

# Administrative Records Coverage of Persons in the 2010 Census

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# Focus of this Presentation

- Select person results from the 2010 Census Match Study
- Person administrative records (AR) matched to the 2010 Census compared to hard-to-count indicators

# Data

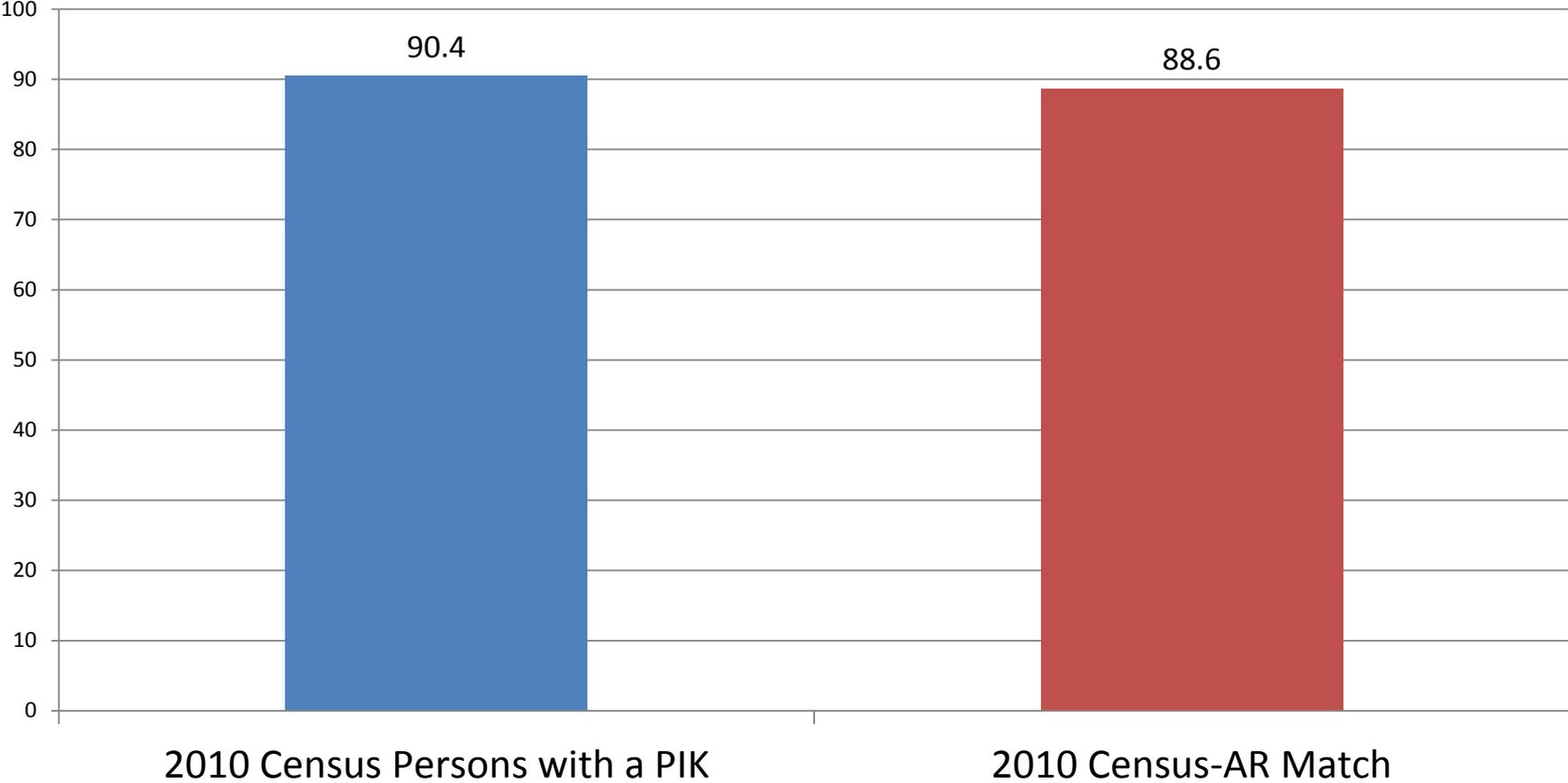
- Medicare Enrollment Database
- Three files from Housing and Urban Development (HUD)
- Indian Health Service Patient Registration File
- Internal Revenue Service (IRS) Individual Income Returns 1040 and IRS Information Returns 1099/W2s
- Selective Service System Registration File
- Supplemental Security Income Record
- Temporary Assistance for Needy Families
- Commercial data (5 vendors, 9 datasets)
- 2010 Census Data

# Record Linkage

- Assign unique person identifiers called Protected Identification Keys (PIKs) and address identifiers to AR as well as census data
  - Person identifiers are assigned using information such as SSN, name, date of birth, address
- Unique identifiers facilitate unduplication and linkage of records

