

Summary of the U.S. Census Bureau's 2019 State-Level Population Estimate for Massachusetts

Prepared by:

UMass Donahue Institute
Economic and Public Policy Research
Population Estimates Program

For Release December 30, 2019

On December 30, 2019, the U.S. Census Bureau released population and components-of-change estimates for the nation, states, and Puerto Rico for July 1, 2019. According to the new release, the Massachusetts population increased by an estimated 9,868 persons from July 1, 2018 to July 1, 2019 to a new total of 6,892,503, making it the 15th most populous state in the U.S. again this year. This 0.14% annual increase puts Massachusetts' percentage growth ahead of the Northeast average of -0.11% and all other Northeast states except for Maine and New Hampshire, which also grew by less than half of a percent over the past year. In terms of population numbers, Massachusetts population increased more in the period than any other Northeast state. At the national level, Massachusetts ranked 24th for annual population change this year, and ranked 35th in terms of annual percentage growth in the 2018 to 2019 period, down from 22nd last year.

Cumulatively since the last Census in April of 2010, Massachusetts has been the fastest growing state in the Northeast, in terms of both numeric and percent change. Since the last Census, the Massachusetts population has increased by 344,718 persons cumulatively, or 5.3%, compared to a 1.2% cumulative increase for the Northeast region and a 6.3% cumulative increase for the U.S. as a whole. Table 1 below shows both the numeric and percentage growth and rankings for the United States, U.S. regions, and the Northeast states including Massachusetts for the periods April 1, 2010, July 1, 2018, and July 1, 2019.

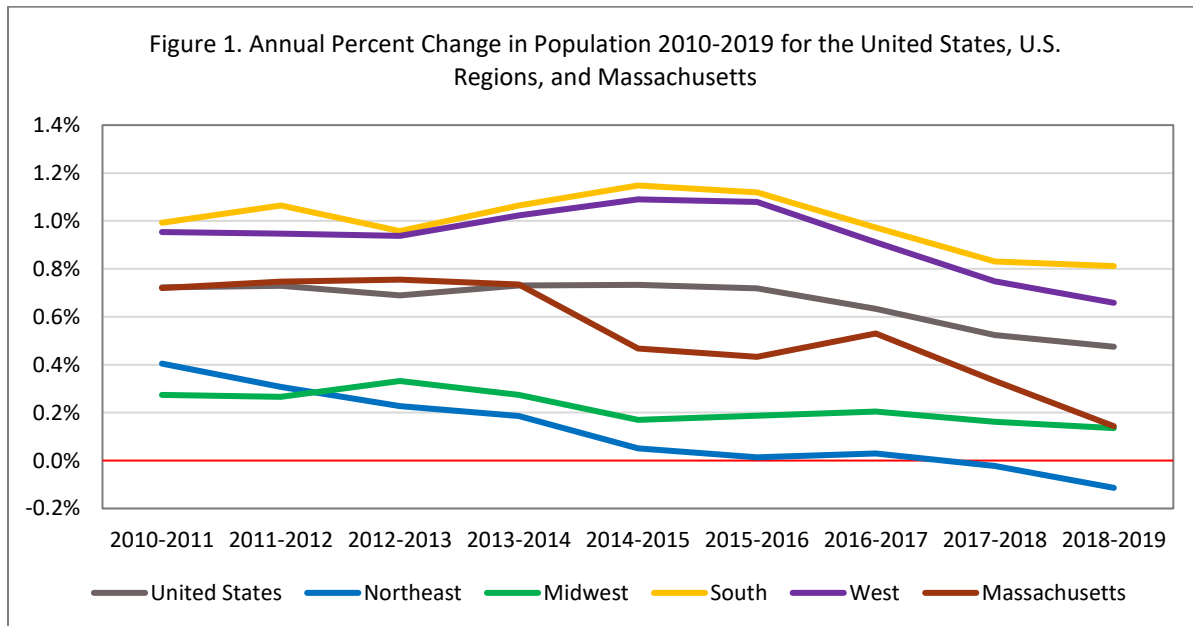
Geographic Area	Population	Population Estimate (as of July 1)		Population Ranking		Annual Change July 1, 2018 to July 1, 2019				Cumulative Change 2010-2019			
	April 1, 2010 Base	2018	2019	April 1, 2010 Base	July 1, 2019	Change	Percent Change	Rank Change		Change	Percent Change	Rank Change	
								Number	Percent			Number	Percent
United States	308,758,105	326,687,501	328,239,523	(X)	(X)	1,552,022	0.48%	X	X	19,481,418	6.31%	(X)	(X)
Northeast	55,318,443	56,046,620	55,982,803	4	4	-63,817	-0.11%	4	4	664,360	1.20%	4	4
Midwest	66,929,725	68,236,628	68,329,004	3	3	92,376	0.14%	3	3	1,399,279	2.09%	3	3
South	114,563,030	124,569,433	125,580,448	1	1	1,011,015	0.81%	1	1	11,017,418	9.62%	1	1
West	71,946,907	77,834,820	78,347,268	2	2	512,448	0.66%	2	2	6,400,361	8.90%	2	2
Connecticut	3,574,147	3,571,520	3,565,287	29	29	-6,233	-0.17%	47	45	-8,860	-0.25%	49	48
Maine	1,328,358	1,339,057	1,344,212	41	42	5,155	0.38%	33	25	15,854	1.19%	44	41
Massachusetts	6,547,785	6,882,635	6,892,503	14	15	9,868	0.14%	24	35	344,718	5.26%	15	24
New Hampshire	1,316,462	1,353,465	1,359,711	42	41	6,246	0.46%	31	21	43,249	3.29%	41	30
New Jersey	8,791,978	8,886,025	8,882,190	11	11	-3,835	-0.04%	44	42	90,212	1.03%	33	43
New York	19,378,144	19,530,351	19,453,561	3	4	-76,790	-0.39%	51	48	75,417	0.39%	37	46
Pennsylvania	12,702,868	12,800,922	12,801,989	6	5	1,067	0.01%	41	41	99,121	0.78%	32	44
Rhode Island	1,052,964	1,058,287	1,059,361	43	44	1,074	0.10%	40	38	6,397	0.61%	47	45
Vermont	625,737	624,358	623,989	49	50	-369	-0.06%	42	43	-1,748	-0.28%	48	49

