

Mapping the Subcomponents of Net International Migration (NIM)

An overview of the geographic distribution of foreign-born migration using ACS data

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Outline

1. Background
2. Analysis
3. Nation
4. State and County
5. Conclusions

Background

- The U.S. Census Bureau produces population estimates annually for states, counties, cities and towns/townships.
- The Population Estimates Program provides estimates important for federal and state funding allocations and survey controls for the American Community Survey (ACS) and the Current Population Survey (CPS).
- The Census Bureau releases population estimates as a time series starting with the most recent census.

Background: Components of Change

$$P_2 = P_1 + B - D + NDM + NIM$$

P_2 estimated population

P_1 starting population (April 1, 2010)

B births

D deaths

NDM net domestic migration

NIM net international migration

Background: NIM Component

$$P_2 = P_1 + B - D + NDM + NIM$$

$$= I - E + (NAT + PR + MIL)$$

<i>I</i>	foreign-born immigration
<i>E</i>	foreign-born emigration
<i>NAT</i>	net native-born migration
<i>PR</i>	net U.S. – Puerto Rico migration
<i>MIL</i>	net military movement

Data and Analysis

- Population Estimates Data
- Time Series: 2010 through 2013
- Type of international migration flows:
 - Mexico
 - All Other Countries
- Measures of international migration
- Maps: States and Counties

Methodology: Nation

- Current Data Sources:
 - Census 2000
 - ACS single-year file (since 2002)
 - Foreign Censuses and Population Registers
- Since 2007, estimated net foreign-born migration by flow:
 - Immigration – based on the citizenship and the residence one year ago question (ROYA)
 - Emigration – residual method applied to data from the Census 2000 and ACS single-year files

Figure 1. Subcomponents of Net International Migration (NIM)

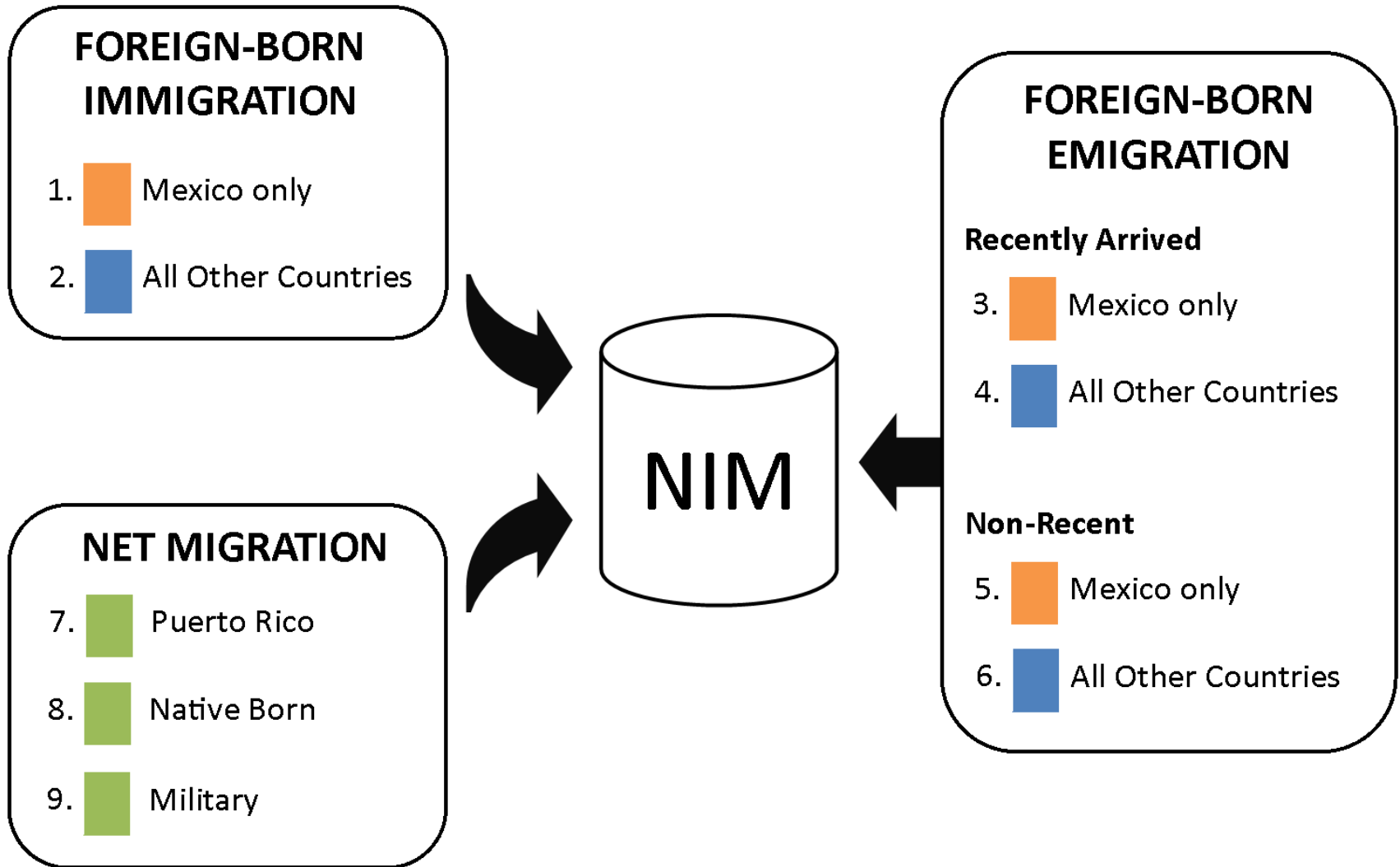
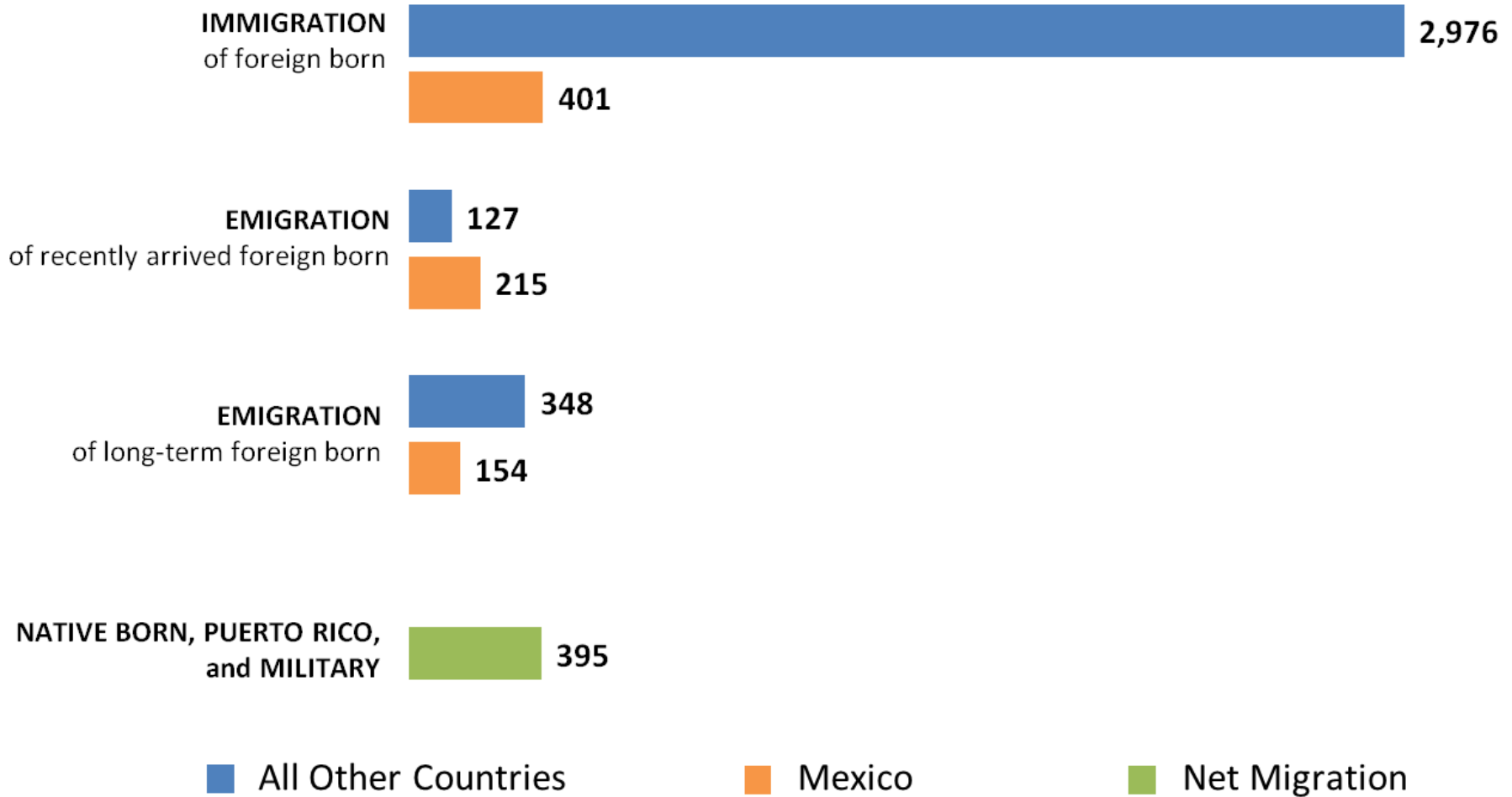


