

The Future of Skilled Labor: New England's Supply of Recent College Graduates

By *Alicia C. Sasser*

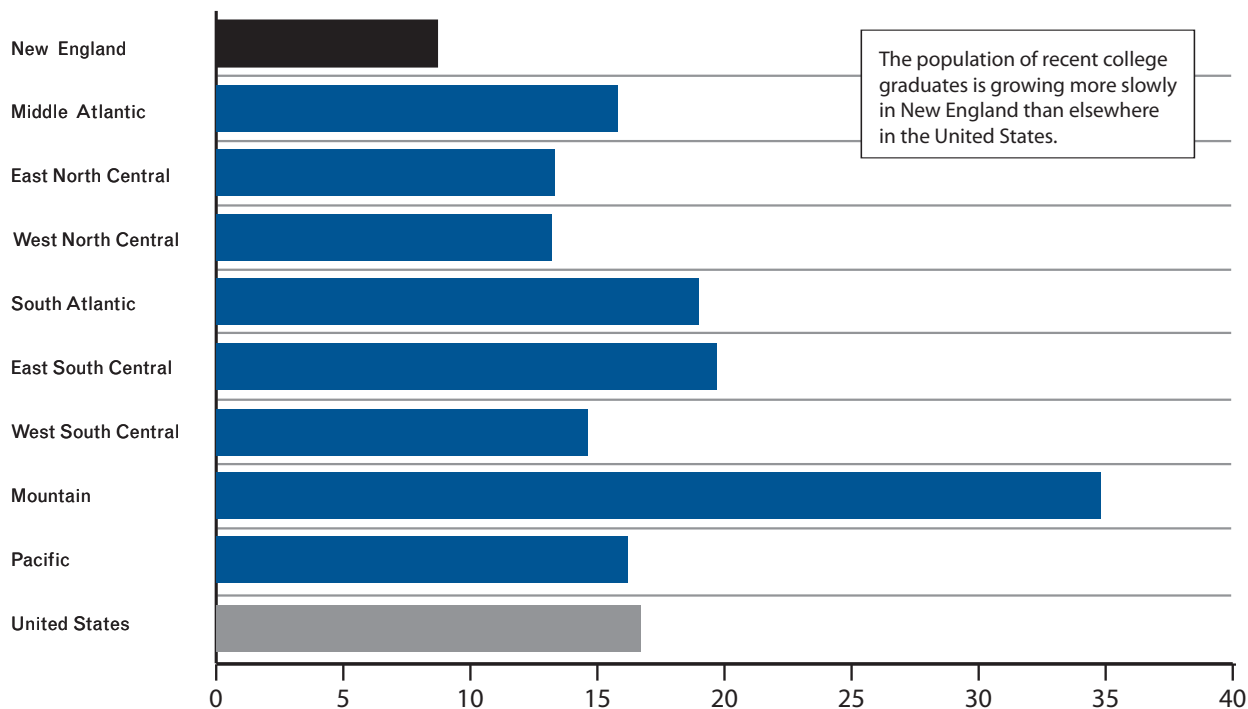
One of New England's greatest assets is its skilled labor force which has historically been an engine of economic growth in the region. Yet the population of recent college graduates—the skilled labor force of the future—has been growing more slowly in New England than in the rest of the United States. Since 2000, the number of individuals ages 22 to 27 with a bachelor's degree or higher has grown by less than 9 percent in New England—roughly half the U.S. increase. This is better than the 11 percent drop in the number of recent college graduates that the region faced in the previous decade. But the increase since 2000 has not offset those earlier losses, making New

England the only region to see a decline in this population since 1990. [See Figure 1.]

Thus, the need to attract and retain recent college graduates has become a salient issue in every New England state. Policymakers and business leaders alike are concerned that an inadequate supply of skilled workers will hamper economic growth by creating barriers for companies looking to locate or expand in New England. Yet few steps have been taken to tackle this challenge because of lack of information on the extent of the problem, its root causes, and how best to address it.

Figure 1: Population Growth of Recent College Graduates by Region

Percent Change, 2000 to 2006



Source: 2000 Census and 2006 American Community Survey.

Factors Affecting the Stock of Recent College Graduates

Every year, the region adds to its stock of recent college graduates, as each successive cohort of young adults flows through the education pipeline: entering college, completing degrees and choosing where to locate. Thus, three main factors affect the stock of recent college graduates: the supply of young adults to be educated, the rate of postsecondary educational attainment, and the migration of students upon graduation.

The supply of young adults to be educated at New England institutions—whether native to the region, from other parts of the United States or from abroad—is the primary source of growth for the region’s population of recent college graduates. That is because students who attend college in New England account for more than three-quarters of the recent college graduates living in the region.

