

Noncitizen Coverage and its Effects on U.S. Population Statistics

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Motivation

- Noncitizen coverage affects
 - Total population
 - Geographic distribution
 - Demographic distribution
 - Socioeconomic distribution
- Foreign-born population statistics mainly from survey-collected data
 - American Community Survey (ACS) foreign-born population estimates used in Demographic Analysis and Population Estimates Program (PEP) estimates
 - ACS uses PEP population controls
- Some noncitizens may appear in administrative data, but not surveys
 - Some immigrants live in nontraditional housing structures not found in Census Bureau's Master Address File (MAF), so not included in decennial census (Kissam, 2017)

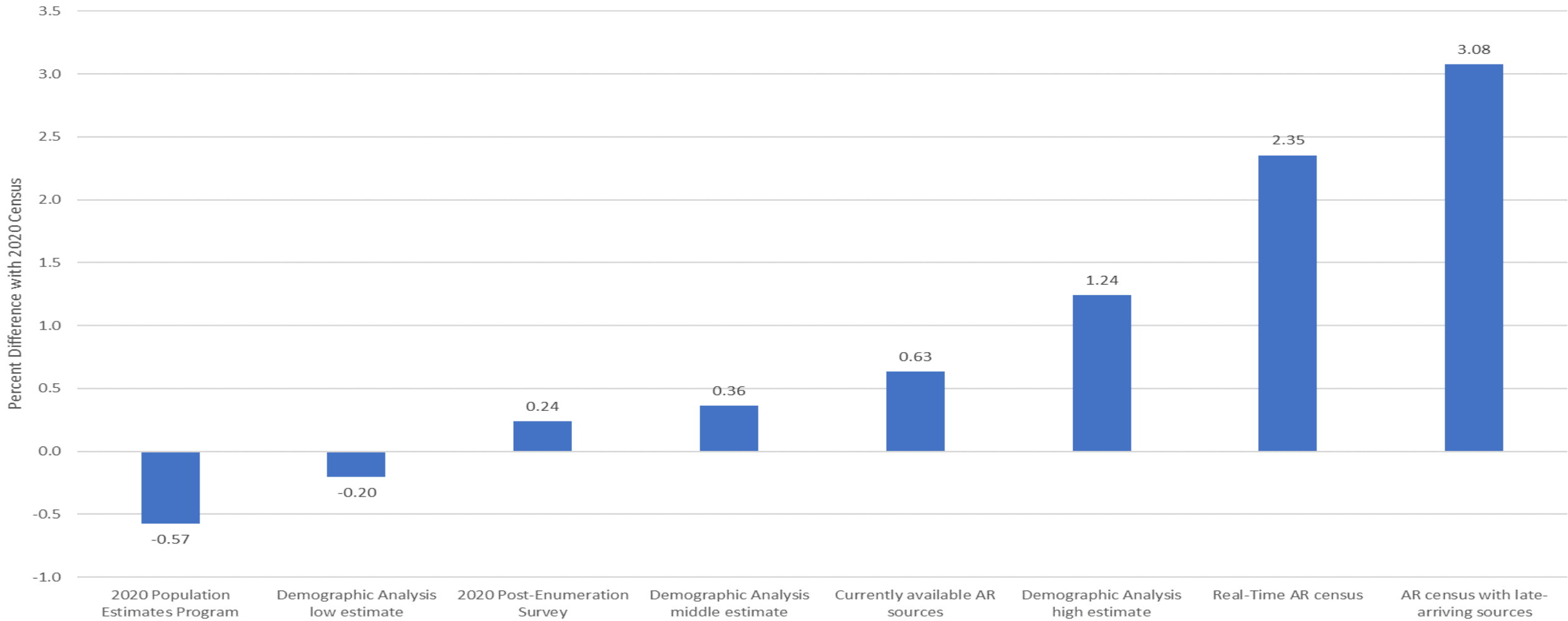
2020 AR Census Construction

- 31 Government and Third-Party Sources, linked and unduplicated
- Use model to predict each person's location on Census Day
- Persons with multiple addresses are assigned fractionally to each, using model probability weights normalized to sum to one
- Attach demographic characteristics from 2020 Census, past Census Bureau surveys and censuses, and AR sources
- Missing values filled in via modeled predictions

