Measuring Characteristics of Unauthorized U.S. Immigrants: Individual- & Aggregate-level Estimates from Alternative Methods

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SAN DIEGO STATE UNIVERSITY

PewResearchCenter

I. Motivations

- Two decades of research assigning legal status to individual foreign-born U.S. residents enumerated in public use datasets to estimate the characteristics, integration and effects of unauthorized migrants …

  - Marcelli, Enrico A. and David M. Heer. 1997. "Unauthorized Mexican Workers in the 1990 Los Angeles County Labour Force." *International Migration* 35(1):59-83.

  - Passel, Jeffrey S. and Rebecca L. Clark. 1998. "Immigrants in New York: Their Legal Status, Income, and Taxes." Washington, D.C.: *The Urban Institute*.

- Scant research directly comparing results of these (two) or other legal status estimation methods for three decades …

  - Heer, David M. and Jeffrey S. Passel. 1987. "Comparison of Two Methods for Computing the Number of Undocumented Mexican Adults in Los Angeles County," *International Migration Review* 21(4):1446-73.

II. Pew Estimation/Assignment Methodology (Outline)

- **Estimate unauthorized in survey**

  - ➢ Residual = survey minus lawful immigrants (LPRs)
  - ➢ Demographic estimate of LPRs from admin records

- **Assign "definite" legal immigrants**

  - ➢ Temporary lawful (e.g. students) using characteristics
  - ➢ Refugees based on date of arrival & country of birth
  - ➢ Naturalized citizens (except Mexico, Central America)
  - ➢ Screen others on characteristics

- **Assign unauthorized in microdata**

  - ➢ Probabilistic "multiple imputation"
  - ➢ P(unauthorized) = Residual / "Potential" unauthorized
  - ➢ Edit families for consistency & iterate to targets

- **Tabulate microdata**

  - ➢ Adjust weights for omissions

- **Definite lawful immigrants**
  - Naturalized citizens, refugees & lawful temps (previous)

  - Entered US before 1982

  - Occupations/employers →

    - Government workers, veterans & military
    - Law enforcement and related
    - Court and legal
    - Licensed occupations (e.g., Medical)
    - Security occupations (esp. with licensing; e.g. police, ATC)
    - Assorted other minor occupations

  - Program participation (SSI, TANF, Medicaid*, Medicare)

  - Family members (most) of lawful residents

- **Others are "Potentially Unauthorized" →**

II. Pew Estimation/Assignment Methodology (Unauthorized Status)

- ## Targets

  - ➢ 6 States (CA, FL, IL, NJ, NY, TX) and balance of US
  - ➢ Total, Under 18 (i.e., children)
  - ➢ Mexico, Latin America, Asia, Other

- ## Random assignments of *Potentials*

  - ➢ Initial *p*'s = Target / Potential Unauthorized
    - o Parents & non-parents done separately
    - o Assignments for parents use targets for children
    - o Initial modification using surveys (LPS, potentially EM, SIPP)

  - ➢ Edit for consistency (parents, children, relatives)