UMass Donahue Institute. Source data: Cumulative Estimates of Resident Population Change for the United States, Regions, States, and Puerto Rico and Region and State Rankings: July 1, 2018 to July 1, 2019 and April 1, 2010 to July 1, 2019 and (NST-EST2019-02 and NST-EST2019-03), U.S. Census Bureau, Population Division. Release date December 30, 2019. Rankings include District of Columbia but not the Commonwealth of Puerto Rico.



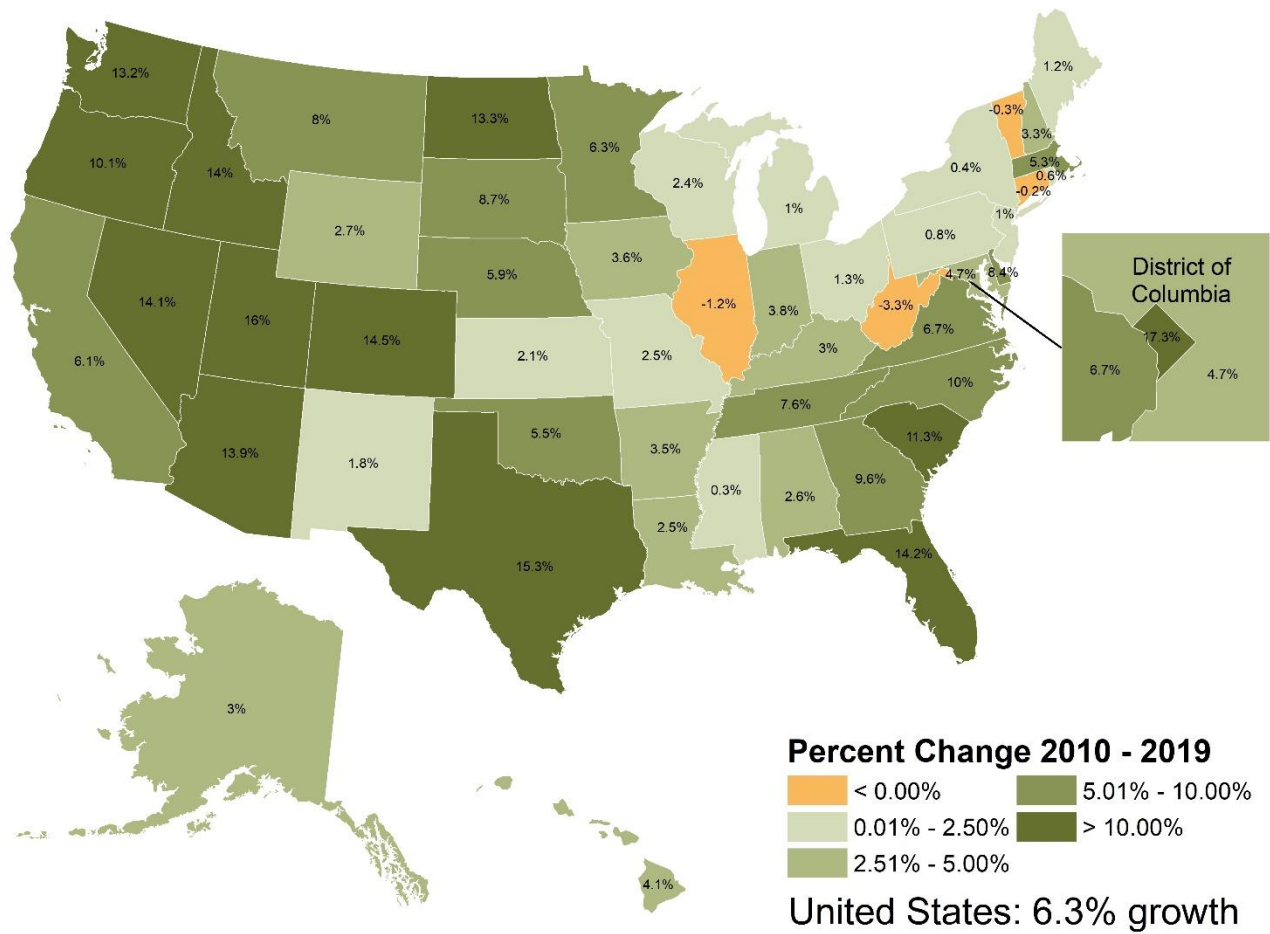
Regional Comparisons

Massachusetts' cumulative population increase of 5.3% since 2010 is somewhat behind the national 6.3% increase, and its single year percentage change of just 0.14% is also below the national average of 0.48% annual change. However, Massachusetts continued to increase in population at a much