

Discussion Paper



Smart places, getting smarter: Facts about the young professional population in New England states

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Each of the New England states is wrestling with how to retain a skilled workforce and sustain economic competitiveness while facing an aging population. In particular, each state fears that it is losing young, educated workers to other states and regions.

“Is New England Experiencing a ‘Brain Drain’? Facts about Demographic Change and Young Professionals”—another discussion paper from the New England Public Policy Center—showed that the region has a strong base of young professionals. However, a smaller birth cohort and domestic out-migration are counterbalancing rising educational attainment and international in-migration leading to slower growth in the population of young professionals

Each New England state must consider its own pool of young, educated workers, given these regional trends. This report therefore looks at the supply of young professionals in each state in the region, to better understand trends in that population amid concerns about the future of the skilled labor force.

This analysis reveals that while there are some differences between the New England states, all are facing slow growth or no growth in its population of young professionals. To better understand this trend, I examine the size of the age cohort, educational attainment, and migration patterns in each state in the region.

Data sources

The U.S. Census Bureau provides extensive data on the age structure and educational attainment of the U.S. population every 10 years. I rely on the 1980, 1990, and 2000 censuses to examine changes in the stock of young professionals over time. For more recent trends, I rely on data from the 2007 American Community Survey (ACS), developed by the Census Bureau to track population trends between the decennial censuses.¹ In analyzing these data, I define young professionals as 25–39-year-olds with at least a bachelor’s degree who are not currently enrolled in school.²

¹ Estimates from the census and the ACS should be compared with caution, as the two surveys differ in the definition of residency, sample size, and sampling technique. Neither data set tracks individuals over time, to definitively determine whether short-term changes in the young professional population reflect migration, rising educational attainment, or changes in the size of the age cohort.

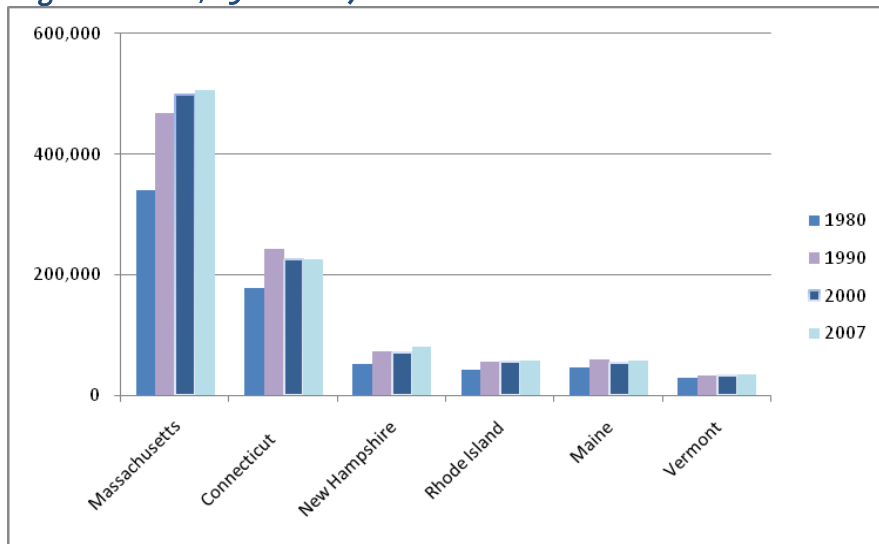
² While a bachelor’s degree is an imperfect measure of skills and professional status, this definition allows me to examine demographic trends in the young labor force.

Do New England states have fewer young professionals today than in 1990?

In Massachusetts, growth of the population of young professionals has slowed, while in Connecticut that population is smaller than at its peak in 2000 (see Figure 1, next page). However, young professionals are a large share of both young adults and the total population in both states.