The rate of educational attainment among native young adults—or the percentage of high school graduates who choose to go on to college—is also a key factor affecting the number of recent college graduates in New England. That is because native New Englanders account for roughly 70 percent of college enrollments within the region.

Finally, the migration decisions of individuals also influence the number of recent college graduates. Regions may increase the size of this population by either retaining those educated within the region or by attracting those who have received degrees elsewhere. Retention is especially important in New England because the region imports a relatively high share of its student body from other parts of the country—about 30 percent of the incoming class each year.

How These Factors Have Changed

The supply of young adults fell sharply in New England during the 1980s and has been growing more slowly than nationally since then. This trend primarily reflects a period of low birth rates during the 1970s. After the baby boom, birth rates fell across the United States, but more so in New England. The result is that some 20 years later, New England had

roughly 25 percent fewer native young adults of college-going age during the 1990s than in the 1980s.

Since then, the number of young adults of college-going age in New England has grown more slowly than in other parts of the country. Moreover, despite a growing number of students coming from elsewhere in the United States and abroad, the increases from these two groups were a drop in the bucket compared with the sharp drop in the number of native young adults. Essentially, the region has not been producing enough of the basic input—young adults—to put through the education pipeline.

With no way to immediately reverse the effects of a decade of sharply lower birth rates, New England had to rely on increasing the rate of educational attainment among young adults. Fortunately, this is exactly what happened during the 1990s. The share of high school graduates attending college rose sharply across the United States, but even more so in New England—going from roughly one-third of high school graduates at the start of the 1990s to just over one-half by the end of the decade.

As a result, the educational attainment of native young adults increased more rapidly in New England than in most other parts of the nation—with nearly one in three native young adults having a college degree in 2006. In comparison, slightly more than one in five young adults was a college graduate for the nation as a whole. Thus, despite the sharp drop in the number of young adults in New England (25 percent), the decline in the number of recent college graduates was only half as steep (11 percent), because of the rising share of young adults receiving a college education.

Despite New England’s higher educational attainment, some are concerned that we retain too few college graduates or at least fewer than in the past. Migration patterns have changed little for this group, but the situation is more complex. Typical migration rates for New England often show net out-migration among recent college graduates—meaning that more individuals are leaving than entering the region. This is because such rates reflect only moves made upon graduation from region of institution to region of

adult residence, failing to capture the earlier in-migration of students to New England to attend college.

Why is this important? As a net importer of college students, these positive inflows into the region to attend college are sizeable and more than offset the negative outflows of those who leave upon graduation. Essentially, because more students come to New England for college than leave to attend college elsewhere, even though the region holds onto only a fraction of that net positive influx, it still comes out ahead. So when analyzing migration patterns of recent college graduates, it's important to account for where students came from as well as where they received their degrees and where they chose to locate after graduating.

While New England's higher education institutions attract a relatively high share of students from outside the region, this makes it more difficult to retain these individuals when they graduate. Indeed, New England retains a lower share of students upon graduation, compared with other regions. For the graduating class of 2000, roughly 70 percent of recent college graduates were still living in New England one year after graduation, compared with about 80 percent for the Mid-Atlantic region and 88 percent for the Pacific region. [See "Lower Retention" table below.]

New England's lower retention rate partly reflects the high share of non-native students who migrate into

the region to attend school. Having already migrated once to attend college, these students have a higher propensity to relocate after graduation—often to return home—whether to take a job or be closer to family. For example, only 22 percent of those migrating into New England to attend college were still in the region one year after graduation, compared with 91 percent of native graduates. Moreover, retention among non-native graduates is relatively low in New England. So, in addition to having a greater share of non-native graduates, who have low retention rates in general, New England is less likely to retain non-native graduates compared with other regions. In addition, graduates of New England's private and very selective institutions are less likely to remain in the region, able to reap the benefits of their high-quality education by moving to any number of locations.