faster rate than the Northeast average, which actually lost population from 2018 to 2019, changing by -0.11% - and was on par with the Midwest Region average of 0.14%. The Southern and Western regions meanwhile continue to lead the U.S. in terms of percentage growth, at 0.81% and 0.66%, respectively, over the last year (Figure 1).



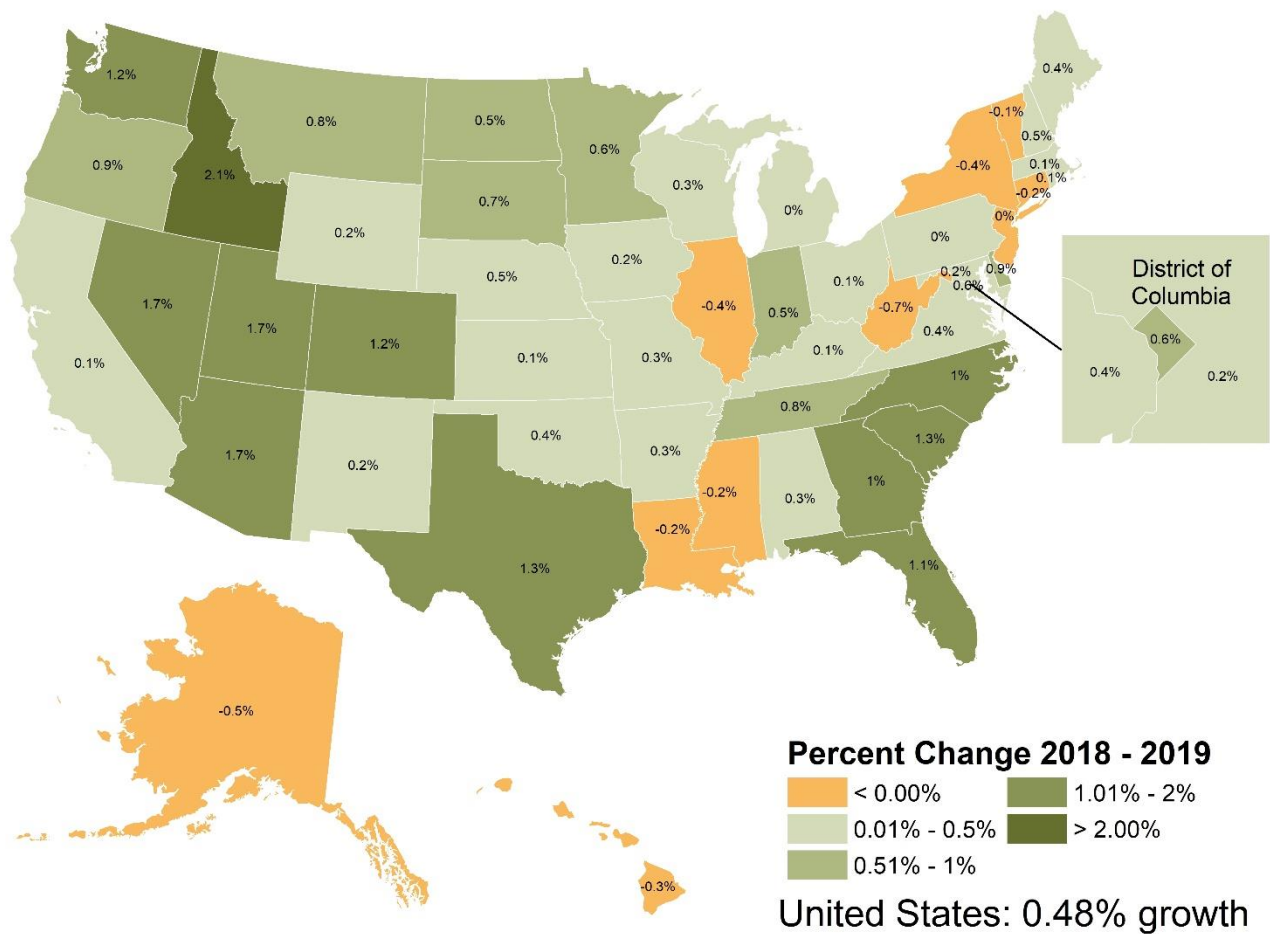
The map below (Figure 2) clearly demonstrates that Massachusetts stands apart from the rest of the Northeastern and Midwestern states in terms of overall percentage growth since 2010, and even surpasses some states in the South and West. The single-year percent change map (Figure 3) for the most recent 2018-2019 period puts Massachusetts ahead of all other Northeast States except New Hampshire and Maine.