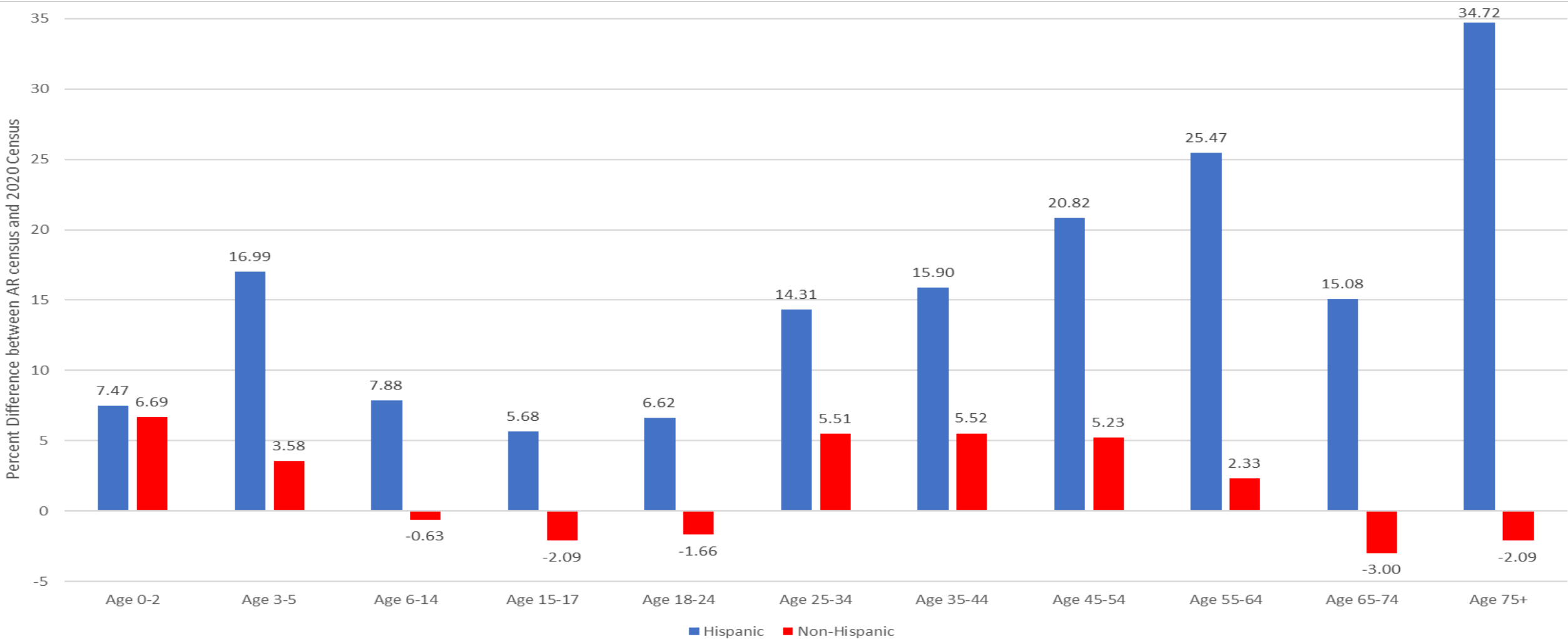
2020 AR Census Construction (continued)

- Records with source vintage in 2019 or 2020
- Include only records for which a unique person identifier can be assigned
 - Facilitates person unduplication
 - Needed to attach demographic characteristics
- Exclude people deceased or not yet born as of reference date
- Exclude non-U.S. residents (tourist and business visa-holders)

