

Using the American Community Survey to Measure Net International Migration

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U S C E N S U S B U R E A U

Overview of Presentation

- Net international migration component of the population estimates
- Using American Community Survey (ACS) data to estimate net international migration
 - Residence One Year Ago Method
- Demographic characteristics and geographic distribution

Net International Migration Component of the Population Estimates

Population Estimates

- The U.S. Census Bureau produces annual estimates of the population using the demographic components of change (births, deaths, and migration)
- One component of the population estimates is **net international migration (NIM)**, defined as the net movement across U.S. (50 states and the District of Columbia) borders.

Net International Migration (NIM)

- The Net International Migration component of the population estimates consists of three subcomponents:
 1. Net migration of the foreign-born population (**NFB**)
 2. Net movement between Puerto Rico and the U.S. (50 states and D.C.) (**NPR**)
 3. Emigration of native population (**NEMIG**)

$$\text{NIM} = \text{NFB} + \text{NPR} - \text{NEMIG}$$

Requirements for NIM Estimates To Be Used in Population Estimates

- Net International Migration and subcomponents
 - Net foreign-born migration
 - Net movement between U.S. and P.R.
 - Native emigration
- County-level
- Detailed characteristics
 - Age: single years
 - Sex
 - Race: 31 race groups
 - Hispanic Origin: 2 groups

Using ACS Data to Estimate Net International Migration

American Community Survey (ACS)

- Annual nationwide survey
- NIM estimates use ACS data
- Full implementation: 2005
- Housing unit sample size (in thousands):

| ACS data year | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------------------|------|------|------|------|------|-------|-------|-------|-------|-------|
| Initial addresses selected | 891 | 858 | 742 | 829 | 838 | 2,923 | 2,885 | 2,886 | 2,895 | 2,897 |
| Final interviews | 588 | 602 | 513 | 572 | 569 | 1,925 | 1,968 | 1,938 | 1,932 | 1,918 |

ACS Question: Citizenship

“Is this person a CITIZEN of the United States?”

- Yes, U.S. citizen by naturalization
- No, not a citizen of the United States

Native {

Foreign born {

8 Is this person a citizen of the United States?

- Yes, born in the United States → *SKIP to 10a*
- Yes, born in Puerto Rico, Guam, the U.S. Virgin Islands, or Northern Marianas
- Yes, born abroad of U.S. citizen parent or parents
- Yes, U.S. citizen by naturalization – *Print year of naturalization*
- No, not a U.S. citizen

ACS Question: Residence One Year Ago

“Did this person live in this house or apartment 1 year ago?”

No, outside the United States – Print name of foreign country, or Puerto Rico, Guam, etc. below

14 a. Did this person live in this house or apartment 1 year ago?

Person is under 1 year old → SKIP to the questions for Person 2 on page 10.

Yes, this house → SKIP to **F**

No, outside the United States – Print name of foreign country, or Puerto Rico, Guam, etc., below; then SKIP to **F**

No, different house in the United States

b. Where did this person live 1 year ago?

Name of city, town, or post office

c. Did this person live inside the limits of the city or town?