  - ➢ Iterate *p*'s to hit targets

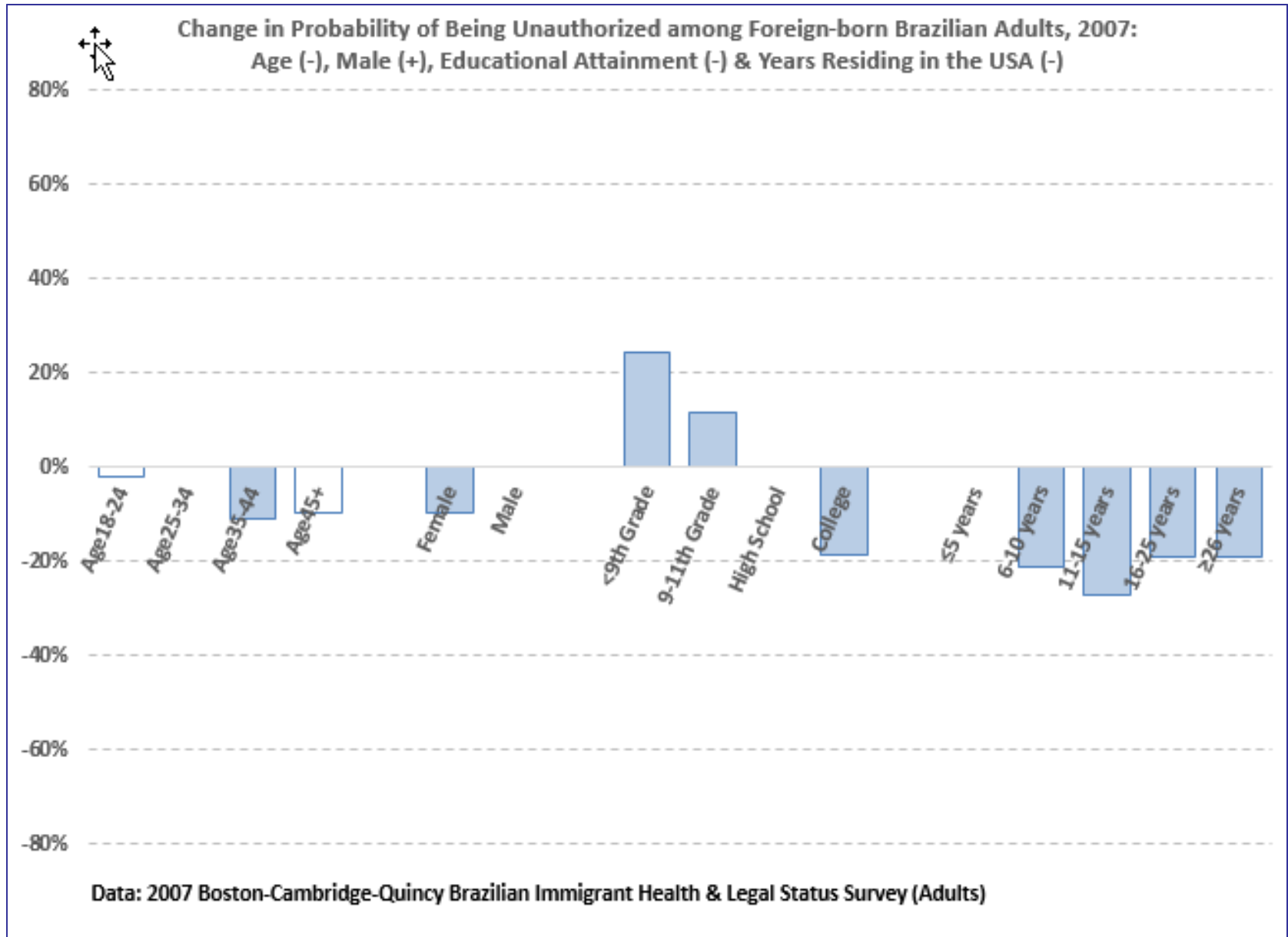- ## Adjust weights for omissions

III. The Community-Based Sample Survey Assignment Method

- **Randomly collected migrant legal status & health data**

  - 2001 & 2012 *Los Angeles County Mexican Immigrant Health & Legal Status Surveys* (LAC-MIHLSS)

  - 2007 *Boston Metro Brazilian & Dominican Immigrant Health & Legal Status Surveys* (BM-IHLSS)

- Sample Selection: U.S. Census tracts → blocks → households → individual adult foreign-born migrants interviewed by 24-30 trained adult compatriots about household members' migration, socioeconomic status, social capital & health.