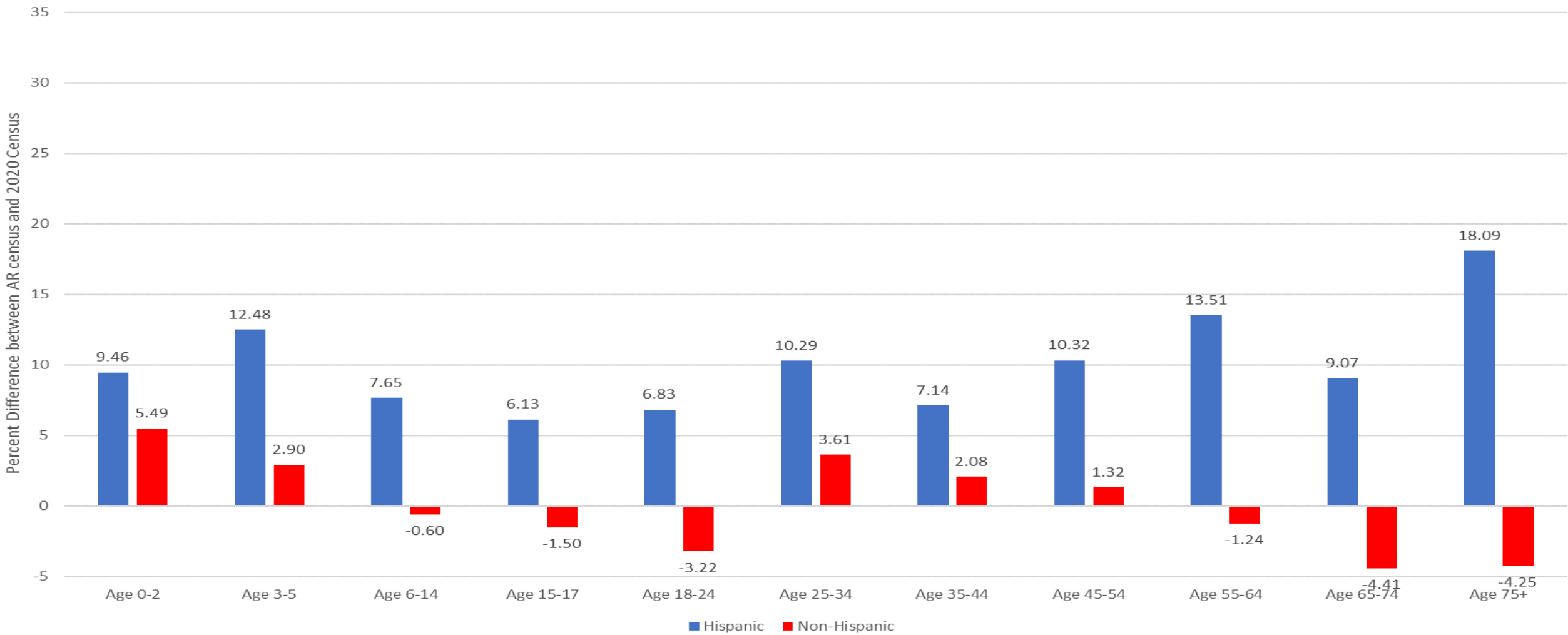
Percent Difference Between Alternative Estimates and 2020 Census for Total Population



Percent Difference Between AR Census and 2020 Census for Hispanic and Non-Hispanic Males



Percent Difference Between AR Census and 2020 Census for Hispanic and Non-Hispanic Females



AR Census and 2020 Demographic Analysis Comparison, Age 0-74

- Demographic Analysis native population is between 1.5 and 3.2 million higher than AR census
 - DA is no more than 1.7 million higher in the 25 to 64 age group
- AR census non-native population is between 9.0 and 12.4 million higher than Demographic Analysis
 - AR census is as least 7.2 million higher in the 25 to 64 age group
- AR census total population is between 6.6 and 9.9 million higher than Demographic Analysis
 - AR census is at least 5.7 million higher in the 25 to 64 age group

AR Census Compared to Other Estimates by Immigration Status

	AR census	2019, 2021 ACS	Office of Immigration Statistics	Pew Research Center
Citizen	308,700,000	308,600,000		
Born citizen	287,300,000	285,000,000		
Naturalized citizen	19,980,000	23,610,000		20,700,000
Citizen of unknown type	1,411,000			
Noncitizen	32,510,000	21,490,000	27,930,000	24,900,000
Lawful permanent resident, refugee, asylee, or other legal noncitizen	13,811,000		13,350,000	12,300,000
Nonimmigrant visa holder	7,009,000		3,190,000	2,200,000
Noncitizen with unknown legal status	11,690,000		11,390,000	10,500,000
Unknown citizenship and legal status	478,300			

