

# Labor Market Trends in the **Southeast Region**

October 2012

A joint project of the Commonwealth Corporation and  
New England Public Policy Center of the Federal Reserve Bank of Boston

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*This profile was developed by Robert Clifford, a policy analyst at the New England Public Policy Center.*

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## EXECUTIVE SUMMARY

Using the most recent data available, the Southeast regional labor market profile provides a detailed picture of the region's current and future labor supply.<sup>1</sup> For context, it also provides detailed information on labor demand in the region over the past decade. This profile is designed to help guide workforce development professionals, policy makers, and civic, education, and business leaders as they make decisions about education and training opportunities.

The charts and analysis are divided into three sections:

1. Labor Supply: Demographic Trends of Residents Who Live in the Southeast Region
2. Labor Demand: Employment Trends of Jobs and Workers in the Southeast Region
3. The Pipeline: Educational Supply of Post-Secondary Degrees Granted by Institutions Located in the Southeast Region

The past decade has been challenging for the Southeast region's labor market. After two

recessions and a decade of declining employment, the region is now gaining jobs and recovering at a modest pace. However, the recovery from the Great Recession has been somewhat slow in the region, falling in the middle of the pack among regional labor markets and trailing statewide growth. While the recovery of the labor market is in its earliest stages, the region has had a varied employment situation, with strong growth in industries such as Retail Trade, Administrative & Support Services, and Other Services but declines in Professional & Technical Services, Financial Activities, and Wholesale Trade. In comparison, Massachusetts has had a broad-based recovery in its earliest stages, with fewer industries continuing to decline in employment and stronger employment gains in the industries that are recovering.

The Great Recession has also left the Southeast region with the highest unemployment rate among all regional labor markets. While the unemployment rate in the region was only slightly higher than the statewide rate through the first half of the past decade, the severity of the Great Recession resulted in Southeast's unemployment rate increasing from 5.1 percent

in 2007 to 9.8 percent in 2010. This was slightly above the national rate (9.6 percent) and far exceeding the statewide rate (8.5 percent), as well as all other regional labor markets. And while high unemployment has impacted all demographic groups, it has been disproportionately concentrated among the young and those with lower levels of education.

While Massachusetts is one of the most highly educated states in the nation, the residents and workforce (which include people who commute from other regions and other states) of the Southeast region tend to have lower levels of educational attainment and are more similar to their counterparts in the United States. Over the past decade, the region saw progressively higher levels of educational attainment among its residents and workforce, but a High School Degree continued to be the most common level of educational attainment. As of 2008-2010, 32.3 percent of the civilian labor force in the region had a Bachelor's Degree or higher, which trailed the 41.2 percent in Massachusetts but was more than the national rate of 29.6 percent. The share of the region's civilian labor force with some post-secondary education (62.6 percent)

<sup>1</sup>This profile builds on the work of the 2008 regional labor market profiles completed by Paul Harrington and Neeta Fogg, formerly at Northeastern University's Center for Labor Market Studies. This work employs their methodology and includes expanded analysis of the educational attainment of the region's population, more detailed analysis of the distribution of occupations by industry, and reviews of trends over a longer time period.

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was closer to the share in Massachusetts (67.9 percent), due to the region's strong concentrations of individuals with a Certificate or Associate's Degree. However, the Southeast region also has a considerable number of residents at the lower end of the education distribution. Compared with the entire state, the region has a larger share of working-age residents and civilian labor force with a High School Degree or less. Given that those with lower educational attainment tend to be disproportionately represented among the unemployed, such residents could be an important source of labor—if educated and trained to meet the state and region's growing demand for skilled workers.

Still, the region faces the demographic challenges of an aging population and potential shortfalls in workers with the educational levels required by employers. In 2008-2010, over 45 percent of the region's civilian labor force was 45 years of age or older, while slightly over 30 percent were 34 or younger. This suggests that the region's businesses may face a potential overall shortage of younger workers to replace baby boomers as they near retirement age. And while the region's residents obtained progressively higher levels of education in the past decade, slower growth in those with Some College, an Associate's Degree, or even a High School Degree has also contributed to the potential shortage in the number of younger residents and workers who can replace baby boom-

ers as they retire. This trend may be particularly troublesome as the region is a net exporter of workers and may not be able to attract commuters from elsewhere to fill positions. However, people who are 34 years of age or younger represent nearly 45 percent of the region's unemployed but account for only 30 percent of the region's civilian labor force. As with those with lower levels of educational attainment, younger workers are disproportionately unemployed and may provide a supply of labor that can be educated and trained to address any potential labor shortages.

To foster strong economic growth in the future, the Southeast region may want to better align the education of its labor force to meet the demands of the region's employers. The higher education institutions in the region can play a key role in influencing the future supply of workers with post-secondary degrees. This supply will be critical to help meet the demographic challenges posed by an aging workforce and the region's increasing demand for educated workers. National and state enrollment patterns indicate that more individuals sought post-secondary education over the past decade. The Southeast region saw a similar trend, with increasing full-time and part-time enrollment at less-than-two-year and two-year institutions, and increasing full-time enrollment at four-year institutions. The region's public two- and four-year institutions are the main drivers

of enrollment at post-secondary institutions, with enrollment growth at public institutions exceeding both statewide and national trends over the past decade.

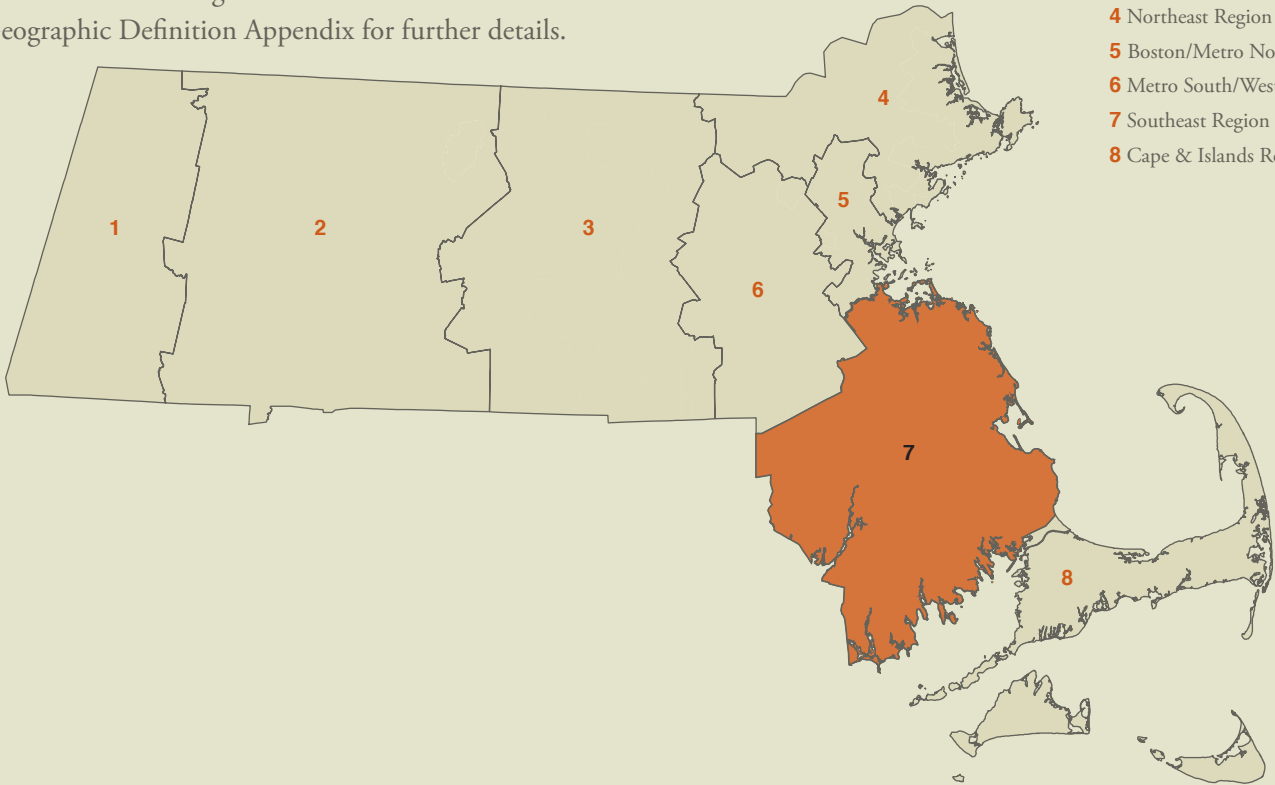
In terms of students completing post-secondary degrees, the institutions in the region have, as a whole, surpassed Massachusetts and come closer to the experience of the United States over the past decade. Between 2000 and 2010, the number of students completing Certificates, Associate's Degrees, and Bachelor's Degrees at institutions in the Southeast region grew faster than in Massachusetts, but only Certificate completions surpassed the national trend. Notably, a large share of the region's post-secondary degrees was completed at public institutions, particularly Associate's Degrees (81.8 percent) and Bachelor's Degrees (60.5 percent). An overall increase in the number of degrees completed was reflected in strong growth in most major fields of study for each program and degree type, especially in recent years. In particular, the number of people earning Certificates, Associate's Degrees, and Bachelor's Degrees in Health Sciences increased toward the end of the decade, possibly a response to the state's and region's growth in the Health Care & Social Assistance industries through the economic downturn and recovery.