- Questionnaire Development: Researchers and CBO staff …

  - Marcelli, Enrico A. 2014. "The Community-Based Migrant Household Probability Sample Survey," In *Migration and Health Research Methodologies: A Handbook for the Study of Migrant Populations.* Schenker et al., Berkeley and Los Angeles, CA, University of California Press: 111-140.
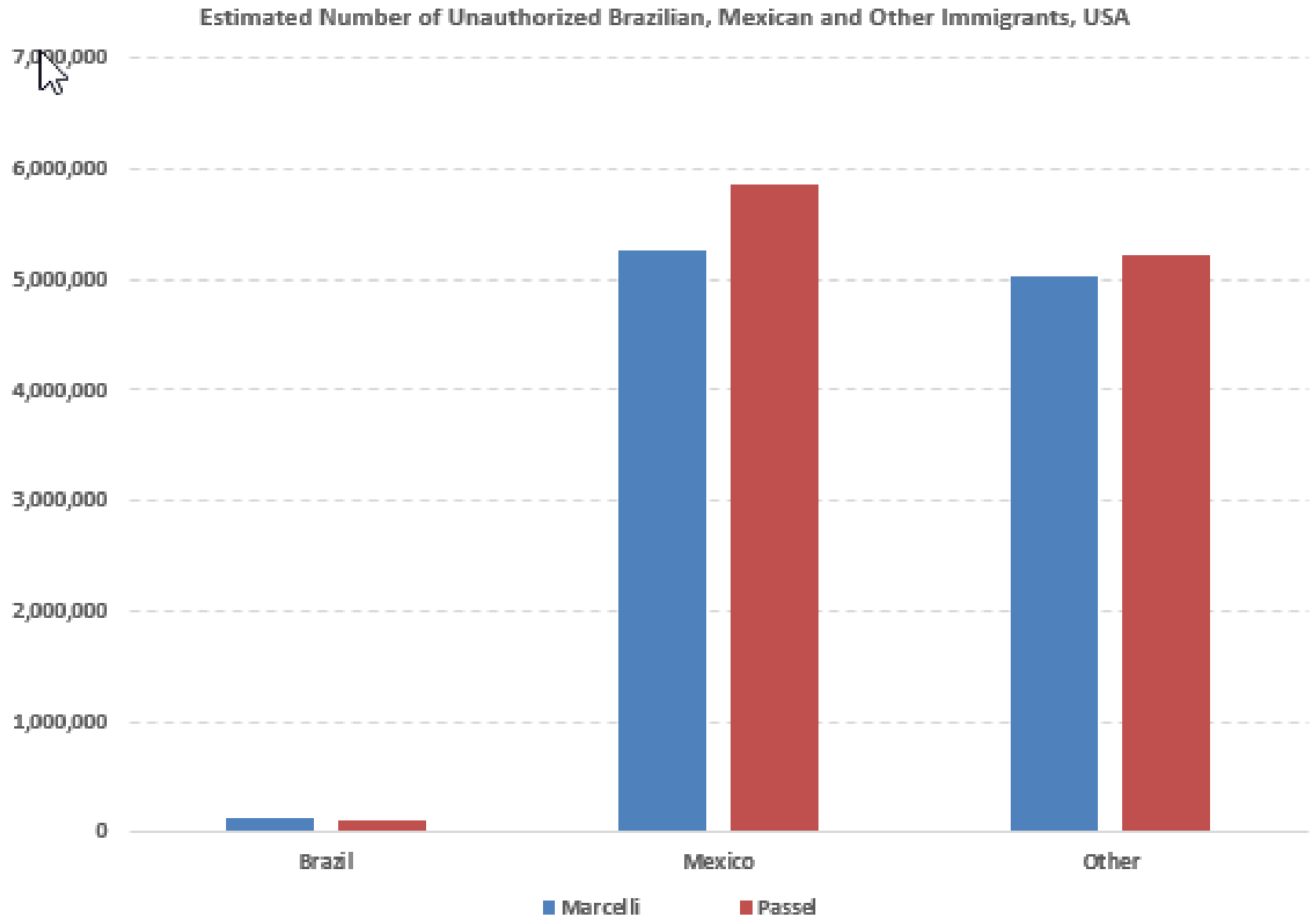
III. The Community-Based Sample Survey Assignment Method

- **Seven-step legal status assignment**
  - ➤ Use community-based sample survey data to generate coefficients
  - ➤ Compute probabilities of being unauthorized in public use data
  - ➤ Compute target number of unauthorized adults = sum of probabilities.
  - ➤ Rank probabilities in decreasing order
  - ➤ Tag each adult as unauthorized until running sum = target
  - ➤ Assign unauthorized legal status to children
  - ➤ Apply survey omission-adjusted sample weights

- **Two limitations of direct sample survey data/method**
  - ➤ Legal status predictors ONLY available for foreign-born Mexican, Brazilian and Dominican residents of the USA … to date.
  - ➤ Legal status predictors ONLY available from Los Angeles County and the Boston-Cambridge metropolitan area, to date.