Figure 2. NIM Subcomponent Totals for the Nation: April 1, 2010 – June 30, 2013
(In thousands)



Methodology: States & Counties

- Distributions by geography and characteristics:
 - States: 3-year ACS
 - Counties: 5-year ACS
- Apply distributions to national NIM subcomponents
- State- and County-level estimates sum to the national estimate for each subcomponent

Figure 3. Net International Migration of the Foreign Born (All Other Countries) by State: April 1, 2010 to June 30, 2013

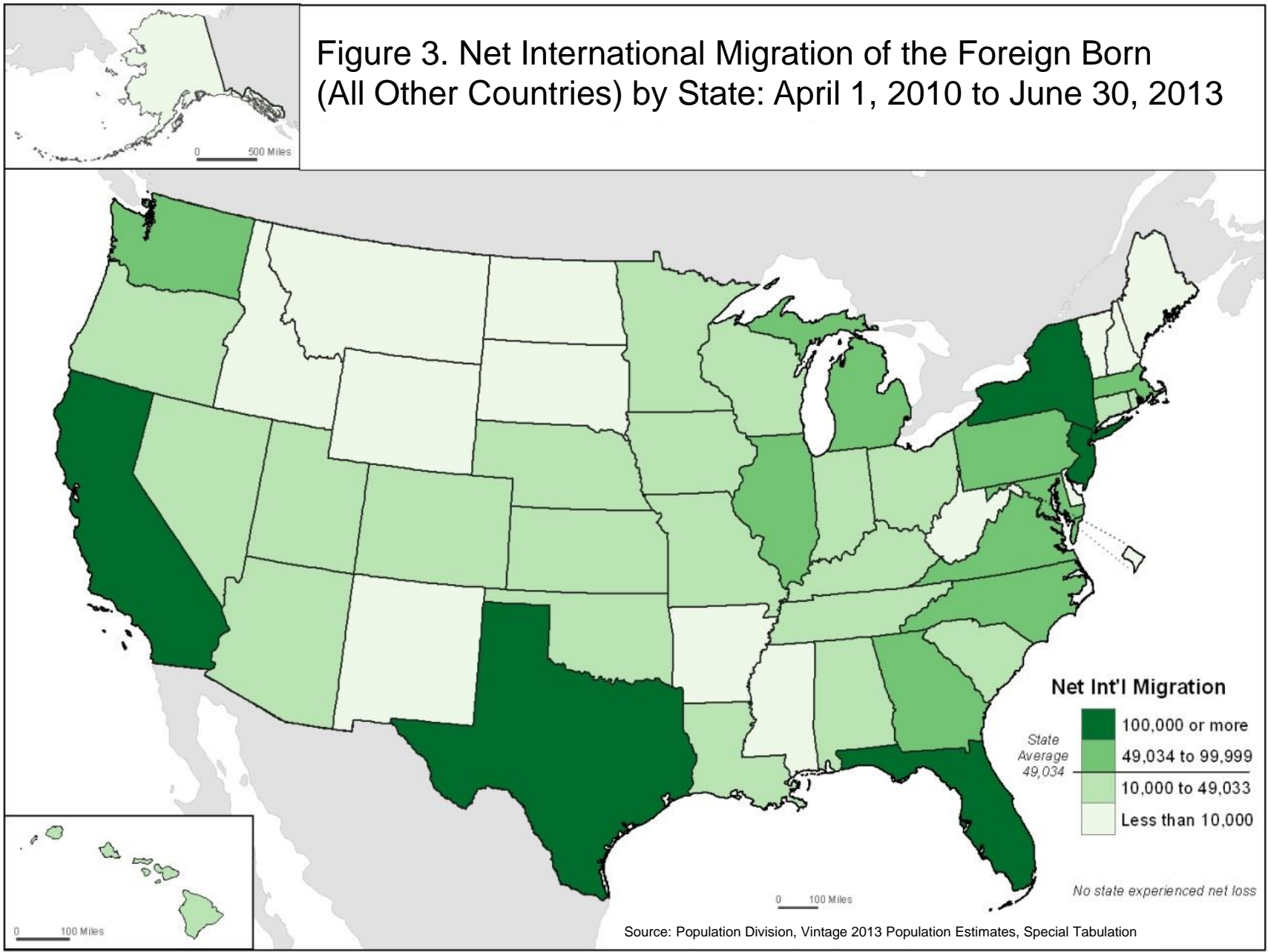


Figure 4. Foreign-Born Migration Flows (All Other Countries) for Ten States With Largest Combined Migration: April 1, 2010 – June 30, 2013

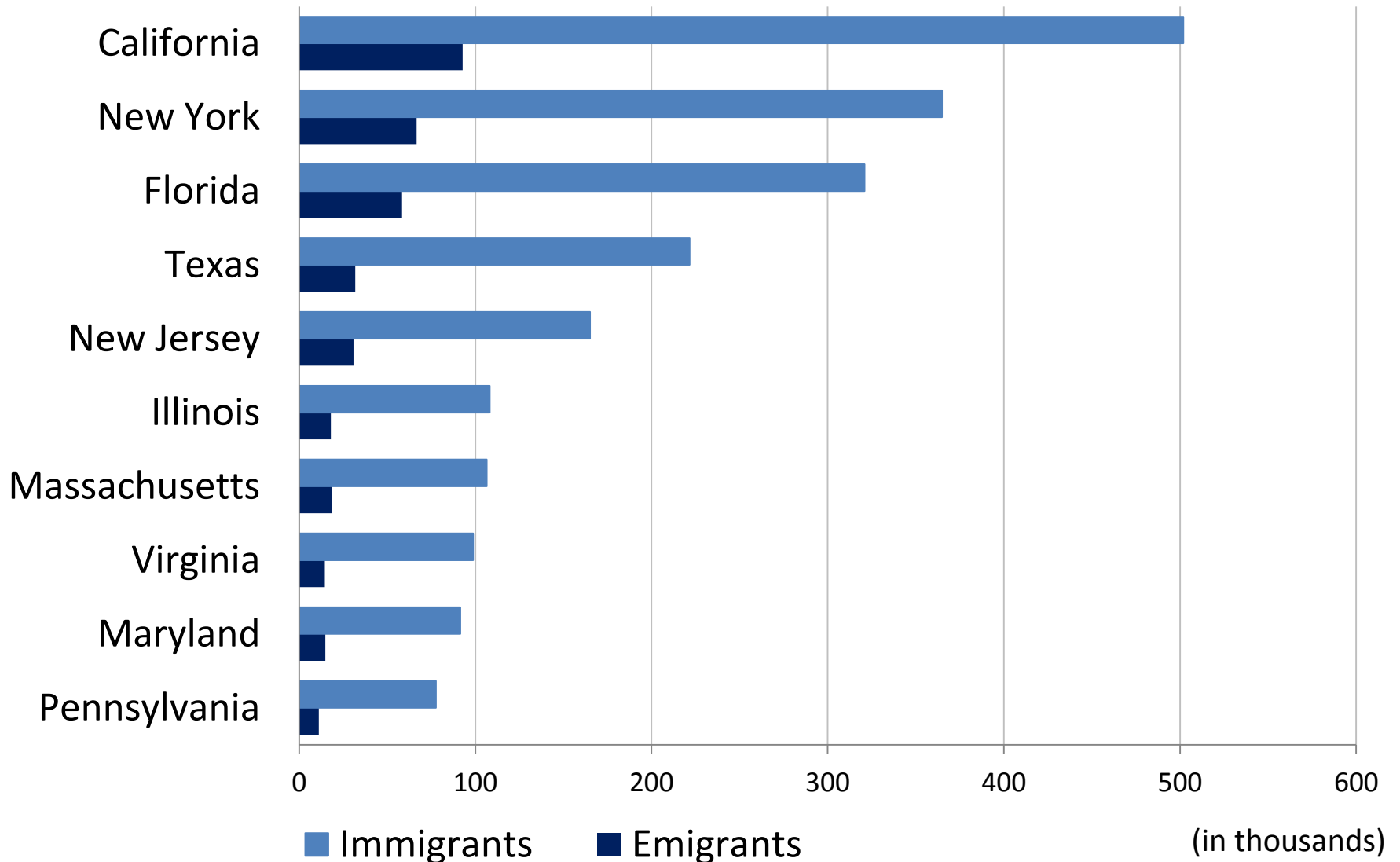


Figure 5. Net International Migration of the Foreign Born (Mexico) by State: April 1, 2010 to June 30, 2013