# GEOGRAPHY OF THE REGIONAL LABOR MARKETS

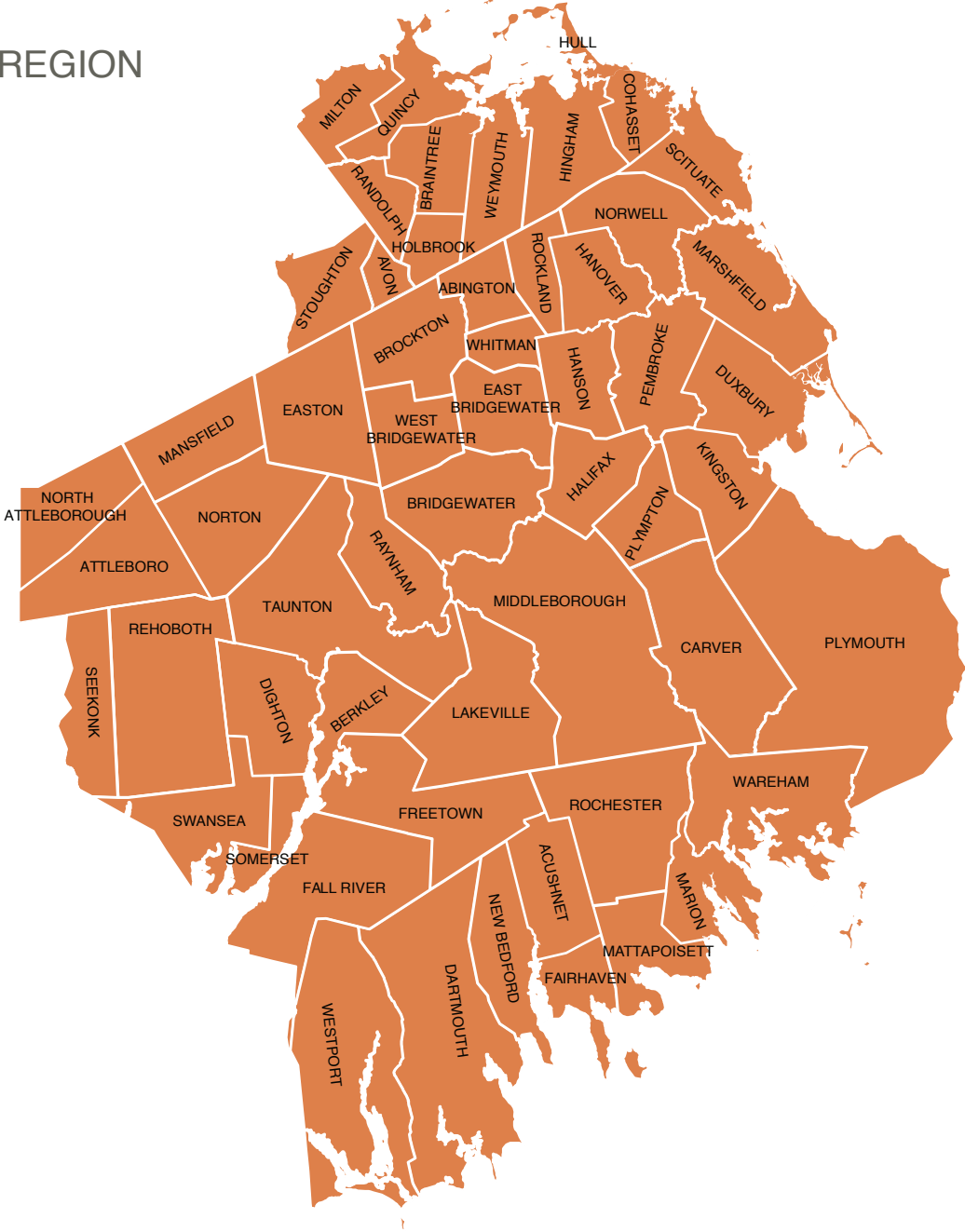
The Southeast region's labor market includes most of the Massachusetts border with Rhode Island and is also bordered by three regional labor markets: Boston/Metro North, Metro South/West, and Cape & Islands. It is composed of 56 Massachusetts cities and towns in Bristol, Norfolk, and Plymouth counties. Some of the larger cities and towns are New Bedford, Brockton, Quincy, Fall River, Plymouth, Taunton, and Weymouth. Because of data limitations, in certain aspects of this analysis, such as industry/occupational distributions, the Southeast region is combined with Berkshire, Cape & Islands, Central Mass, Northeast, and Pioneer Valley and is referred to as the region Outside Greater Boston. See the on-line Geographic Definition Appendix for further details.