Figure 2. Cumulative Percent Population Change April 1, 2010 to July 1, 2019 by U.S. State



UMass Donahue Institute. Source: Cumulative Estimates of the Resident Population Change for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019 (NST-EST2019-02). U.S. Census Bureau, Population Division. Release Date: December 30, 2019.

Figure 3. Annual Percent Population Change July 1, 2018 to July 1, 2019 by U.S. State

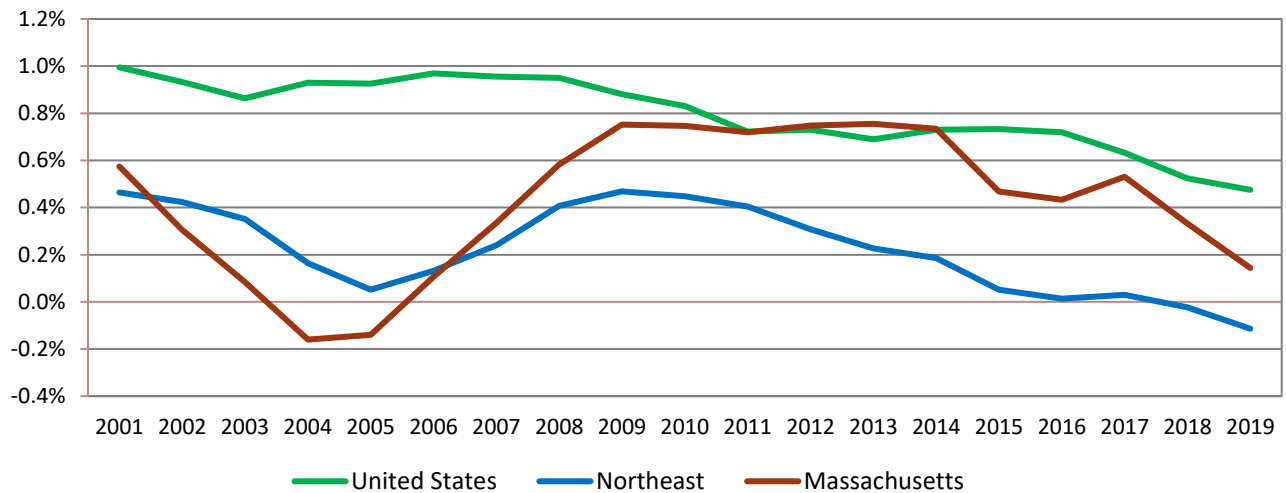


UMass Donahue Institute. Source: Cumulative Estimates of the Resident Population Change for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2019 (NST-EST2019-02). U.S. Census Bureau, Population Division. Release Date: December 30, 2019.

Long Term Trend

Massachusetts has been growing almost twice as fast this decade compared to last. From 2001 to 2004, Massachusetts' growth rates, along with the Northeast rates, were actually declining, and only turned around after 2005, due in part to a reversal of domestic out-migration. Starting in 2007, the Massachusetts annual growth rate overtook the Northeast rate, at 0.5% for Massachusetts compared to 0.3% for the Northeast for that year, and the state's annual percentage growth has remained above the Northeast average since that time.