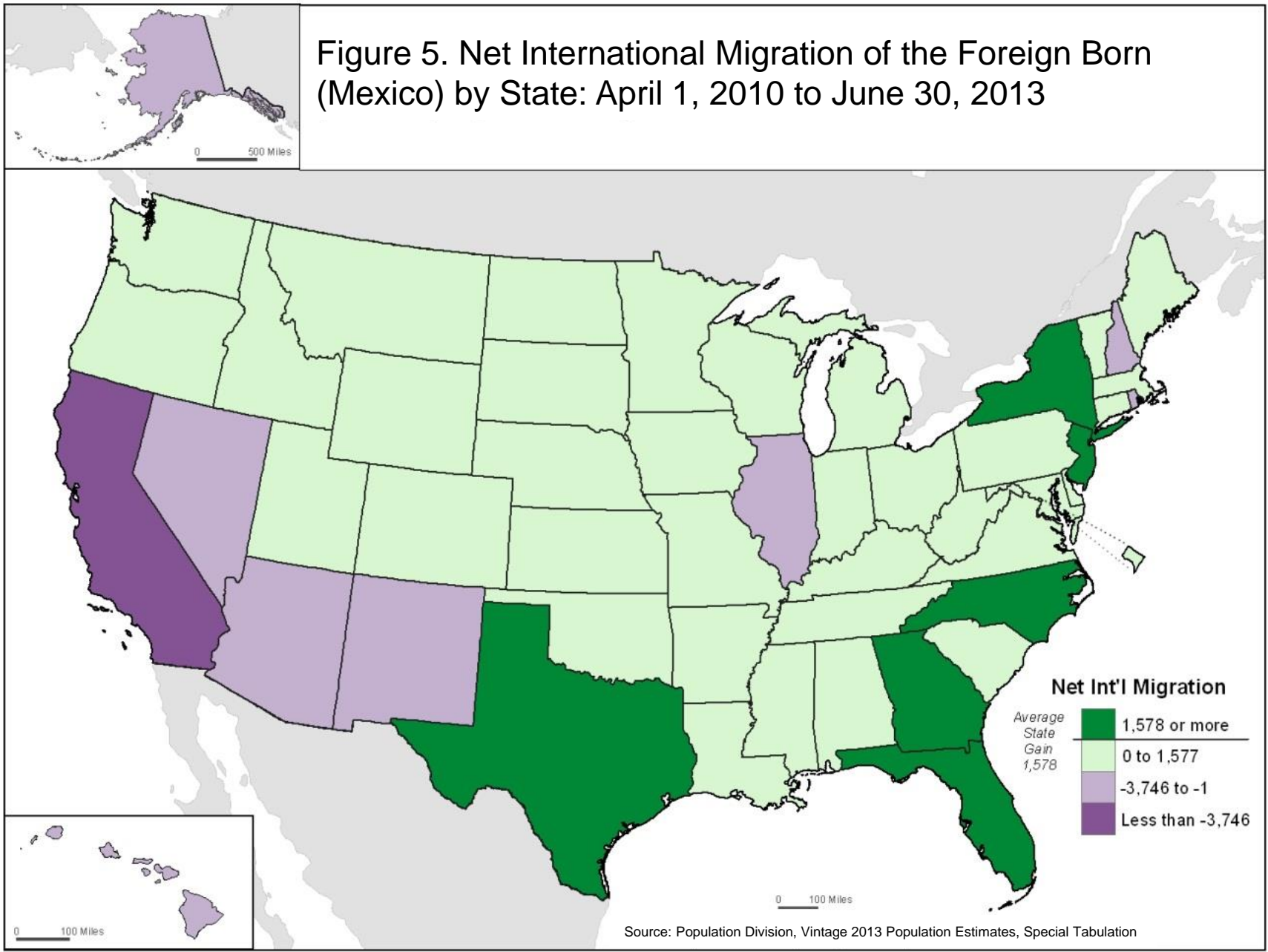


Figure 6. Foreign-Born Migration Flows (Mexico) for Ten States With Largest Combined Migration: April 1, 2010 – June 30, 2013