### Eight Regional Labor Market Areas

- 1 Berkshire Region
- 2 Pioneer Valley Region
- 3 Central Mass Region
- 4 Northeast Region
- 5 Boston/Metro North Region
- 6 Metro South/West Region
- 7 Southeast Region
- 8 Cape & Islands Region



# THE SOUTHEAST REGION





## EMPLOYMENT TRENDS AND RECESSIONS

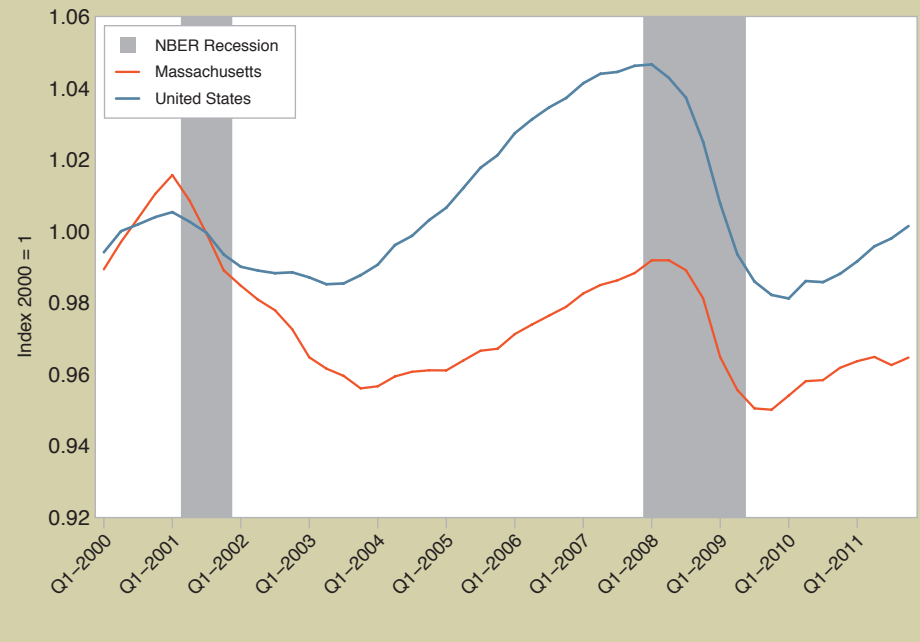
Massachusetts reached peak employment in 2001 and remained 5.0 percent below its peak (a loss of 169,800 jobs) at the end of 2011. In contrast, over the same time period, employment in the United States ended at only 0.4 percent (a loss of 513,700 jobs) below its 2001 peak. In Massachusetts, the short national recession at the beginning of the decade created a prolonged contraction and slow recovery. By the start of the Great Recession, Massachusetts had still not recovered all of the jobs it had lost during the previous recession. In contrast, the nation experienced a short labor market contraction in 2001, followed by a strong recovery that expanded employment up until the Great Recession. The Great Recession impacted the nation severely, while Massachusetts experienced a less pronounced downturn, with a slightly stronger recovery through 2010 followed by slower employment growth in 2011.

These differences between Massachusetts and the United States over the economic cycles are important to keep in mind when evaluating the performances of the eight regional labor markets. When possible, these labor market profiles will look at labor market information for the beginning of the millennium, the period preceding the Great Recession, and the decline in and recovery from the Great Recession.

**Source:** US Bureau of Labor Statistics.

**Note:** Shaded bars are National Bureau of Economic Research dated national recessions.

Non-Agricultural Employment for United States and Massachusetts, Q1 2000 to Q4 2011



## POPULATION GROWTH TRENDS

The Southeast region is the most populous regional labor market, accounting for 21.0 percent of the state's residents at the end of the decade. After growing at the same annual rate as Massachusetts (0.2 percent) early in the decade, the Southeast region outpaced the state in population growth toward the end of the decade, with an annual rate of 0.6 percent. While the region's population growth was one of the strongest in the state (second only to Central Mass), it lagged considerably behind the 0.9 percent annual growth in population nationwide between 2005-2007 and 2008-2010.

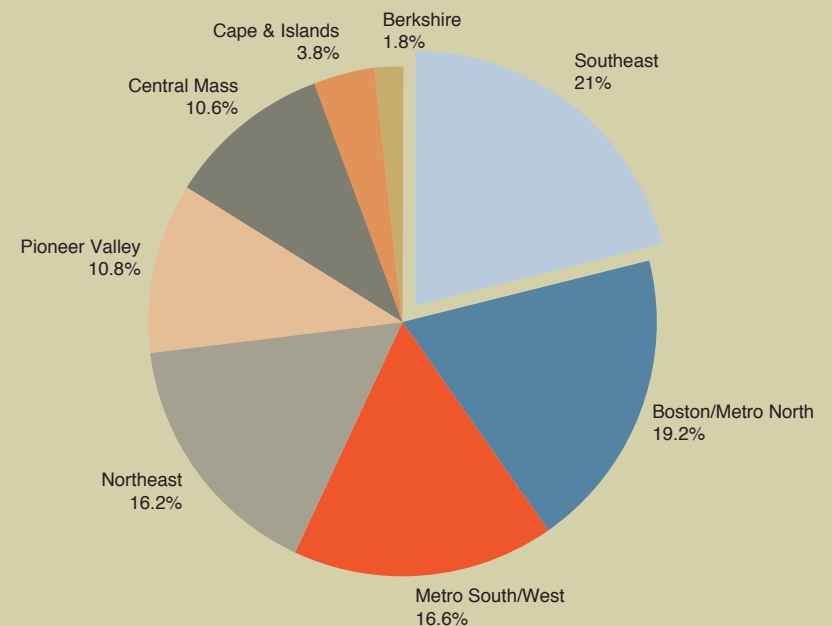
**Source:** US Census Bureau 2000 Decennial Census Public Use Microdata Samples (PUMS) data files, 2005-2007 and 2008-2010 American Community Survey Public Use Micro Sample (PUMS) data files.

**Note:** The use of the three-year American Community Survey was necessary to capture accurate sample size for the small geographic areas. The three-year sample is representative of the demographic and employment characteristics of the region over a 36-month period.

### Annual Growth Rates



### Massachusetts Population Distribution Across Regional Labor Markets, 2008-2010



## DEMOGRAPHIC CHARACTERISTICS OF THE RESIDENT POPULATION OF THE SOUTHEAST REGION

Over the past decade, the number of people living in the Southeast region increased at an annual rate of 0.3 percent. With little growth in the native-born population over the decade, strong annual growth in the region's immigrant population (2.2 percent) led Southeast's total population to increase. The region also became more diverse over the past decade, with growing Black, Asian, and Hispanic populations. Most notably, the Black population in the region nearly doubled over the course of the decade. The region's population also became older as baby boomers (born between 1946 and 1964) neared retirement age. As a result, all cohorts of residents age 45 and older grew during the decade, while nearly all the cohorts of those ages 44 and younger declined. The exception was 16-24-year-olds, who are children of baby boomers and are commonly referred to as the echo-boom generation.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.

**Note:** Further data for racial/ethnic and gender characteristics for the residential population, as well as the working-age, civilian labor force, unemployed, and employed populations, are available in the on-line Data Appendix.

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
<b>Resident Population</b>	1,281,613	1,319,715	38,102	0.3
<b>Gender</b>				
Male	618,463	635,944	17,481	0.3
Female	663,150	683,771	20,621	0.3
<b>Nativity</b>				
Native Born	1,135,918	1,142,325	6,407	0.1
Immigrant	145,695	177,390	31,695	2.2
<b>Race/Ethnicity</b>				
White, non-Hispanic	1,124,396	1,096,965	-27,431	-0.3
Black, non-Hispanic	43,735	82,958	39,223	7.4
Asian, non-Hispanic	31,600	49,362	17,762	5.1
Hispanic	35,313	55,012	19,699	5.0
Other race, non-Hispanic	46,569	35,418	-11,151	-3.0
<b>Age</b>				
Less than age 16	288,105	270,156	-17,949	-0.7
Age 16-24	126,986	142,701	15,715	1.3
Age 25-34	175,000	152,131	-22,869	-1.5
Age 35-44	220,097	194,252	-25,845	-1.4
Age 45-54	185,918	213,801	27,883	1.6
Age 55-64	118,214	166,844	48,630	3.9
Age 65+	167,293	179,830	12,537	0.8