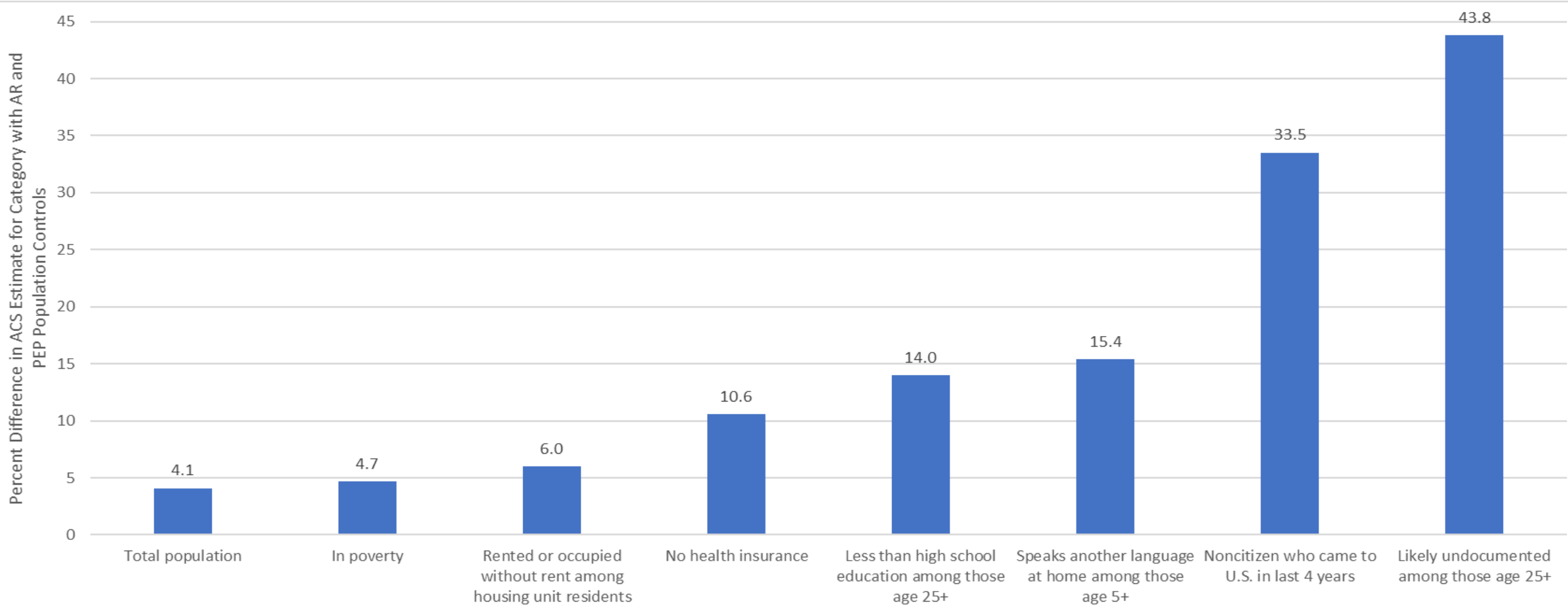
AR Census Linkage to 2020 Census by Immigration Status

	Linked to person in 2020 Census	Matched to 2020 Census person without PIK/EPIK at address by age-sex- Hispanic origin	2020 Census person without PIK/EPIK at address, not matched by age- sex-Hispanic origin	No 2020 Census person without PIK/EPIK at address
Total	78.28	3.12	6.70	11.91
Born U.S. citizen	82.38	2.77	5.39	9.46
Naturalized U.S. citizen	80.28	3.18	6.68	9.90
Lawful permanent resident	67.15	3.61	11.02	18.27
Temporary visa holder	43.50	3.38	9.61	43.51
Noncitizen of unknown legal status	15.43	10.92	31.33	42.28