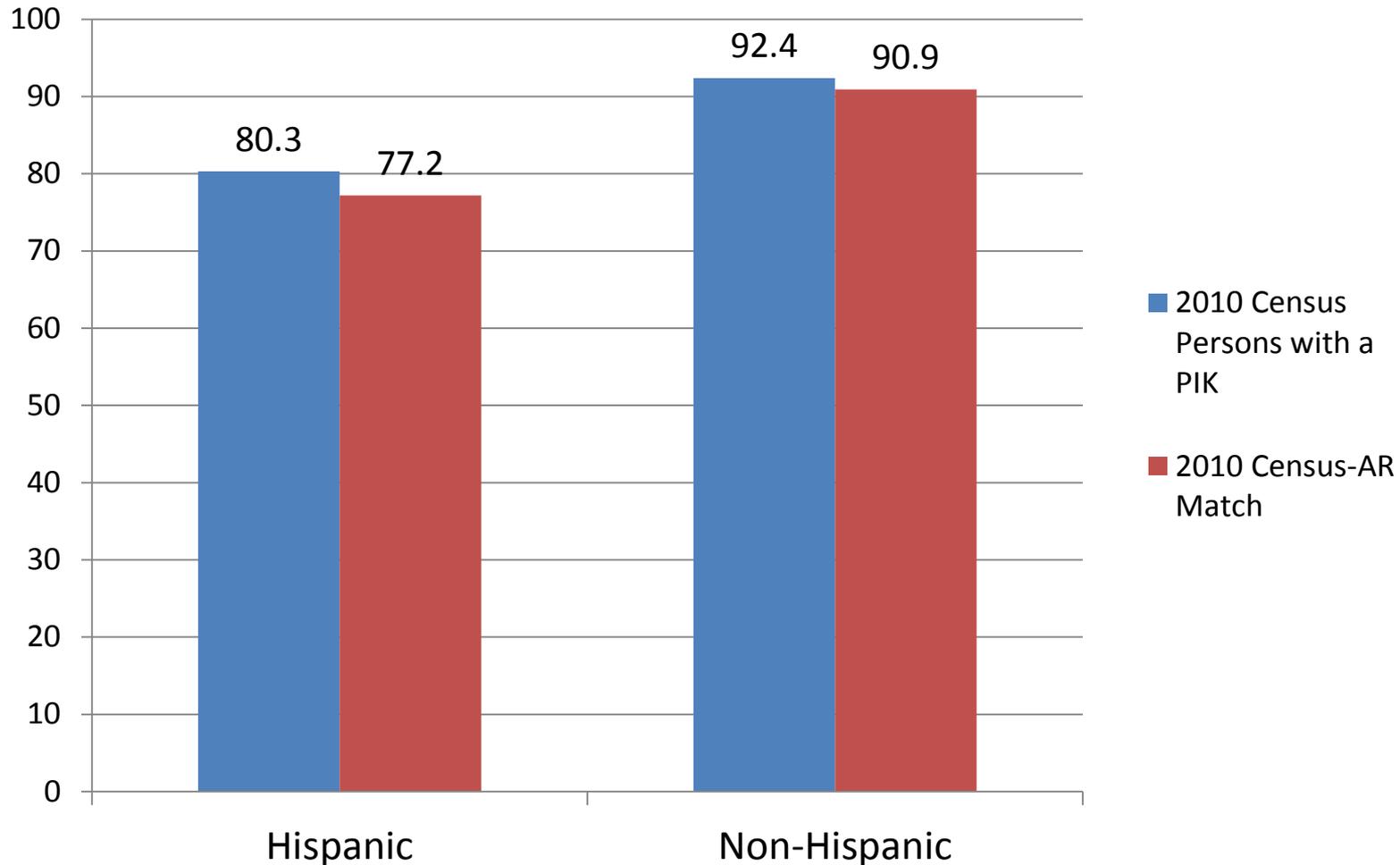
# Select Person Results from the 2010 Census Match Study

# Percentage of 2010 Census Persons with PIKs and 2010 Census-AR Person Match Ratios



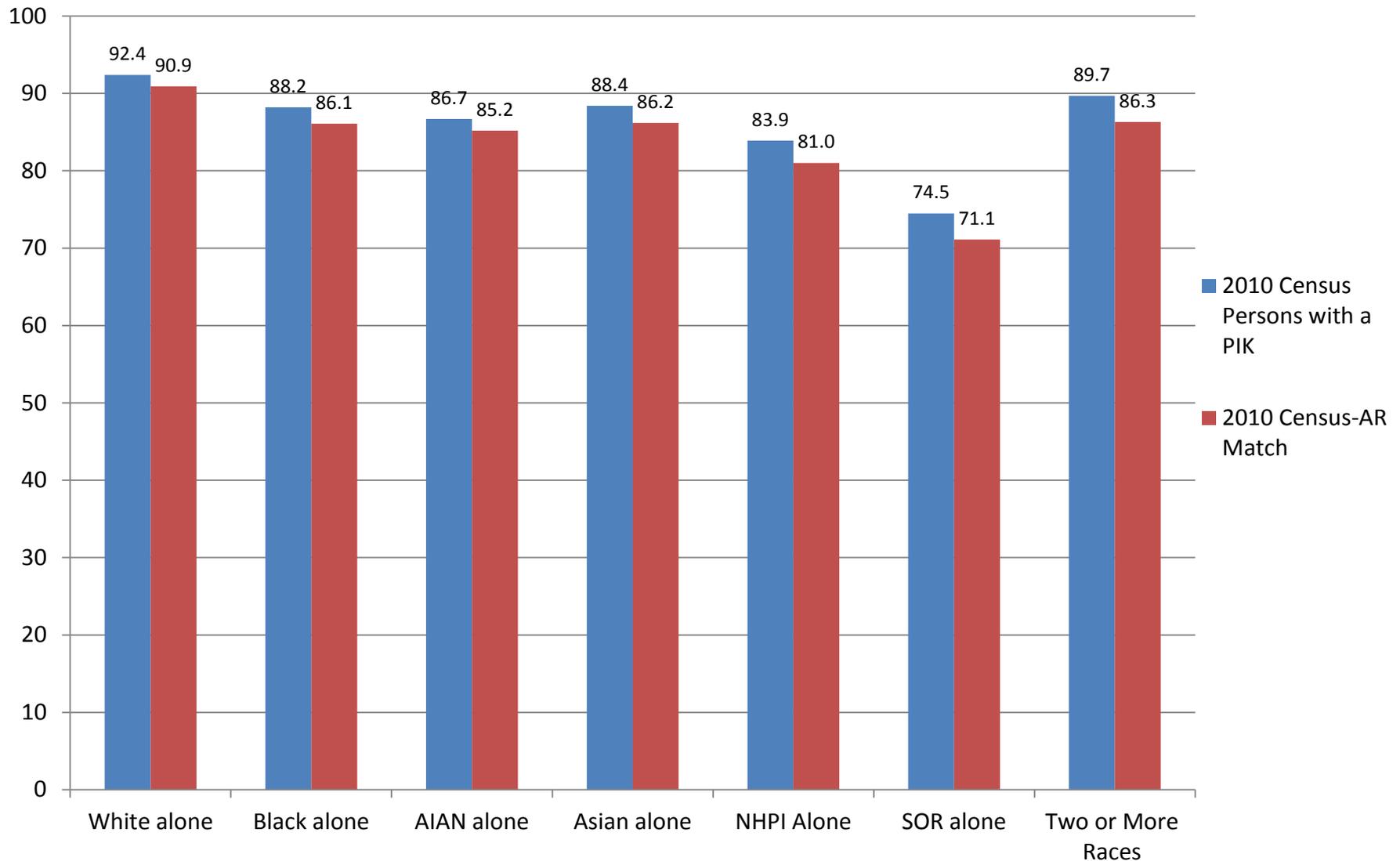
Sources: 2010 Census and 2010 Census Match Study Administrative Records

