

# Evaluating Coverage of the US Census Bureau's Integrated Database for International Migration (IDIM)

**UNECE Meeting**

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*This presentation is released to inform interested parties of ongoing research and to encourage discussion of work in progress.  
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# Overview

Background

Linking Administrative Record (AR) Data Sources, Censuses, and Surveys including the American Community Survey (ACS)

Integrated Database on International Migration (IDIM) Universes and Matching Rates between the ACS and the IDIM

Compare Distributions for the ACS-IDIM Matched and Unmatched Foreign-Born Respondents

Compare ACS Survey Responses to Linked IDIM Administrative Records

Next Steps

# Background

**Construct Foreign-born International Migration Flows from American Community Survey (ACS) Data**

- Increases Variance
- Lag Measurement

**Developed Integrated Database for International Migration (IDIM) to estimate IN-Flows**

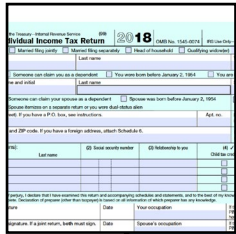
*Likely misses:*

- Irregular migrants
- Working Migrants Did Not File Taxes
- Non-working dependents
- International students

**Can We Use ACS to Adjust IDIM?**

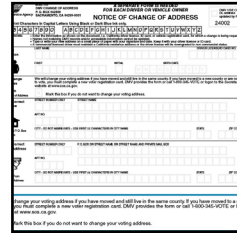
- Do the distributions of ACS foreign-born records linked to the IDIM differ from distributions of ACS records that cannot be linked to the IDIM?

# Administrative Record (AR) and Survey Data Sources



## IRS 1040 Tax Data

- SSN (Social Security Number)
- Name
- Address
  - Domestic\*
  - Foreign



## SSA Numident

- SSN
- Name
- Date of Birth\*
- Sex\*
- Year of Entry\*
- Citizenship status\*
  - Native Born
  - Naturalized Citizen
  - Non-citizen
- Place of Birth
- Death Flag



## ACS

- Name
- Date of Birth\*
- Sex\*
- Race and Hispanic Origin
- Year entered United States\*
- Citizenship Status\*
- Socio-economic Characteristics
- Place of Birth
- Address\*

# Linking AR, Census, and Survey Data Sources

## Protected Identification Key (PIK)

- Unique identifier across ARs, censuses, and surveys
- Assigned to all records with an SSN or Individual Tax Identification Numbers (ITIN) via lookup table

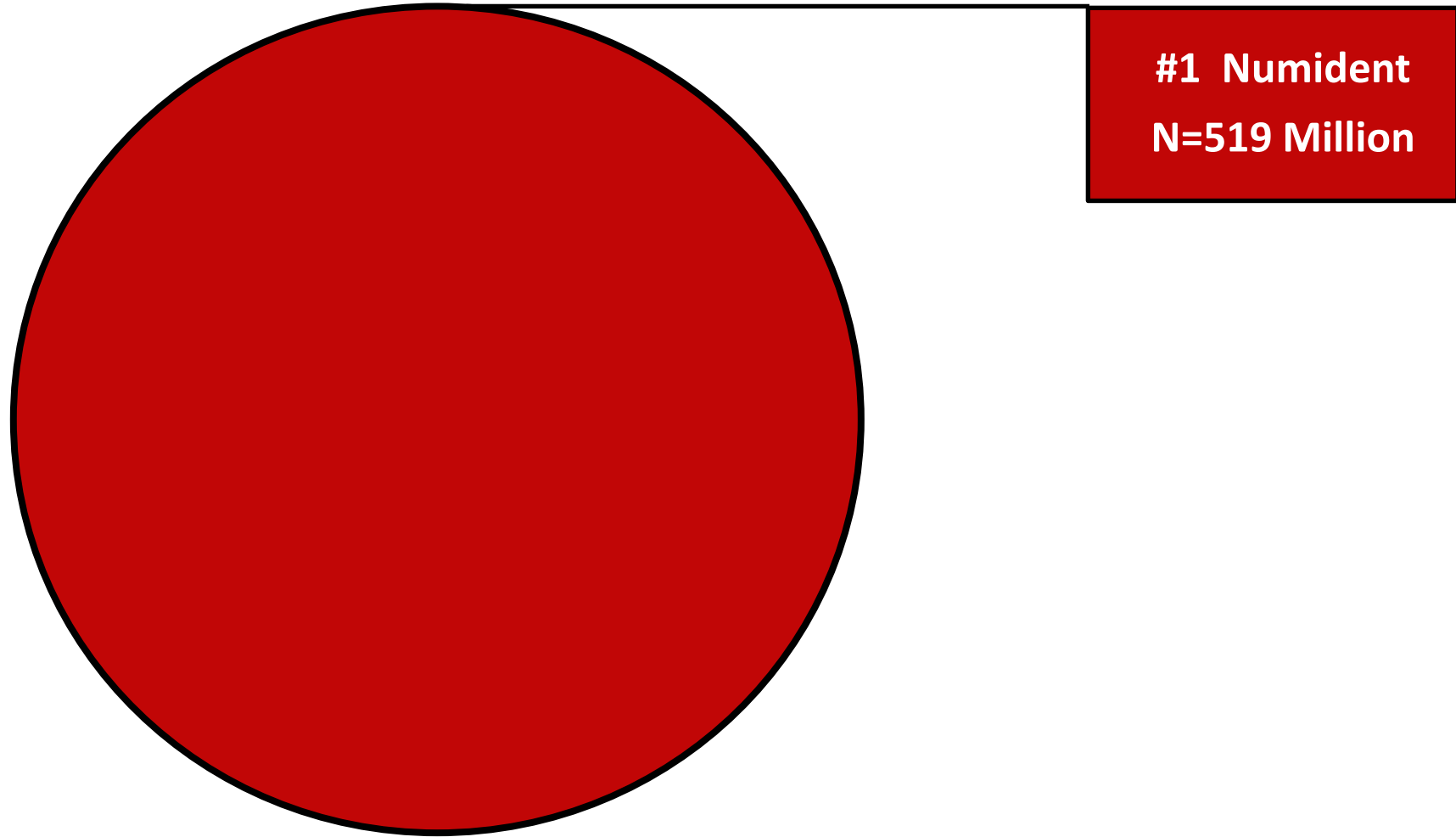
## Person Validation System (PVS)

- Exact SSN match to Numident
- Geography
- Name
- Date of birth

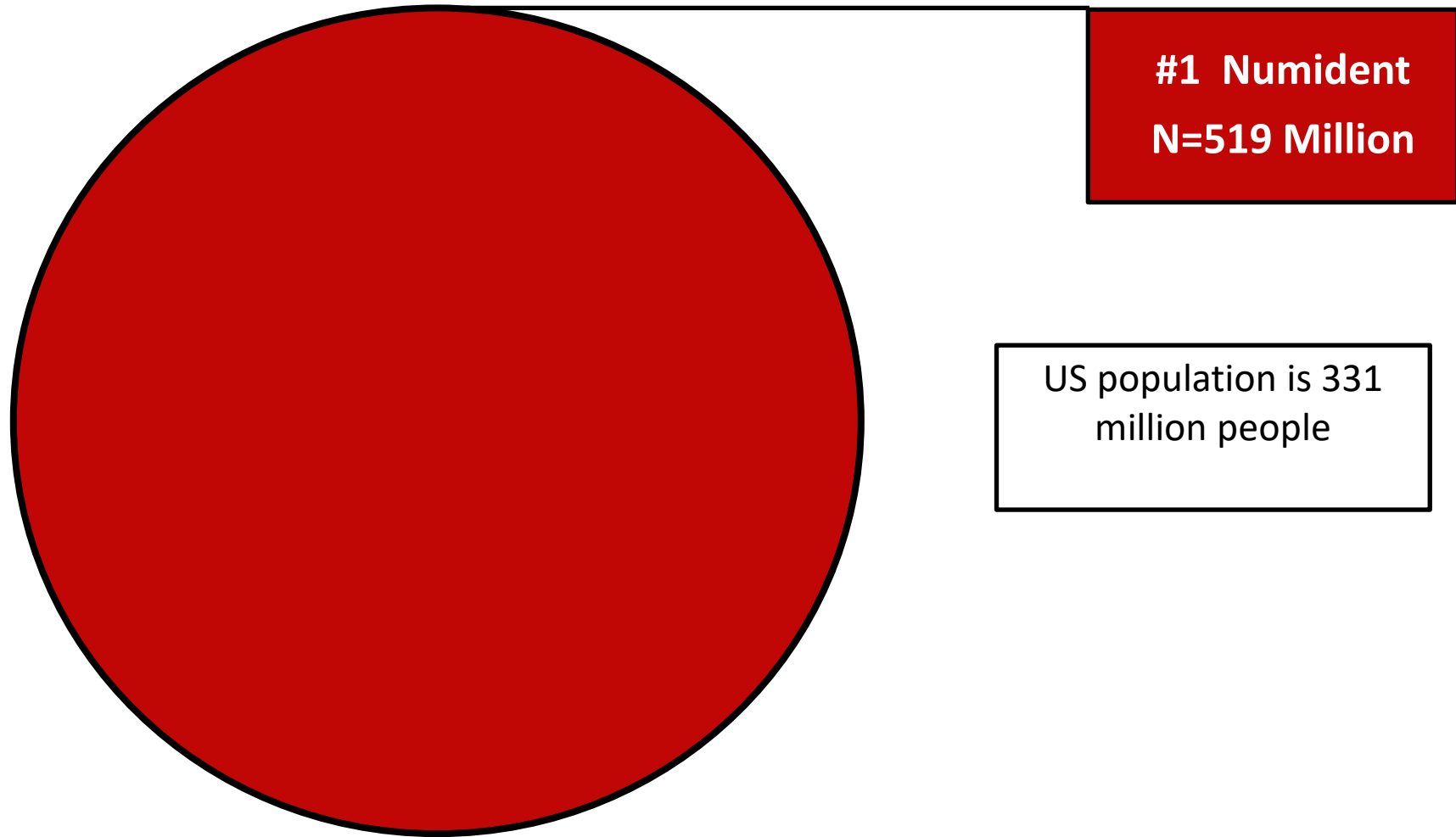
## Reliability, Validity, and Bias

- SSNs most reliable (not collected in surveys)
- Less likely to validate young children, minorities, residents of group quarters, immigrants, recent movers, low-income individuals
- PIK erroneously assigned