Yes

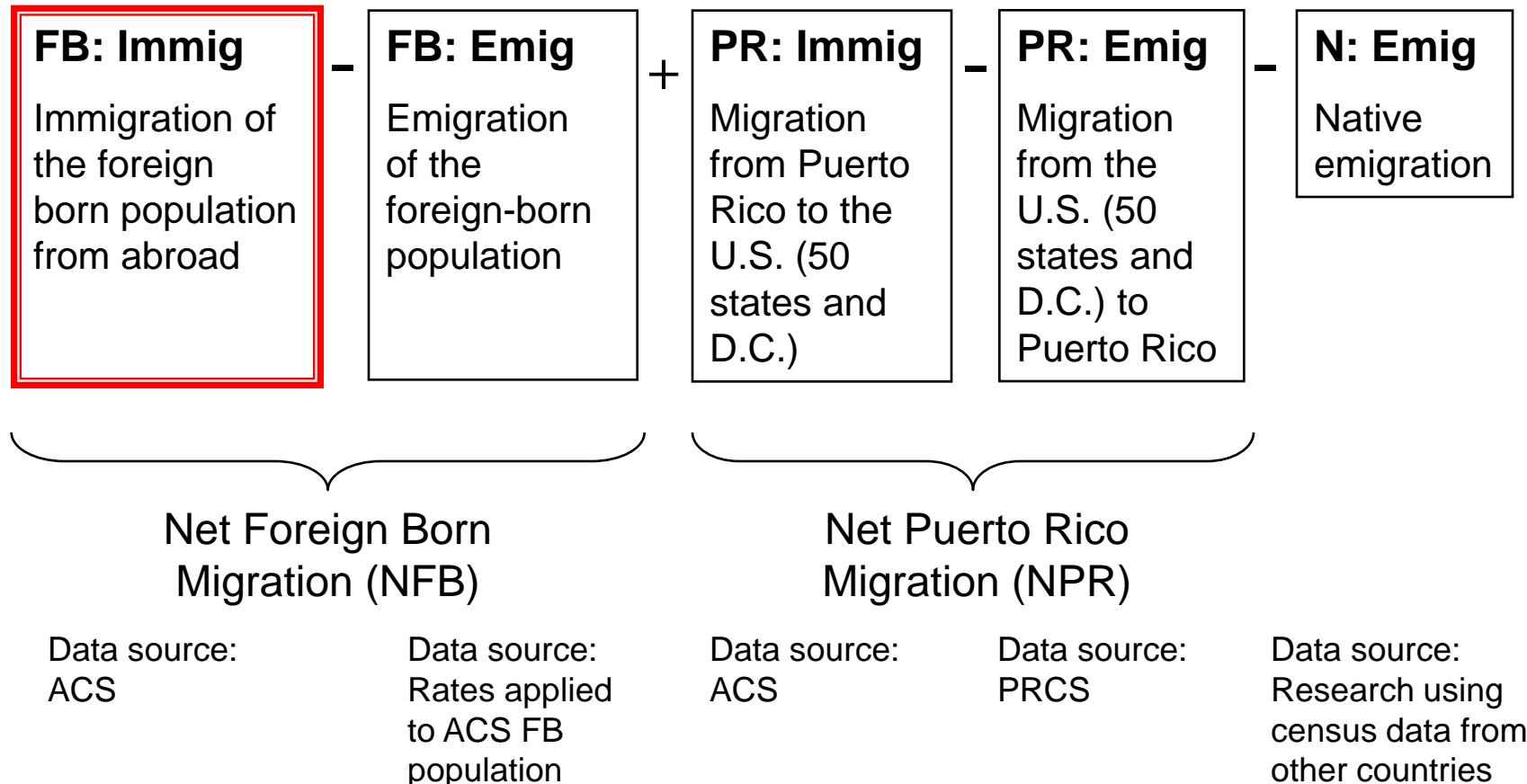
No, outside the city/town limits

Name of county

Name of state ZIP Code

Residence One Year Ago (ROYA) Method

Net international migration (NIM) =



ROYA: Foreign-Born Immigration

- Information derived from question on ACS which asks where the person lived one year ago
- Immigrants: Foreign born who were abroad (outside the United States and U.S. outlying areas) one year ago, plus an estimate of entrants less than one year old
- Annual foreign-born immigration inputs for 2000 to 2009 are between 1,431,000 and 1,090,000*

*numbers are rounded

ROYA: Foreign-Born Emigration

- Residual method used to generate rates by period of entry (within the last 10 years / more than 10 years ago)
- Rate applied to eligible population (eligible to emigrate)
- Eligible population: Foreign born living in the United States one year ago (ACS)
- Annual foreign-born emigration inputs for 2000 to 2009 are between 209,000 and 244,000*

*numbers are rounded

ROYA: Puerto Rico Immigration

- Information derived from question on ACS which asks where the person lived one year ago
- Immigrants (moved from Puerto Rico to one of the 50 states or D.C.): People in ACS who reported a residence one year ago of Puerto Rico, plus an estimate of entrants less than one year old
- Annual Puerto Rico immigration inputs for 2005 to 2009 are between 47,000 and 65,000*

