

National Population Growth Declines as Domestic Migration Flows Rise

By William H. Frey

U.S. population trends are showing something of a dual personality when viewed from the perspective of the nation as a whole or that of its regions. Nationally, population growth has yet again hit a new low, foreshadowing a likely future of only modest gains. Yet, on a more positive note, there is a notable rise in migration flows within the U.S. relocating more residents to fast-growing Sun Belt states as the post-recession economy revives.

A New National Post-Depression Low

The most recent data show that the U.S. registered a new post-Depression era low in population growth, extending a pattern that became evident since the 2007–09 recession. Between 2015–16, the nation’s annual growth percentage sunk to just under 0.7 percent for 2015–16, making it the lowest rate of growth since 1936–37. (See Figure A)

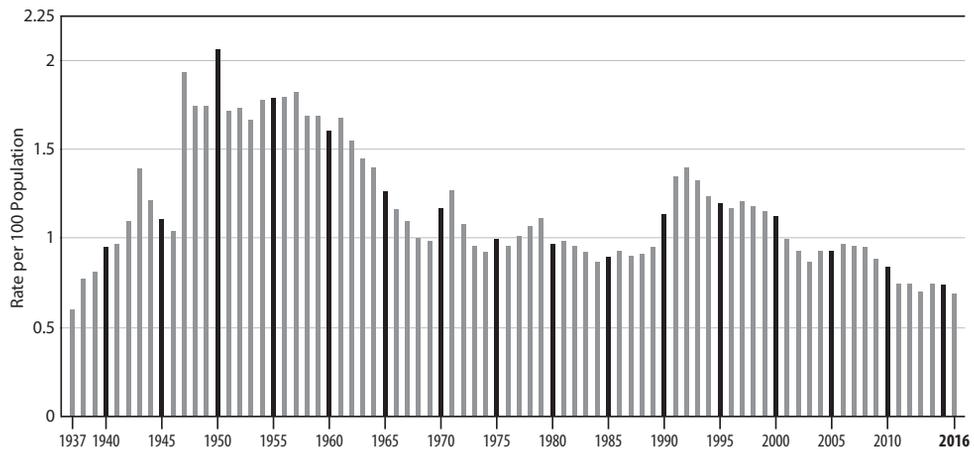
For the bulk of the period spanning from World War II though the early 1980s, national growth exceeded 0.95 percent—hitting more than 1.5 percent for the prime baby boom years and reaching 2.1 percent in 1949–1950. A modest slowdown occurred during the 1980s, though rates still hovered around 0.9 percent. They rose to more than 1 percent in the 1990s, consistent with the birth

of the millennial generation and rises in immigration. The early 2000s showed a slight diminution in those rates, but they remained above 0.9 percent.

After 2008, rates dipped to below 0.8 percent to the sub 0.7 percent low in 2015–16. Some of the initial decline over these years is attributable to reduced immigration. But as immigration levels have picked up over the past three years, hovering at around 1 million annually, recently reduced natural increase—the excess of births over deaths—has played a bigger role as the birth rate has declined and the death rate has risen. (See Figure B)

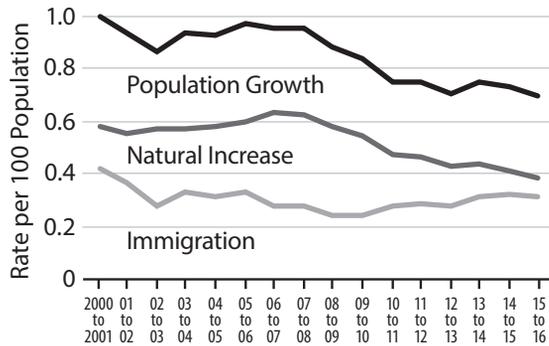
It is likely that some of the reduced fertility during recent years is attributable to recession-related delays in family formation among young adult millennials, which could spike upward in the

Figure A: U.S. Annual Population Growth 1937–2016

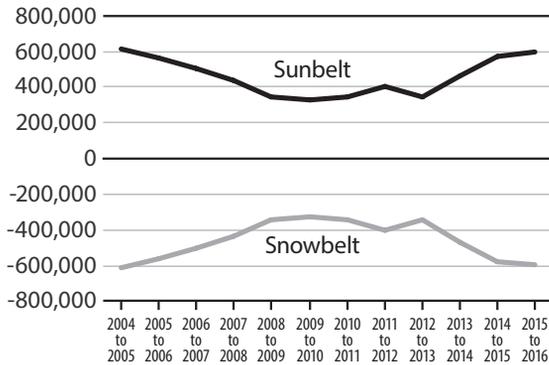


Source: William H. Frey analysis of U.S. Census Bureau historical population estimates.