# Percentage of 2010 Census Persons with PIKs and 2010 Census-AR Match Ratios: Hispanic Origin



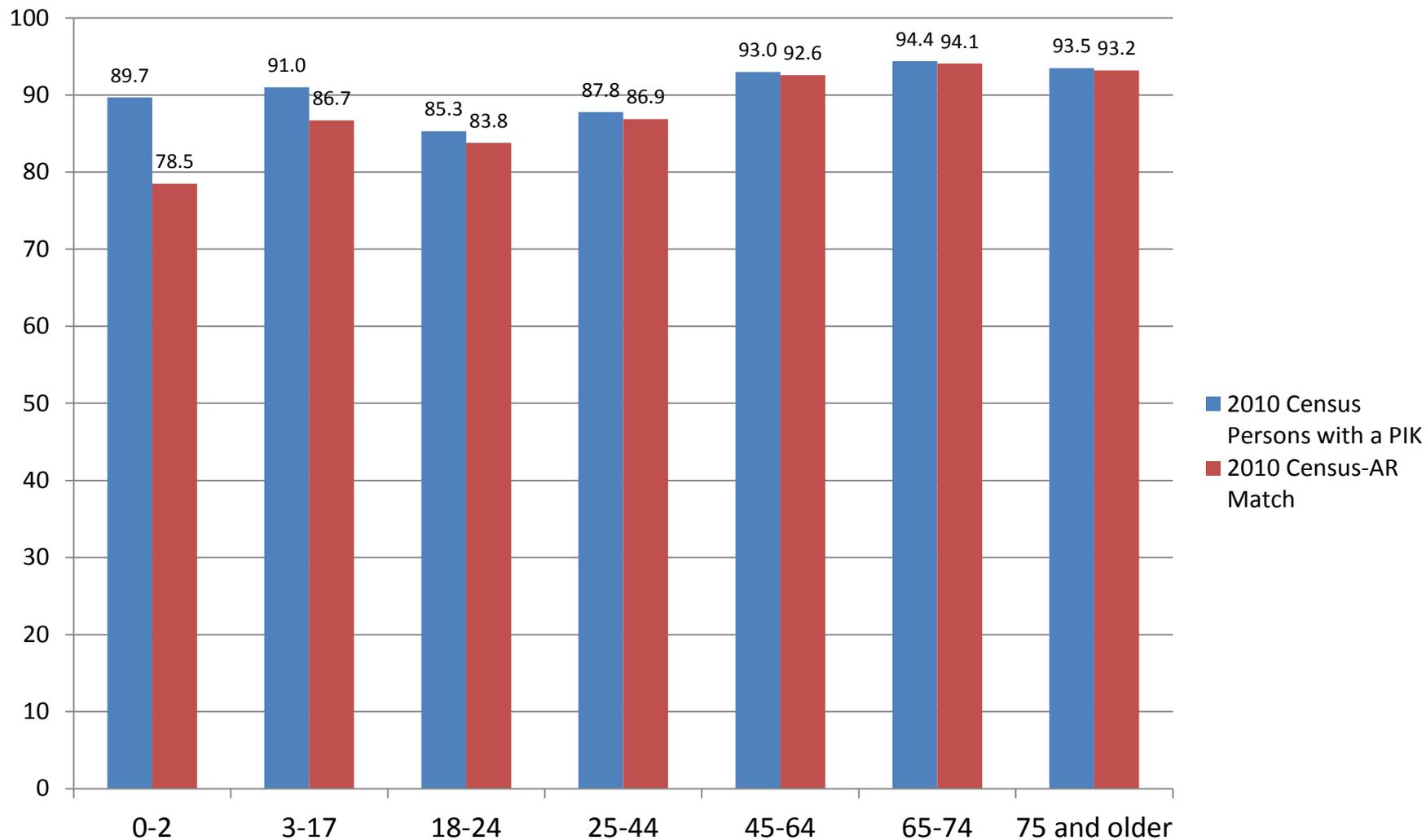
Sources: 2010 Census and 2010 Census Match Study Administrative Records