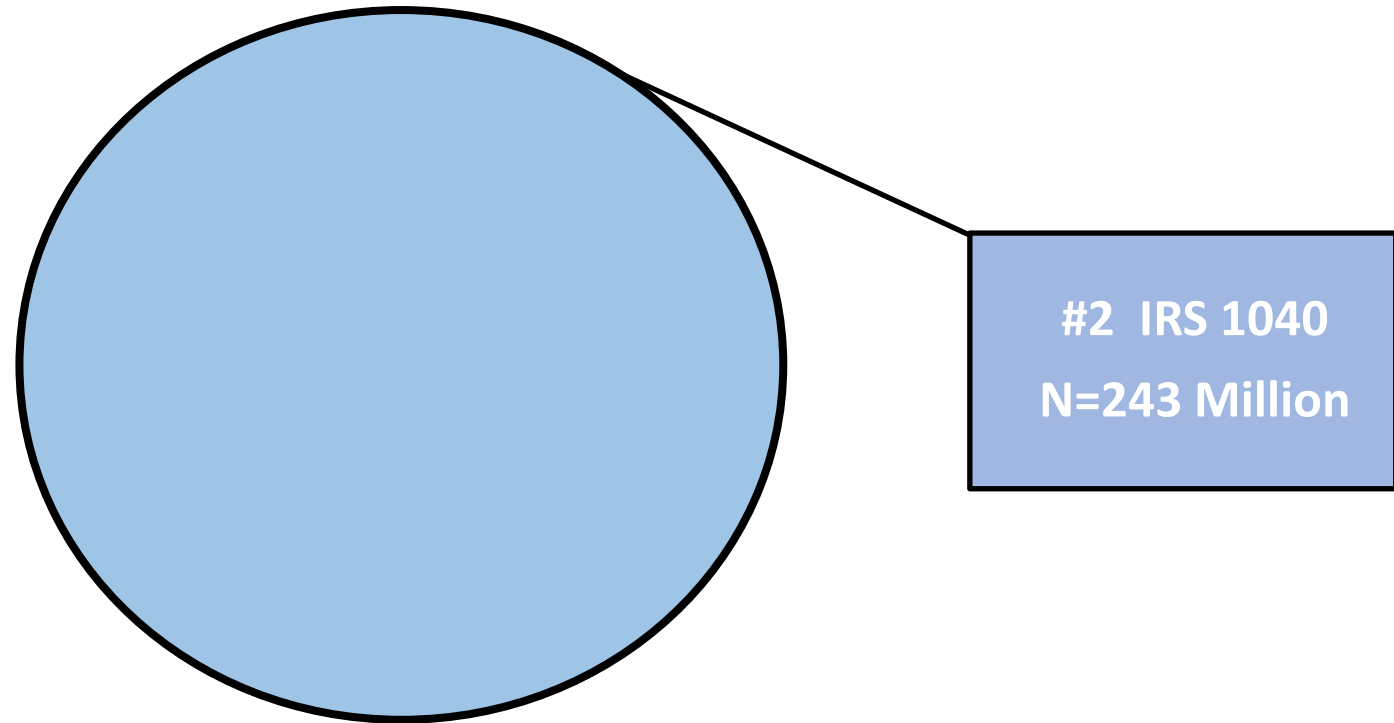
# Numident, IRS, IDIM, and ACS Evaluation Universes



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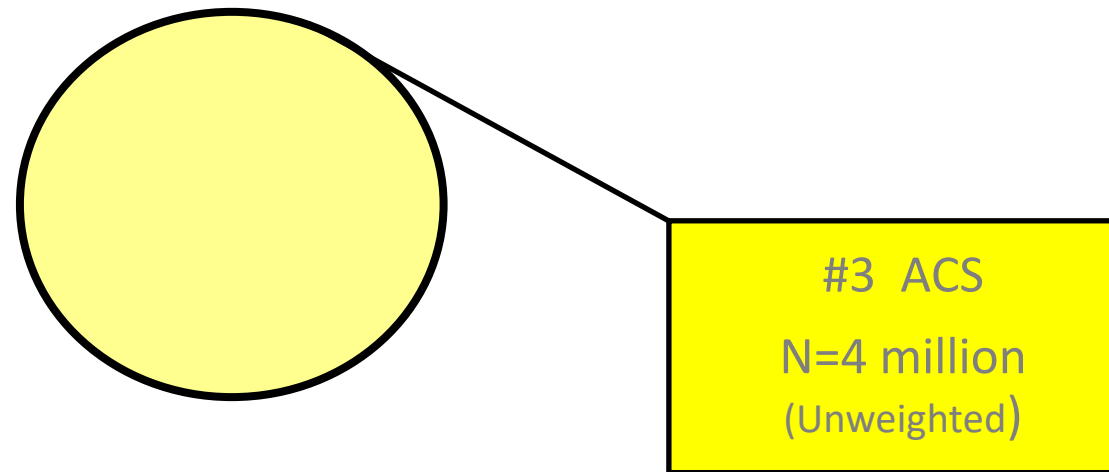


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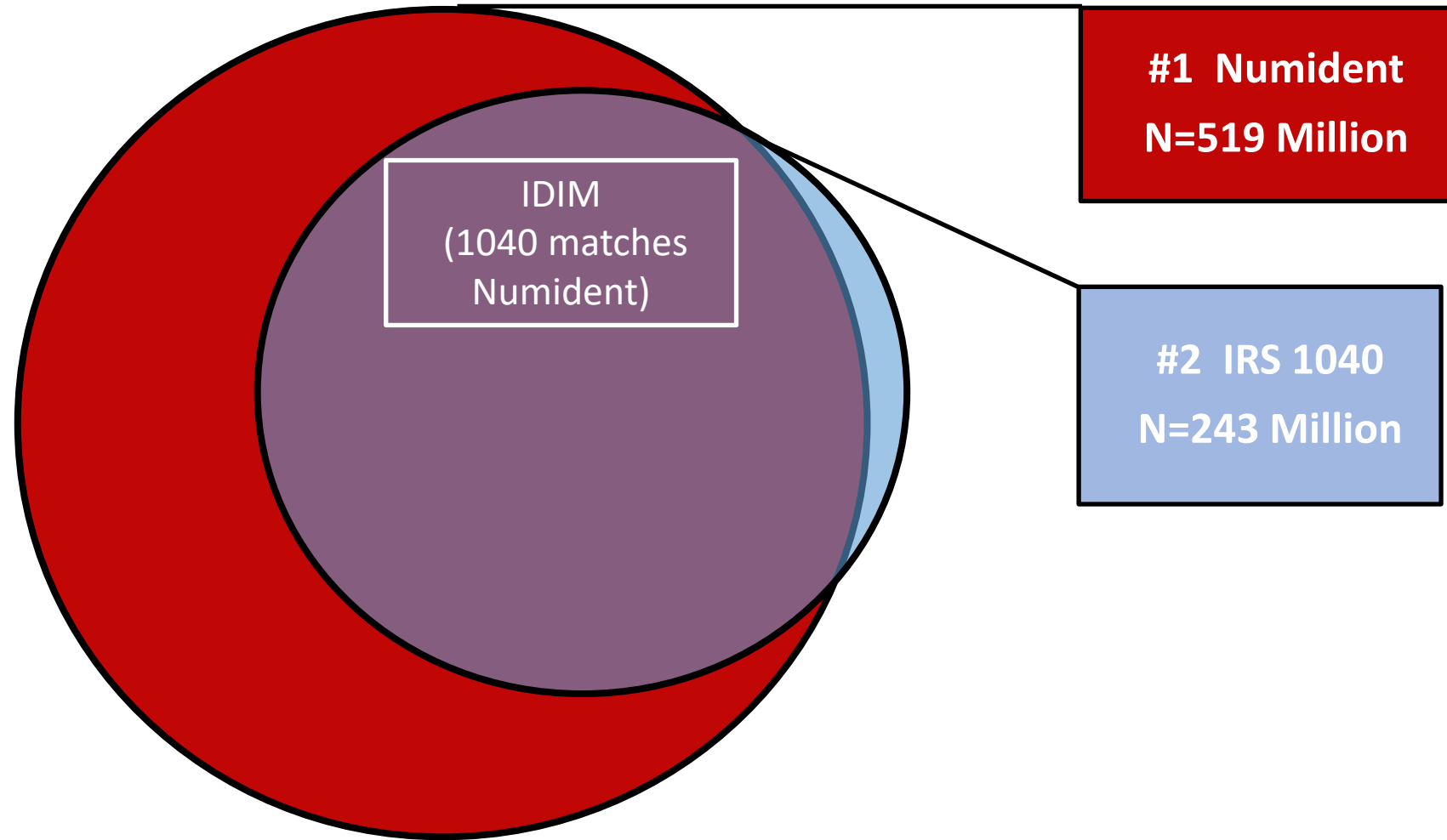