Figure 4: Massachusetts Annual % Growth Over Previous Year 2001-2019



UMass Donahue Institute. Source data: ST-EST00INT-01 and NST-EST2019-01. U.S. Census Bureau, Population Division.
Release dates: September 2011 and December 2019.

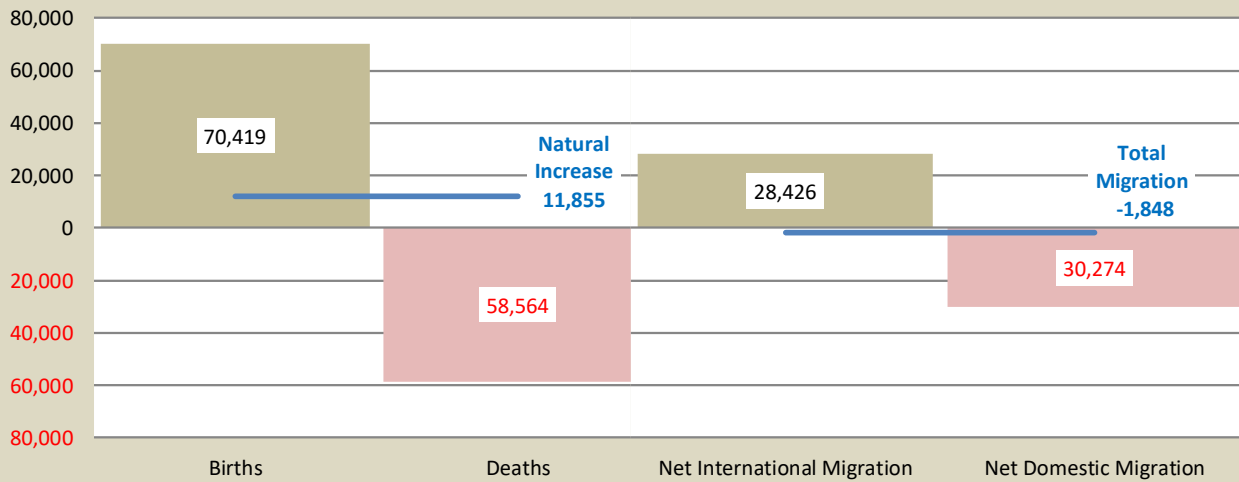
In the last decade, from Census 2000 to Census 2010, the average growth for Massachusetts was about 0.3% per year, with an average population increase of just 19,842 per year. Since the 2010 Census, Massachusetts has increased its population by an average of 37,267 persons per year, or about 0.6%, per year. From 2000 to 2010, Massachusetts population increased by 198,265 – or 3.1% total. Since Census 2010, Massachusetts population has already increased by 344,718, or 5.3% cumulatively.

Components of Change

The U.S. Census Bureau produces revised population estimates each year by adding updated *components of change* to the Census 2010 base. These components include both the number of **births** and **deaths**, which together constitute the **natural increase**. They also include **net domestic migration** (migration to and from other states within the U.S.) and **net international migration** (migration to and from other countries) which sum to the **total net migration**. A fifth component, the *group quarters* population, is factored into the estimates base for the previous year, but is not broken out as a separate number in the Bureau's published release.

According to the U.S. Census estimates, from July 1, 2018 to July 1, 2019 Massachusetts experienced 70,419 births and 58,564 deaths, for a net natural increase of 11,855. At the same time, Massachusetts experienced a net outflow of 30,274 persons to other states in the U.S. and a net inflow of 28,426 persons from other countries, for total net outflow of migration of 1,848 persons. Figure 5 displays the extent to which a higher number of births offsets the number of deaths and how positive international migration offsets some of the negative net domestic migration to sum to positive population change overall in Massachusetts during this period.