# Percentage of 2010 Census Persons with PIKs and 2010 Census-AR Match Ratios: Race



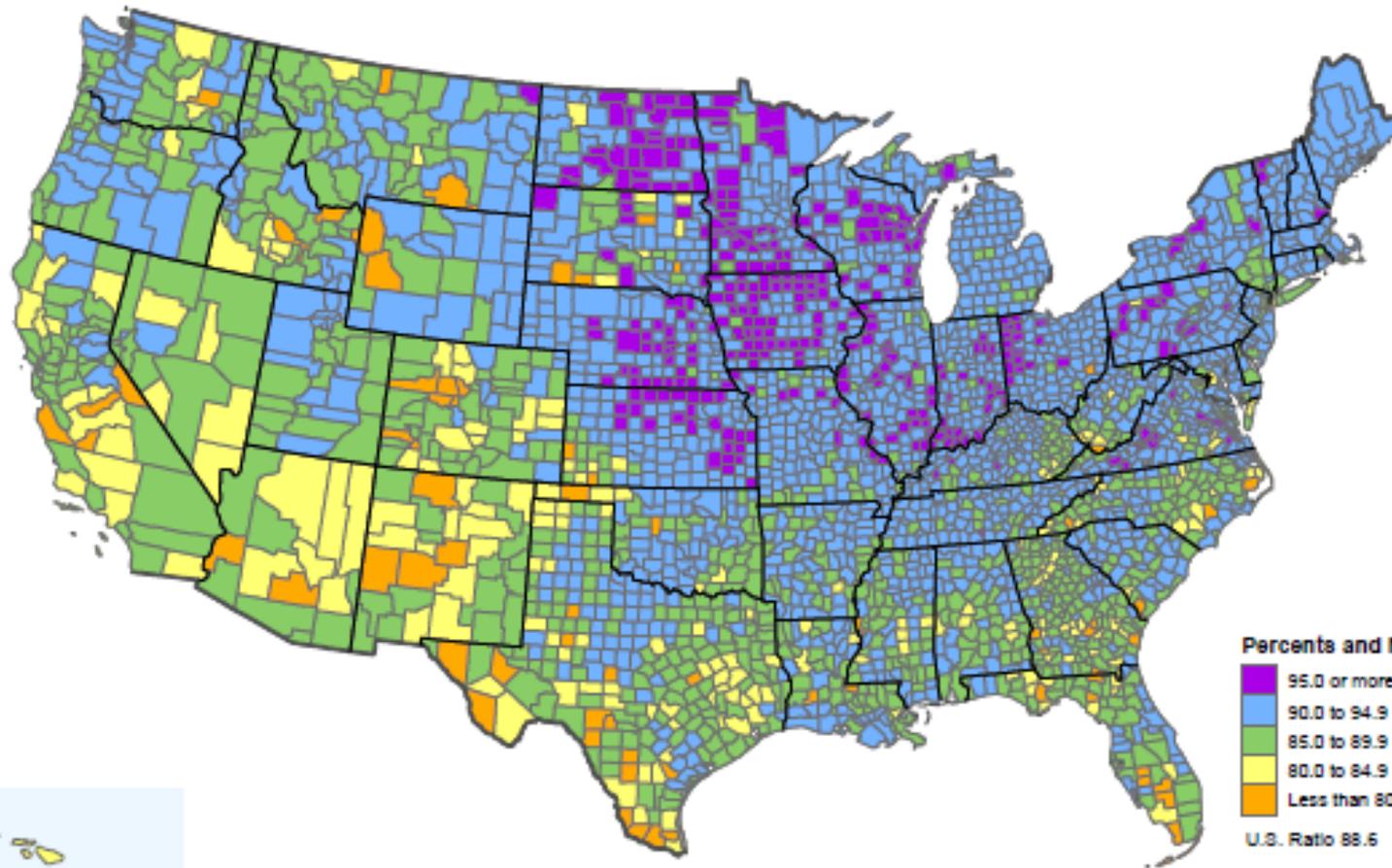
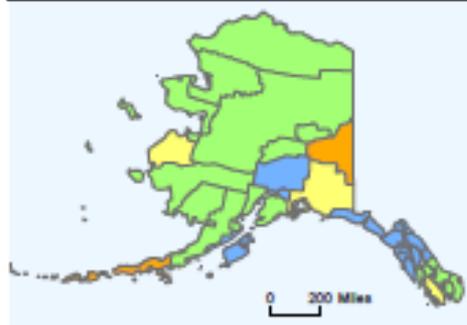
Sources: 2010 Census and 2010 Census Match Study Administrative Records

# Percentage of 2010 Census Persons with PIKs and 2010 Census-AR Match Ratios: Age



Sources: 2010 Census and 2010 Census Match Study Administrative Records

# Match Ratio of 2010 Census and Administrative Records Persons by County



## Percents and Number of Counties

95.0 or more	N = 208
90.0 to 94.9	N = 1,611
85.0 to 89.9	N = 988
80.0 to 84.9	N = 249
Less than 80.0	N = 87