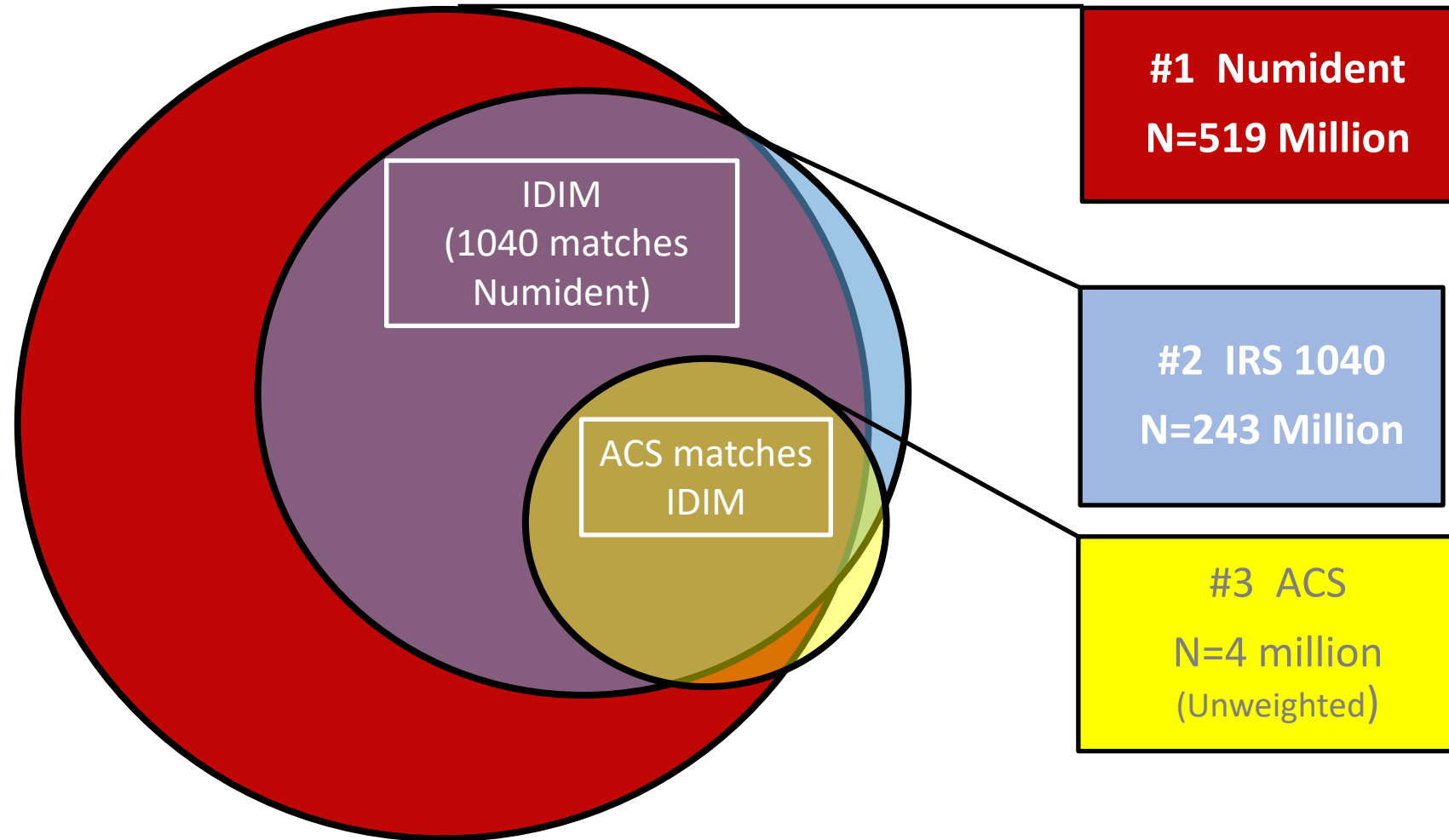
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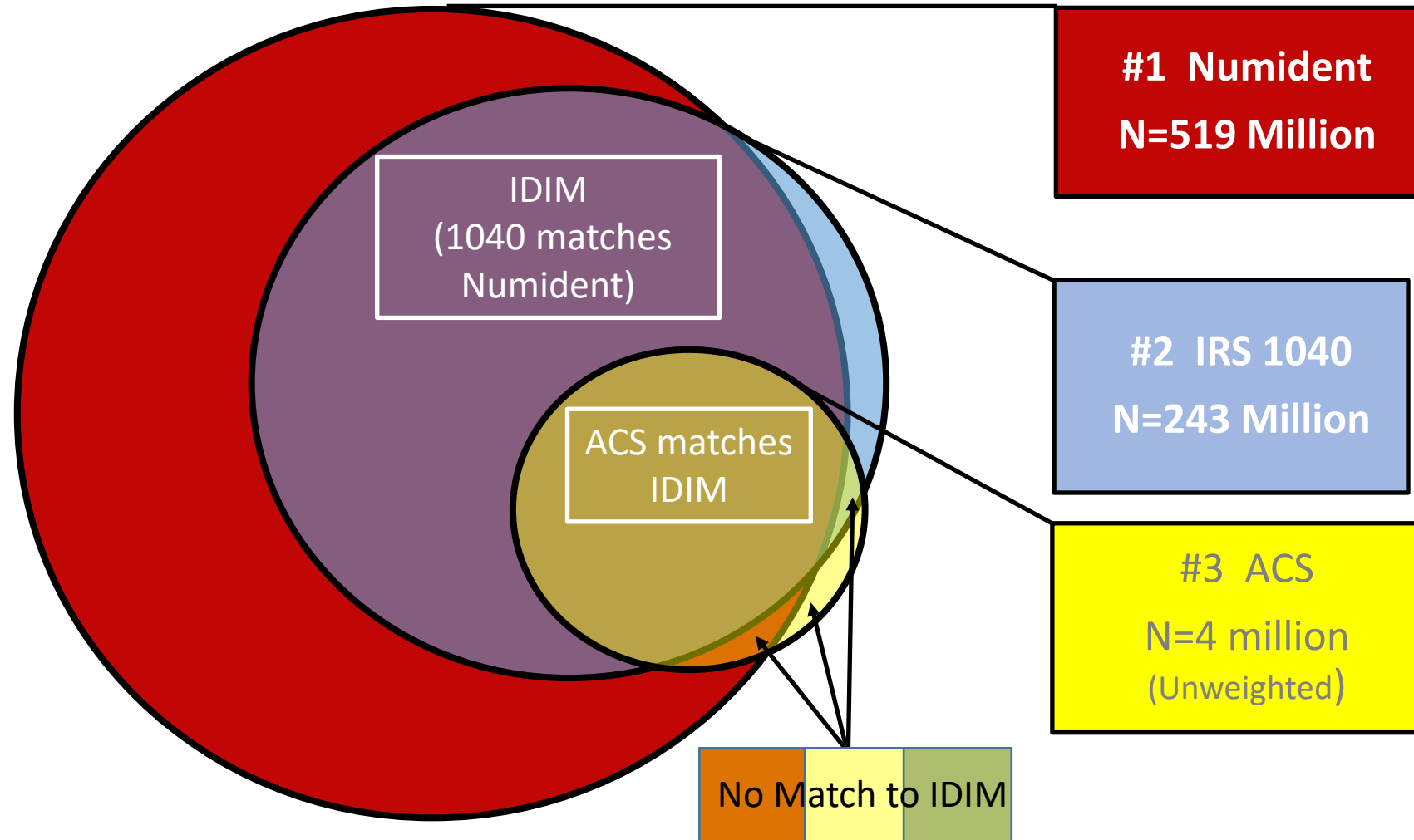
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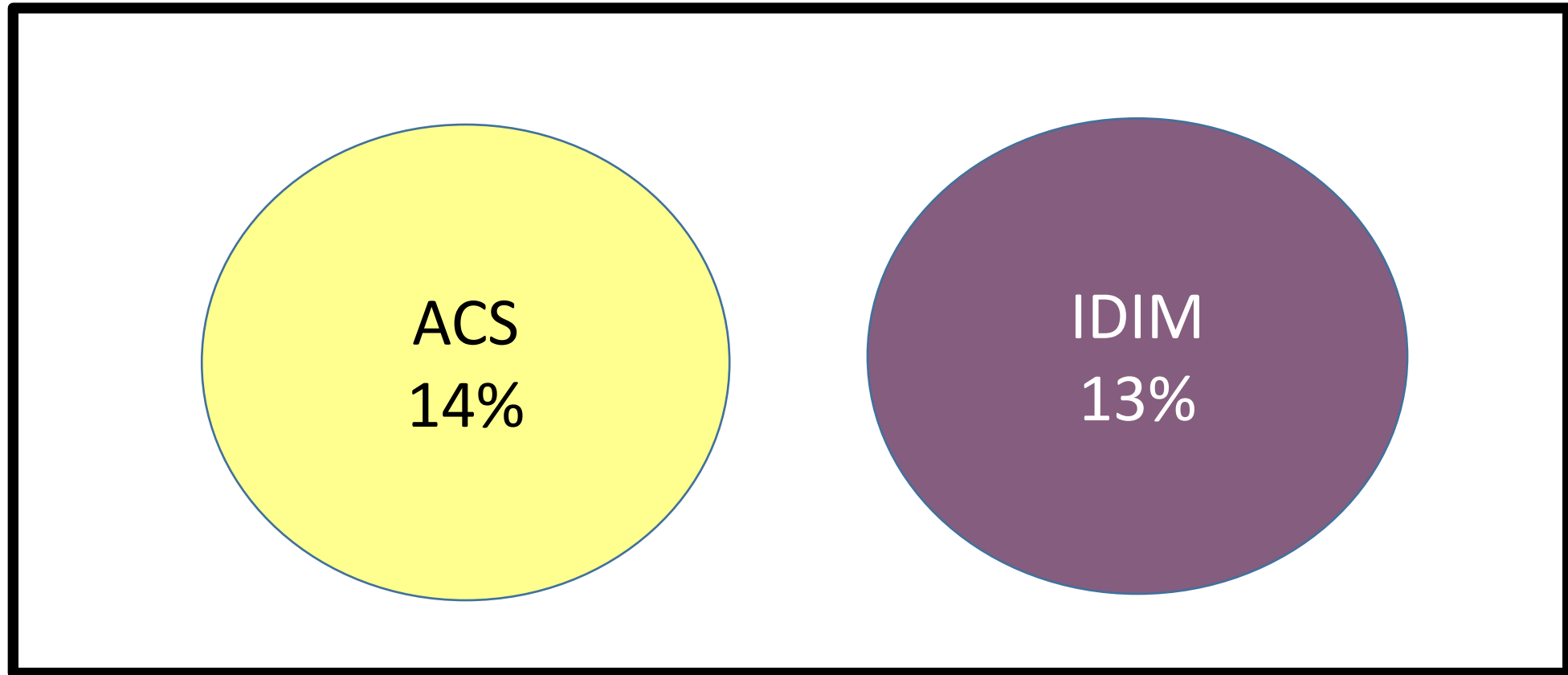
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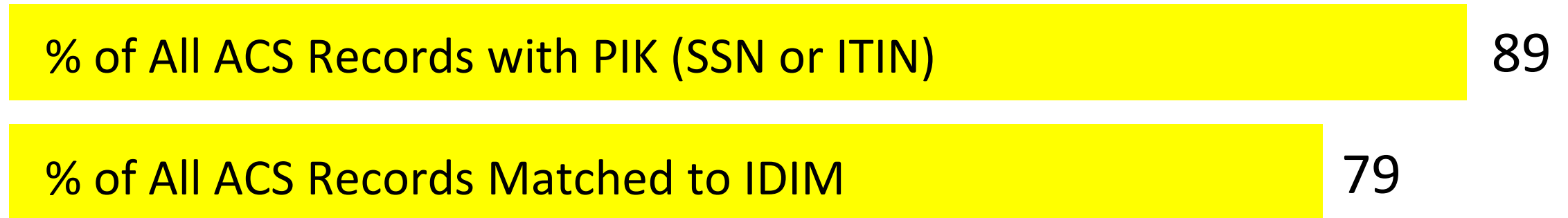
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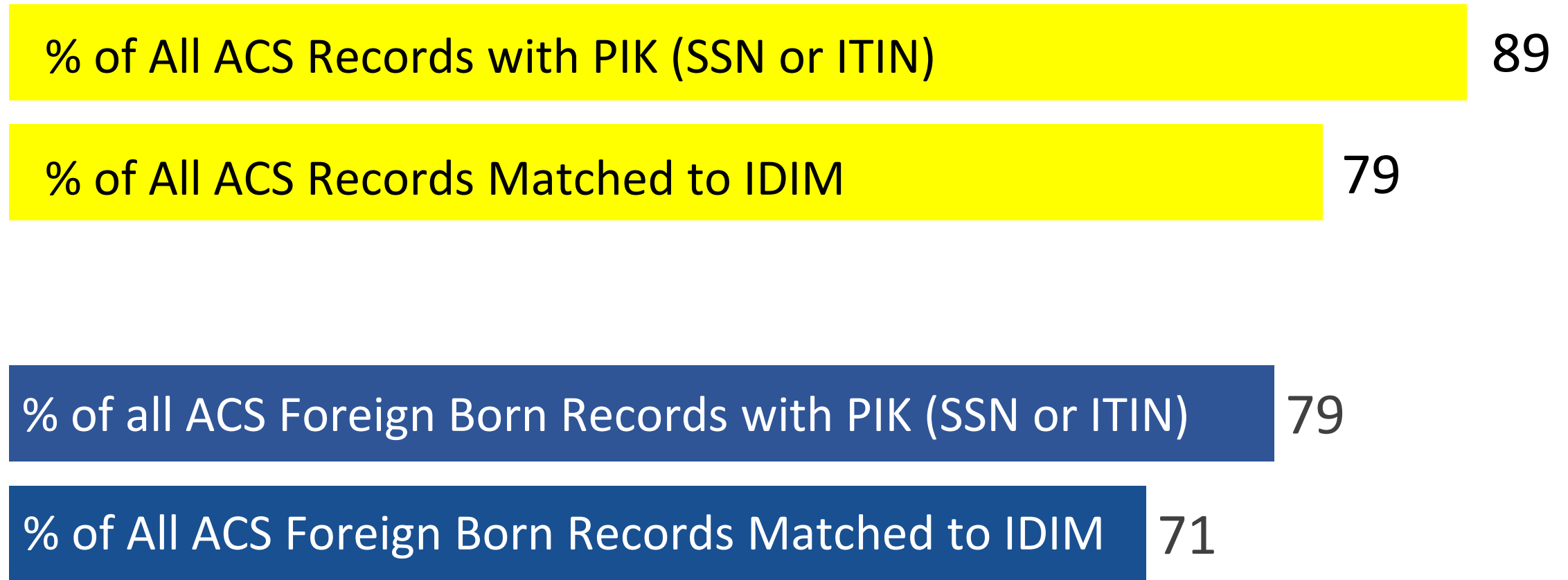
# Percent Foreign Born in The American Community Survey and the IDIM