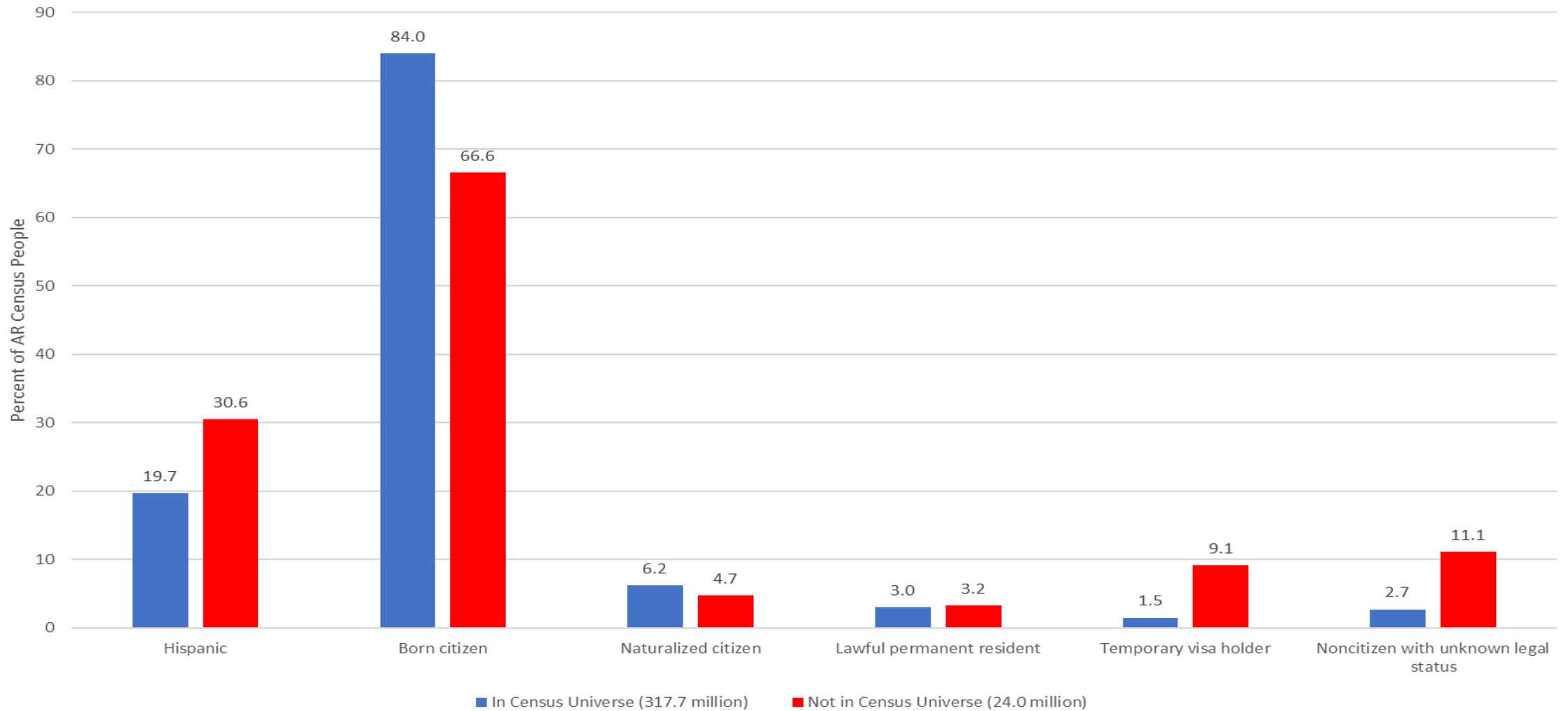
Linked and Unlinked AR Census Percent Distribution by Immigration Status using 2020 Census Records without PIK/EPIKs as Population Controls

	Linked AR census	Unlinked AR census	Unlinked AR census weighted by 2020 Census without PIK/EPIKs	Unlinked AR census – unlinked AR census weighted by 2020 Census without PIK/EPIKs	Number of unlinked AR census people not in 2020 Census without PIK/EPIK group
Total people	266,900,000	74,170,000	54,310,000	19,860,000	19,860,000
Born U.S. citizen	88.50	68.46	71.11	61.28	12,170,000
Naturalized U.S. citizen	6.01	5.32	5.05	6.06	1,204,000
Lawful permanent resident	2.63	4.64	4.32	5.52	1,096,000
Temporary visa holder	1.14	5.23	5.13	5.50	1,092,000
Noncitizen of unknown legal status	0.68	13.15	11.41	17.92	3,559,000

Percent Difference Between 2016-2020 American Community Survey Estimates for Historically Undercounted Populations with 2020 AR Census and 2016-2020 Population Estimates Program Population Controls



Differences in Demographic Distributions for AR Census People with Addresses in 2020 Census Universe and Others



Conclusions (1 of 2)

- Relative to survey-based estimates, AR suggest population has more:
 - males
 - Hispanics
 - middle-aged people
 - noncitizens
 - Californians
 - Texans
 - people along the U.S.-Mexico border
 - renters
 - people without health insurance
 - people with less than high school education
 - people speaking other languages at home
- Illustrates importance of interagency data sharing

Conclusions (2 of 2)

- Further work needed to refine the estimates
 - Study if there is duplication when person switches ITINs or from ITIN to SSN
 - Obtain more sources on noncitizens to improve locational accuracy, including whether they are U.S. residents
 - Develop model estimating probability of U.S. residence