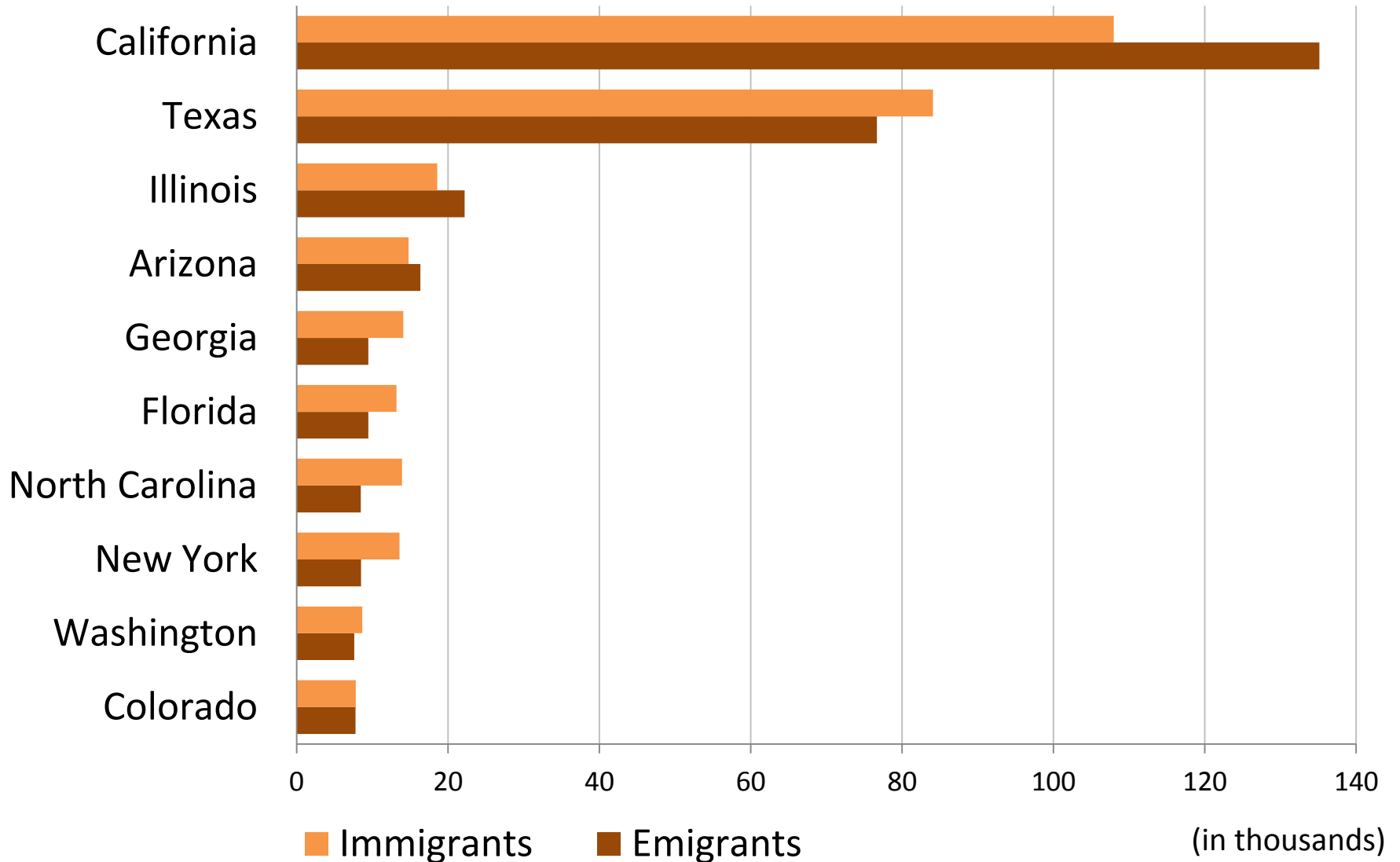


Figure 7. Net International Migration of the Foreign Born (All Other Countries) by County: April 1, 2010 to June 30, 2013