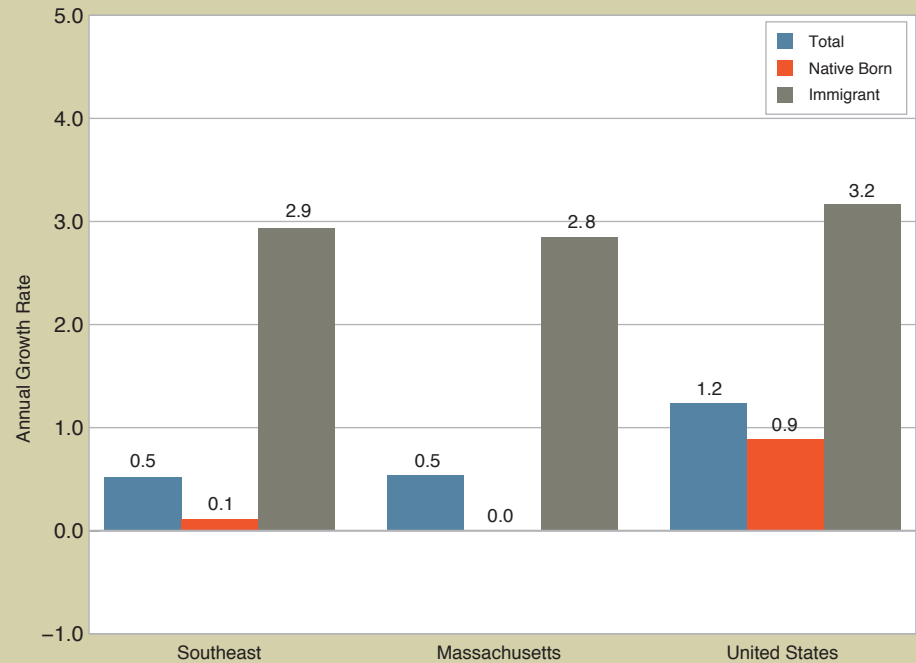
## GROWTH IN THE WORKING-AGE POPULATION BY NATIVITY STATUS

Immigrants living in the Southeast region have been a major driver of growth in the working-age population (a region's potential labor supply, typically defined as people 16 years of age or older). Between 2000 and 2005-2007, the growth of working-age immigrants in the region (2.9 percent) slightly exceeded the growth of working-age immigrants in Massachusetts. With slow growth in native-born populations, working-age populations in both the Southeast region and Massachusetts increased by 0.5 percent over this time period, much slower than the 1.2 percent seen nationally. The influx of working-age immigrants slowed to an annual rate of 1.2 percent in recent years, trailing both state and national immigration trends. However, growth in the Southeast region's working-age population (0.8 percent) actually outpaced statewide growth (0.5 percent) due to a stronger recent increase in the native-born population relative to Massachusetts (0.7 percent versus 0.2 percent). Such growth still trailed that of the United States, which saw stronger increases for both native-born and immigrant populations.

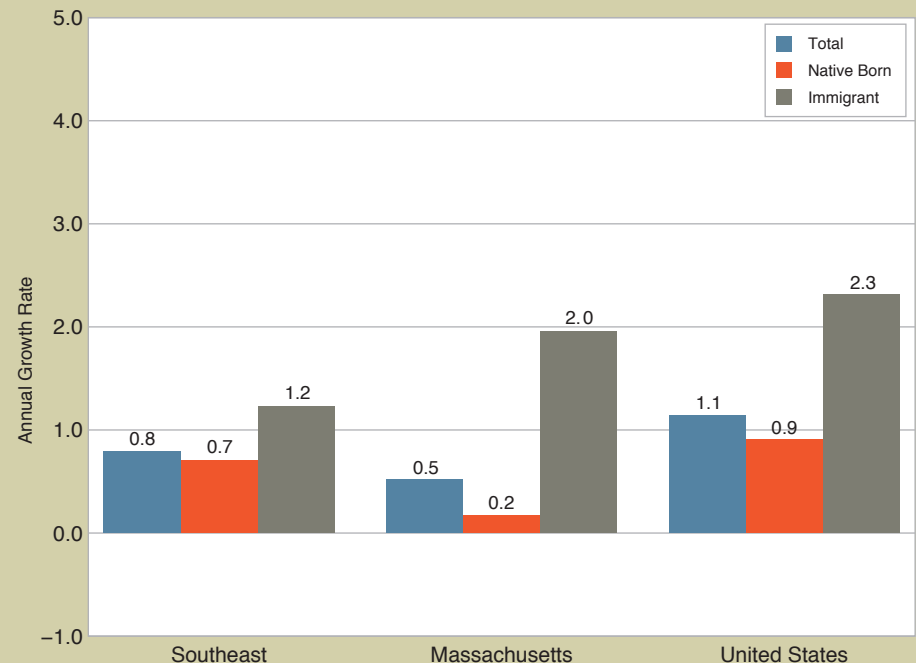
**Source:** US Census 2000 Decennial Census PUMS data files, 2005-2007 and 2008-2010 American Community Survey PUMS data files.

**Note:** The working-age population is defined as individuals 16 years of age or older, excluding institutionalized populations. Immigrants are individuals born outside the country.

Annual Growth Rate, 2000 to 2005-2007



Annual Growth Rate, 2005-2007 to 2008-2010



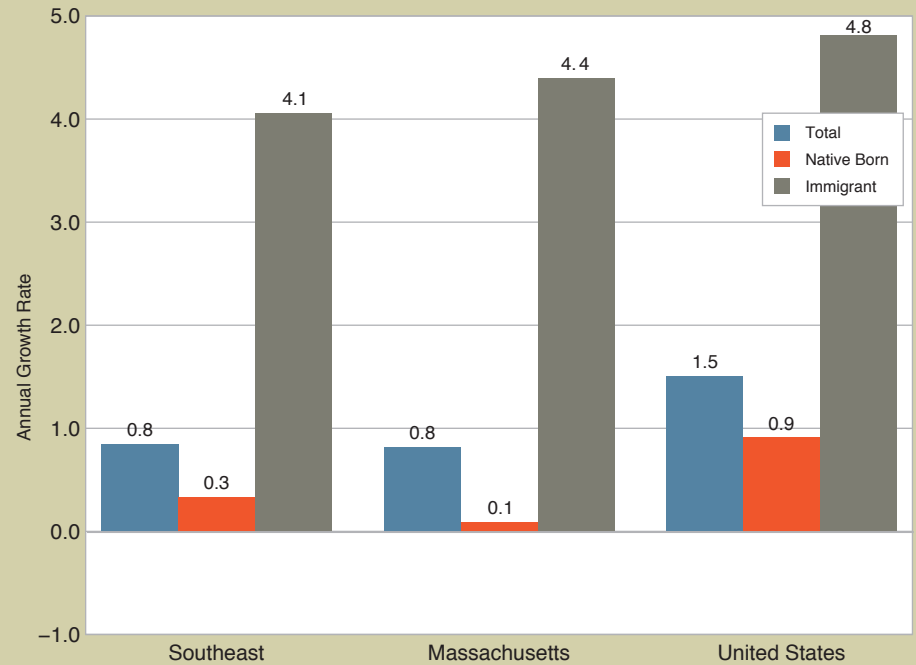
## GROWTH IN THE CIVILIAN LABOR FORCE BY NATIVITY STATUS

The civilian labor force consists of the people who live in a region and are either working or unemployed but actively looking for work (a region's actual labor supply). Like the region's working-age population, the Southeast region's civilian labor force has grown due to increases in both immigrant and native-born populations who are part of the labor force. With only modest annual growth in the native-born civilian labor force between 2000 and 2005-2007, most of the region's labor force growth came from immigrants. The immigrant growth rate slowed in more recent years, but the Southeast region compensated with a 1.3 percent annual increase in the native-born civilian labor force. The region's total civilian labor force grew at a strong annual rate of 1.4 percent between 2005-2007 and 2008-2010, exceeding the growth in Massachusetts and matching that of the United States.