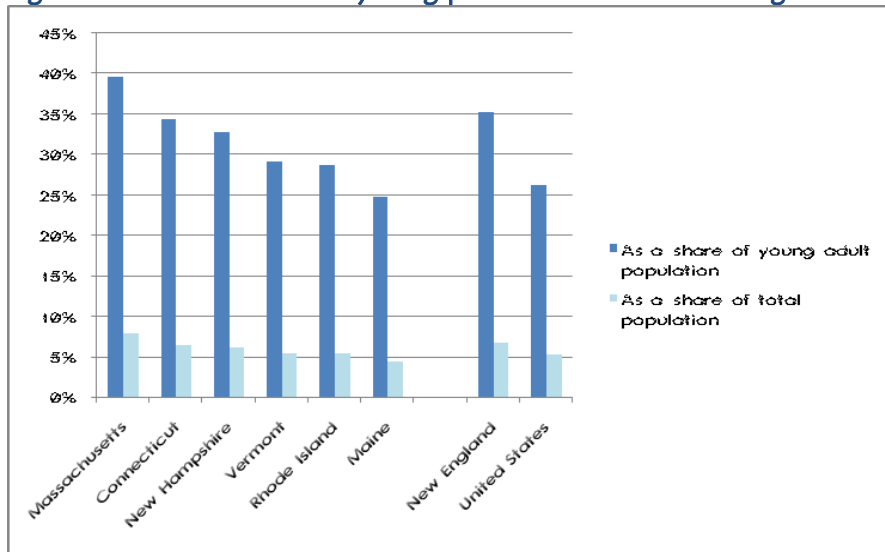
In Massachusetts, for example, 8 percent of the total population is young professionals, while 40 percent of young adults meets that definition. Those are by far the highest concentrations of young professionals in the region (see Figure 2, next page). Indeed, Massachusetts has a higher concentration of young professionals as a share of both young adults and the total population than all other U.S. states.

Figure 1: Population of 25-39-year-olds with a B.A. and not currently enrolled in school in New England states, 1980–2007



Source: NEPPC calculations from 1980, 1990, and 2000 censuses and 2007 ACS. Direct comparisons of 2007 ACS and 2000 Census data should be treated with caution. The 2007 ACS estimates draw from a smaller sample size and have a different definition of residency.

Figure 2. Concentration of young professionals in New England states, 2007



Source: NEPPC calculations from 2007 ACS.

Rhode Island, New Hampshire, Vermont, and Maine all have slow growth or no growth in their populations of young professionals. Still, in every New England state except Maine, the concentration of young professionals as both a share of total population and a share of young adults exceeds the national average.

The modest declines in some New England states and modest growth in others mean that the total number of young professionals in New England has not changed much in recent years. In nearly every other region around the country, in contrast, the population of young professionals is growing.³

Which demographic trends have affected the size of the young professional population in New England states? To answer this question, I examine three demographic forces that affect the population of young professionals in the region: the size of the age cohort, its educational attainment, and its migration, both domestic and international.

Changes in the size of the age cohort

One factor driving the supply of young professionals in the region is the total population of young people. In a given state, if the number of young people is growing, then the number of young professionals is likely growing as well.

Between 1980 and 1990, the number of 25–39-year-olds in the United States grew by 24 percent, as the bulk of the Baby Boom generation aged into this cohort. However, as the last of the Baby Boom generation has aged into its 40s, the cohort of young adults has shrunk. Since 1990, the United States has recorded a drop of 2 million—or about 3 percent—in the population of young adults.

The decline in the young adult cohort has been more acute in New England than in other parts of the United States (see Table 1, next page). New England as a whole had 21 percent fewer young adults in 2007 than in 1990. In fact, all the states in the region rank in the top 10 nationwide for contraction of the population of adults aged 25–39 from 1990 to 2007. Of the New England states, Maine saw the largest drop in its population of young people: the state now has 26 percent fewer young adults than just 17 years ago.

The contraction in the number of young people is also affecting some states that compete with New England to attract skilled workers and businesses. Even California has fewer young people today compared with the prior cohort. However, the population of young adults has grown in North Carolina, Texas, and Washington—states often identified as competitors with New England.

