Race and Ethnicity Research

Estimates of unauthorized immigrants:
Methods, data and assumptions

Jeffrey S. Passel

Senior Demographer

Berkeley Workshop on Formal Demography
(extended version of presentation)
Berkeley Population Center
Berkeley, CA—3-7 June 2024

Pew Research Center

Pew Research Center is a nonpartisan <u>fact tank</u> that informs the public about the issues, attitudes and trends shaping America and the world.

We conduct public opinion polling, demographic research, content analysis and other data-driven social science research. We do not take policy positions.

We are a subsidiary of The Pew Charitable Trusts, our primary funder.

Pew Research Center

www.pewresearch.org

Pew Research Center

SHORT READS | NOVEMBER 16, 2023   SHARE

What we know about unauthorized immigrants living in the U.S.

BY **JEFFREY S. PASSEL** AND **JENS MANUEL KROGSTAD**

The unauthorized immigrant population in the United States reached 10.5 million in 2021, according to new Pew Research Center estimates. That was a modest increase over 2019 but nearly identical to 2017.

The number of unauthorized immigrants in the U.S. remained mostly stable from 2017 to 2021

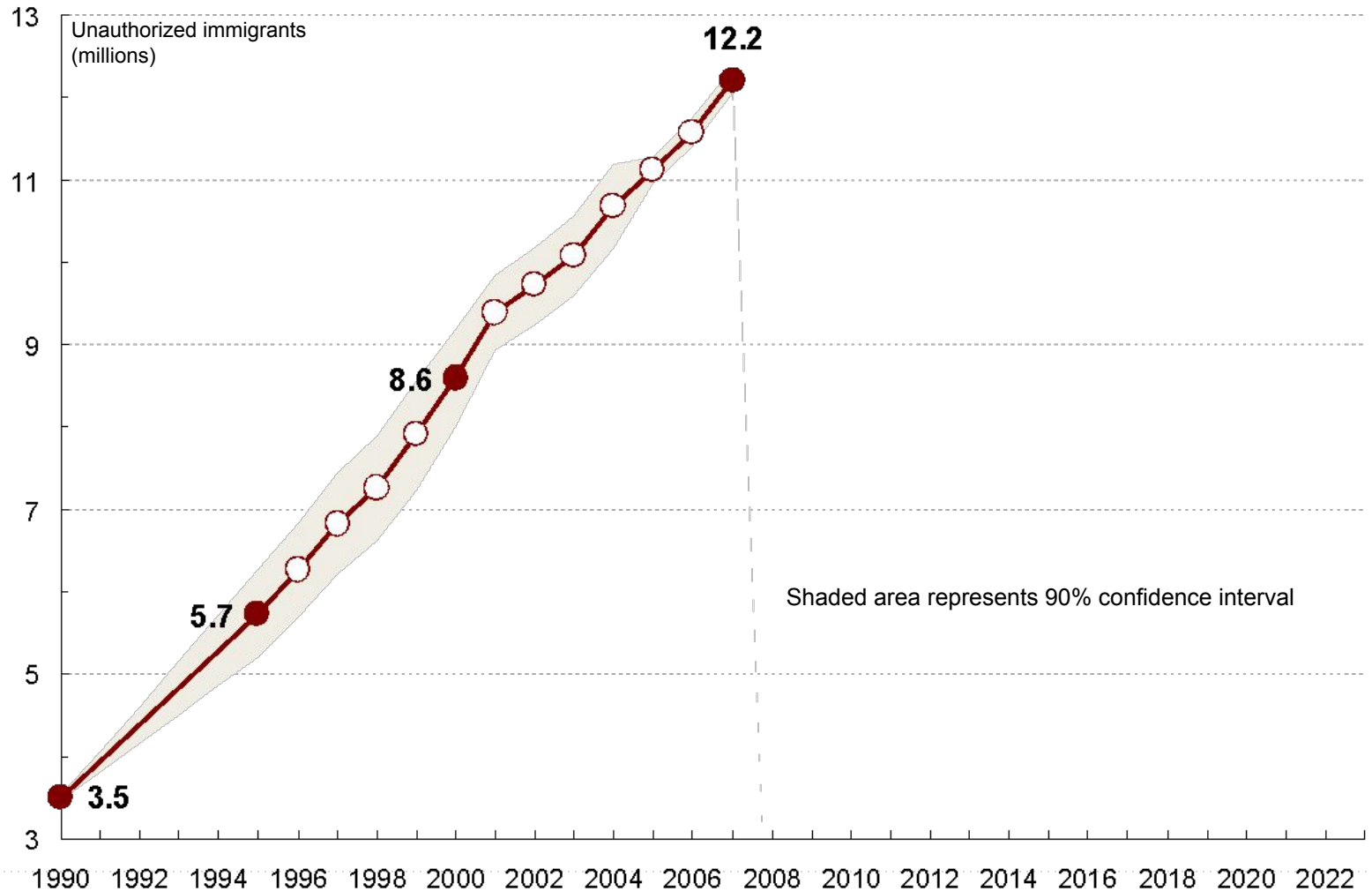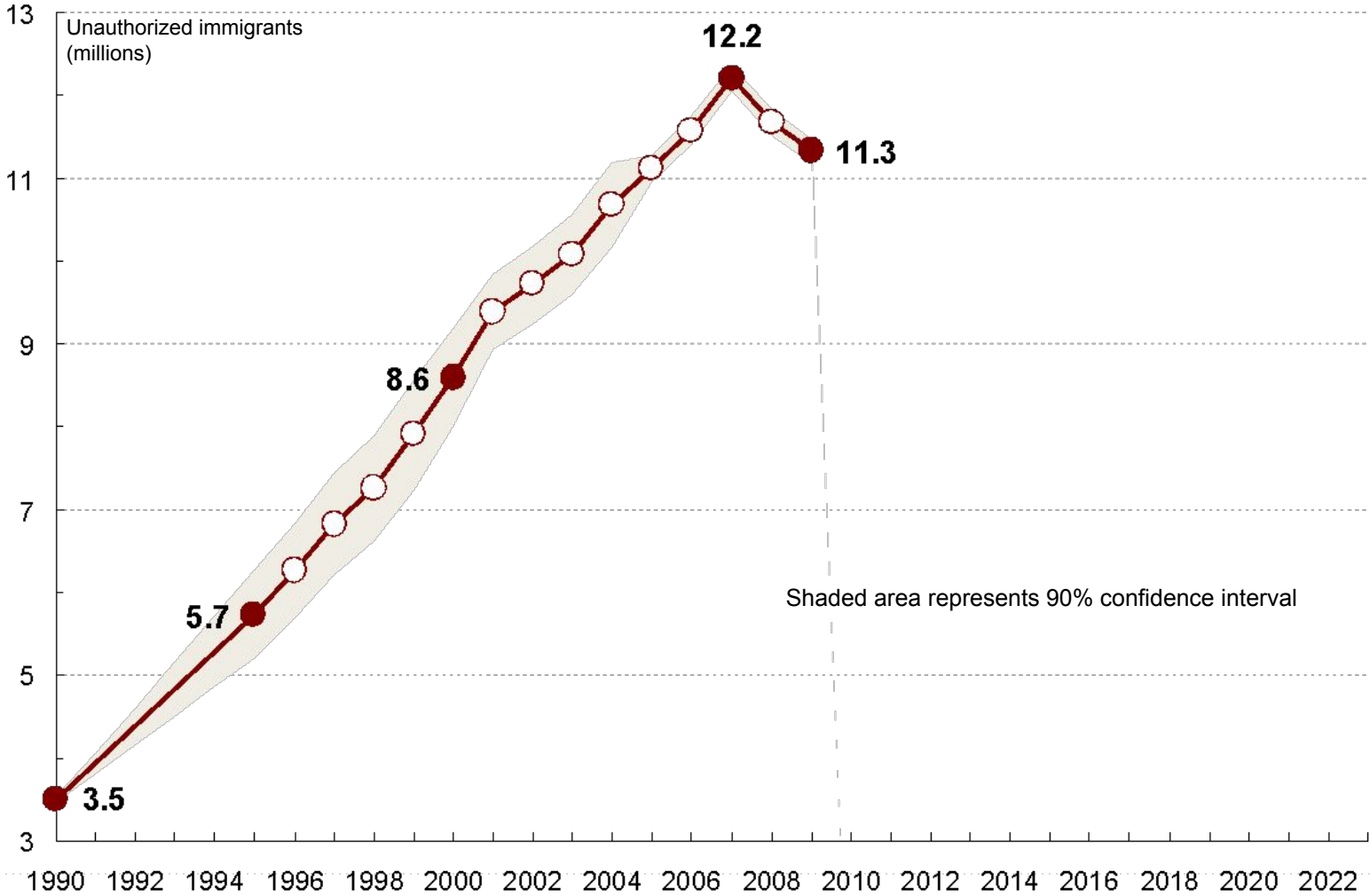*Unauthorized immigrant population in the United States, in millions*
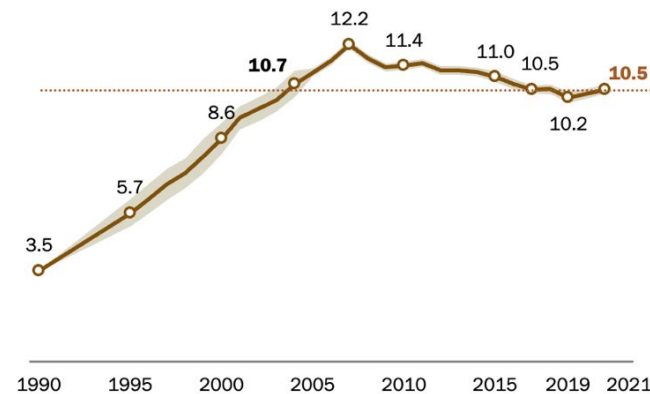
Today's presentation

