERSITY

WASHINGTON, DC

Counting for Dollars 2020

16 Large Federal Assistance Programs that Distribute Funds on Basis of Decennial Census-derived Statistics (Fiscal Year 2015)

New Mexico

Total Program Obligations: \$6,197,394,617

Per Capita: \$2,972 (see note on proper use)

CFDA #	Program Name	Dept.	Type	Recipients	Obligations
93.778	Medical Assistance Program (Medicaid)	HHS	Grants	States	\$4,173,017,895
10.551	Supplemental Nutrition Assistance Program (SNAP)	USDA	Direct Pay	Households	\$685,206,629
20.205	Highway Planning and Construction	DOT	Grants	States	\$360,908,073
93.774	Medicare Part B (Supplemental Medical Insurance) – Physicians Fee Schedule Services	HHS	Direct Pay	Providers	\$252,631,865
84.010	Title I Grants to Local Education Agencies	ED	Grants	LEAs	\$115,281,583
10.555	National School Lunch Pr				
84.027	Special Education Grants				
93.600	Head Start/Early Head St				
14.871	Section 8 Housing Choice				
93.767	State Children's Health In Program (S-CHIP)				
93.527/ 93.224	Health Center Programs (Migrant, Homeless, Publi				
10.557	Supplemental Nutrition P Women, Infants, and Chil				

Uses of Census Bureau Data in Federal Funds Distribution

A New Design for the 21st Century

Issued September 2017

Version 1.0

Prepared by Marisa Hotchkiss, Jessica Phelan



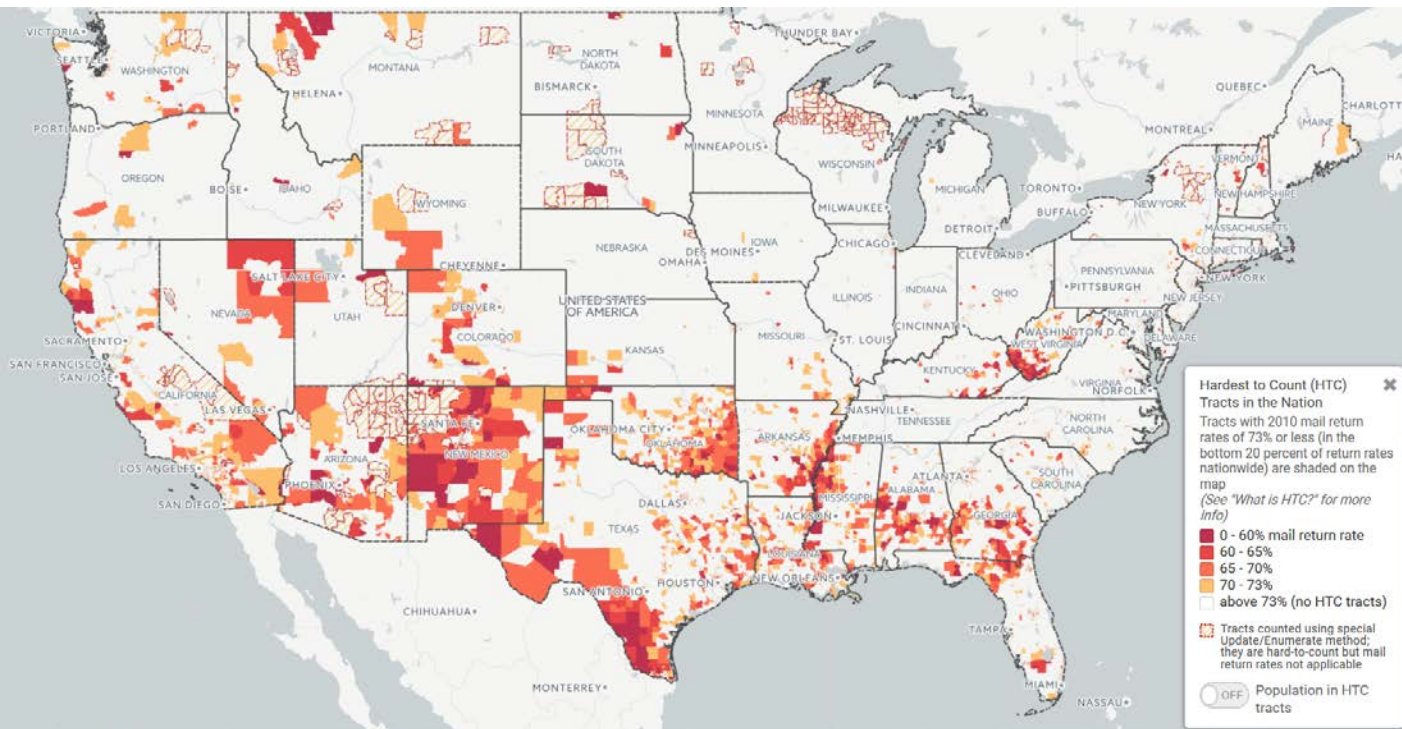
Census 2020 Concerns

- * **Citizenship Question**
- * **Budget**
- * **Leadership**
- * **IT Infrastructure**
- * **Insufficient Testing**
- * **Data Confidentiality (Real and Perceived)**
- * **New Mexico is Hard to Count!**



Hardest to Count Communities

- * New Mexico's 2000 Undercount = 1.94%
- * New Mexico 2010 – 2nd Lowest Response Rate in US



Most at Risk:

- * Native Americans
- * Hispanics
- * African Americans
- * Children 0-4
- * Impoverished
- * Remote, Rural Areas
- * Colonias

Minimizing New Mexico's Undercount

No 1. Improve the Census Bureau's Address List

- * UNM GPS is Governor Martinez's appointed lead
- * Funding provided by the state and private foundations

No 2. Motivate Response/Complete Count Committees

- * State and Local Complete Count Committee
 - * Elected Officials, State Agencies, Business Community, Faith Leaders, Higher Ed, K-12, Non-profits, Media
- * Timeline for Complete Count Committees
 - * Early 2019 – Convene
 - * Mid-Late 2019 – Build Team/Strategize/Secure Funding
 - * Early 2020 – Outreach/Marketing

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Questions or Comments???

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