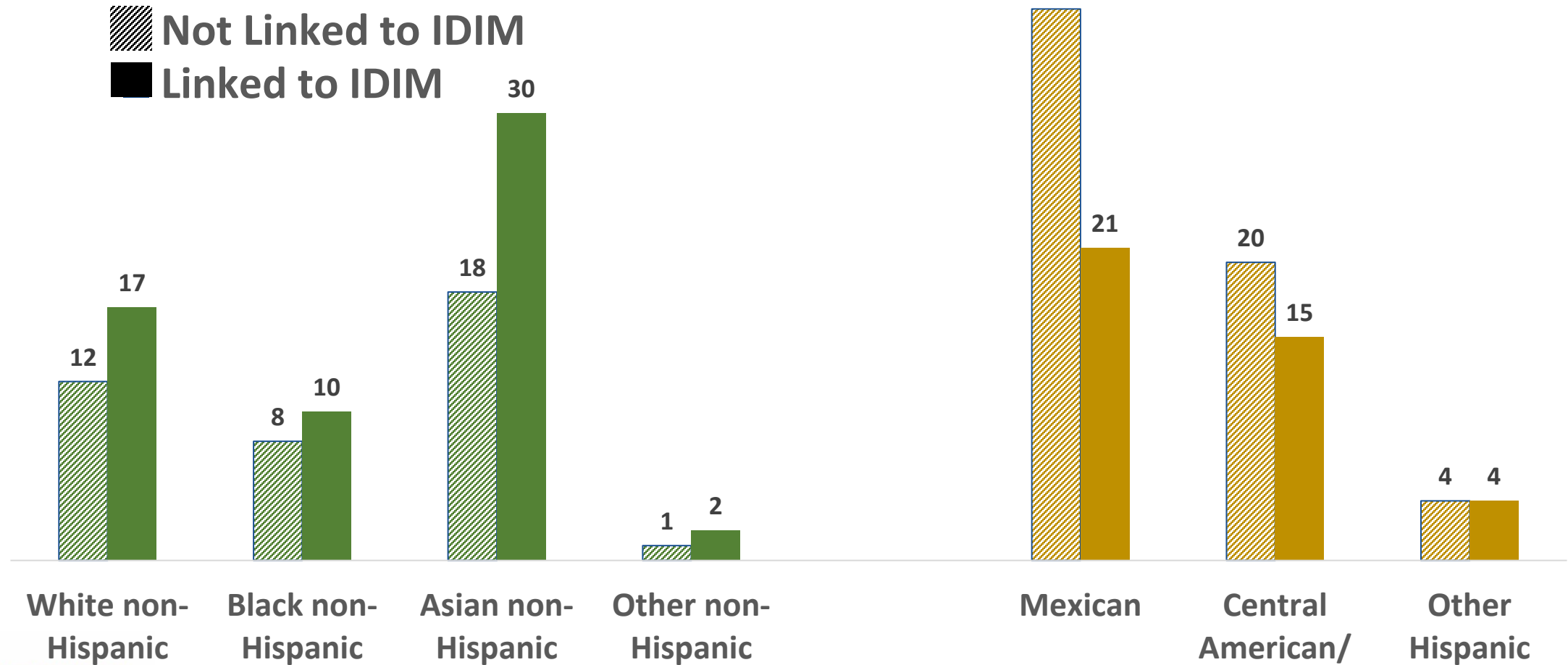
# AR Linkage Rates for All ACS Records and Foreign-Born ACS Records



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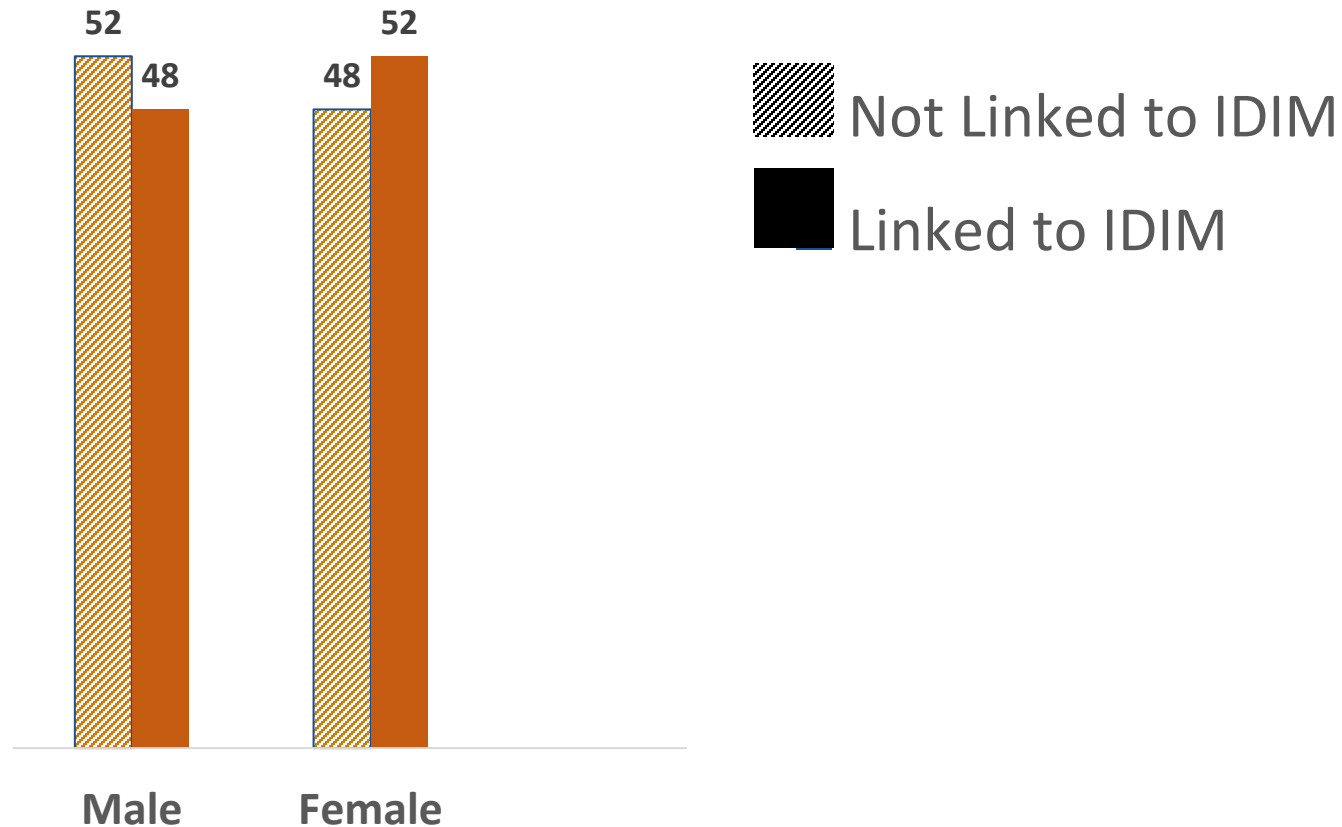