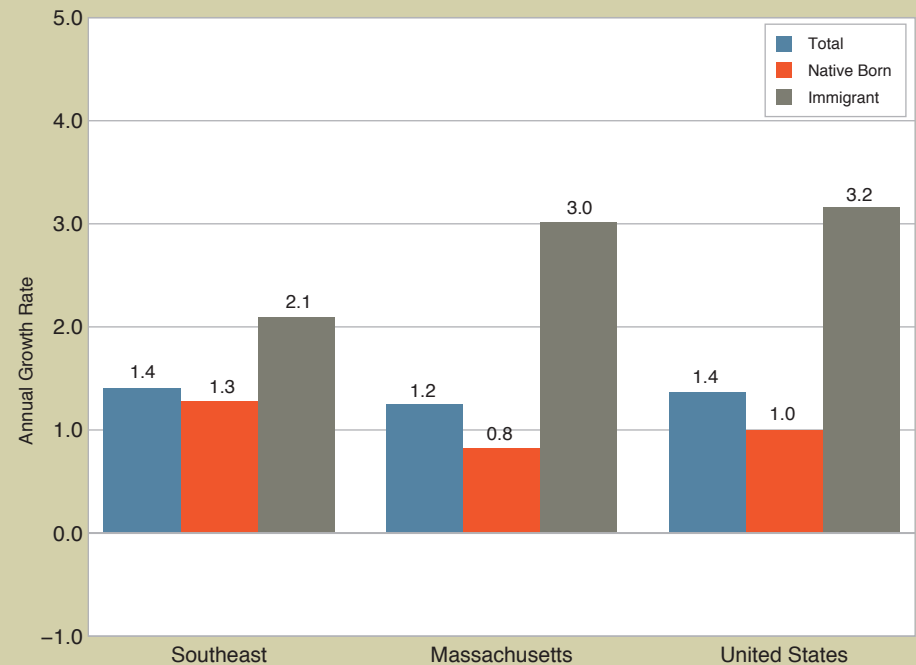
**Source:** US Census Bureau 2000 Decennial Census PUMS data files, 2005-2007 and 2008-2010 American Community Survey PUMS data files.

**Note:** The civilian labor force consists of all individuals 16 years of age or older who are classified as employed or unemployed and actively looking for work. Immigrants are individuals born outside the country.

Annual Growth Rate, 2000 to 2005-2007



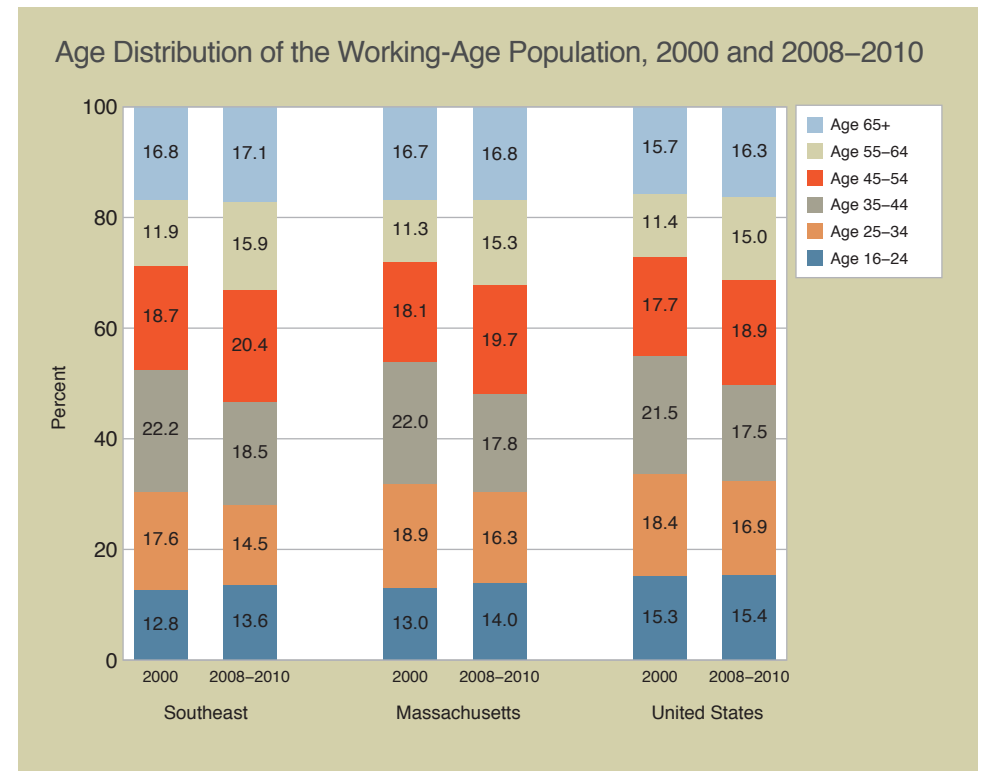
Annual Growth Rate, 2005-2007 to 2008-2010



## THE AGE PROFILE OF THE WORKING-AGE POPULATION

Massachusetts is one of the older states in the country, and the Southeast region is fairly similar to the state in its age composition. In both the region and the state, more than half of the working-age population was 45 years of age or older in 2008-2010. Further, over the past decade the fastest growing age cohorts in the region were 45-54- and 55-64- year-olds, while the number and share of 25-34- and 35-44-year-olds declined. In fact, nearly one-third of the region's (and state's) working-age population was 55 years of age or older at the end of the decade, while less than 30 percent of the working-age population was 34 years or younger. In comparison, the working-age population in the United States was fairly evenly divided among age cohorts, with roughly a third of the population in the 16-34, 35-54, and 55-or-older age cohorts.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.