Contrary to the conventional wisdom, recent college graduates are leaving New England primarily for job-related reasons—not housing costs. According to the Census Bureau's *Current Population Survey*, about half of those leaving New England between 1998 and 2006 cited employment-related reasons. Just under one-third left for "other" reasons—almost exclusively to attend or leave college—likely reflecting the large share of non-native students who come to New England and then leave upon graduation. About 17 percent left for family-related reasons such as a change in marital status or to establish their own

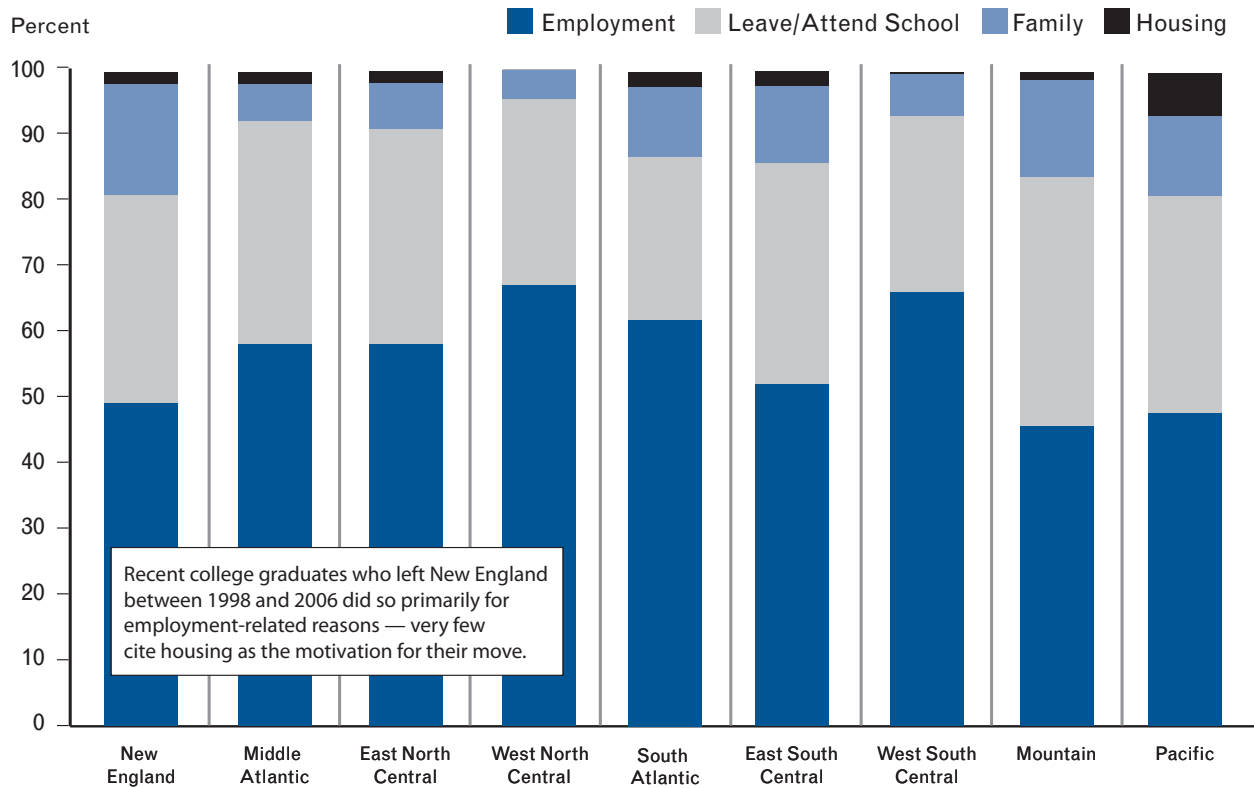
Lower Retention

New England attracts a relatively high share of non-native students, the majority of whom leave the region when they graduate.

	Percent of College Students Who Are Non-Natives	Percent of Graduates Living in Same Region as BA Institution One Year After Graduation		
		All Graduates	Non-Native Graduates	Native Graduates
New England	28.5	70.5	22.7	91.0
Mid-Atlantic	14.3	79.9	28.6	88.7
East North Central	11.6	79.7	18.0	87.8
East South Central	15.5	72.2	15.3	82.8
South Atlantic	16.2	79.1	29.2	89.1
West North Central	18.4	74.9	21.5	86.9
West South Central	9.4	85.1	24.2	91.4
Mountain	14.2	76.4	26.2	84.8
Pacific	6.0	87.5	32.3	91.0

Source: 2000/01 Baccalaureate and Beyond Longitudinal Survey, NCES, U.S. Department of Education.

Figure 2: Primary Reason for Leaving Among Recent College Graduates, By Region of Origin



Source: *Current Population Survey, 1999-2007.*

household. In contrast, housing-related reasons accounted for less than 2 percent of moves from New England among recent college graduates. [See Figure 2.]

On second glance, this is perhaps not all that surprising, given that recent college graduates are more likely to be seeking rental housing rather than owner-occupied housing. Rental housing, unlike owner-occupied housing, is relatively affordable in New England compared with other places. Indeed, the Mid-Atlantic and Pacific regions—both with relatively high housing costs—were two of the three top destinations for recent college graduates leaving New England, suggesting that housing costs are not the main drivers of the location decisions of recent college graduates.