Figure 5: Massachusetts Estimated Components of Change, 2019

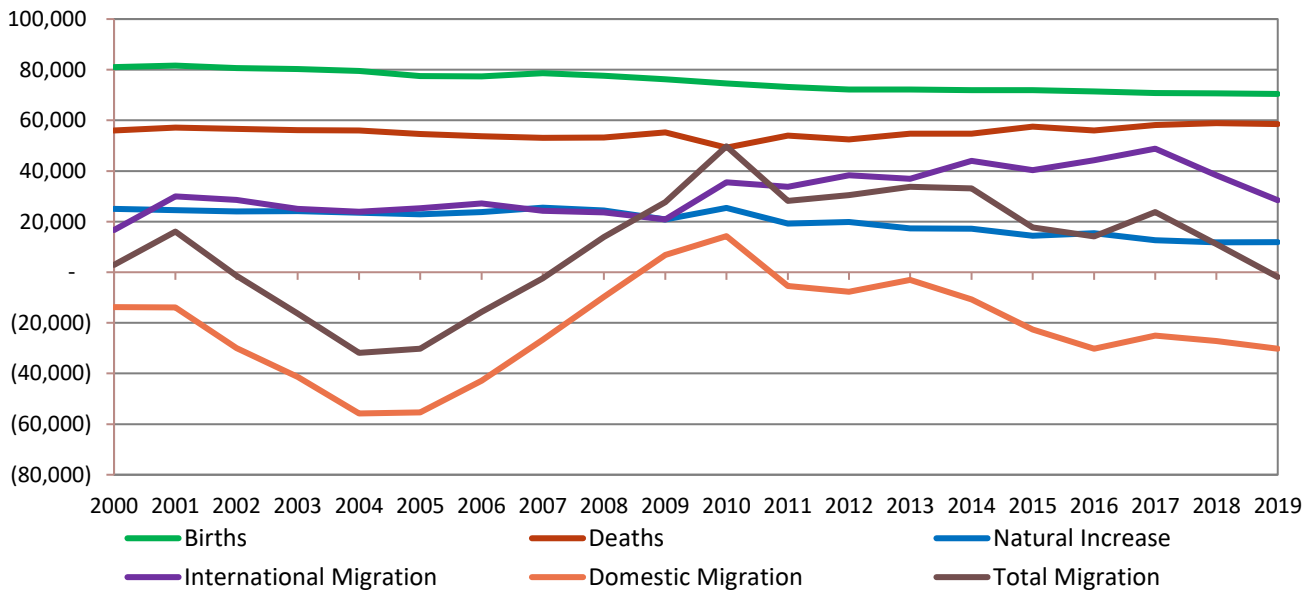


UMass Donahue Institute. Source: U.S. Census Bureau, Population Division, NST-EST2019-ALLDATA, December 30, 2019.

Components of Change: Trends 2000-2019

Massachusetts has long experienced, to varying degrees, component patterns similar to those seen above. Figure 6 below shows the trends in these components from 2000 through 2019.

Figure 6: Massachusetts Estimated Components of Change 2000-2019



UMass Donahue Institute. Source Data: ST-2000-7; CO-EST2010-ALLDATA; and NST-EST2019-ALLDATA, U.S. Census Bureau Population Division.

A greater number of births over deaths and positive international migration offsetting negative domestic migration have all contributed to an overall population increase this decade and last. Domestic out-migration from Massachusetts peaked in the middle of the last decade with an estimated net outflow of 55,788 persons leaving Massachusetts for other parts of the United States in 2004. This outflow was reduced significantly in 2007 (by 52%) and again in 2008 (by 63%), and then finally reversed to a positive in-flow in 2009, with an estimated 6,843 net persons moving into Massachusetts from other U.S. states. In the years since 2010, domestic migration reverted to a negative value again. The domestic outflow has been more moderate compared to the peak outflow over the last decade, however the outflow has been increasing since 2010 and is now at an estimated 30,274 persons net. At the same time, estimated international immigration into the state has fallen off sharply between 2018 (38,352) and 2019 (28,426). Notably, 2019 marks the first year since 2007 when international immigration was not large enough to offset all domestic outmigration, such that total migration summed to a net outflow (of 1,848 persons.)

Births and deaths throughout the 2000-2019 period have been much less variable from year to year than migration, however births have been trending slightly downwards and deaths slightly upwards through the period, yielding an overall decrease in population attributed to “natural increase” over the course of the time series.

Components of Change: Regional and State Comparisons

An examination of the components-of-change data begins to answer the question of why some states or regions are racing ahead in growth while others lag behind. From 2010 to 2019, Massachusetts, was the fastest growing state in the Northeast Region. The estimated components data suggest that, while Massachusetts shows a reasonable rate of natural increase compared to other northeastern states, its total positive migration – specifically the large number of international in-migrants nearly offsetting the number of domestic out-migrants – explains why the state leads the region in growth, as shown in Table 2 below.

Table 2. Estimated Components of Change for the United States, U.S. Regions, and Northeast States, 2019						
Geography	Vital Events			Migration		
	Births	Deaths	Natural Increase	International Migration	Domestic Migration	Total Net Migration
United States	3,791,712	2,835,038	956,674	595,348	(X)	595,348
Northeast Region	602,740	505,588	97,152	134,145	-294,331	-160,186
Midwest Region	792,343	622,854	169,489	85,675	-161,549	-75,874
South Region	1,481,244	1,122,130	359,114	242,942	407,913	650,855
West Region	915,385	584,466	330,919	132,586	47,967	180,553
Connecticut	34,567	31,149	3,418	12,323	-22,059	-9,736
Maine	12,073	14,335	-2,262	852	6,613	7,465
Massachusetts	70,419	58,564	11,855	28,426	-30,274	-1,848
New Hampshire	12,004	12,125	-121	1,947	4,469	6,416
New Jersey	99,501	75,723	23,778	21,284	-48,946	-27,662
New York	222,924	164,817	58,107	45,753	-180,649	-134,896
Pennsylvania	135,190	133,439	1,751	19,532	-19,588	-56
Rhode Island	10,481	9,802	679	3,645	-3,215	430
Vermont	5,581	5,634	-53	383	-682	-299