- **Measurement methods**
  - Description of ***Residual Method***
  - View from "30,000 feet" [more details in handout]

- **Who is "authorized" vs. "unauthorized"**
  - Who is a lawful immigrant
  - Significant number in recognized "unauthorized" statuses
  - DACA, TPS, asylum backlogs, CHNV
  - Rapid growth in last few years

- **Microdata status assignments**
  - Citizens, legal temporary, refugees, definite legals
  - Potential unauthorized ▯ unauthorized
  - Approximations

But, first...
some context

Unauthorized immigrants reached 12+ million in '07 — NET growth of 500,000 per year for 17 years

Unauthorized immigrants (millions)

12.2

8.6

5.7

3.5

Shaded area represents 90% confidence interval

13

11

9

7

5

3

1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Pew Research Center

Sudden reversal after '07 (Great Recession) — DROP of 500,000 per year for two years

Unauthorized immigrants (millions)

12.2

11.3

8.6

5.7

3.5

Shaded area represents 90% confidence interval

13

11

9

7

5

3

1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Pew Research Center

Stable or downward drift for a decade '09-'19; unauthorized immigrants drop to '03 (!) level

Unauthorized immigrants (millions)

- 3.5
- 5.7
- 8.6
- 10.1
- 12.2
- 11.3
- 11.0
- 10.2

Shaded area represents 90% confidence interval

1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Pew Research Center

New reversal after 2019;
first sustained increase since 2005-07

Unauthorized immigrants (millions)