**Figure B:
U.S. Rates of
Annual Population Growth,
Natural Increase and
Immigration, 2000–2016**



**Figure C:
Net Migration between
The Snow Belt and
The Sun Belt Regions,
2004–2016**



Source: William H. Frey, 2017.

near future as the economy continues to pick up. However, higher death rates, associated the long-term aging of the population are likely to continue, contributing to projected declines in U.S. annual growth rates trending toward 0.5 percent in 2040.¹

Immigration, both past and present, has contributed to the nation’s population growth at a time when several other industrialized countries, such as Japan, Germany and Italy are facing the specter of long-term decline.² From that perspective, the U.S. can look forward to continued population growth, albeit at lower levels, for decades to come.

A Rise in Migration to Sun Belt States

Population growth for states is the sum of several components: natural increase, immigration and domestic migration. The latter reacts most directly to economic circumstances and shapes year-to-year gains and losses across states and regions.

The latest net domestic migration statistics show a continued revival of movement from the broad

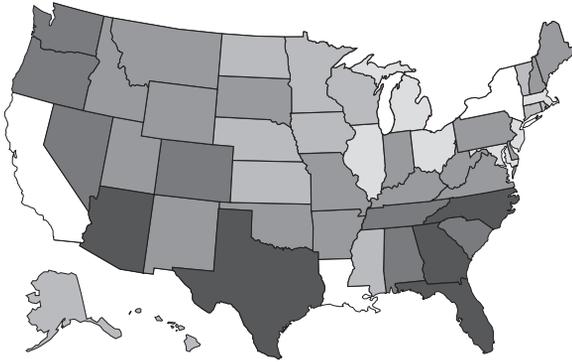
Northeast and Midwest “Snow Belt” region to the South and West “Sun Belt” region, after falling off during the recession and immediate post-recession years. The mortgage meltdown, financial crisis and the onset of the Great Recession converged to stall Sun Belt-directed migration and led the Snow Belt to reduce its out migration to the region during the period of 2007–2013. Now the Snow Belt to Sun Belt flows, which began to re-emerge in 2013–14, are continuing, as shown in Figure C.

To gain a sense of how the changing volume of movement has impacted states, Figure D depicts net domestic migration patterns among states for: a pre-recession period, 2005–06; the immediate post-recession year, 2009–10; and for the most recent year available, 2015–16.

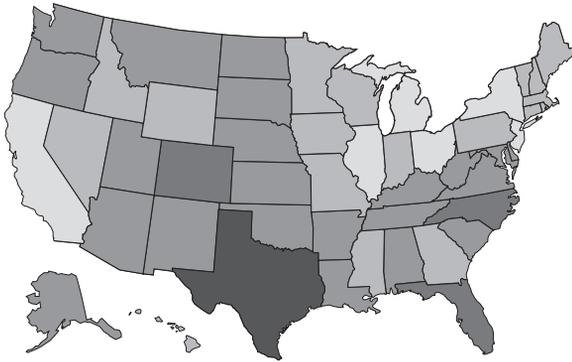
There is a noteworthy shift from the sharp gain/loss pattern in 2005–06 to a more modest redistribution of migrants in 2009–10, as the recession tamped down the volume of migration flows. In the former year, five states— Arizona, Florida, Georgia,