# Demographic Characteristic Distributions: Race and Ethnicity

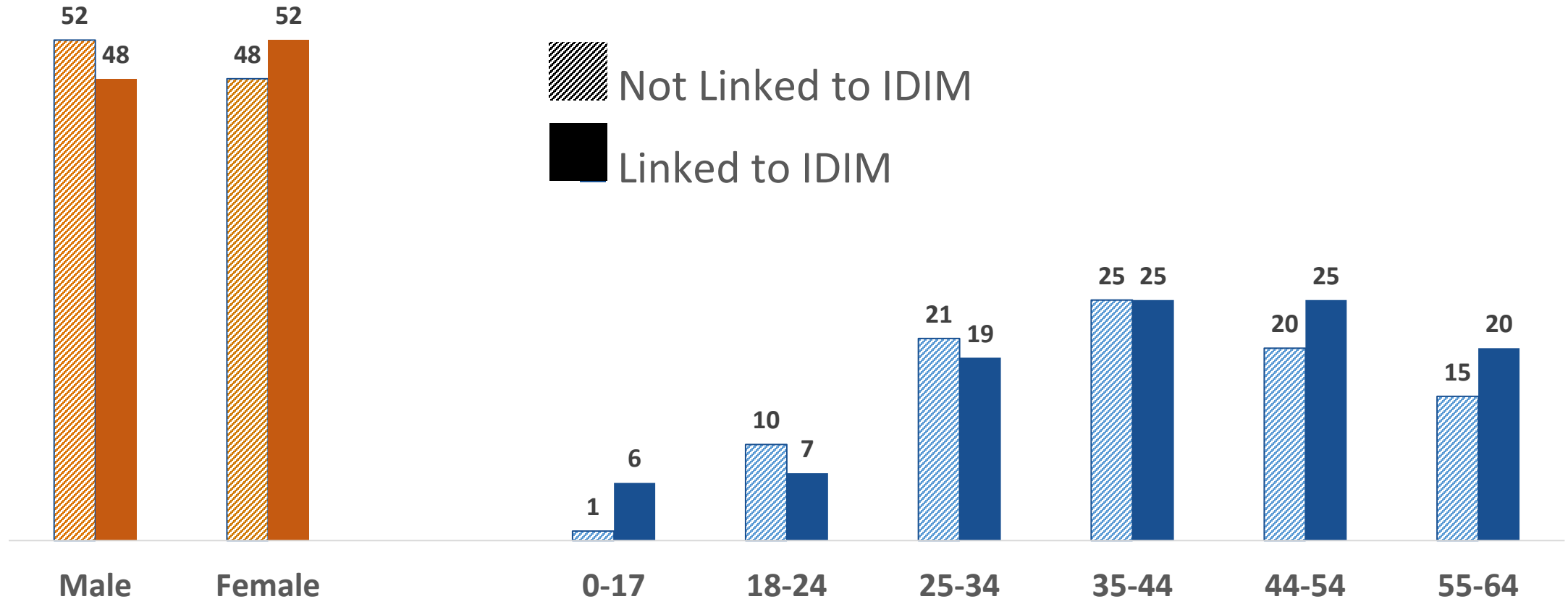




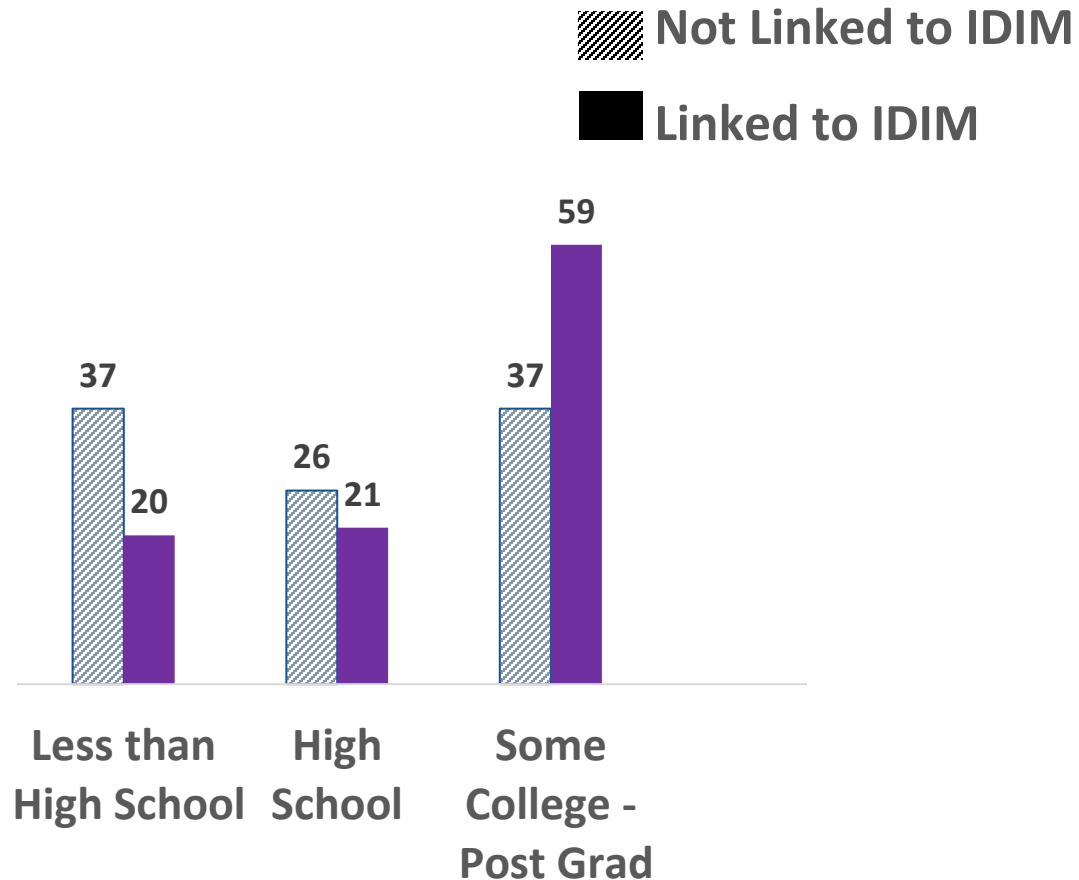
# Demographic Characteristics Distributions: Age and Sex