12.2

11.3

11.0

10.1

8.6

5.7

3.5

10.2

10.5

11.0

Shaded area represents 90% confidence interval

1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Pew Research Center
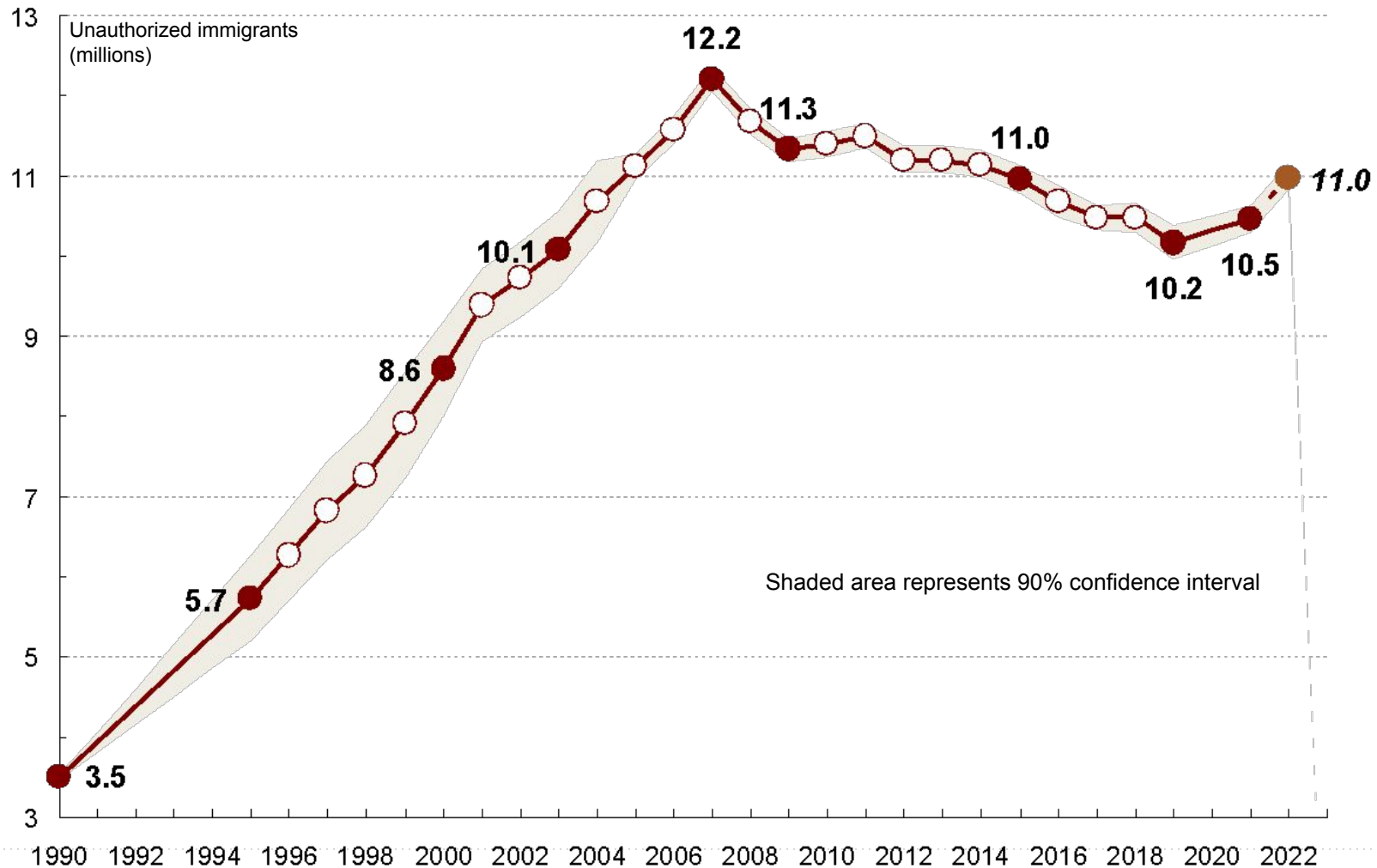
Continued increase likely –
Other data (discussed later) points to this
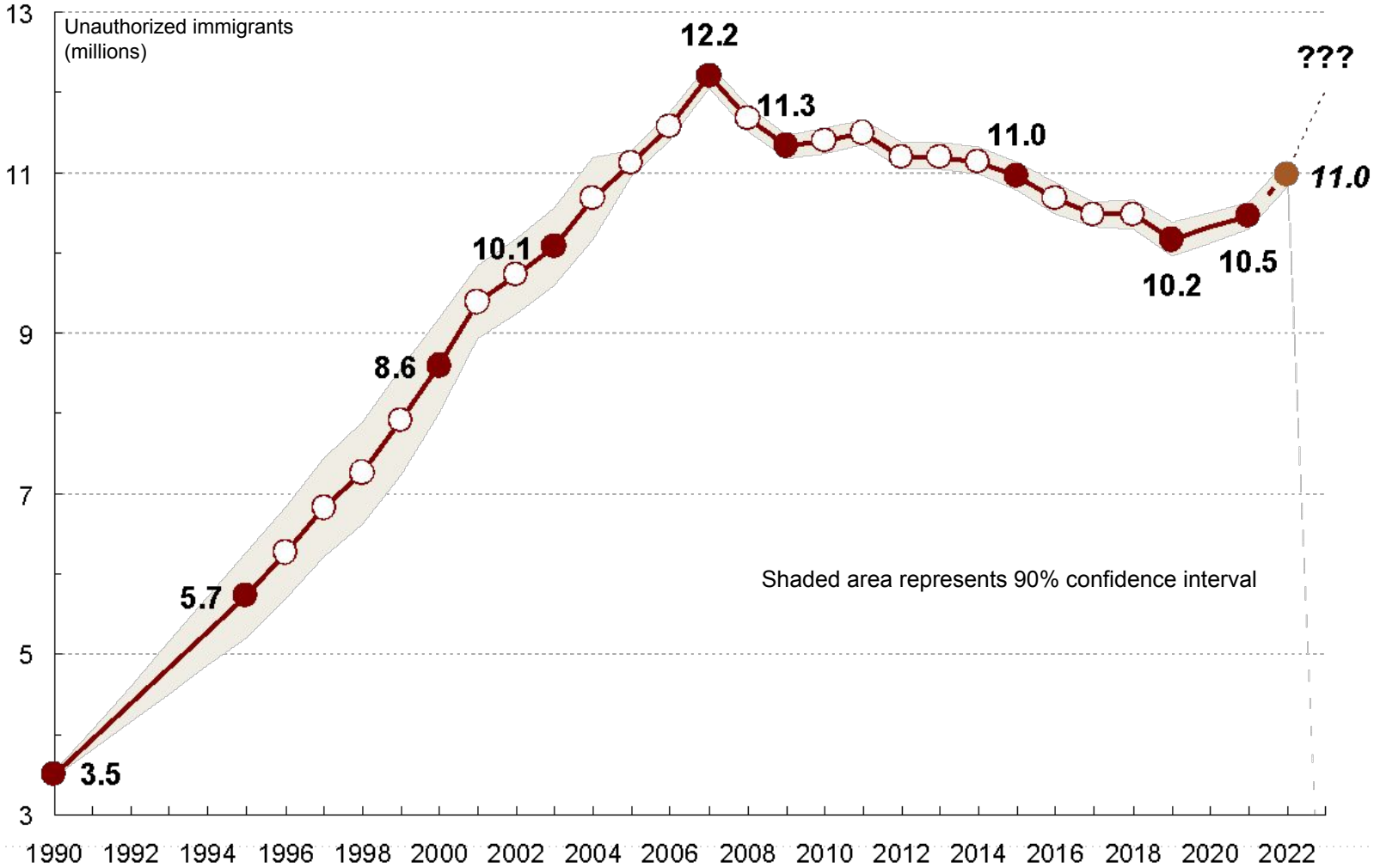
Unauthorized immigrants (millions)