Regional and State Comparisons of Components-of-Change Rates

Another way to compare this data over different geographies is to first convert it to a rate –so that larger and smaller geographies can be evaluated together. Table 3 below shows the rate, per 1,000 persons, of each change component for the United States, U.S. Regions, and the Northeast States, including Massachusetts.

Table 3. Estimated Components of Change Rates for the United States, U.S. Regions, and Northeast States, 2019						
Geography	Vital Events			Migration		
	Births	Deaths	Natural Increase	International Migration	Domestic Migration	Total Net Migration
United States	11.6	8.7	2.9	1.8	(X)	1.8
Northeast Region	10.8	9.0	1.7	2.4	-5.3	-2.9
Midwest Region	11.6	9.1	2.5	1.3	-2.4	-1.1
South Region	11.8	9.0	2.9	1.9	3.3	5.2
West Region	11.7	7.5	4.2	1.7	0.6	2.3
Connecticut	9.7	8.7	1.0	3.5	-6.2	-2.7
Maine	9.0	10.7	-1.7	0.6	4.9	5.6
Massachusetts	10.2	8.5	1.7	4.1	-4.4	-0.3
New Hampshire	8.8	8.9	-0.1	1.4	3.3	4.7
New Jersey	11.2	8.5	2.7	2.4	-5.5	-3.1
New York	11.4	8.5	3.0	2.3	-9.3	-6.9
Pennsylvania	10.6	10.4	0.1	1.5	-1.5	-
Rhode Island	9.9	9.3	0.6	3.4	-3.0	0.4
Vermont	8.9	9.0	-0.1	0.6	-1.1	-0.5

UMass Donahue Institute. Source U.S. Census Bureau Population Division NST_EST2019_ALLDATA. Release Date December 30, 2019.
Rates per 1,000 average population.

These estimated component rates indicate that Massachusetts births are occurring at a lower rate (10.2 per 1,000 average population) than in the United States as a whole (11.6) and each U.S. region on average (Table 3). Deaths in Massachusetts are also occurring at a lower rate (8.5) than other regions of the U.S. except the West (7.5), but are almost on par with the U.S. average of 8.7. Taken together, these vital events lead to a natural increase rate (1.7) that is below that of the U.S. as a whole (2.9) and all of its regions, except the Northeast, which is also 1.7. Note that all other states in the Northeast except for New Jersey and New York show even smaller rates of natural increase, as this region of the U.S. tends to be older than the greater U.S.

As for migration, we see that the Northeast and Midwest regions experience net domestic out-migration (-5.3 and -2.4 per 1,000 population, respectively) while the Southern and Western regions have positive domestic migration (3.3 and 0.6). The domestic migration rate of -4.4 in Massachusetts is less than the Northeast regional average of -5.3, but still indicates net domestic outmigration to Southern and Western states. On the other