Figure D: State Net Domestic Migration—Selected Years

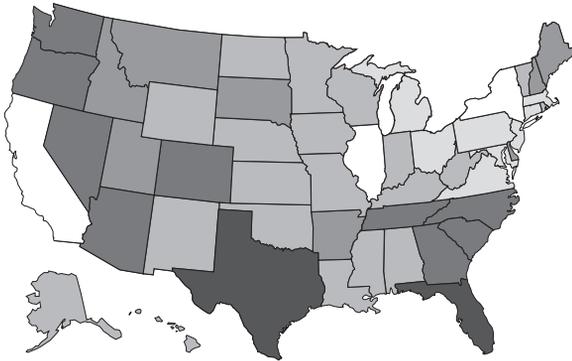
2005–2006



2009–2010



2015–2016

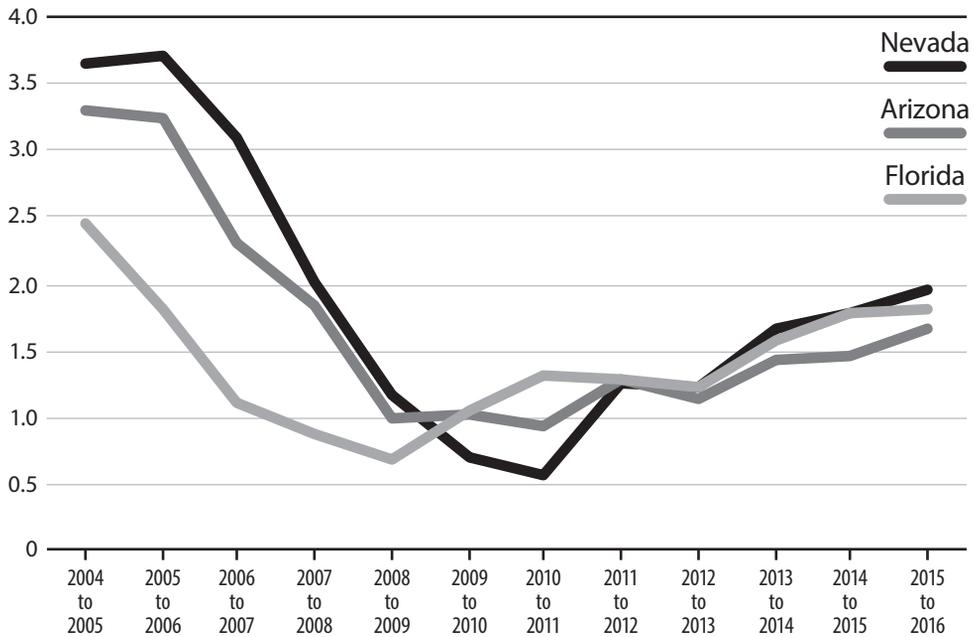


Net Migration

- 100,000 and above
- 25,000 to 100,000
- 0 to 25,000
- 0 to -25,000
- 25,000 to -100,000
- 100,000 and below

Source: William H. Frey analysis of U.S. population estimates.

Figure E: Annual Population Growth, Nevada, Florida and Arizona



Source: William H. Frey analysis of U.S. Census Bureau historical population estimates.

North Carolina and Texas—each registered net migration of more than 100,000 and an additional seven states gained more than 25,000 each.

This contrasts sharply with 2009–10 when Texas gained more than 100,000 migrants and only three other states gained more than 25,000. Most of the front-runners before the recession showed migration hits: Texas’s migration plummeted from 233,000 to 119,000 and Florida’s migration gains were reduced from 140,000 to 33,000. Migration losses were also smaller after the recession for the biggest “out migration” states. New York lost 245,000 migrants in 2005–06 but only 92,000 in 2009–10, as the “Snow Belt to Sun Belt highway” became less travelled.

Since 2013, most of earlier in-migration flows have begun to re-emerge. Among states, the largest 2015–16 net migration gainers include Arizona, Colorado, Florida, Georgia, Nevada, North Carolina, Oregon, South Carolina, Texas and Washington. Most of these states displayed an uptick in net migration since 2014–15 and a decided gain from their situation in 2009–10. Florida’s net domestic

migration rose to 207,000 in 2015–16, making it the migration leader of all states.

At the same time, out-migration increased in many migration-losing states. The greatest out-migration states, with the exception of California, are located in the Snow Belt, including Connecticut, Illinois, Michigan, New Jersey, New York, Ohio and Pennsylvania. While many of these states held on to “would be” migrants during the recession as Sun Belt jobs dried up, most are once again registering increased out-migration. New York’s out-migration increased to -191,000 in 2015–16.

California is a notable Sun Belt exception. Unlike most other states in this region, California followed the “New York model,” losing fewer migrants during the recession and now experiencing renewed out-flows to surrounding nearby affordable states like Arizona, Nevada, Oregon and Washington, as economies pick up. California led all states with an out-migration of -315,000 in 2005–06. After a reduction to -42,000 in 2009–10, it rose again to -109,000 in 2015–16.

Table A: States Ranked by Average Annual Population Growth Rates for Periods 2004–07, 2007–10, 2010–13 and 2013–16