III. The Community-Based Samlpe Survey Assignment Method

Change in Probability of Being Unauthorized among Foreign-born Brazilian Adults, 2007:
Age (-), Male (+), Educational Attainment (-) & Years Residing in the USA (-)

Data: 2007 Boston-Cambridge-Quincy Brazilian Immigrant Health & Legal Status Survey (Adults)

IV. Results

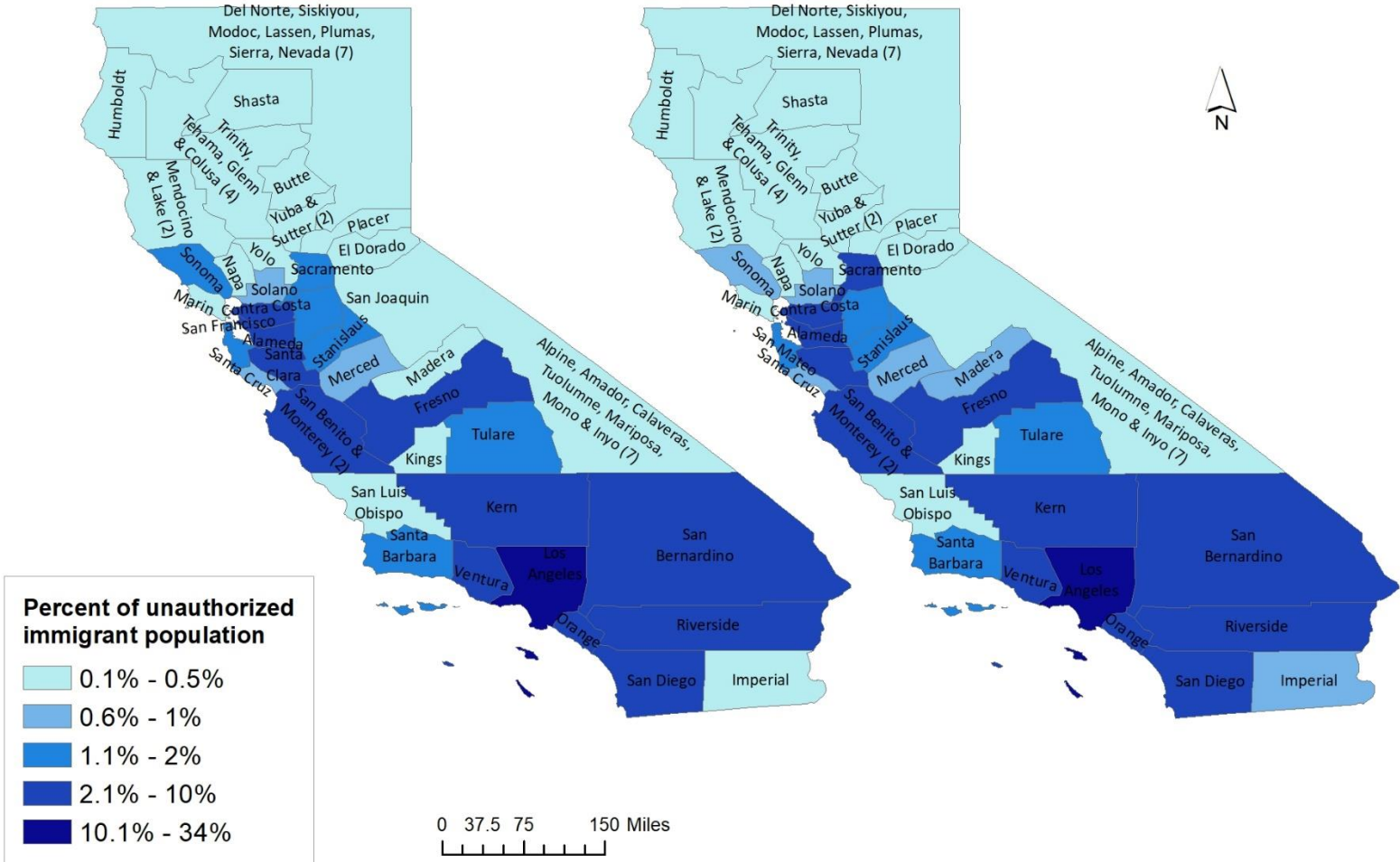Estimated Number of Unauthorized Brazilian, Mexican and Other Immigrants, USA