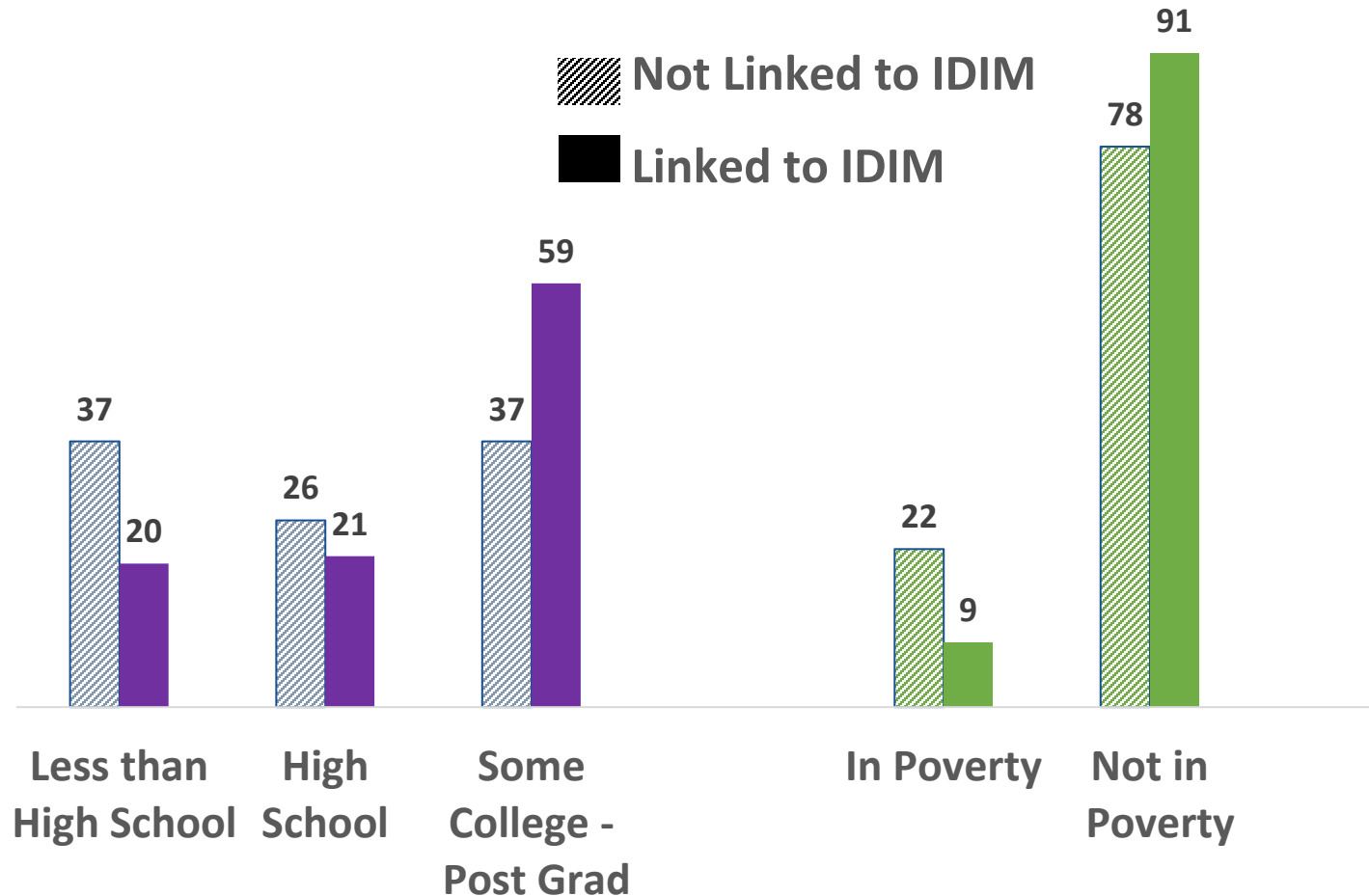
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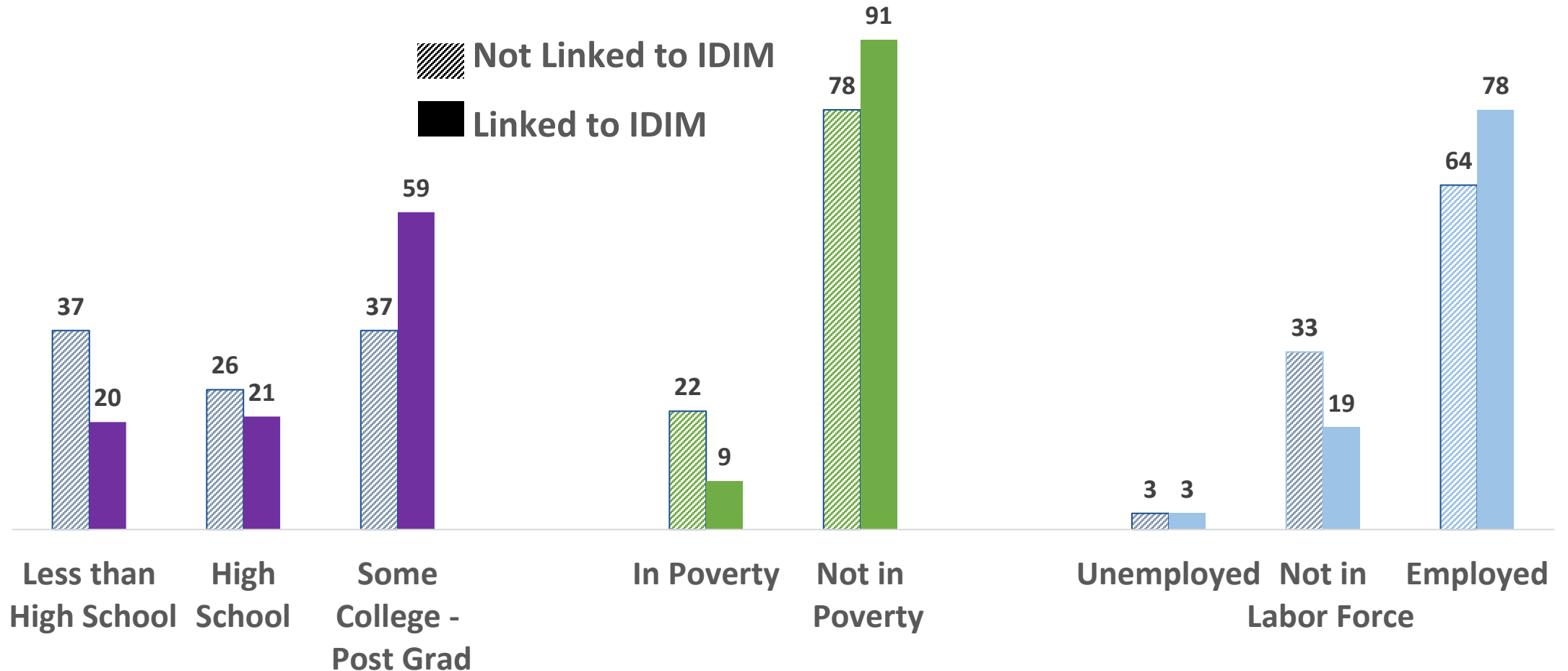
# Socio-Economic Characteristic Distributions