*numbers are rounded

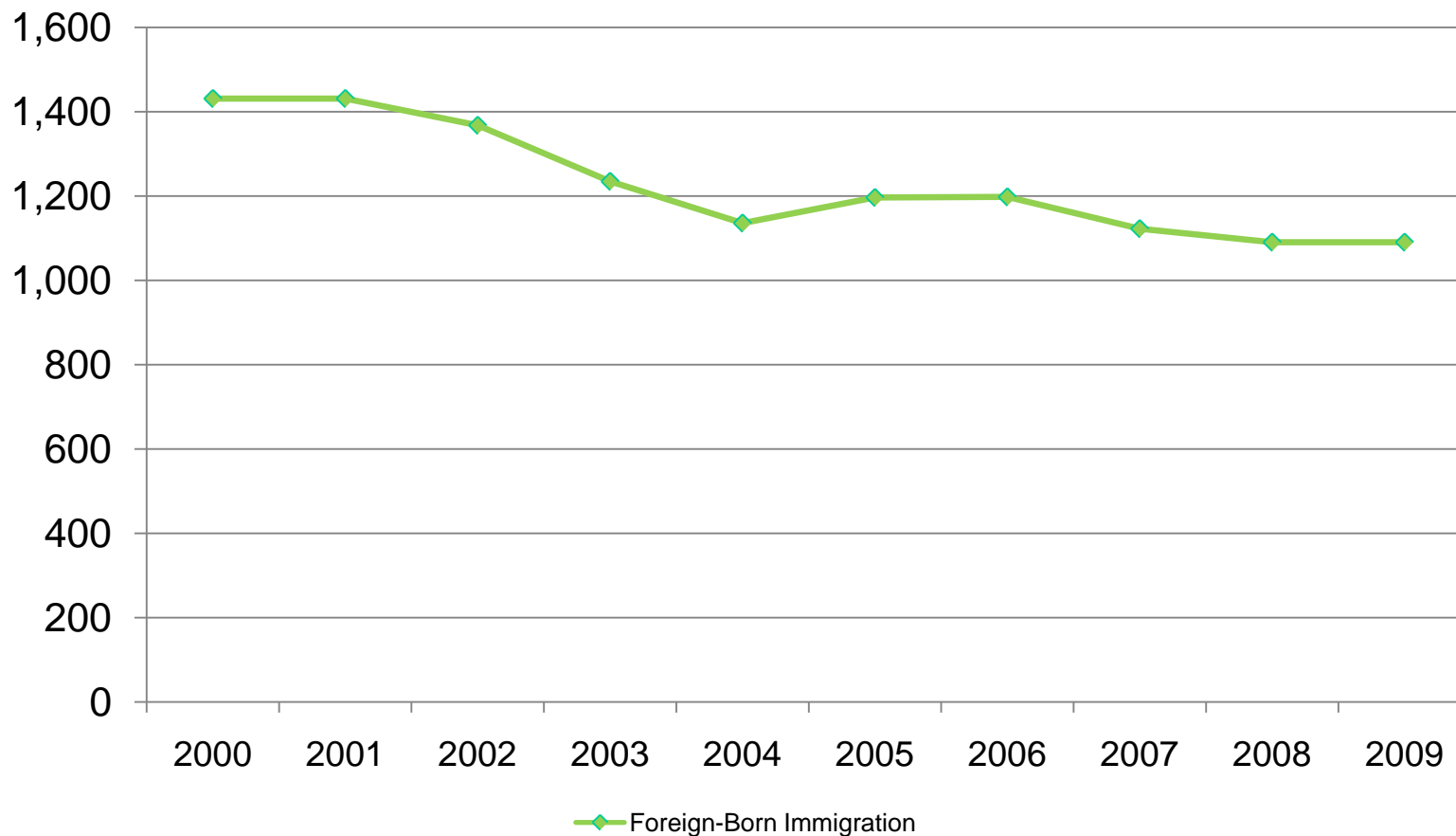
ROYA: Puerto Rico Emigration

- Information derived from question on Puerto Rico Community Survey (PRCS) which asks where the person lived one year ago
 - The PRCS was first fielded in 2005
- Emigrants (moved from United States to Puerto Rico): People in PRCS who reported a residence one year ago of the United States, plus an estimate of entrants less than one year old
- Annual Puerto Rico emigration inputs for 2005 to 2009 are between 28,000 and 35,000*