13

12.2

11.3

11.0

11.0

10.1

10.5

8.6

10.2

???

5.7

Shaded area represents 90% confidence interval

3.5

11

9

7

5

3

1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022

Pew Research Center

Outline of Pew methodology

- **Estimate unauthorized in survey**
  - **Residual** = survey "immigrants" *minus* lawful (LPRs)
  - Demographic estimate of LPRs from admin records

- **Adjust for omissions**
  - Based on several external data sources

- **Assign legal status in microdata**
  - Create status variable for individuals, families, h'holds
  - Deterministic for legal temps, refugees, naturalized
  - Probabilistic "multiple imputations" for lawful and unauthorized immigrants

- **Tabulate microdata**

Estimating the population

Residual estimates of unauthorized immigrants

Unauthorized immigrants =

Total immigrants (Survey)

minus

Lawful immigrants (Estimate)

- *Widely used:*
  - Passel (et al.) '80–present
  - Van Hook-Bachmeier
  - DHS-OIS '05–'22; Warren '80–'00
  - CMS (Warren-Warren, variant)
  - Binational Study '96

Pew Research Center

Equations for Pew estimate of unauthorized immigrants

Unauthorized Immigrants **=** **Total Immigrants** **minus** **Lawful Immigrants**

Less Estimated Undercount

Unauthorized Counted **=** **Counted Immigrants** **minus** **Counted Lawful Immigrants**

Counted Immigrants **=** *Survey Foreign-Born* **minus** **Counted Lawful Non-Immigrants**

Note: All populations are for post-1980/1982 entrants.

Pew Research Center

Residual estimate using 2017 American Community Survey

In millions

44.490

35.7

8.745

6.896   +1.9

6.9   6.9   6.9

Pre-'80 lawful immigrants (ACS)   **Add lawful nonimmigrants**   **Leaves post-'80 immigrants (ACS)**   **Lawful immigrants (post-'80)**   **Residual counted**