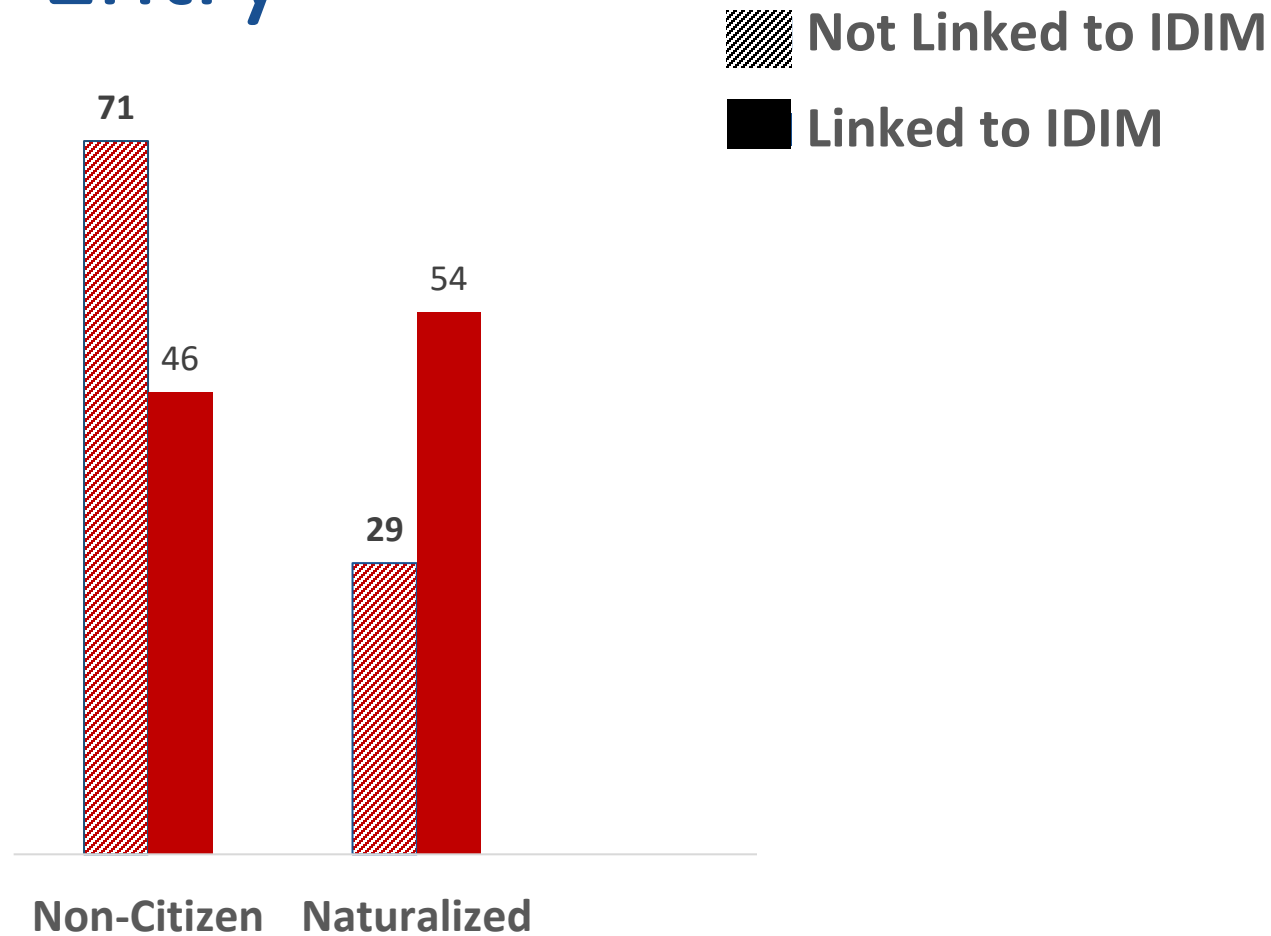
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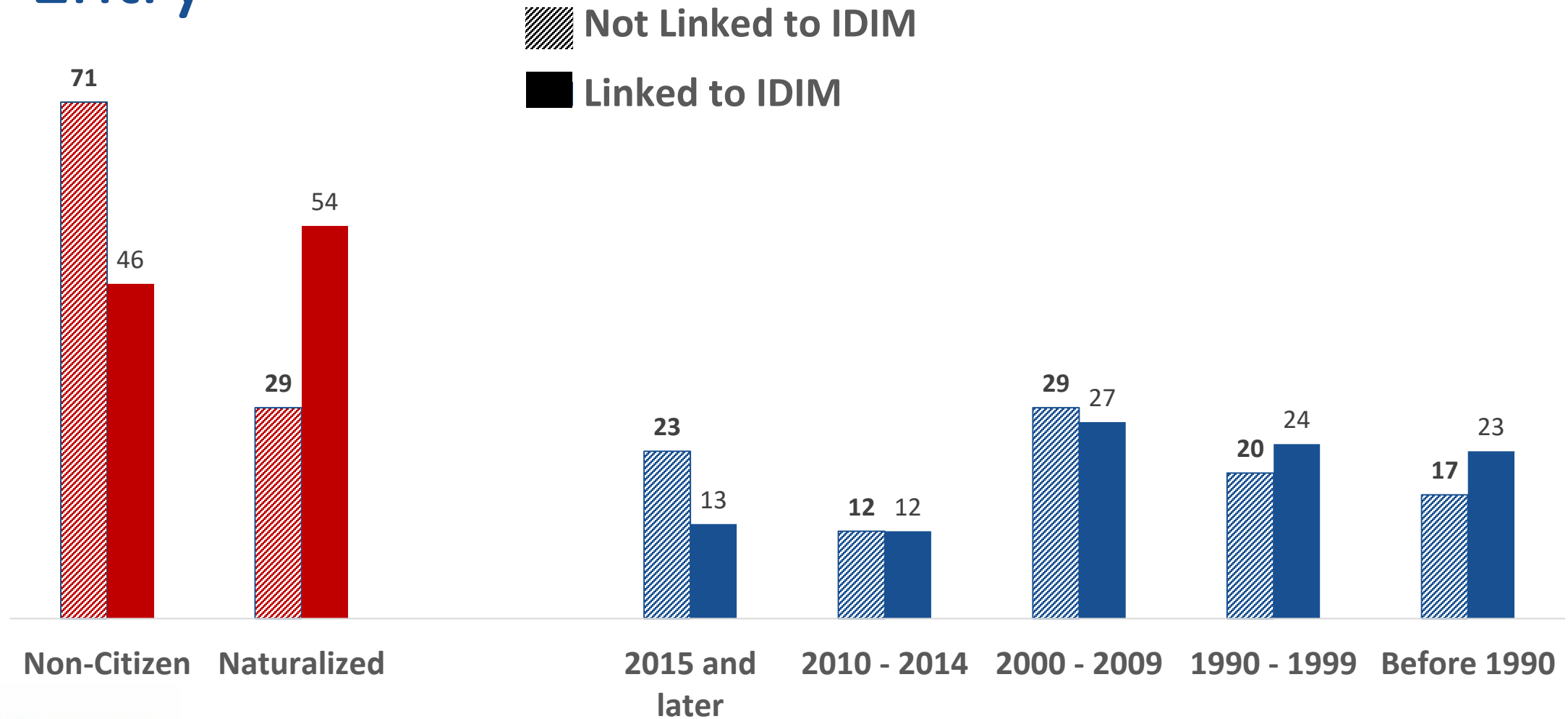
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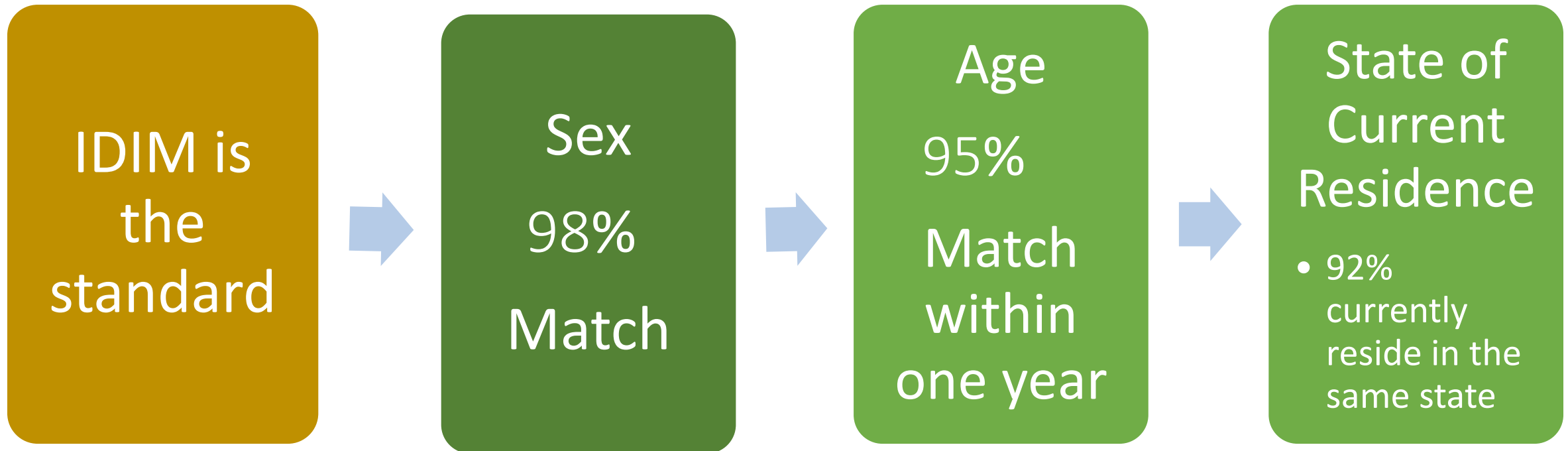
# Distributions of Citizenship Status and Year of Entry



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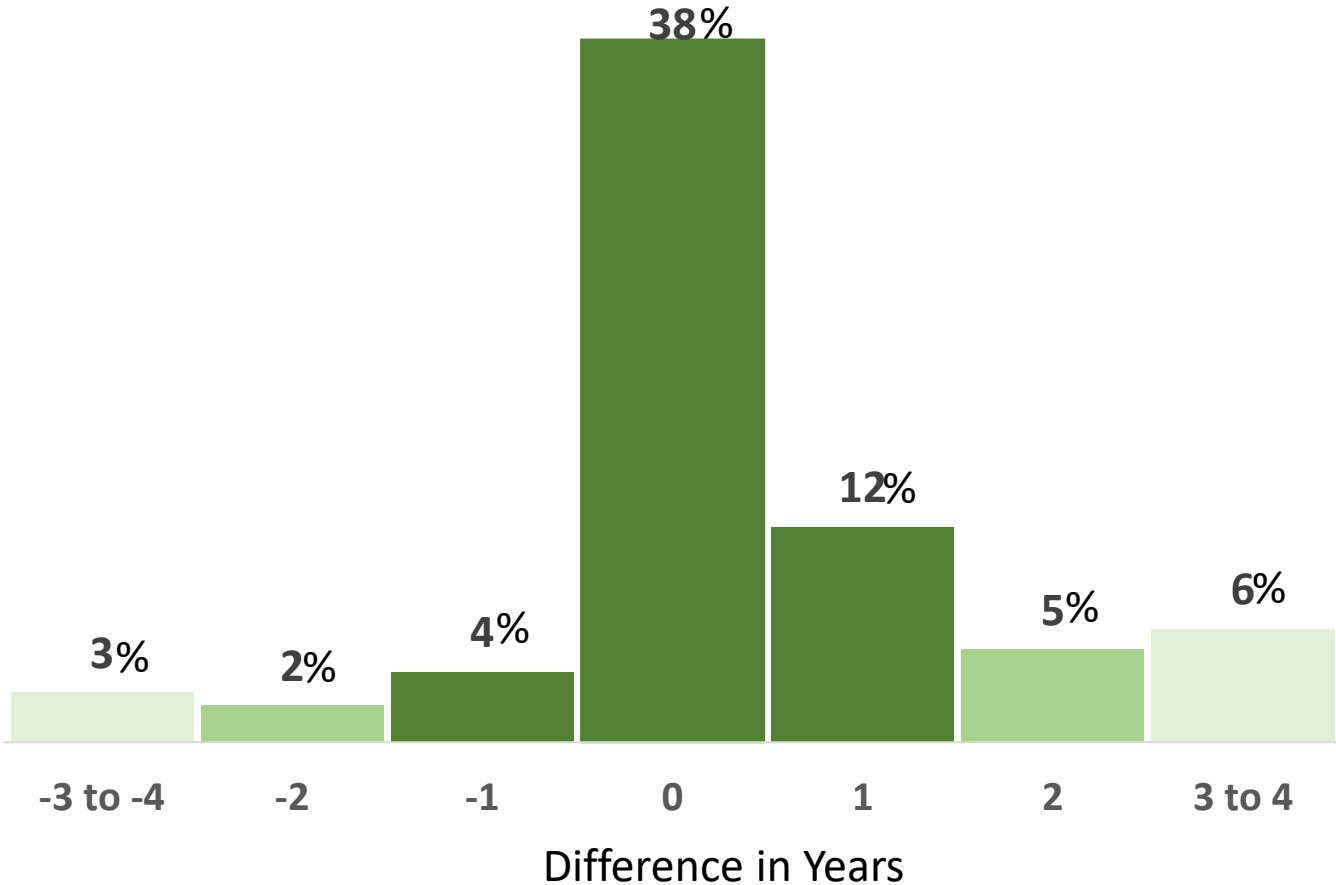