IV. Results

Distribution of Unauthorized Immigrants by County, CA, 2011-15 ACS

2,400,000 (6.1%) — Passel Estimates

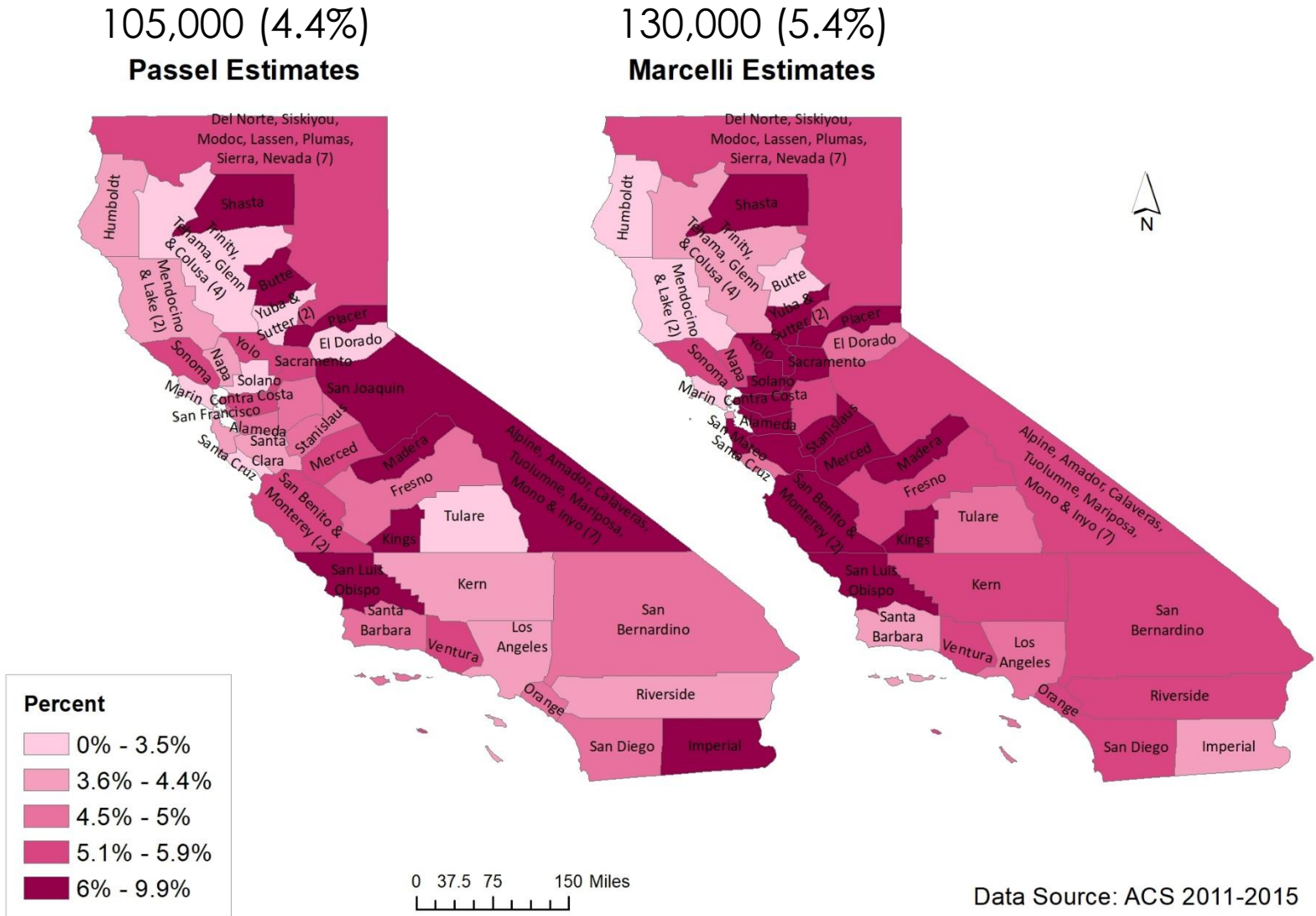2,415,000 (6.2%) — Marcelli Estimates

Percent of unauthorized immigrant population:
- 0.1% - 0.5%
- 0.6% - 1%
- 1.1% - 2%
- 2.1% - 10%
- 10.1% - 34%