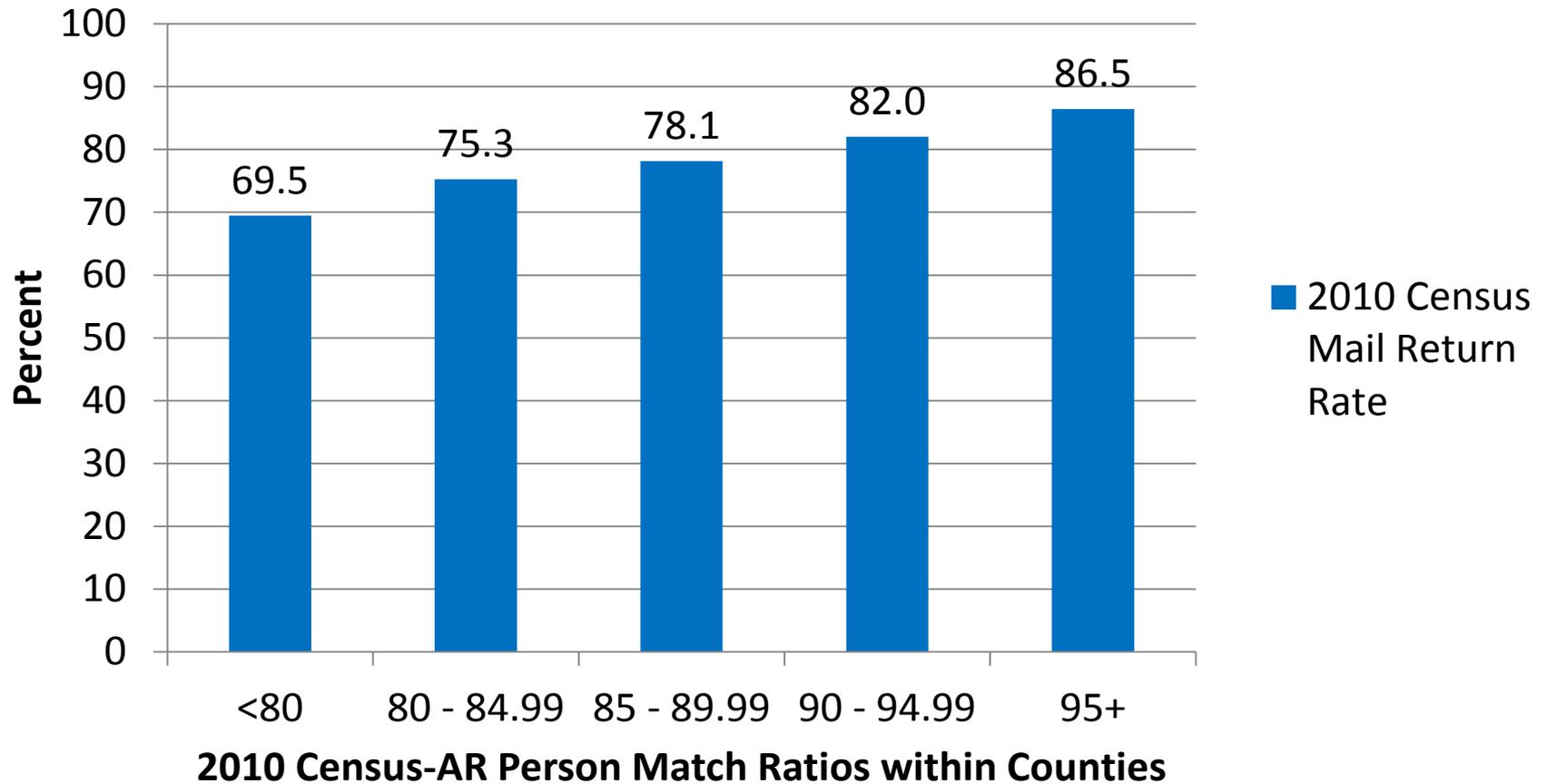
U.S. Ratio 88.6



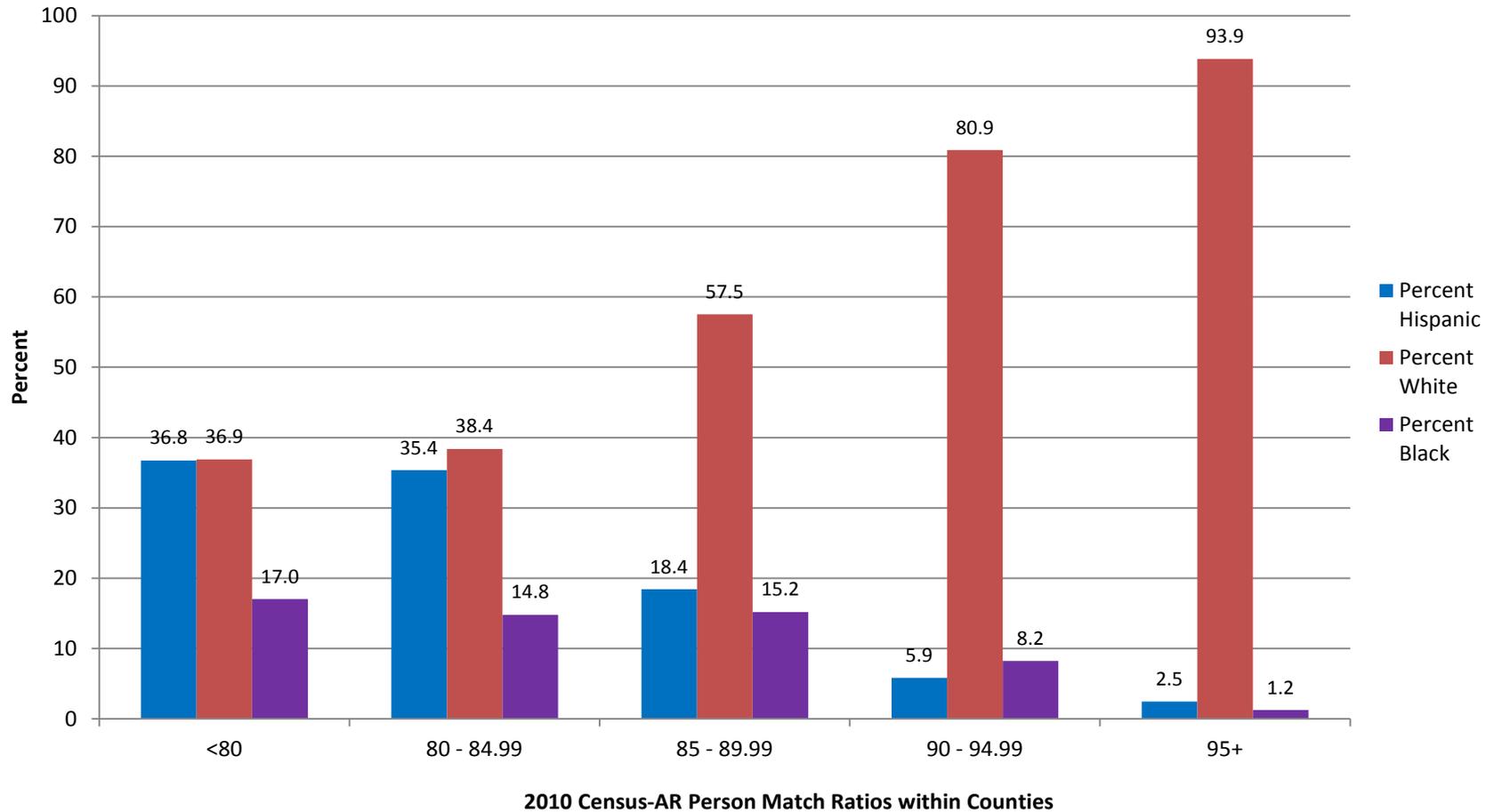
Source: 2010 Census and 2010 Census Match Study Administrative Records Data