Pew Research Center
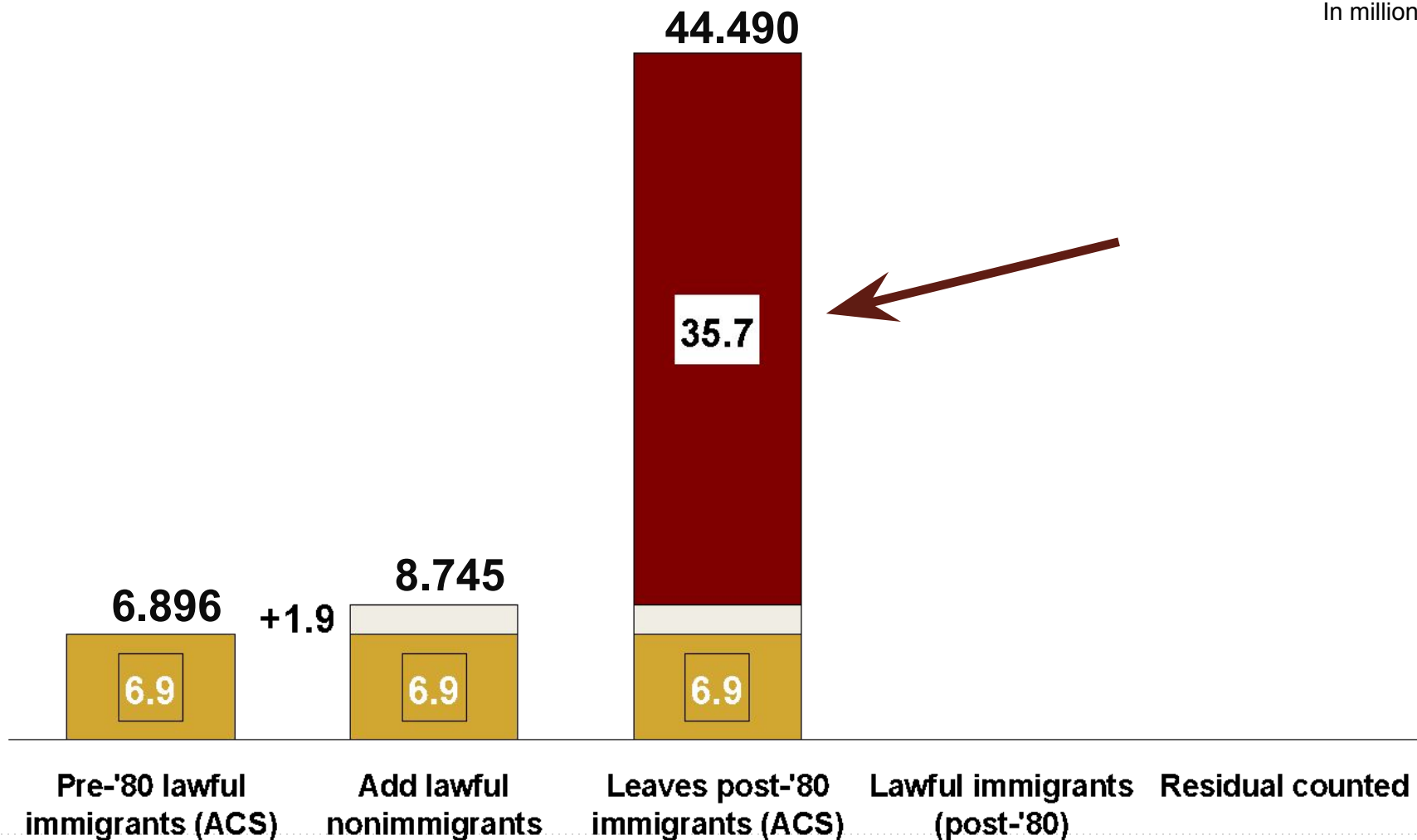
Residual estimate of unauthorized immigrants

Total = Counted _{plus} ***Missed***
unauthorized unauthorized ***unauthorized***
immigrants immigrants ***immigrants***

Some assumptions:

a. *Estimated undercount*
% Undercount for <u>lawful immigrants</u> – based on Census coverage studies – *age-sex-race* * 1.75 for recent arrivals
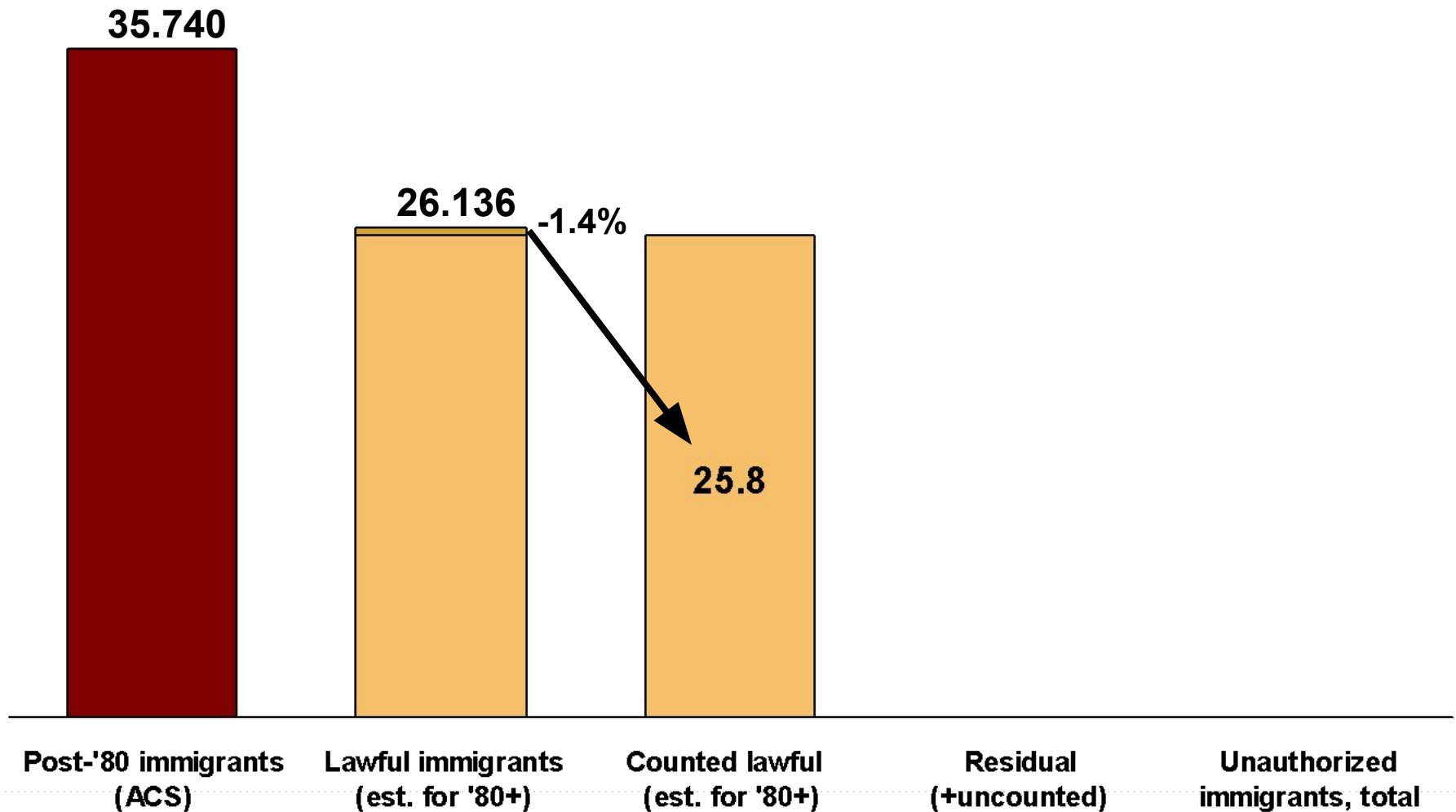**% Undercount for <u>unauthorized immigrants</u> – 1.83 * specific rates for lawful immigrants**

b. *Estimated undercount (2)*
New work (Van Hook et al. 2014) shows improvements in ACS/CPS coverage for Mexicans from '90s to late '00s