IV. Results

Share of Unauthorized Immigrants Under 18 Years Old by County, CA

105,000 (4.4%)
Passel Estimates

130,000 (5.4%)
Marcelli Estimates

Percent
- 0% - 3.5%
- 3.6% - 4.4%
- 4.5% - 5%
- 5.1% - 5.9%
- 6% - 9.9%

0   37.5 75   150 Miles

Data Source: ACS 2011-2015

Share of Unauthorized Immigrants from Mexico by County, CA
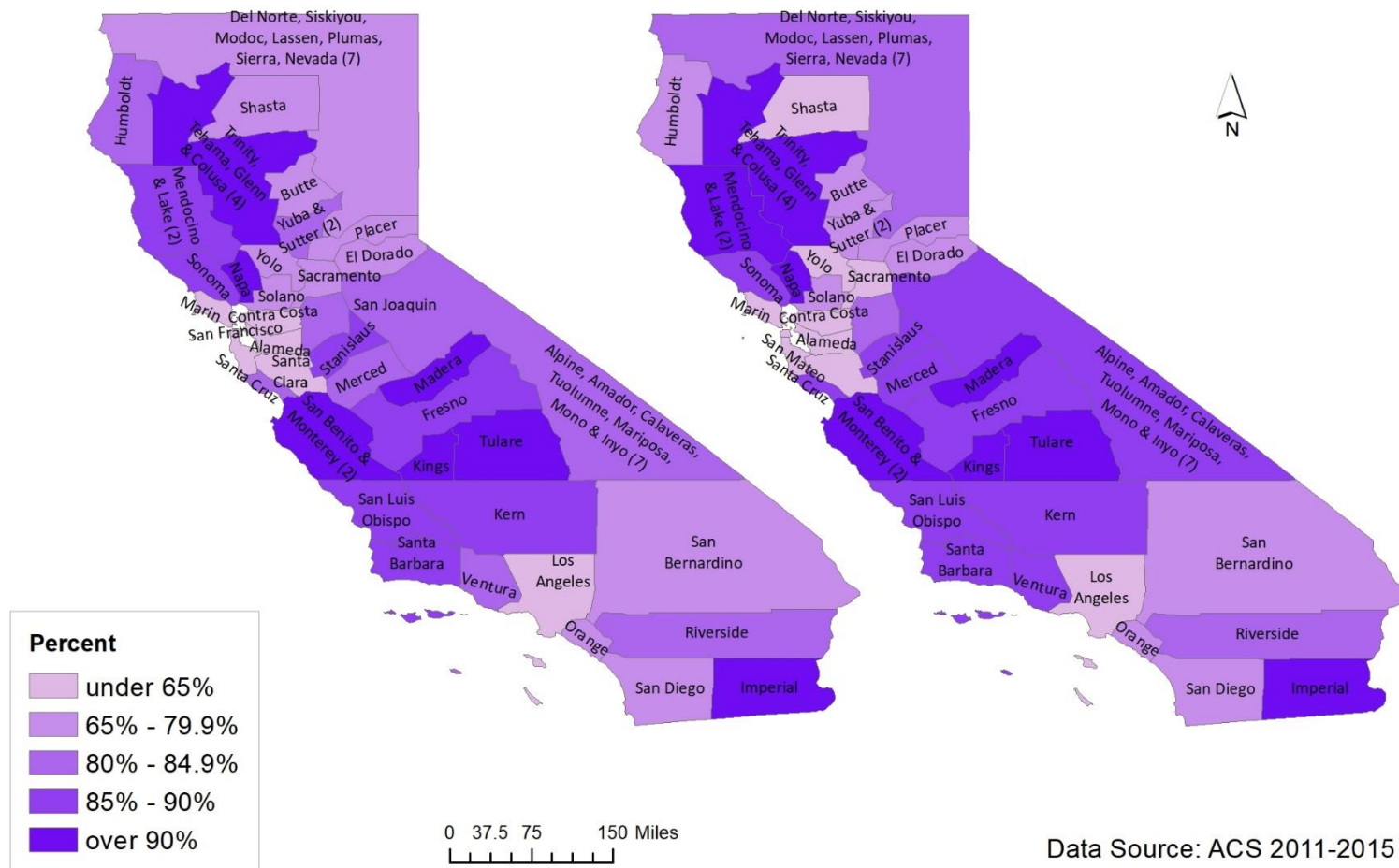
IV. Results