Rank	State or other jurisdiction	2004–07	State or other jurisdiction	2007–10	State or other jurisdiction	2010–13	State or other jurisdiction	2013–16
1	Nevada.....	3.50	Utah	2.23	North Dakota.....	2.39	Nevada.....	1.80
2	Arizona.....	2.95	Texas	1.94	Dist. of Columbia.....	2.37	Florida	1.72
3	Utah.....	2.65	Wyoming	1.82	Texas	1.60	Texas	1.72
4	Idaho.....	2.64	Dist. of Columbia.....	1.75	Utah.....	1.51	Colorado.....	1.70
5	Georgia.....	2.16	Colorado.....	1.67	Colorado.....	1.43	Utah.....	1.68
6	North Carolina.....	2.16	Alaska.....	1.63	Florida	1.28	Dist. of Columbia.....	1.62
7	Texas.....	2.10	North Carolina.....	1.59	South Dakota.....	1.15	North Dakota.....	1.54
8	South Carolina.....	1.81	Idaho.....	1.44	Arizona.....	1.11	Arizona.....	1.52
9	Florida.....	1.79	Washington.....	1.43	Washington.....	1.10	Washington.....	1.51
10	Wyoming.....	1.66	South Carolina.....	1.42	Wyoming.....	1.06	Idaho.....	1.45
11	Colorado.....	1.64	Nevada.....	1.30	Alaska.....	1.06	Oregon.....	1.40
12	Delaware.....	1.62	Arizona.....	1.28	Hawaii.....	1.03	South Carolina.....	1.33
13	Washington.....	1.50	Georgia.....	1.28	Nevada.....	1.02	Georgia.....	1.07
14	New Mexico.....	1.49	Louisiana.....	1.27	North Carolina.....	0.98	North Carolina.....	1.02
15	Tennessee.....	1.47	New Mexico.....	1.24	Virginia.....	0.97	Delaware.....	0.95
16	Oregon.....	1.41	Hawaii.....	1.21	South Carolina.....	0.94	Montana.....	0.92
17	Montana.....	1.23	Virginia.....	1.17	Delaware.....	0.94	South Dakota.....	0.80
18	Virginia.....	1.21	Oklahoma.....	1.14	Georgia.....	0.92	Tennessee.....	0.80
19	Arkansas.....	1.19	North Dakota.....	1.10	California.....	0.89	California.....	0.79
20	Hawaii.....	1.09	Delaware.....	1.06	Idaho.....	0.86	Nebraska.....	0.68
21	Alaska.....	1.05	South Dakota.....	1.03	Oklahoma.....	0.82	Minnesota.....	0.62
22	Alabama.....	1.03	Oregon.....	1.02	Maryland.....	0.81	Oklahoma.....	0.61
23	Oklahoma.....	1.02	California.....	0.99	Montana.....	0.79	Virginia.....	0.60
24	South Dakota.....	0.91	Tennessee.....	0.97	Oregon.....	0.76	Hawaii.....	0.52
25	Kentucky.....	0.88	Kansas.....	0.89	Tennessee.....	0.72	Massachusetts.....	0.52
26	Missouri.....	0.80	Montana.....	0.89	Massachusetts.....	0.71	Maryland.....	0.48
27	Indiana.....	0.78	Florida.....	0.87	Nebraska.....	0.70	Iowa.....	0.46
28	Minnesota.....	0.78	Nebraska.....	0.86	Minnesota.....	0.67	Louisiana.....	0.40
29	Nebraska.....	0.65	Arkansas.....	0.86	Louisiana.....	0.59	Arkansas.....	0.33
30	Maryland.....	0.64	Alabama.....	0.80	New York.....	0.46	Indiana.....	0.32
31	California.....	0.63	Maryland.....	0.79	Iowa.....	0.45	New Hampshire.....	0.30
32	Kansas.....	0.60	Kentucky.....	0.71	Arkansas.....	0.42	Missouri.....	0.28
33	Wisconsin.....	0.58	Massachusetts.....	0.69	Indiana.....	0.40	Kentucky.....	0.28
34	New Hampshire.....	0.58	Minnesota.....	0.66	Kentucky.....	0.40	Alabama.....	0.23
35	Iowa.....	0.51	Missouri.....	0.61	Kansas.....	0.39	Alaska.....	0.23
36	Mississippi.....	0.45	Indiana.....	0.58	New Jersey.....	0.36	Wisconsin.....	0.21
37	North Dakota.....	0.42	Iowa.....	0.57	New Mexico.....	0.33	New Jersey.....	0.17
38	Pennsylvania.....	0.41	Connecticut.....	0.49	Wisconsin.....	0.31	Kansas.....	0.17
39	Dist. of Columbia.....	0.39	New Jersey.....	0.48	Alabama.....	0.31	Wyoming.....	0.16
40	Maine.....	0.34	Mississippi.....	0.48	Missouri.....	0.26	Ohio.....	0.13
41	West Virginia.....	0.32	Wisconsin.....	0.47	Mississippi.....	0.23	New York.....	0.12
42	Connecticut.....	0.30	New York.....	0.47	Pennsylvania.....	0.18	Rhode Island.....	0.11
43	Illinois.....	0.28	Pennsylvania.....	0.39	Connecticut.....	0.15	Michigan.....	0.10
44	Vermont.....	0.19	Illinois.....	0.38	New Hampshire.....	0.15	Maine.....	0.06
45	New Jersey.....	0.17	West Virginia.....	0.37	Illinois.....	0.10	Pennsylvania.....	0.01
46	Ohio.....	0.14	Vermont.....	0.13	Ohio.....	0.08	Mississippi.....	(0.02)
47	Massachusetts.....	0.10	Ohio.....	0.12	Michigan.....	0.07	New Mexico.....	(0.07)
48	New York.....	(0.07)	New Hampshire.....	0.11	Vermont.....	0.06	Vermont.....	(0.14)
49	Michigan.....	(0.18)	Maine.....	0.02	Maine.....	0.03	Connecticut.....	(0.18)
50	Rhode Island.....	(0.54)	Rhode Island.....	(0.13)	Rhode Island.....	(0.01)	Illinois.....	(0.20)
51	Louisiana.....	(1.25)	Michigan.....	(0.41)	West Virginia.....	(0.02)	West Virginia.....	(0.40)