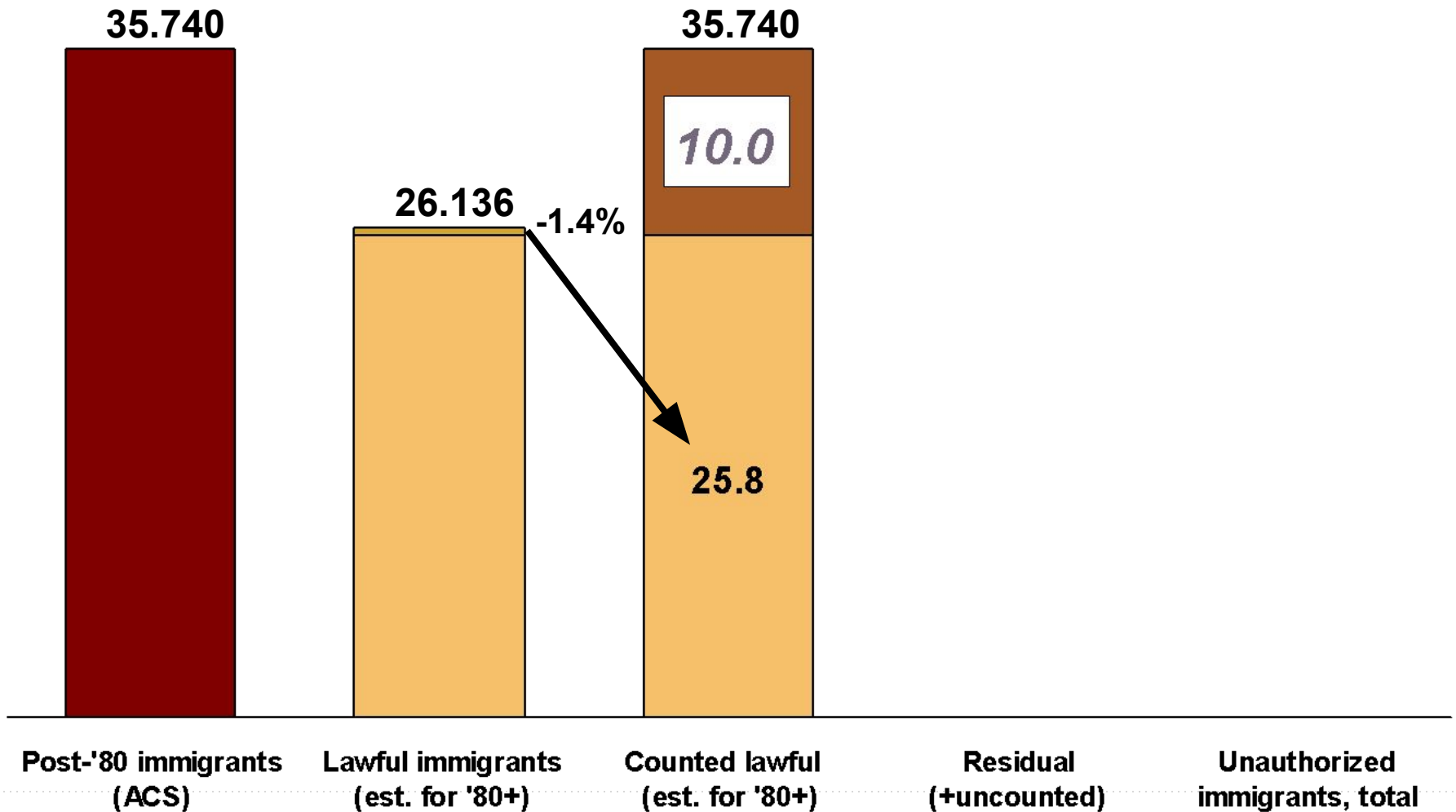**c. *Internal migration* – ACS rates for F-B for lawful pop**

Pew Research Center

Residual estimate using 2017 ACS —
Reduce estimate of lawful by undercount

In millions

35.740

26.136 -1.4%

25.8

Post-'80 immigrants (ACS) | Lawful immigrants (est. for '80+) | Counted lawful (est. for '80+) | Residual (+uncounted) | Unauthorized immigrants, total

Source: Pew Research Center, consistent with Passel & Cohn 2019.

Pew Research Center

Residual estimate using 2017 ACS —
Initial estimate of "counted unauthorized"

In millions

35.740

35.740

10.0

26.136 -1.4%

25.8

Post-'80 immigrants (ACS)

Lawful immigrants (est. for '80+)

Counted lawful (est. for '80+)

Residual (+uncounted)

Unauthorized immigrants, total

Source: Pew Research Center, consistent with Passel & Cohn 2019.

Pew Research Center

Residual estimate using 2017 ACS —
Add uncounted ⮕ Total unauthorized

In millions

35.740

26.136 -1.4%

35.740

10.0 +5.5%

10.5

25.8

Post-'80 immigrants (ACS)

Lawful immigrants (est. for '80+)

Counted lawful (est. for '80+)

Residual (+uncounted)

Unauthorized immigrants, total

Source: Pew Research Center, consistent with Passel & Cohn 2019.