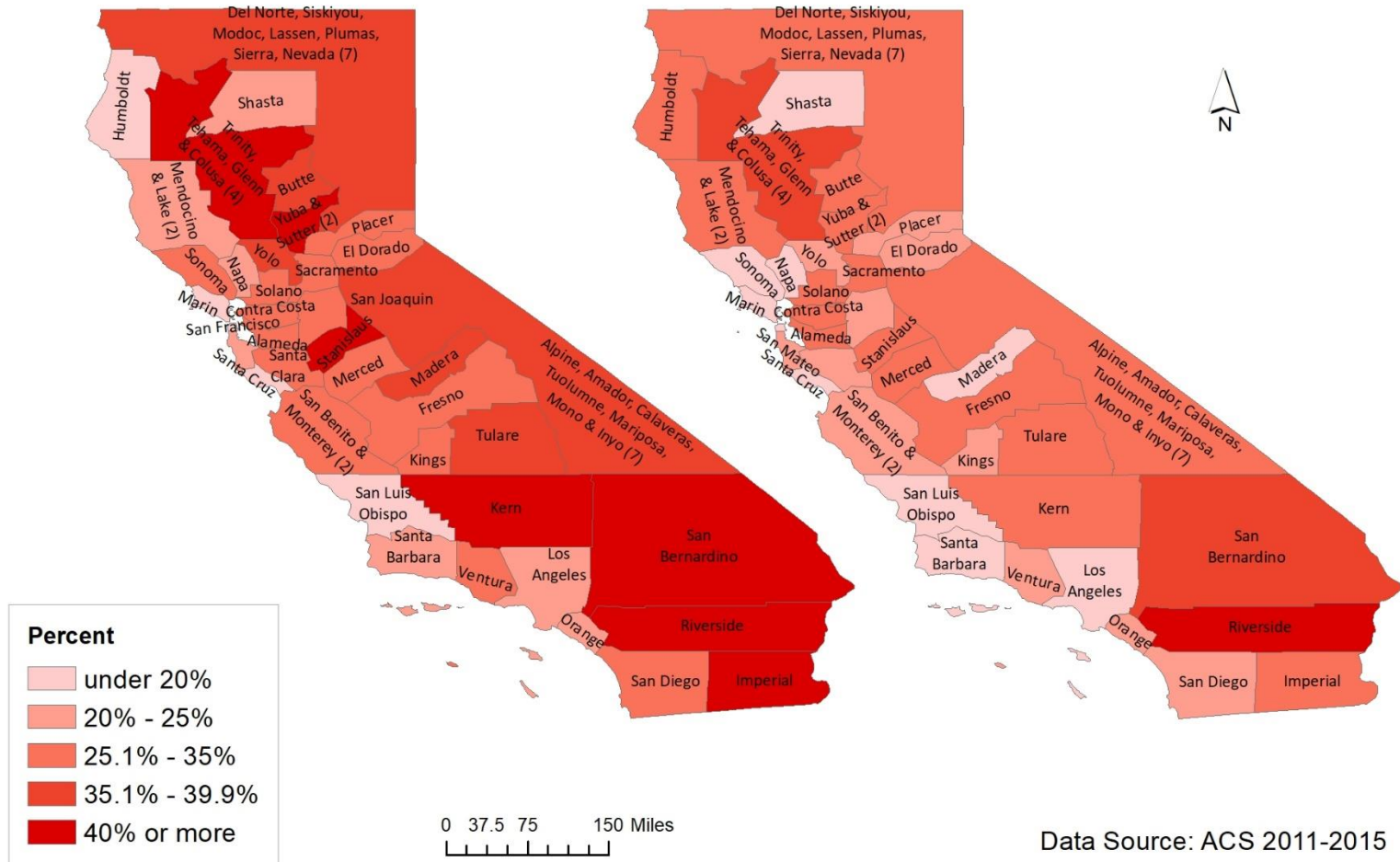## Share of Unauthorized Immigrants who Own a Home, by County, CA

695,000 (29%)   575,000 (24%)