Source: William H. Frey analysis of U.S. Census Bureau Population Estimates.
 Note: Average is the average of annual percent growth for three-year periods shown.

State Population Growth Ranks

Despite the lower national growth rate, the renewed migration flows impact state population growth rates favoring Sun Belt states, after many experienced earlier growth slowdowns. Figure E provides an illustration of these patterns for three Sun Belt states—Arizona, Florida and Nevada.

Each state ranked high in growth prior to the recession—more than triple (for Nevada and Arizona) or double (for Florida) the nation’s rate of growth. Yet as the recession set in, each state (led by Florida) showed growth slowdowns to rates that approximated or fell below national growth rates.

This changed over the three years between 2013–17, when all three showed incremental upticks in their growth rates to levels well above the national rate. Clearly domestic migration, fueled by rebounding employment opportunities and a stronger housing market, contributed to these gains. Each state’s growth was modestly helped by stronger post-2013 immigration from abroad.

Still, the growth levels for these states in 2015–16 were well below the peak growth they enjoyed before the recession. While migration flows have risen, they are still not at the levels observed prior to 2007, and as with the nation as a whole, natural increase and immigration stand at lower levels than in the early 2000s.

A broader view of state growth patterns can be seen in Table A, which ranks states according to their average annual growth rates for the pre-recession period, 2004–07; the recession and post-recession periods, 2007–10 and 2010–13; and the most recent period of 2013–2016.

Clearly, higher rates of state growth were more widespread prior to the recession. Seven Western and Southern states, led by Arizona and Nevada, registered average annual rates exceeding 2 percent over the 2004–07 period, compared with far fewer in the recession and post-recession periods, and none in 2013–16. Moreover, fully 39 states grew less rapidly in the latter period than before the recession.

Yet, as with domestic migration, there has been a rise in growth since the recession and immediate post-recession years for many states in the Sun Belt. Thirteen states and the District of Columbia grew by more than 1 percent, on average, annually between 2013–16. Except for D.C. and North Dakota, each of them grew more rapidly than in the recession/immediate post-recession periods. These include the Western states of Arizona, Colorado, Idaho, Nevada, Oregon, Utah and Washington

and the Southern states of Florida, Georgia, North Carolina, South Carolina and Texas.

At the other end of the spectrum are six states that registered population declines in 2013–16. Illinois is notable because it experienced its first state population loss since at least 1990 and the largest numeric population loss of any state for three years running.

Also noteworthy is North Dakota because it led all states for individual years between 2011–12 and 2014–15 when it registered growth rates exceeding 2 percent. Its recent economic slowdown due to the reversal of the oil boom has led to a severe drop-off in its ability to attract workers. In 2015–16, North Dakota’s growth fell to 0.15 percent, ranking 37th among states.

Overall, the U.S. seems to be in the midst of a population growth paradox. As the nation continues to show stagnating growth as fertility declines in the context of an aging population, internal population shifts toward the Sun Belt are again on the rise. Because the latter is more economically driven than former, it is encouraging to see that a key demographic indicator—migration in response to newly emerging employment opportunities—is reviving in tandem with the economy.

Notes

¹U.S. Census Bureau, 2014 National Population Projections, <https://www.census.gov/population/projections/data/national/2014.html>.

²United Nations Department of Economic and Social Affairs/Population Division, *World Population Prospects: The 2015 Revision, Volume I: Comprehensive Tables*, https://esa.un.org/und/wpp/Publications/Files/WPP2015_Volume-I_Comprehensive-Tables.pdf.

About the Author

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