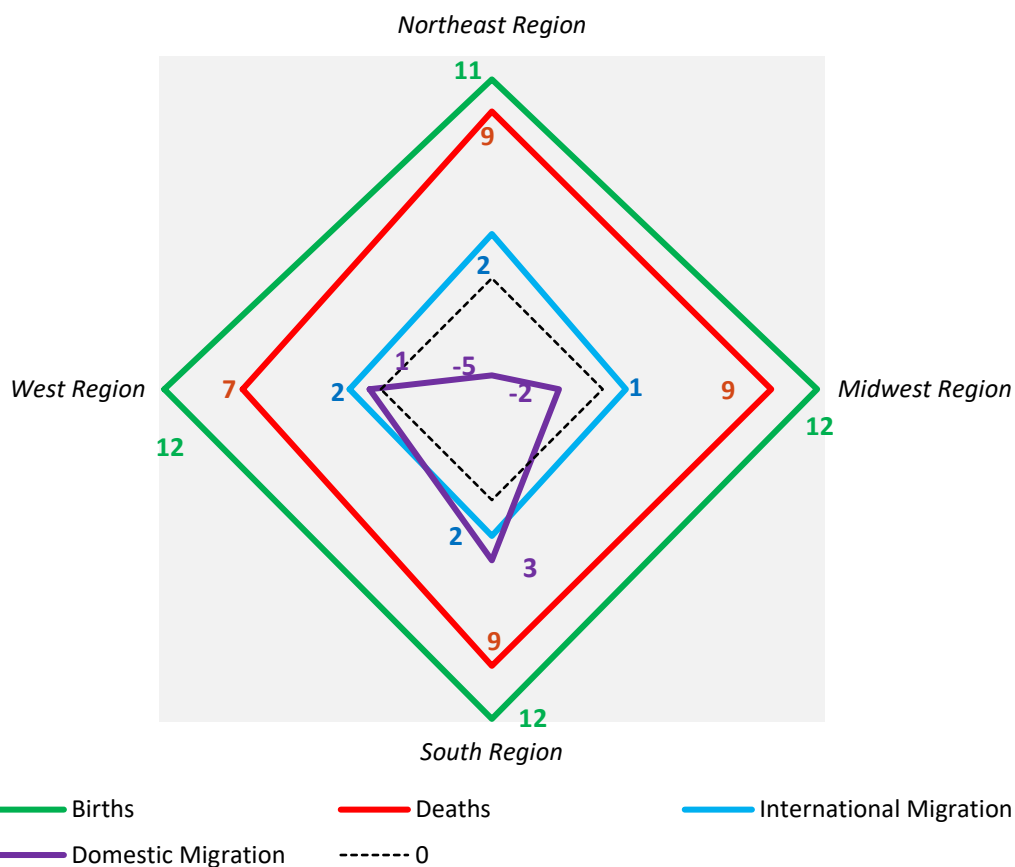
hand, the international migration rate of 4.1 for Massachusetts is more than double that of the U.S. as a whole (1.8) and exceeds all U.S. regional averages and all other Northeast states. According to the latest Census estimates, only Florida ranks higher than Massachusetts in its rate of annual net international immigration per 1,000 population. (Table 4). In terms of numbers of net immigrants, Massachusetts ranked 5th (Table 5). As a result, Massachusetts domestic outmigration is almost offset, and total migration, including domestic and international, nets to -0.3 per 1,000 population - higher than both the Northeast and Midwest regional averages (Table 3).

Table 4. States With Highest Net International Immigration Rates, 2019		
State	Rate of Net International Immigration	Ranking
Florida	4.2	1
Massachusetts	4.1	2
District of Columbia	3.7	3
Hawaii	3.5	4
Connecticut	3.5	5
Rhode Island	3.4	6
Washington	3.2	7
Maryland	2.5	8
New Jersey	2.4	9
New York	2.3	10
Texas	2.3	11
Indiana	2.1	12
California	1.9	13
Colorado	1.8	14
Utah	1.8	15
UMass Donahue Institute. Source U.S. Census Bureau Population Division NST_EST2019_ALldata. Release Date December 30, 2019. Rates per 1,000 average population. State rankings include District of Columbia.		

Table 5. States With the Highest Net International Immigration, 2019		
State	Net International Immigrants	Ranking
Florida	88,678	1
California	74,028	2
Texas	65,044	3
New York	45,753	4
Massachusetts	28,426	5
Washington	24,103	6
New Jersey	21,284	7
Pennsylvania	19,532	8
Illinois	19,209	9
Georgia	15,053	10
Maryland	15,011	11
Virginia	14,869	12
Indiana	14,379	13
North Carolina	14,184	14
Michigan	13,146	15
UMass Donahue Institute. Source U.S. Census Bureau Population Division NST_EST2019_ALldata. Release Date December 30, 2019.		

Figure 7 demonstrates the magnitude of each of the components of population change, graphing component rates by U.S. region. Births represent the component with the greatest influence on population change, and are more heavily weighted to the West, South, and Midwest. Deaths are the second most influential component and are most prominent in the Midwest, South, and Northeast. International migration is heavily weighted to the Northeast, while domestic migration adds to the West and especially to the South, with losses in the Midwest and especially the Northeast.

Figure 7. Rates of Estimated Components of Change by U.S. Region, 2019



UMass Donahue Institute. Source Data: U.S. Census Bureau, Population Division, NST_EST2019_ALLDATA. Release date December 30, 2019

Additional Information and estimates data can be found on the U.S. Census Bureau's website at <https://www.census.gov/programs-surveys/popest.html>

Additional UMass Donahue Institute Massachusetts summaries of U.S. Census Bureau releases can be accessed at <http://www.donahue.umassp.edu/business-groups/economic-public-policy-research/massachusetts-population-estimates-program/population-estimates-by-massachusetts-geography>

Summary prepared by:

Susan Strate, Senior Manager, Population Estimates Program

Meghan Flanagan, Senior Research Analyst

Michael McNally, Research Analyst