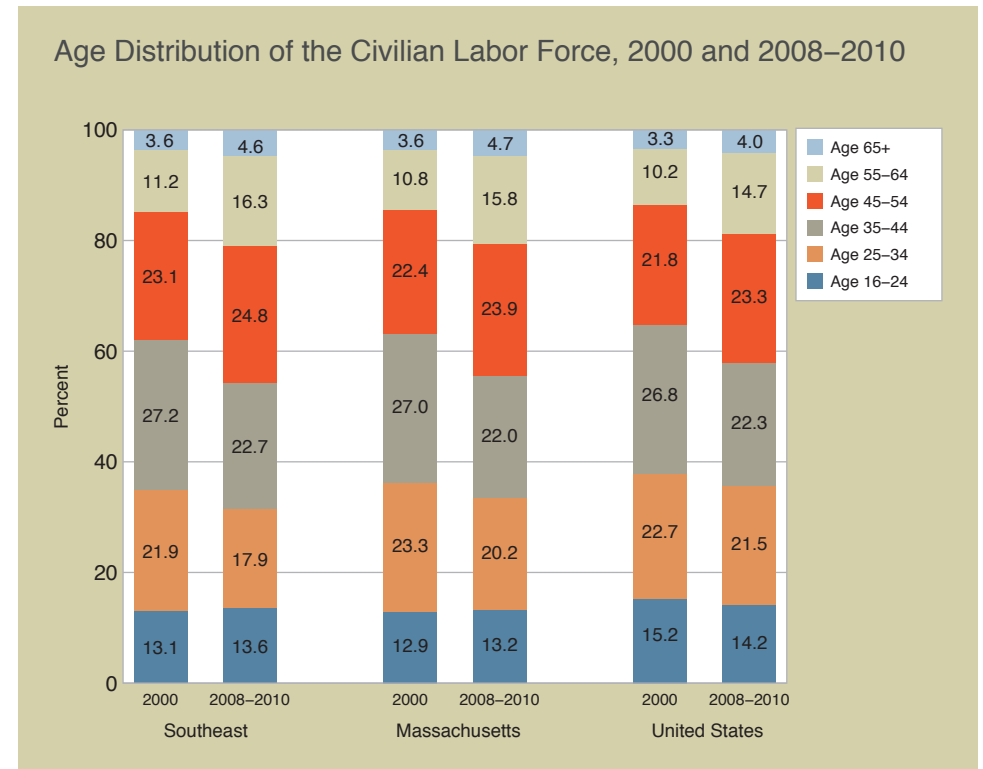
### Growth of Working-Age Population by Age in the Southeast Region

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Age 16-24	126,986	142,701	15,715	1.3
Age 25-34	175,000	152,131	-22,869	-1.5
Age 35-44	220,097	194,252	-25,845	-1.4
Age 45-54	185,918	213,801	27,883	1.6
Age 55-64	118,214	166,844	48,630	3.9
Age 65+	167,293	179,830	12,537	0.8

## THE AGE PROFILE OF THE CIVILIAN LABOR FORCE

Given the age of the region's population, it is not surprising that Southeast's civilian labor force is getting older. About 46 percent of the civilian labor force in the Southeast region was 45 years or older in 2008-2010, compared with 37.9 percent in 2000. In the past decade, the fastest growing age groups in the region's civilian labor force were 55-64-year-olds and those 65 or older. At the same time, there were a declining number of workers between the ages of 25 and 44, and the slowest growing age cohort were those between the ages of 16 and 24. While such trends are fairly similar to those statewide and nationally, the civilian labor force in the Southeast region became slightly older than Massachusetts over the past decade and continued to have higher shares of older populations than did the United States.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.



### Growth of Civilian Labor Force Population by Age in the Southeast Region

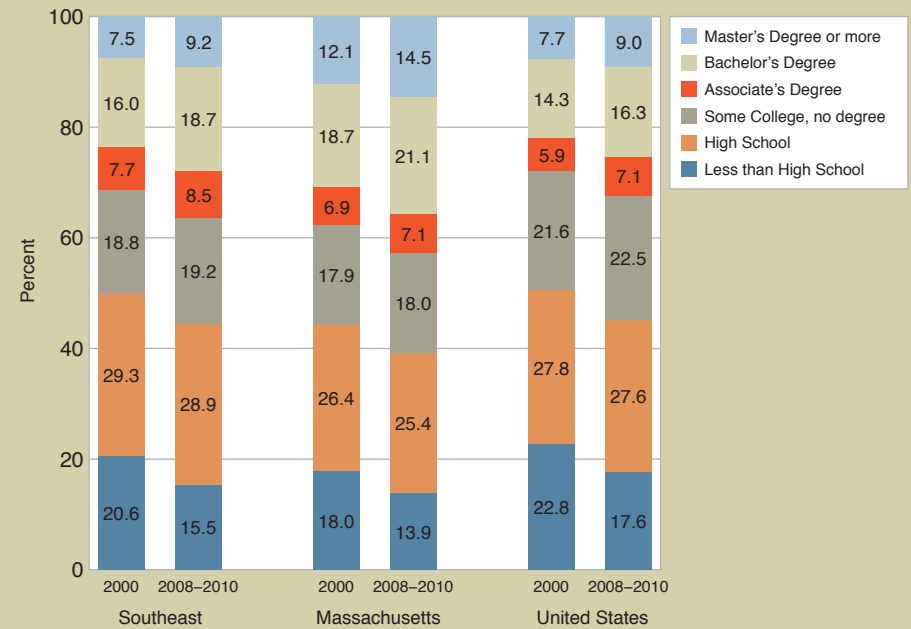
	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Age 16-24	88,449	101,108	12,659	1.5
Age 25-34	147,908	133,126	-14,782	-1.2
Age 35-44	183,745	168,316	-15,429	-1.0
Age 45-54	156,195	184,279	28,084	1.9
Age 55-64	75,636	120,801	45,165	5.3
Age 65+	24,406	34,125	9,719	3.8

## EDUCATIONAL ATTAINMENT OF THE WORKING-AGE POPULATION

Massachusetts is one of the states with the highest shares of population with a college degree; the educational attainment of the working-age population in the Southeast region has somewhat lagged that of the state. Over the past decade, the Southeast region saw progressively stronger growth in the share of the working-age population with higher levels of education, with declines occurring only among those with less than a High School Degree. But even with these educational gains, the share of the population with a High School Degree or less was 44.4 percent in 2008-2010, closer to that of the United States (45.2 percent) than of Massachusetts (39.3 percent). And though the share of the population in the Southeast region with a Bachelor's Degree or higher increased to 27.9 percent at the end of the decade, it was much lower than the share in Massachusetts (35.6 percent)—but still greater than the share in the United States (25.3 percent).

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.

Educational Distribution of the Working-Age Population, 2000 and 2008–2010



Growth of Working-Age Population by Educational Attainment in the Southeast Region

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Less than High School	204,987	162,523	-42,464	-2.5
High School Graduate	290,844	303,784	12,940	0.5
Some College, no degree	187,168	201,920	14,752	0.8
Associate's Degree	76,254	88,971	12,717	1.7
Bachelor's Degree	159,307	196,301	36,994	2.3
Master's Degree or more	74,948	96,060	21,112	2.8