# Person AR Matched to the 2010 Census Compared to Hard-to-Count Indicators

# County 2010 Census-AR Person Match Ratios by Mail Return Rates

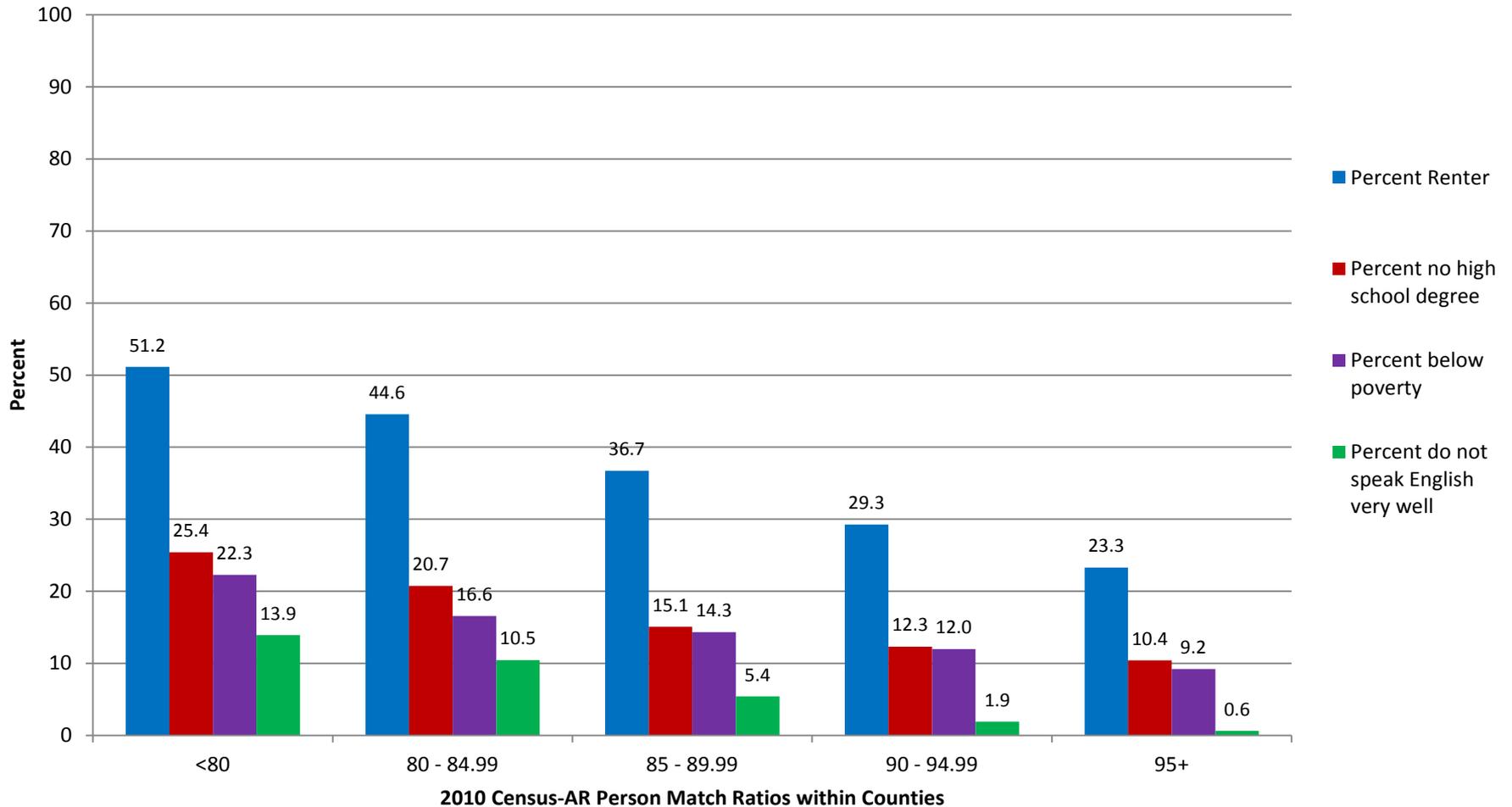