Pew Research Center
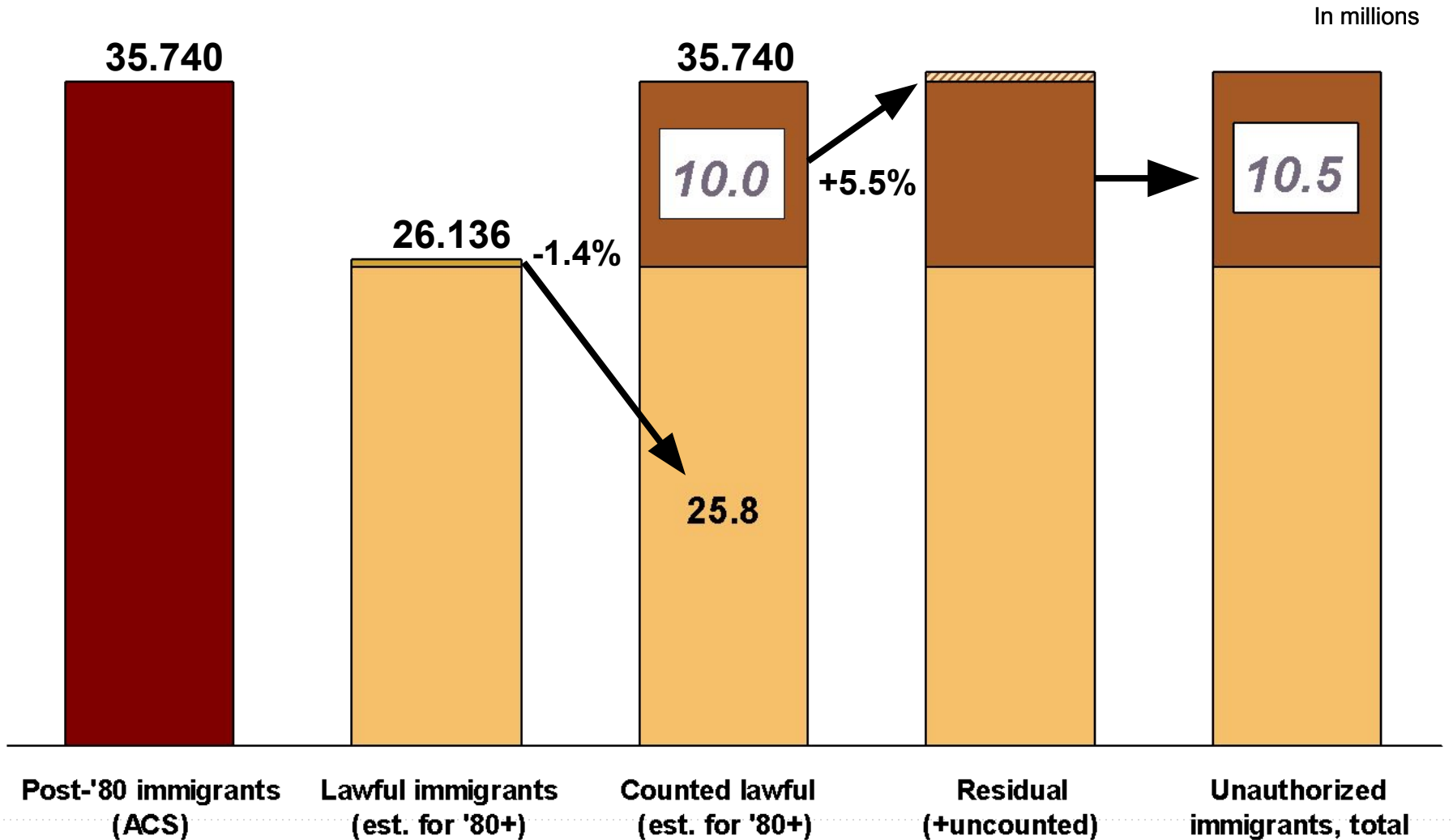
Who are the "Lawful immigrants"?

Components of lawful immigrants:

a. <mark>DHS/INS "new arrival" LPRs (green cards)</mark>

b. <mark>Refugee arrivals (State Dept, DHS/INS, ORR)</mark>

c. <mark>Asylum approvals (DHS/INS)</mark>

d. <mark>Adjustments to LPR status, except from e.-g. below (DHS/INS)</mark>

e. Cuban-Haitian entrants, Amerasians, some parolees (ORR)

f. Other entrants, other parolees (DHS/INS)

g. IRCA legalizations approved—SAWs & "LAWs" (INS)

h. Pre-1980 (or 1982) arrivals (ACS/CPS counts)

a.-g. are combined year-by-year using allowances for mortality, emigration, & state-to-state movement to estimate the legal population

Who are the "Unauthorized"?

- ==Not "lawful immigrants" or legal nonimmigrants== (i.e., temporary *residents*)

- Overstays vs. EWIs (illegal entrants)
  - -- Inferred because ACS doesn't ask mode of entry
  - -- Before 2010, most were EWIs
  - -- 2010s, most new unauthorized were likely overstays
  - -- Today, most are illegal border crossers

- Distinction is relevant for enforcement

- Today, many are known to authorities (so-called "quasi"-legals)

Pew Research Center

Who are the "Quasi"-Legal?