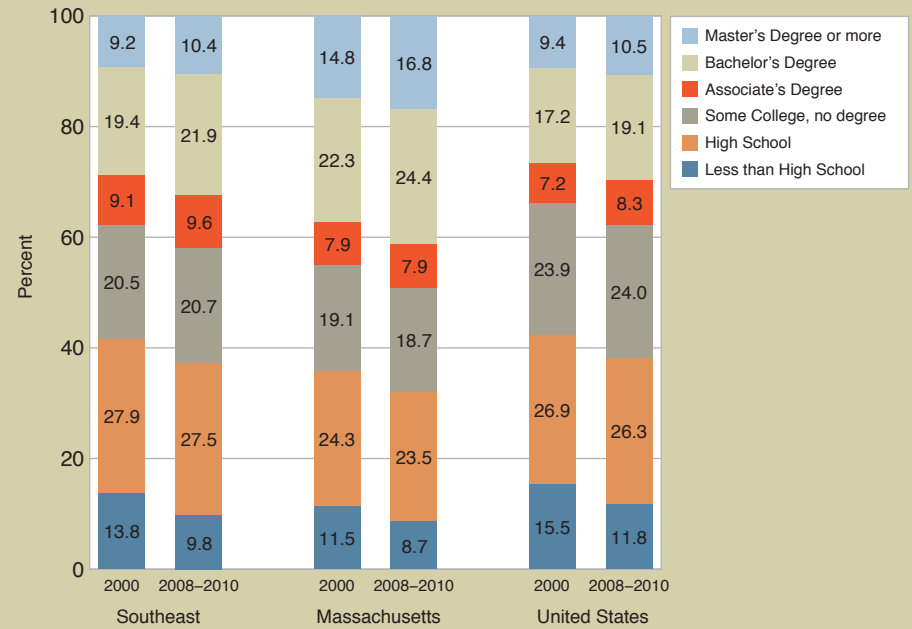


## EDUCATIONAL ATTAINMENT OF THE CIVILIAN LABOR FORCE

Much like the working-age population, the number of people in the civilian labor force in the Southeast region with a Bachelor's Degree or higher is increasing, while the number with a High School Degree or less is shrinking. By 2008-2010, 32.3 percent of the civilian labor force in the Southeast region had a Bachelor's Degree or higher, but that still trailed the 41.2 percent in Massachusetts who had such a degree. However, nearly 63 percent of the civilian labor force in the Southeast region had completed at least some post-secondary education (Some College or higher). This trailed the nearly 68 percent of Massachusetts civilian labor force who had some post-secondary education but exceeded the nearly 62 percent nationwide. Nonetheless, the most common level of educational attainment among the region's residents in the civilian labor force continued to be a High School Degree (27.5 percent), while Bachelor's Degree had become the most common education level in the civilian labor force statewide.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.

Educational Distribution of the Civilian Labor Force, 2000 and 2008–2010

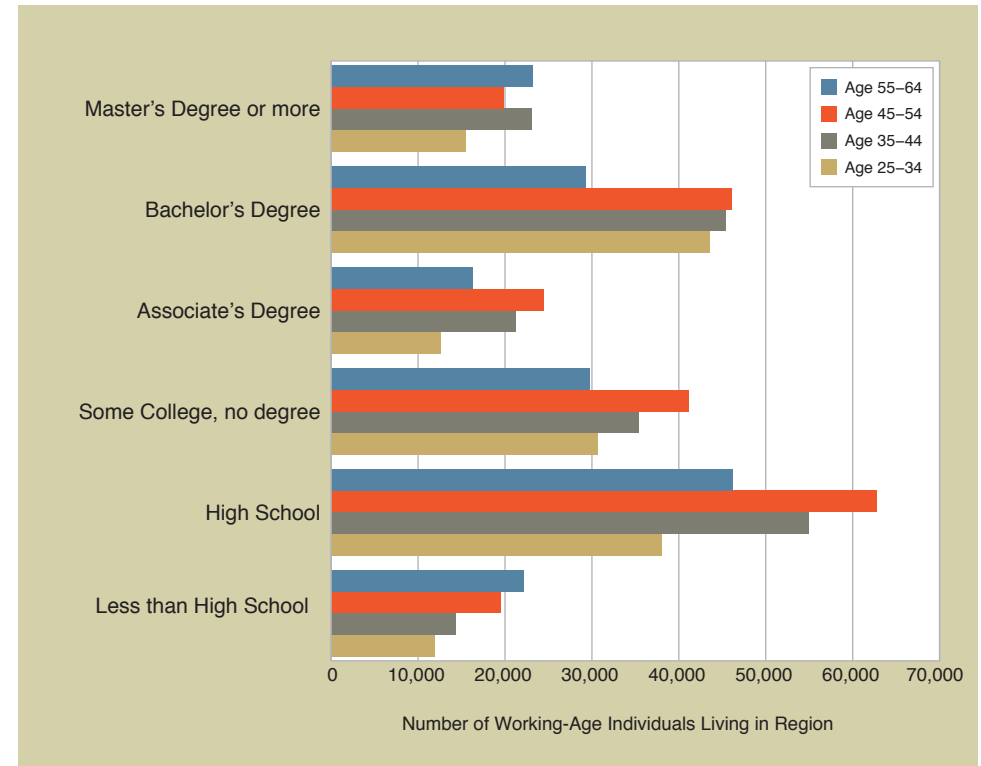


Growth of Civilian Labor Force Population by Educational Attainment in the Southeast Region

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Less than High School	93,635	72,746	-20,889	-2.8
High School Graduate	188,568	204,265	15,697	0.9
Some College, no degree	138,943	153,437	14,494	1.1
Associate's Degree	61,877	71,547	9,670	1.6
Bachelor's Degree	130,891	162,611	31,720	2.4
Master's Degree or more	62,425	77,149	14,724	2.4

## EDUCATIONAL ATTAINMENT BY AGE GROUP: THE SOUTHEAST REGION (2008-2010)

If we look at the region's population by both age and education, we gain an understanding of the workers who may replace the baby boomers. As the baby boomers have aged, 45-54-year-olds have become the largest age cohort. As the boomers continue to age and, over time, leave the labor force, nearly every educational category may face a shortfall of workers. For example, in 2008-2010, nearly 25,500 people between the ages of 45 and 54 had an Associate's Degree, compared with more than 12,500 individuals ages 25 to 34 with such an education—a difference of over 11,900 working-age individuals. This amounts to a shortfall of nearly 49 percent of the region's potential labor supply that would replace the 45-54-year-olds as they leave the workforce. Similar shortages of working-age individuals may exist for High School Degrees (24,600, or 39.3 percent) and Some College (10,500, or 25.5 percent). However, these gaps may actually be much smaller since the educational requirements for most industries and occupations have been increasing, and some positions traditionally filled by people with a High School or Associate's Degree are now held by people with a Bachelor's Degree or higher.



**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

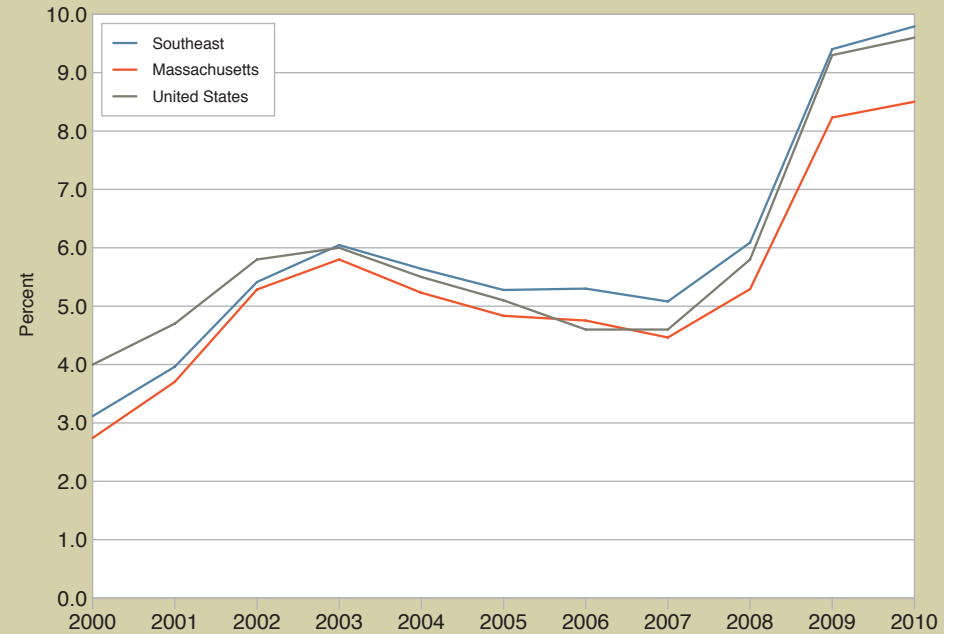
## UNEMPLOYMENT RATE TRENDS

During the Great Recession, unemployment rates nationwide increased sharply. Beginning the decade with a 3.1 percent unemployment rate, the Southeast region had the second-highest unemployment rate of all regional labor markets and exceeded the state's unemployment rate (2.7 percent). The region's unemployment rate subsequently climbed to over 6 percent in 2003 before moderating to reach 5.1 percent in 2007. However, even as Southeast's employment situation improved, it lagged the improvements in both Massachusetts and the United States, with the region's jobless rate eventually exceeding both state and national rates by over half a percentage point. As a result of the Great Recession, the Southeast region's unemployment rate skyrocketed to 9.8 percent by 2010, the highest among all regional labor markets. And while the region's unemployment rate moved in lockstep with the national rate in the Great Recession, it grew to far exceed the statewide figure (8.5 percent).