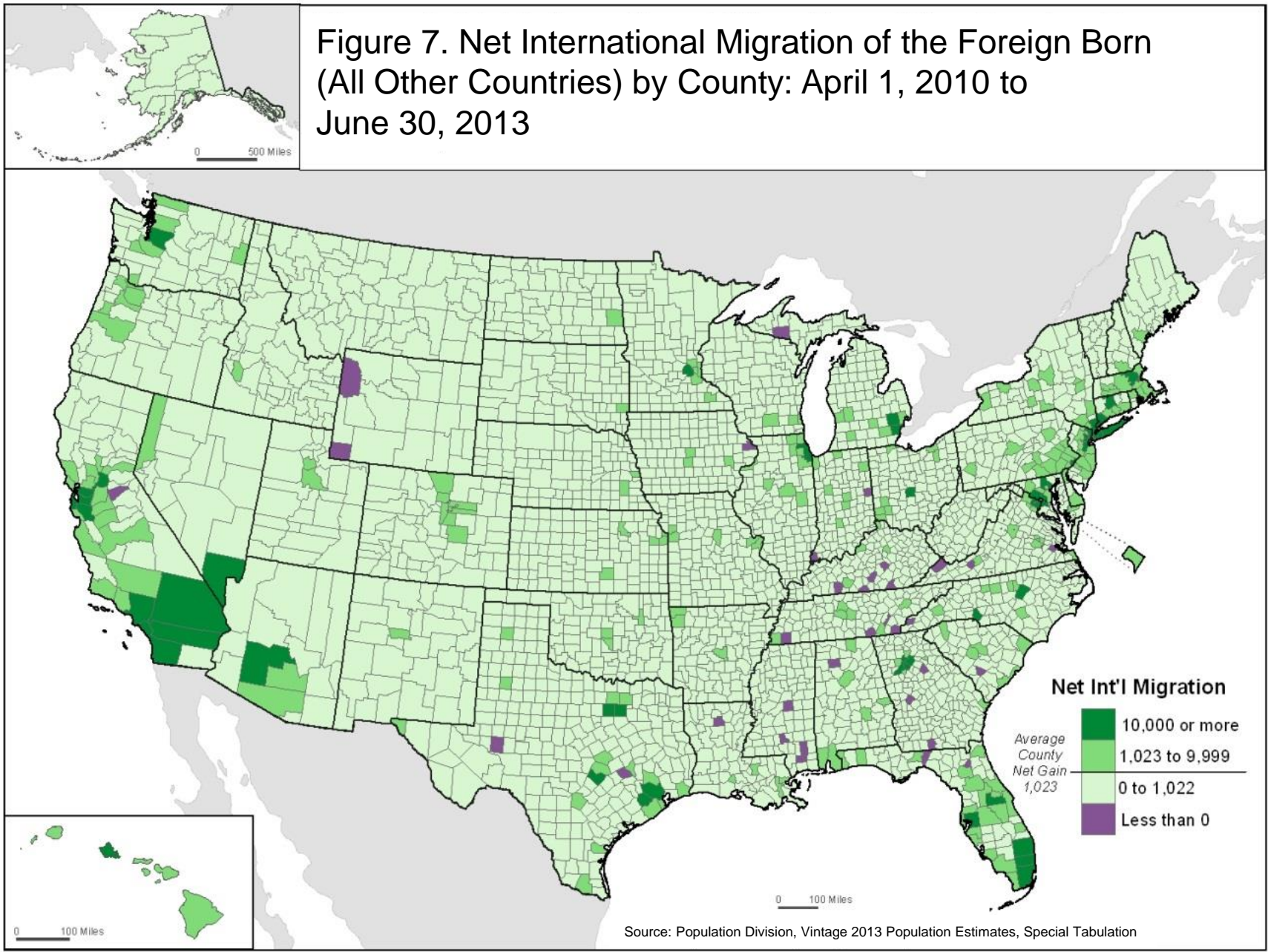
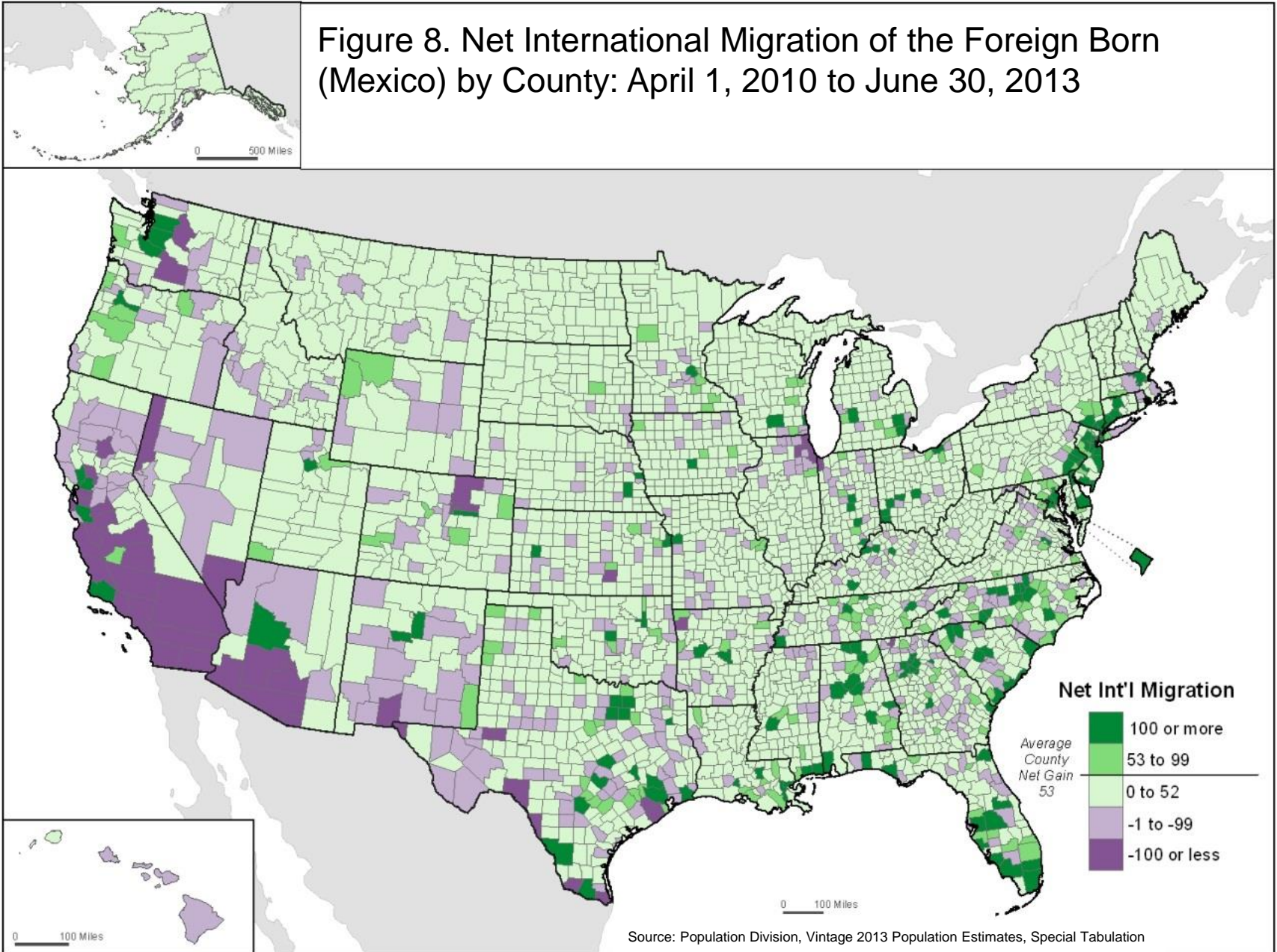


Figure 8. Net International Migration of the Foreign Born (Mexico) by County: April 1, 2010 to June 30, 2013



Source: Population Division, Vintage 2013 Population Estimates, Special Tabulation