Passel Estimates   **Marcelli Estimates**

Percent
- under 20%
- 20% - 25%
- 25.1% - 35%
- 35.1% - 39.9%
- 40% or more

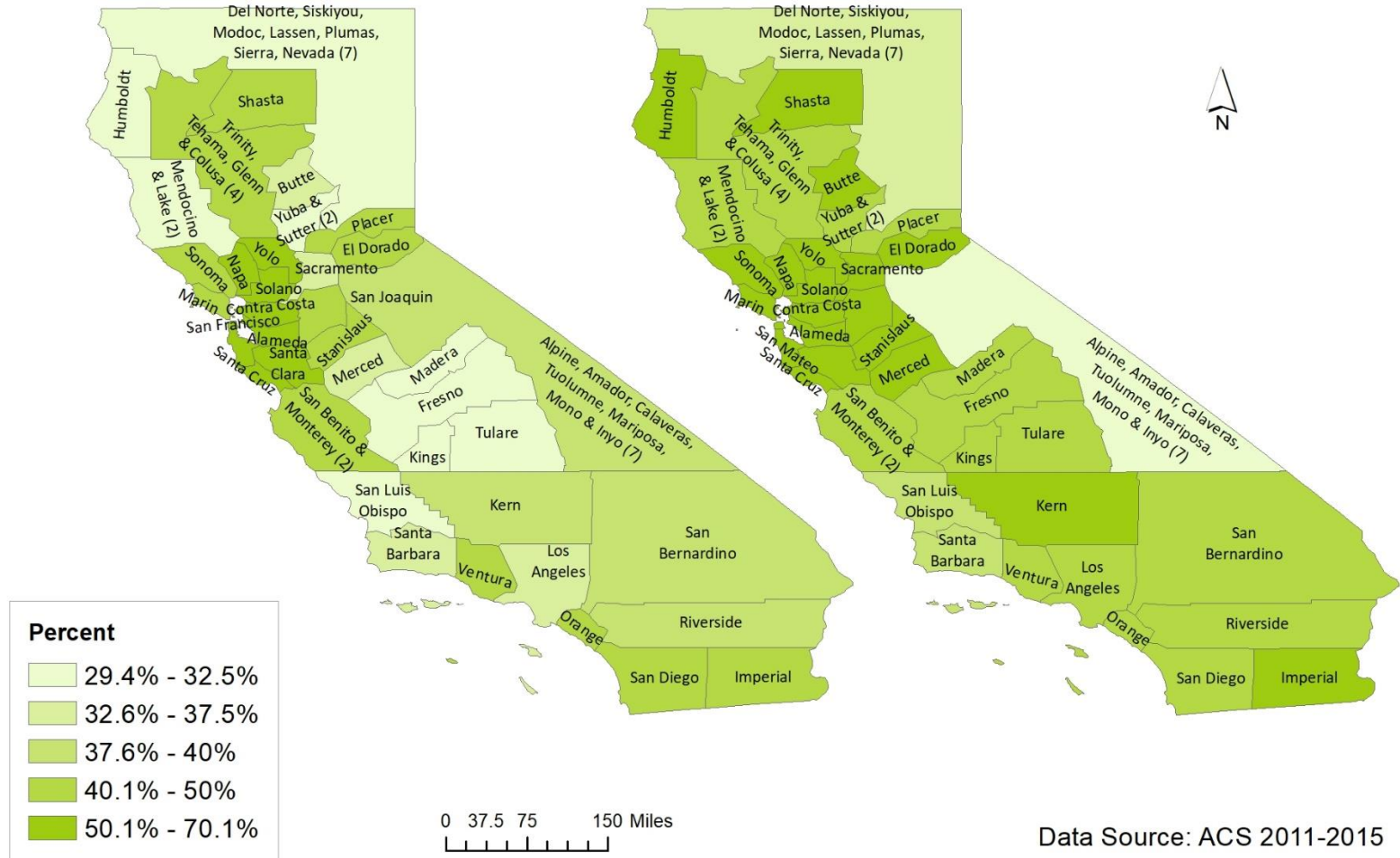0   37.5 75   150 Miles

Data Source: ACS 2011-2015

IV. Results

Share of Unauthorized Immigrants with Health Insurance by County, CA

1,000,000 (42%)
Passel Estimates

1,200,000 (50%)
Marcelli Estimates

Percent
- 29.4% - 32.5%
- 32.6% - 37.5%
- 37.6% - 40%
- 40.1% - 50%
- 50.1% - 70.1%

Data Source: ACS 2011-2015

V. Next steps and discussion

- Use dissimilarity indexes

- Compare individual-level legal status assignments

- What components of the two methods explain observed differences?

- From which (if any) immigrant populations do we need sample survey-based legal status data?