*numbers are rounded

Foreign-Born Immigration: 2000 to 2009

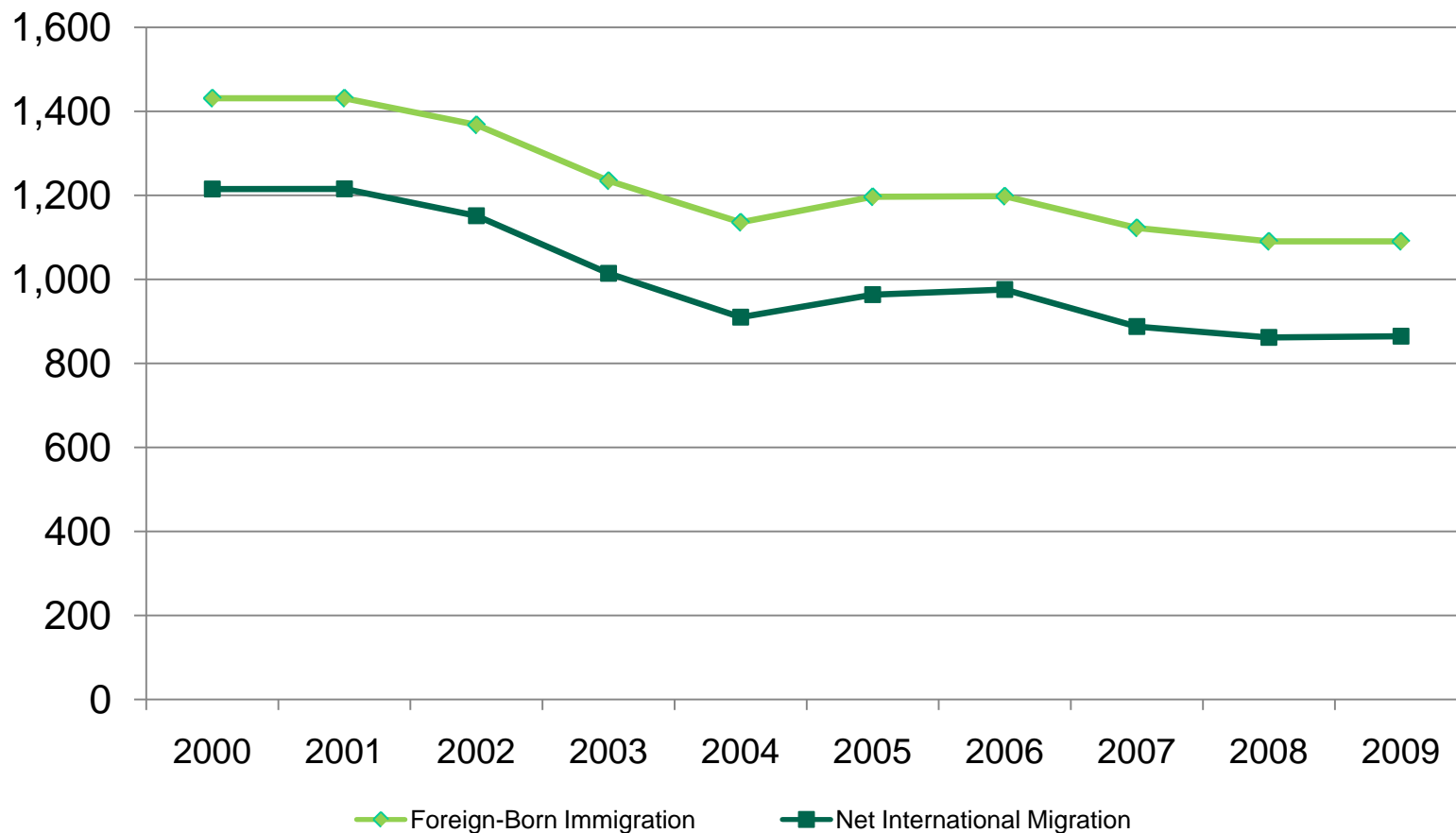
(in thousands)



Source: Vintage 2009 Population Estimates

Net International Migration: 2000 to 2009

(in thousands)



Source: Vintage 2009 Population Estimates

Demographic Characteristics and Geographic Distribution

- Estimates are produced at the county level by age, sex, race, and Hispanic origin
- Census 2000 and ACS 2005-2007 are used to determine the demographic characteristics and geographic distribution of estimates of NIM

Demographic Characteristics and Geographic Distribution

- Proxy universes are defined whose characteristics are believed to be representative of the different components
 - Example: Foreign-born immigrants are assigned characteristics of the foreign-born population whose year of entry was 5 or fewer years before the Census or survey year

Questions?