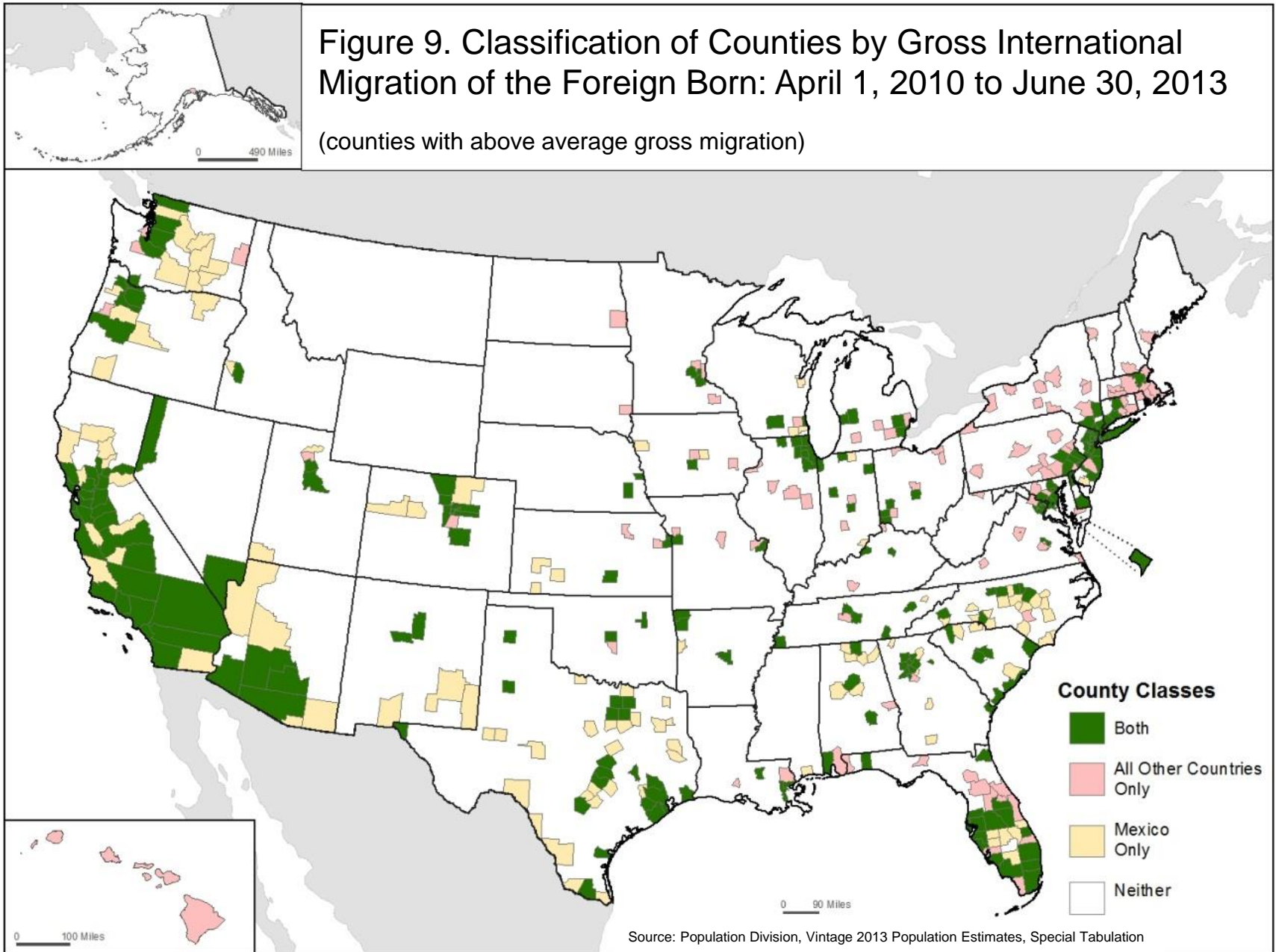
Gross (Total) Migration

$$G = (I + E)$$

- Sum of total in- and out-migration flows
- Immigration and Emigration
- Ignores the direction of migration

Figure 9. Classification of Counties by Gross International Migration of the Foreign Born: April 1, 2010 to June 30, 2013

(counties with above average gross migration)



Demographic Effectiveness of Foreign-Born International Migration

$$F_{FB} = \left(\frac{NIM_{FB}}{G_{FB}} \right) \times 100$$

- Net International Migration of the Foreign Born (NIM_{FB}) and Gross Migration of the Foreign Born (G_{FB})
- Measure of directionality:
 - 100% all migration outflow
 - 0% migration flows are equal
 - -100% all migration inflow

Sources: Shryock (1964); Plane and Rogerson (1994); Plane, Henrie and Perry (2005); Henrie and Plane (2008)

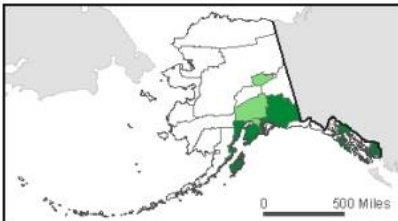


Figure 10. Effectiveness of International Migration of the Foreign Born (All Other Countries) by County: April 1, 2010 to June 30, 2013

(For counties with 50 or more gross migrants)