# County 2010 Census-AR Person Match Ratios by Percentage Race and Ethnicity Group



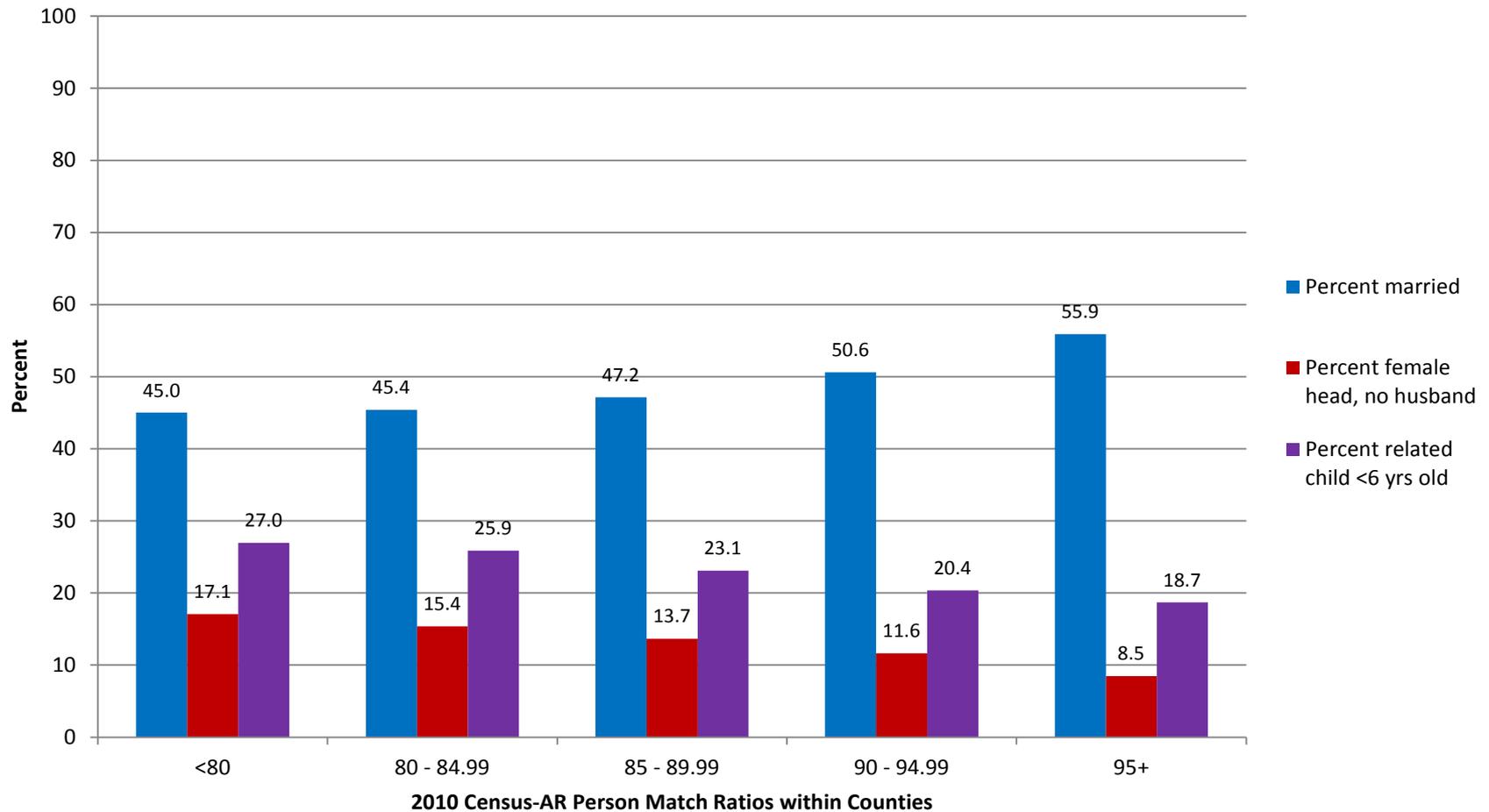
Sources: 2010 Census and 2010 Census Match Study Administrative Records