³ See “Is New England Experiencing a ‘Brain Drain’? Facts about Demographic Change and Young Professionals,” NEPPC Discussion Paper 07-3.

Table 1. Size of the 25–39-year-old age cohort and share with college degree

	1990		2007		Percent change in cohort size	Percentage point change in B.A.s
	Population	Percent with at least a B.A.	Population	Percent with at least a B.A.		
Connecticut	852,326	33	655,918	39	-23	7
Maine	310,381	21	228,507	29	-26	7
Massachusetts	1,585,958	35	1,279,003	46	-19	11
New Hampshire	303,949	28	248,298	36	-18	9
Rhode Island	254,413	26	200,482	35	-21	8
Vermont	143,366	26	115,884	33	-19	7
New England	3,450,393	31	2,728,092	41	-21	9
United States	63,272,358	24	61,235,126	30	-3	6
California	8,218,009	24	7,931,749	30	-3	5
Illinois	2,905,110	26	2,676,234	35	-8	8
New Jersey	1,979,483	32	1,714,419	38	-13	7
North Carolina	1,681,590	22	1,859,251	29	11	7
Pennsylvania	2,817,675	24	2,283,240	32	-19	9
Texas	4,499,513	23	5,221,040	25	16	3
Washington	1,287,519	25	1,361,650	31	6	7

Source: NEPPC calculations from 1980, 1990, and 2000 censuses and 2007 ACS. Direct comparisons of 2007 ACS and 2000 Census data should be treated with caution. The 2007 ACS estimates draw from a smaller sample size and have a different definition of residency.

Changes in educational attainment

Rising educational attainment has helped offset the impact of declining numbers of young people in the United States. And New Englanders are among the most highly educated young people in the nation, as their educational attainment has increased over time (see Table 1).

Massachusetts has the highest college attainment rate among its young people in the nation: 46 percent of its 25–39-year-olds hold at least a bachelor’s degree. And Connecticut has the country’s third-highest educational attainment among this cohort. Rhode Island, New Hampshire, and Vermont, too, all exceed the national average in educational attainment. Only Maine lags the region and the national average in college attainment among its young people.

The region started the 1990s with a greater share of young adults with at least a bachelor’s degree. And the region has since outpaced the nation in expanding this share, as young people in all New England states have made rapid gains in educational attainment.⁴ The percentage of the region’s

⁴ Note that the share of young adults with a bachelor’s degree differs from the share of young adults referred to here to as “young professionals”: the latter excludes young adults currently enrolled in school. So, for example, if a young adult

young people with at least a bachelor’s degree rose by 9 percentage points from 1990 to 2007, compared with only 6 percentage points for the United States as a whole. Massachusetts, with the highest share of young people with a bachelor’s degree in the nation, also saw the region’s largest increase in this share over the past 17 years.

The bottom line is that very few states have the concentration of human capital that New England has, which bodes well for the productivity of its labor force.

Changes in migration

Young, educated adults are more likely to move, and to move longer distances, than their peers with lower levels of education, and are also more likely to move than older adults. New England has experienced both net domestic out-migration among young professionals and international in-migration in recent years.⁵ Although the sample sizes in the ACS are not large enough to construct migration rates over the near term at the state level, we can look at the birthplace of New England’s young professional population to understand their lifetime migration to and from states in the region.

More than half of the region’s young professionals were born in New England (see Table 2). This share stayed mostly constant from 1990 to 2007 (compare Table 2 with Table 3, next page). However, the share of young professionals born abroad has grown, while the share of young professionals born in another region of the country has shrunk.