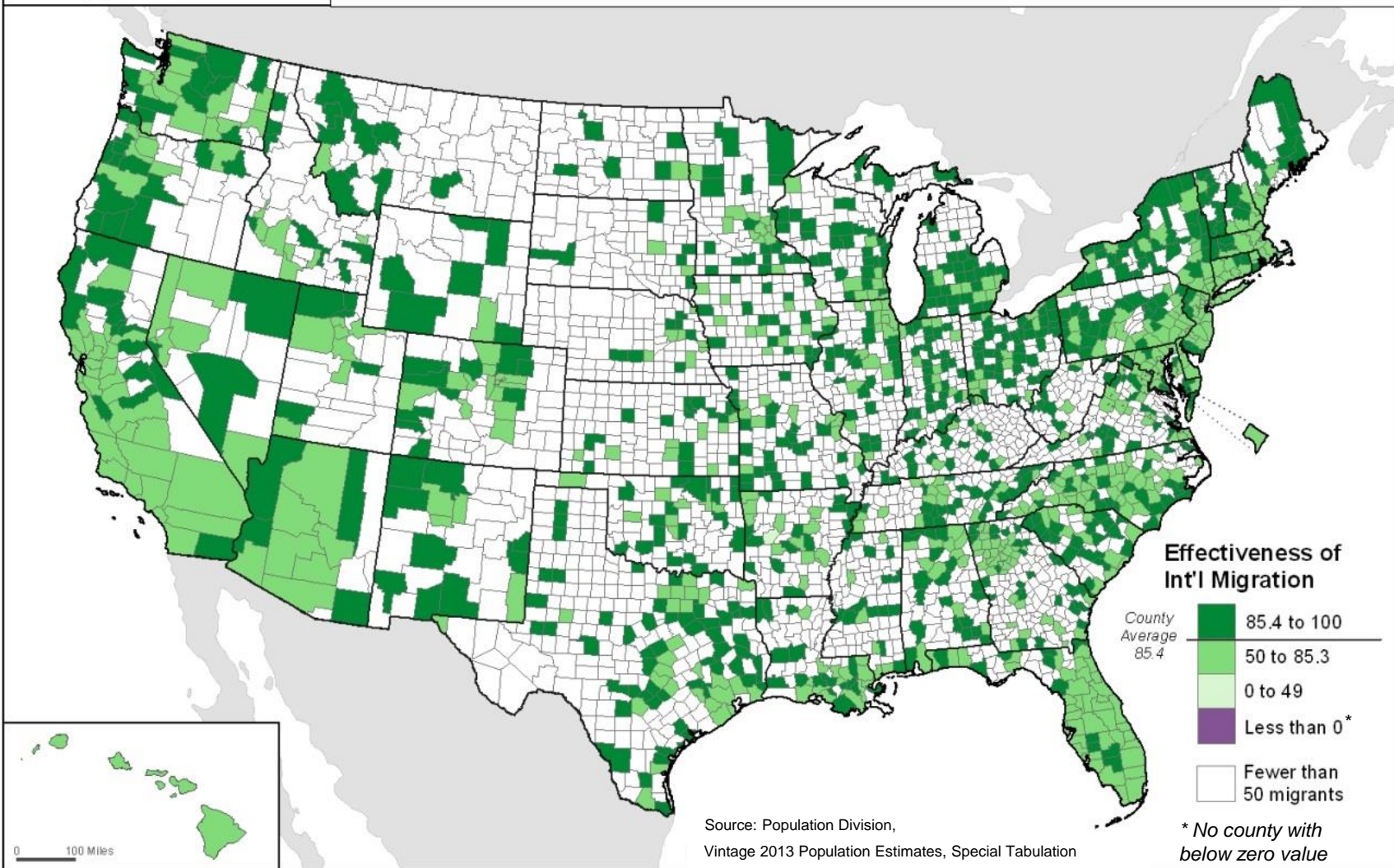
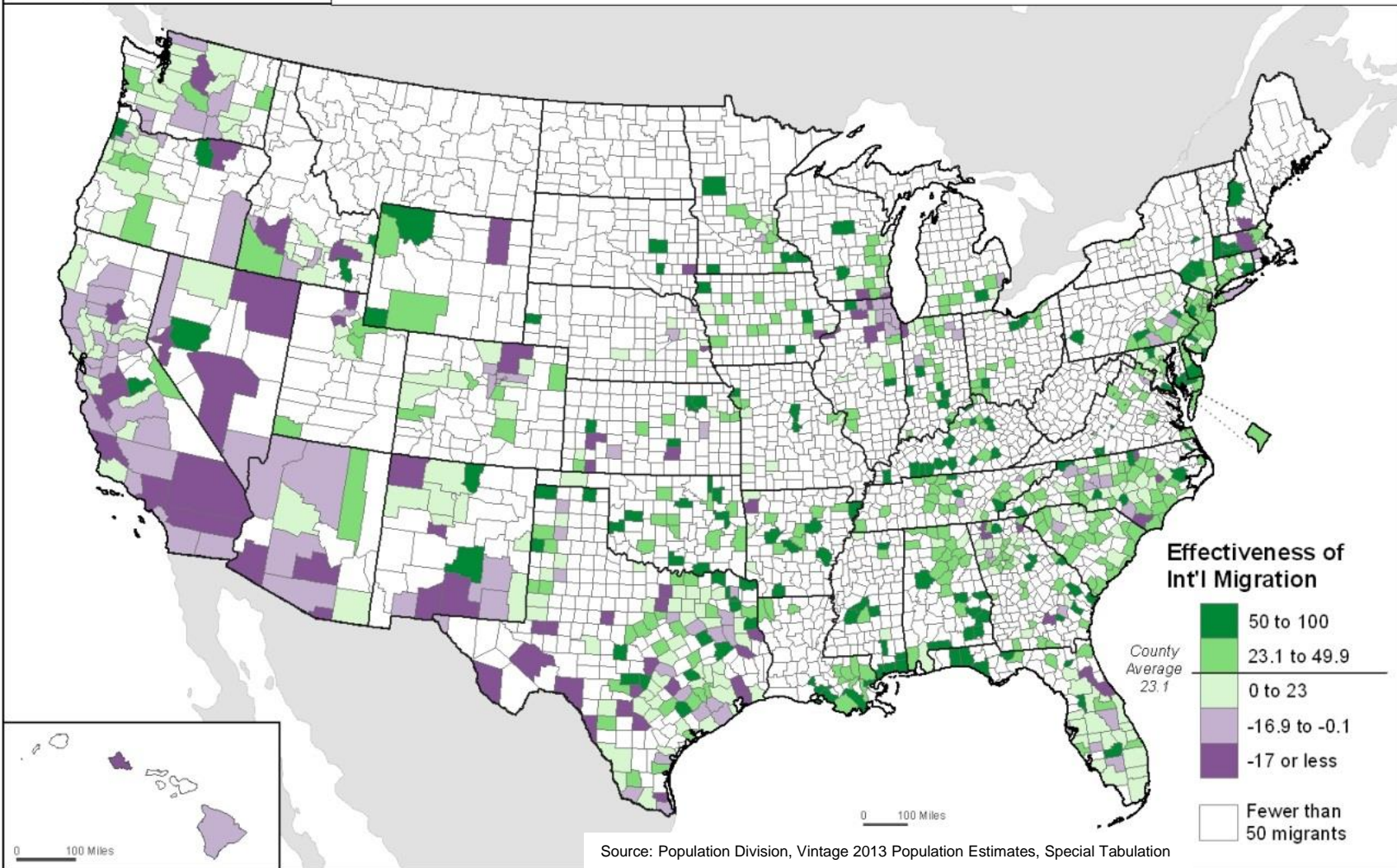




Figure 11. Effectiveness of International Migration of the Foreign Born (Mexico) by County: April 1, 2010 to June 30, 2013

(For counties with 50 or more gross migrants)



Conclusions

- Geographic variation in international migration
- All Other Countries distributions:
 - Net gains for most counties
 - Activity in college counties
- Mexico migration distributions:
 - Net losses experienced in the West and border counties
 - Net gains in other regions
- Future research on migration from All Other Countries category

More Information

Population Division

Net International Migration Branch

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- Population Estimates Program Homepage
www.census.gov/popest/
- Foreign Born Population
www.census.gov/population/foreign/