# County 2010 Census-AR Person Match Ratios by Socioeconomic Status



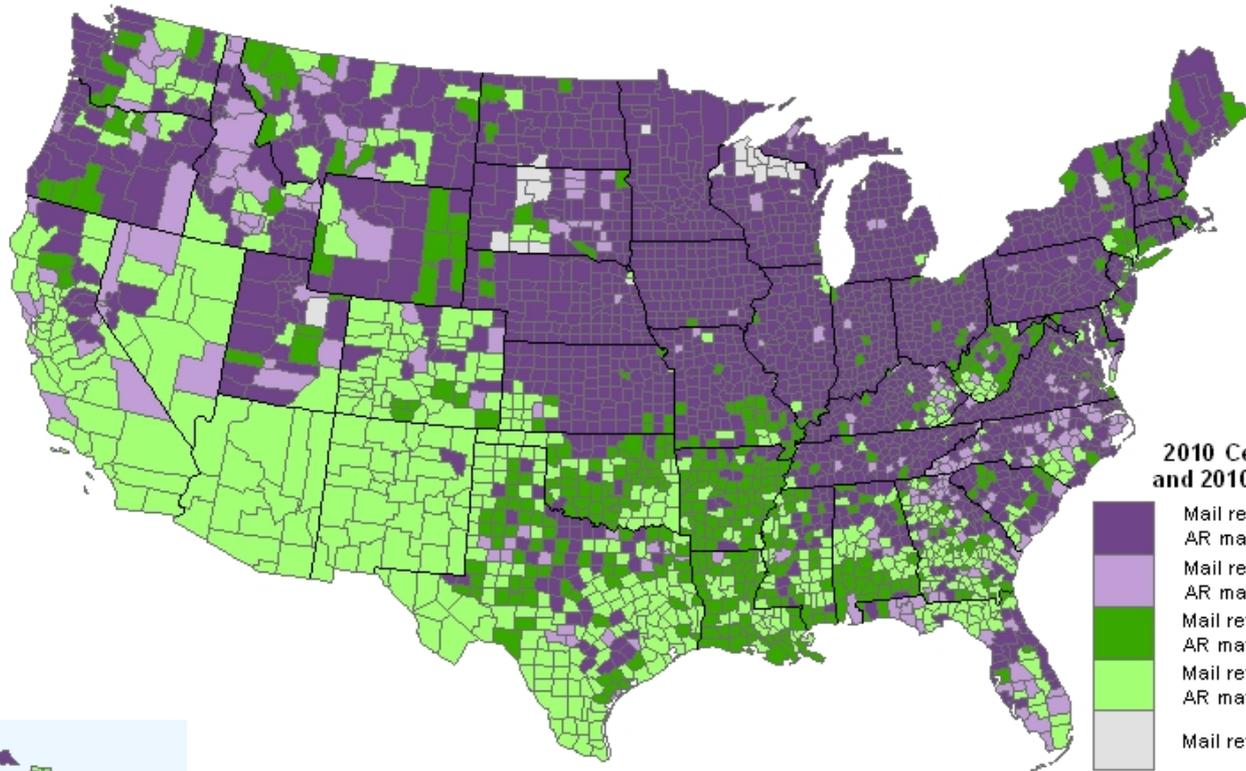
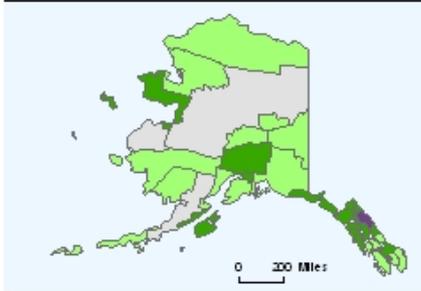
Sources: 2010 Census, 2010 Census Match Study Administrative Records, and 2006-2010 American Community Survey

# County 2010 Census-AR Person Match Ratios by Family Type



Sources: 2010 Census and 2010 Census Match Study Administrative Records

# 2010 Census Mail Return Rates and 2010 Census-AR Person Match Ratios by County



**2010 Census Mail Return Rate  
and 2010 Census-AR Match Ratio**

	Mail return rate above 79.3 AR match ratio above 88.2	<i>n</i> = 1,792
	Mail return rate above 79.3 AR match ratio below 88.2	<i>n</i> = 227
	Mail return rate below 79.3 AR match ratio above 88.2	<i>n</i> = 472
	Mail return rate below 79.3 AR match ratio below 88.2	<i>n</i> = 623
	Mail return rate N/A	<i>n</i> = 29



0 100 Miles Source: 2010 Census and 2010 Census Match Study Administrative Records

Mail return rate national average: 79.3  
National AR match ratio: 88.2

# Garza County, Texas

- Census 2010 population: 6,461
- 2010 Census-AR match rate: 59.4

Characteristics	Garza County , Texas	Median of all U.S. counties
Mail return rate	84.2 %	81.4 %
Percent Hispanic	47.1 %	3.3 %
Percent other language	46.9 %	4.8 %
Percent institutionalized group quarter	32.4 %	1.1 %
Percent with no high school diploma	37.1 %	15.4 %

Sources: 2010 Census, 2010 Census Match Study Administrative Records, and 2006-2010 American Community Survey

# Stewart County, Georgia

- Census 2010 population: 6,058
- 2010 Census-AR match rate: 68.4

Characteristics	Stewart County, Georgia	Median of all U.S. counties
Mail return rate	69.6 %	81.4 %
Percent Black	46.8 %	1.9 %
Percent unmarried	64.6 %	47.7 %
Percent institutionalized group quarter	27.7 %	1.1 %
Percent with no high school diploma	29.6 %	15.4%

Sources: 2010 Census, 2010 Census Match Study Administrative Records, and 2006-2010 American Community Survey

# Glades County, Florida

- Census 2010 population: 12,884
- 2010 Census-AR match rate: 70.4

Characteristics	Glades County, Florida	Median of all U.S. counties
Mail return rate	74.8 %	81.4 %
Percent vacant	35.0%	13.3%
Percent other language	22.6%	4.8%
Percent below poverty	19.6 %	14.7%
Percent with no high school diploma	28.7%	15.4%

Sources: 2010 Census, 2010 Census Match Study Administrative Records, and 2006-2010 American Community Survey

# Conclusion/Next Steps

- The person match between AR and the 2010 Census varies by many hard to count indicators
- Ongoing Efforts and Next Steps:
  - More research on the quality and coverage of AR and hard to count indicators
  - Pursuing additional data sources
  - 2020 Census research involving decennial operations where mail return rates and AR are low
  - Continued efforts to improve record linkage techniques

# Questions

- Do you have suggestions for other data sources we should consider pursuing?
- What do you think will be the major concerns from different communities regarding the use of administrative data in census operations?
- Given the findings we have discussed, what are your suggestions for next steps for future research?