New England’s ability to attract college graduates is comparable to that of most regions, particularly once its

smaller population size is accounted for. The number of new graduates migrating into the states from other parts of the country represented 2.5 percent of New England’s total population of recent college grads—roughly equivalent to most other regions. Interestingly, more than half of those migrating into New England were natives who had received their degrees elsewhere and chose to return upon graduation.

Among the three factors examined, changes in supply of young adults account for most of the sharp drop and subsequently slower growth in the number of recent college graduates in New England. Fortunately, rising educational attainment helped the region swim against the tide of slower population growth, as the share of high school graduates attending college rose more sharply in New England than the rest of the nation. Yet changes in the migration patterns of recent college graduates have not been very large over this period,

accounting for only a small fraction of the overall trend in the number of recent college graduates.

What Can Be Done to Shore up Supply of Recent College Grads?

Although migration has played a relatively small role in New England college graduates over time, boosting retention among those educated in New England may offer the most promising strategy. Although increasing the supply of young adults to be educated would have the greatest impact, short of a baby boom, the region would need to attract more non-native students—of which only 20 percent are likely to stay upon graduation. Moreover, although rising educational attainment has been a boon in the past, raising college attendance rates much higher would be difficult without significant investments in financial aid. And as college attendance has increased, completion has fallen, so policymakers will need to expand college readiness and success programs to get the most “bang for the buck” for each additional student who enters the pipeline.

This suggests we focus on boosting retention as the immediate strategy to increase the number of recent college graduates—particularly among non-natives and those educated at private and selective institutions. States are currently pursuing a range of policies to boost retention such as building stronger ties between colleges and employers, increasing investments in higher education, branding the region to appeal to recent college graduates, and providing financial incentives to alleviate college loan debt.

Building stronger ties between colleges and employers by expanding internship opportunities may help graduates, particularly non-natives, learn about local job opportunities and form networks within the region. Indeed, the Central Massachusetts Talent Retention Project found that connections to employers and the community are an important factor for retention with 47 percent of students who worked off campus and 41 percent of students who participated in an internship planning to stay upon graduation. Yet interviews with employers revealed that many smaller companies do not use interns because of the difficulties negotiating the arrange-

ments to secure one, and the time commitment required for supervision. In response, the Colleges of Worcester Consortium, a 40-year-old alliance of 13 area colleges in central Massachusetts, developed an online internship database to enable employers of all sizes to tap into the pool of educated workers in the area. The Consortium estimates that its members place more than 3,000 students annually in internships, co-ops, clinics and schools with most programs offering academic credit for professional level work. More formal and widespread internship programs across the region could potentially be a win-win-win situation: allowing students to learn about a job or firm, lowering recruiting costs for employers, and enhancing the reputation of the college or university.

Some states are increasing investment in public higher education to make New England’s state universities more competitive with prestigious private institutions. The establishment of Commonwealth College at the University of Massachusetts Amherst is one example. This could help stem the tide by encouraging more academically talented native students, who have higher retention rates than non-native students, to stay and attend college in the region rather than going to a flagship public university in another part of the country.

Branding the region to appeal to recent college graduates, particularly non-natives, as a place to “work, play, and stay” could help New England shake off the “old, cold, and expensive” image and boost retention rates. This is the goal of New Hampshire’s “55-Percent Initiative,” which calls for increasing the percentage of college graduates who remain in the state after graduation from the current 50 percent to 55 percent through a “tourism-like” marketing campaign.

The effectiveness of financial incentives to boost retention rates is not as clear. For example, Opportunity Maine allows college graduates who work and pay taxes in the state to claim tax credits for payments on students loans. This type of initiative is not specifically targeted at graduates who are not originally from Maine. It also runs the risk of rewarding others who would have chosen to stay in Maine anyway. Other New England states have targeted loan-for-

givenness programs aimed at retaining recent college graduates in particular industries, such as biotech, or occupations, such as teaching.

New England is likely to face even greater competition for college graduates in the future—particularly in a global economy where workers and jobs are more mobile. An article in the Boston Globe earlier this year warned that college students often treat coming to New England to get a degree like “spinning through a revolving door”—acquiring a high-quality education and then using it to take advantage of job opportunities elsewhere.

Contrary to the usual reasons offered to explain why individuals leave New England, recent college graduates appear to be moving primarily to seek the best job opportunities. What then will boost retention? As

Bentley College economics professor Patricia Flynn observes, “Being offered a really good job will override housing costs, snow and a lot of other issues.”

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The full report is available at the Center's website: <http://www.bos.frb.org/economic/neppc/>.