- **DACA recipients**
  a. As of Dec-23 -- 530,000; Jul-22, 595,000; Initially ~700,000

- **Temporary Protected Status**
  a. Mainly Central Americans until recently
  b. As of Dec-23 – 1,200,000; Jul-22, 650,000

- **Affirmative asylum claimants** (processed by DHS-USCIS)
  a. Dec-23 – 1,120,000 cases/1,600,000 people in backlog; Jul-22, 500,000/725,000 people
  b. Increase *adds* 875,000 to the unauthorized immigrant population

- **Defensive asylum claimants** (processed by DOJ-EOIR)
  a. Dec-23 – 1,030,000 people; Jul-22, 915,000 people
  b. Increase *adds* 120,000 to the unauthorized immigrant population

- **CHNV paroles** – visas for Cubans, Haitians, Nicaraguans, Venezuelans
  a. Began in Oct. 2022 for Venezuela and January 2023 for the rest
  b. Cumulative admissions to Dec-23 – 320,000

- **U (criminal victims), K (finance), V, T, DED** and various other categories
  a. Most are small, but the U visa backlog grew from 300,000 to 355,000 in Dec-23

- **3.2 million in 2022** unauthorized immigrants are "quasi"-legal (28%)

- By Dec-23, these will grow by **1.8 million** to more than **5 million**

Pew Research Center

Status assignments
(microdata)

Types of data and estimates

- ***Analytic*** estimates of unauthorized
  a. "Counted" in survey
  b. "Corrected" for undercount
  c. ***Totals by country/region birth*** (i.e., Mexico, Latin America, Asia, Rest of World)
  d. ***6 States*** (CA, FL, IL, NJ, NY, TX) and Rest of Country
  e. Some, limited demographic information:
      * ***Age (<18/18+)*** and sex
      * Period of entry

- ***Status assignments*** into survey

- ***Final estimates*** may differ from ***analytic*** totals for some countries, age groups, regions, etc.

Status assignments *(I)*

- ***Lawful temporary immigrants****
  a. Students (F, M visas) & scholars (J visa)
  b. "High-tech" guest workers (H-1B), intracompany transfers (L visas), nurses (H-1A) and physicians (J visas)
  c. International organizations (G visas), diplomats and embassy employees (A visas)
  d. Religious workers (R visas), athletes, artists, entertainers and "outstanding" talent (O,P visas)
  e. Au pairs and exchange visitors (J visas)
  f. Identified in survey based on occupation, period of entry, household relationships, other characteristics (e.g. program participation, veteran status)
  g. No targets, tends to understate DHS estimates
  h. Many more in ACS than CPS

* More detailed specifications available on request.

Pew Research Center

Status assignments *(II)*

- ***Refugees/asylees*** (at entry)
  a.   Country of birth and year of entry*
  b.   Demographic estimates (targets) control the assignments

- ***Naturalized citizens***
  a.   In US < 6 years ☐ edit to alien (except spouses)
  b.   In US >= 6 years ☐
    - ***Mexico*** ☐ potential unauthorized***
    - ***Central America*** ☐ same as Mexico***
    - ***All others countries*** ☐ keep as naturalized
  c.   No demographic targets

* More detailed specifications available on request.   *** Those not assigned as unauthorized revert to naturalized citizens.

Pew Research Center

Status assignments *(IIa—Lawful)*

- ***Definite lawful immigrants***
  a. Naturalized citizens, refugees, legal temps (previous)

  b. Entered US before 1982/1980

  c. Occupations/employers* ☐
  - Government workers, veterans, military
  - Law enforcement and related occupations
  - Court and legal employees
  - Licensed occupations (e.g., medical)
  - Security occupations (esp. with licensing; e.g., police, ATC)
  - Assorted other minor occupations

  d. Program participation* (SSI, TANF, Medicaid, Medicare)

  e. Most family members of lawful immigrants

  f. No demographic targets

- ***Others: "Potential unauthorized"*** ☐

* More detailed specifications available on request.

Pew Research Center

Status assignments *(III-Unauthorized)*

- ## *Targets*
  a. 6 *States* (CA, FL, IL, NJ, NY, TX) and balance of US
  b. Total, *Under 18*
  c. ACS: *Mexico, Latin America, Asia, all other* (may collapse)
  d. CPS: *Mexico, all other*

- ## *Random assignments of Potentials*
  a. Replicate households for "multiple" imputation
    1) Weights are fractionalized (10 in ACS; 100 in CPS)
    2) Random assignments separately for individuals in each replicate
    3) "Like" assignments collapsed at end
  b. Initial *p*'s = Target (above) / potential unauthorized (previous)
    1) Parents and non-parents done separately
    2) Assignments for parents use child estimates as targets

Status assignments *(IIIa-Unauthorized)*

- ***Final status assignments of*** *Potentials*
  - a. Household edits for consistency of parents, children & relatives (based on date of arrival)
  - b. Adjustment of *p*'s from (Target /potential unauthorized)
    1) Initial modification based on IRCA LPS occupation groups
    2) Possibility of using other data here (e.g., SIPP, Marcelli)
    3) Adjust each state-region of birth for convergence to targets
    4) Separate adjustments for parents/non-parents by state-region
  - c. Iterate assignments and edits until targets are hit
  - d. Relatively insensitive to initial assignments (a.-b.) since targets are 80–95% of ***potential unauthorized targets***

- ***Adjust weights for undercount***
  - a. From analytic estimates by state-region of birth-ages

Approximate status assignments

- **Assign refugees**
  a. Country of birth and year/period of entry*

- **Assign legal temporary residents**
  a. Short-term residents
  b. Occupations, school enrollment, family status*

- ***Assign definite lawful immigrants***
  a. Pre-1982 arrivals
  b. Naturalized citizens except Mexico/Central America*
  c. Specific occupations and industries*

- ***Potential unauthorized ☐ unauthorized***
  a. One option – analyze potential unauthorized
  b. Use external totals (e.g., Pew, DHS, MPI) as controls – could be states/state groups, countries/regions of birth
  c. Randomly assign unauthorized

* More detailed specifications available on request.

Pew Research Center

There's a lot more in the reports! Thank you! Questions?

Contact Information

Jeffrey S. Passel
Senior Demographer

jpassel@pewresearch.org
~~202-419-3625~~ (direct, not currently in use)
202-527-2146 (mobile)

Race and Ethnicity Research