# How Does the ACS Survey Response Compare to Administrative Records?



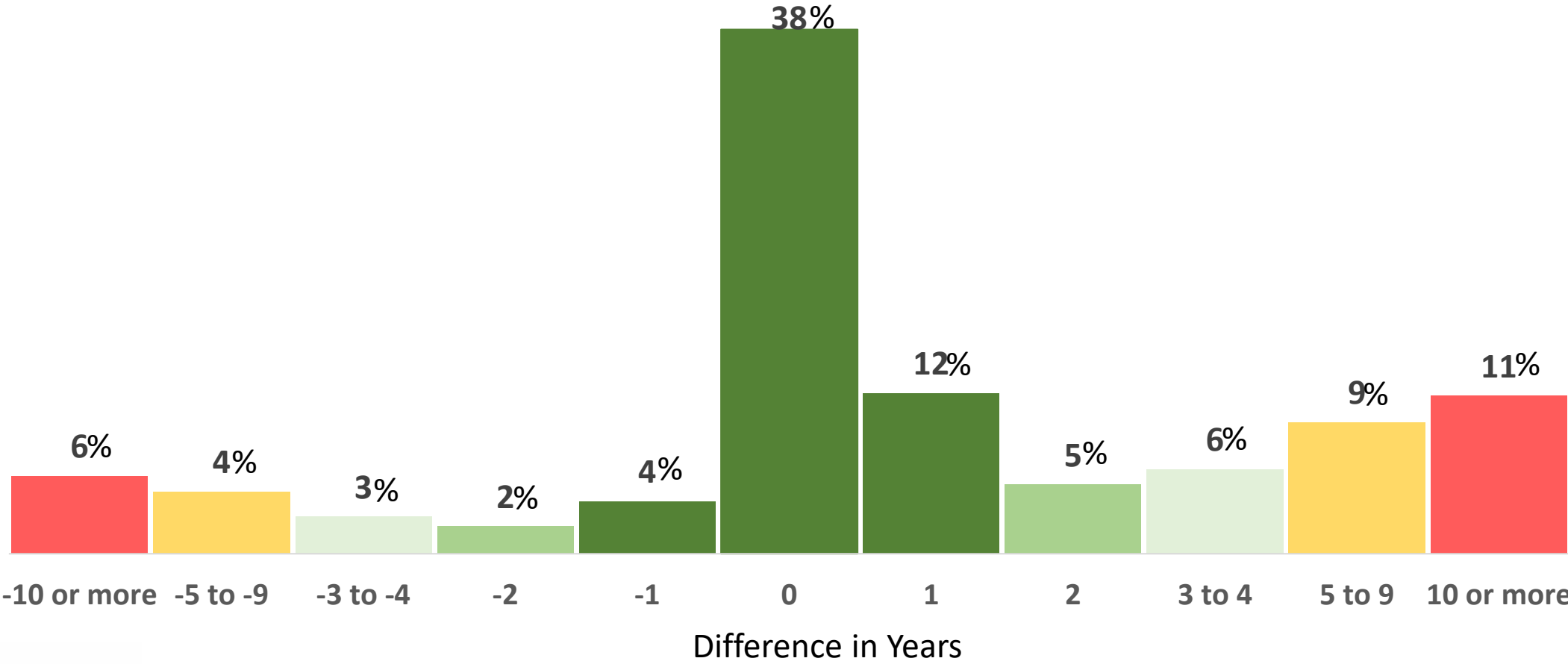


# Distribution of the Difference in Years for Responses to Year of Entry Question on the ACS Compared to the IDIM



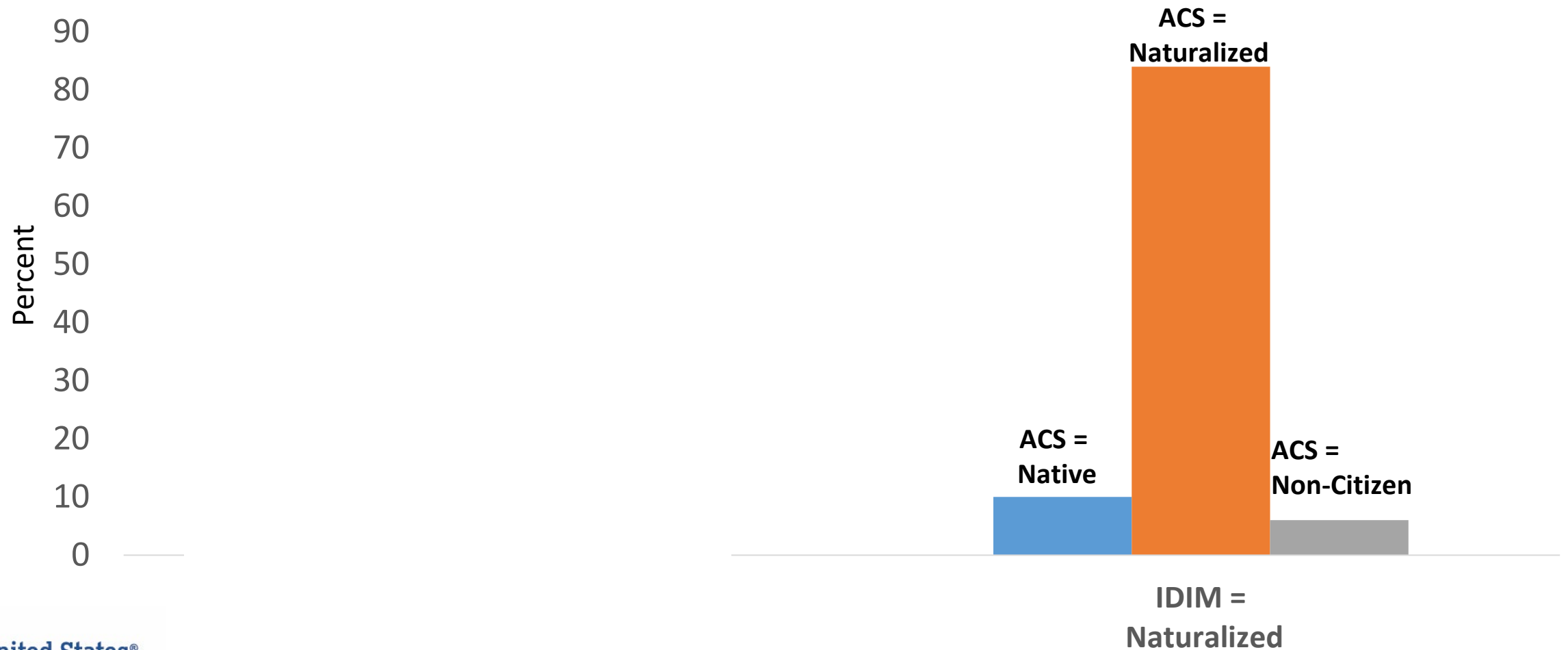
Sources: US Census Bureau, Integrated Database for International Migration and 2019 American Community Survey; Social Security Administration; and Internal Revenue Service.

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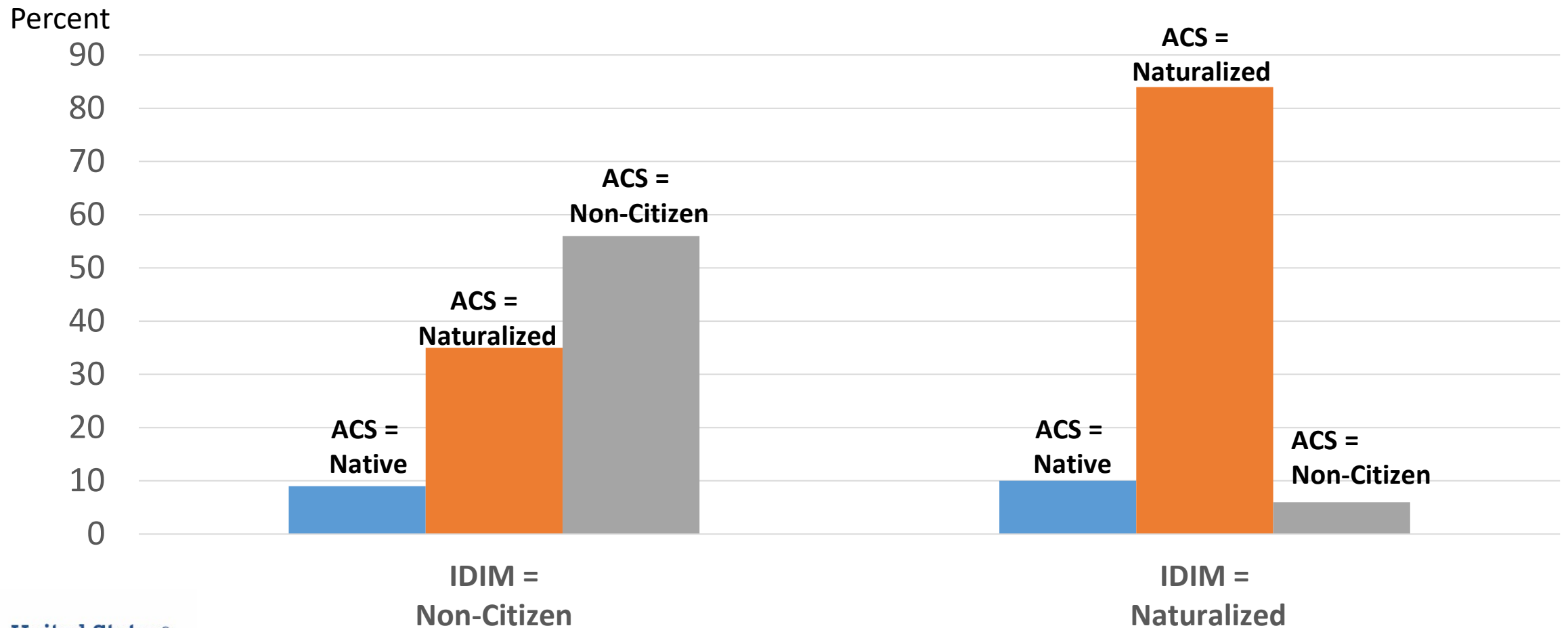


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# Comparison of Citizenship Status Reported on the IDIM and ACS for Matched Respondents



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# Summary: Foreign Born Residents Not Matched to IDIM (vs Matched to IDIM)

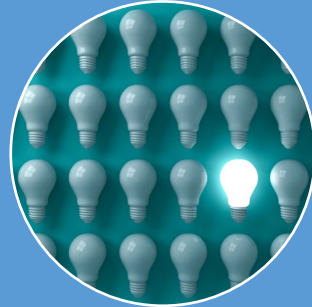
ACS  
measures  
foreign-  
born  
population  
missing  
from IDIM

- More Male
- Younger
- Less Asian
- More Hispanic (Mexican and Central American)
- Less Educated
- Lower Labor Force Participation
- Higher Poverty

# Next Steps



Add Race and Hispanic Origin to IDIM and Compare Responses



Develop Strategies to Adjust IDIM for Missing Groups, e.g. Irregular Migrants with ACS Data



Add More Administrative Record Data Sources



Work on Underestimate of Foreign-Born Children



# Contact information

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