Table 2: Place of birth of population aged 25–39 with a B.A. and not enrolled in school in New England states, 2007

	Born in a NE state	Born elsewhere in U.S.	Born abroad
Connecticut	49.6%	29.3%	21.1%
Maine	68.9%	23.6%	7.5%
Massachusetts	54.5%	21.9%	23.6%
New Hampshire	62.9%	26.4%	10.7%
Rhode Island	60.8%	21.3%	17.9%
Vermont	53.4%	39.7%	6.8%
New England	55.2%	24.7%	20.0%

Source: NEPPC calculations from 2007 ACS.

has a bachelor’s degree but is enrolled in graduate school, I do not consider him or her a young professional. However, in computing the percentage of young adults with a bachelor’s degree, I include college graduates currently enrolled in graduate school.

⁵ See NEPPC Discussion Paper 07-3.

Table 3: Place of birth of population aged 25-39 with a B.A. and not enrolled in school in New England states, 1990

	Born in a NE state	Born elsewhere in U.S.	Born abroad
Connecticut	50.7%	39.7%	9.6%
Maine	64.2%	31.3%	4.5%
Massachusetts	59.0%	30.6%	10.4%
New Hampshire	57.7%	36.0%	6.3%
Rhode Island	67.9%	25.3%	6.8%
Vermont	46.6%	47.3%	6.0%
New England	57.2%	33.7%	9.1%

Source: NEPPC calculations from 1990 Census.

Today Massachusetts and Connecticut have about the same share of young professionals born in New England as they did in 1990. However, the share of their young professionals born abroad has more than doubled.⁶ In all, more than one in five young professionals in these two states was born outside the 50 U.S. states.

Meanwhile the share of their young professionals born in other parts of the country has declined. Indeed, all New England states have gained young professionals born abroad, with the most rapid gains since 1990 occurring in Rhode Island.

Among New England states, young professionals in Maine are most likely to have been born in New England, while those in Vermont are most likely to have been born elsewhere in the United States. Both Vermont and Maine have smaller shares of young professionals who were born outside the country than other states in the region.

Conclusion

While each New England state faces its own challenges around population growth, migration, and economic competitiveness, this analysis suggests that the states are all facing little or no growth in their young professional population.

Massachusetts and Connecticut historically have enjoyed a large concentration of young professionals. Moreover, in both states, the percentage of young adults holding at least a bachelor's degree continues to exceed that of most other states around the country, and of the nation as a whole. Thus, these states enjoy a particularly skilled young workforce.

⁶ In this analysis I considered everyone born outside the 50 U.S. states as born abroad, including people from Puerto Rico and other U.S. territories.

Rhode Island, New Hampshire, Vermont, and Maine have slow or no growth in their populations of young professionals. As in Massachusetts and Connecticut, each state has made steady progress in boosting the rate of educational attainment among its young people.

However, all New England states have smaller cohorts of young people today than in the past. These smaller cohorts have offset the gains in educational attainment, leading to slow or no growth in the population of young professionals in each state in the region.

International in-migration has offset factors retarding the growth of the population of young professionals in New England. Massachusetts, Connecticut, and Rhode Island have been particularly successful in attracting young professionals born abroad, while Maine and Vermont have been less successful. Remaining attractive to and inclusive of international immigrants is important to the region's future competitiveness.

Each New England state will need to employ its own strategies for expanding its skilled labor pool. However, the long-term supply will depend on boosting residents' access to higher education and preparedness for it, continuing to welcome young people born abroad, and working to attract and retain domestic talent. These efforts will become ever more important as opportunities for young professionals expand in some other regions of the United States and the world.

Specifically, while education levels have been rising in New England, they must continue to do so to meet the region's demand for skilled labor. Expanding the educational pipeline will require continued investments in that arena.

Most young people—particularly those with a bachelor's degree or higher—cite employment as the primary reason for moving. Policies that connect young people attending New England's colleges and universities—especially those from outside the region, who may have fewer connections to it—with regional employers may help states retain young professionals.

Encouraging international in-migration is trickier, as policymakers can do little to affect the number of visas available to educated workers from abroad. However, they can work to ensure that their states welcome talent from around the world.



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