**Source:** US Bureau of Labor Statistics and Massachusetts Executive Office of Labor and Workforce Development.

**Note:** The annual unemployment rate is a 12-month average of the non-seasonally-adjusted unemployment rate.

Unemployment Rate, 2000 to 2010



### The Southeast Region Unemployment

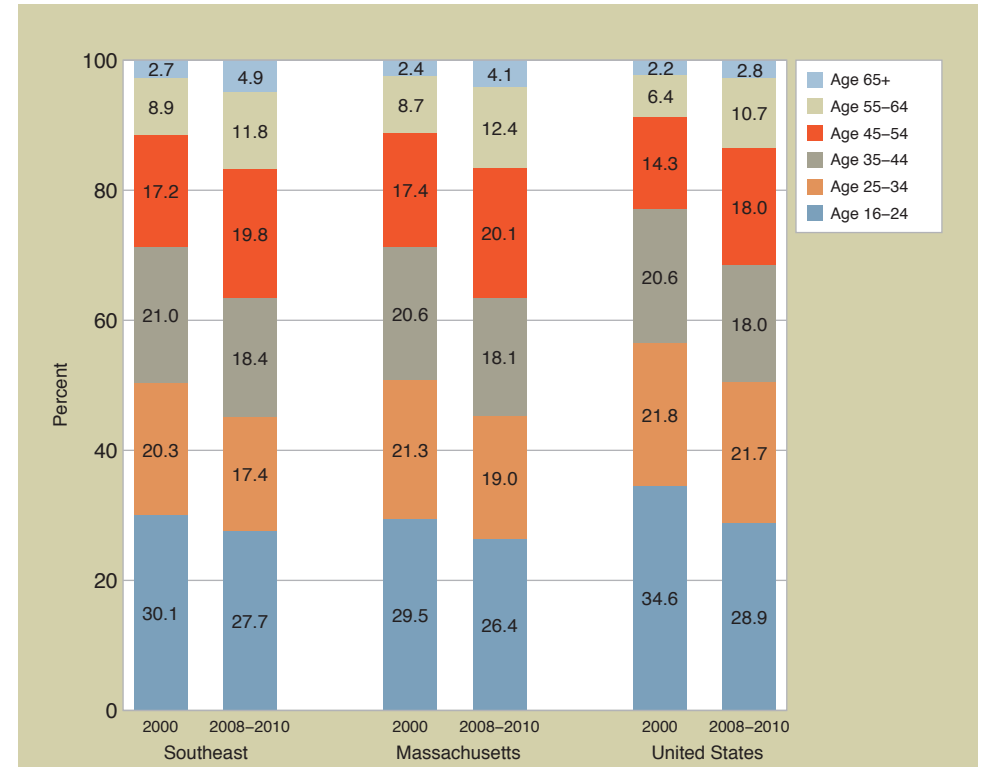
	2000	2010	Relative Change	Annual Growth Rate (Percent)
Unemployed	21,402	70,456	49,054	12.7
Employed	665,426	649,089	-16,337	-0.2
Civilian Labor Force	686,827	719,544	32,717	0.5
Unemployment Rate	3.1	9.8	-	-

## THE UNEMPLOYED: AGE DISTRIBUTION (2000 AND 2008-2010)

While 31.5 percent of the civilian labor force in the Southeast region was 34 years of age or younger at the end of the decade, 45.1 percent of the region's unemployed was 34 or younger. The share of unemployed 34 or younger is down from more than 50 percent at the beginning of the decade. This is because the region's aging population has contributed to higher shares of individuals ages 45 and older among the unemployed. Most notably, the number of unemployed individuals who were 65 or older in the Southeast region more than quadrupled over the course of the decade, nearly doubling this age group's share of the unemployed from 2.7 percent in 2000 to 4.9 percent in 2008-2010. However, the younger age cohorts continue to be disproportionately represented among the unemployed. For example, in 2008-2010, 16-24-year-olds accounted for the largest share of the unemployed among all age cohorts (27.7 percent) but were the second-smallest age cohort in the civilian labor force (behind those age 65 and older), at only 13.6 percent.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.

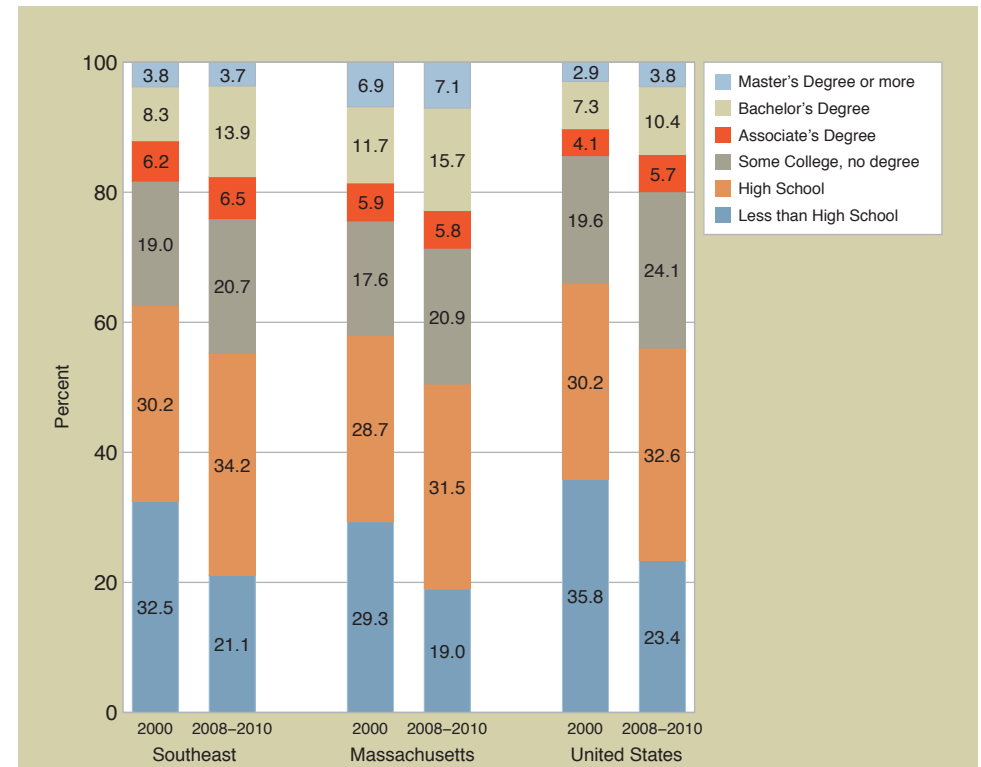
**Note:** Unemployed are individuals age 16 or older not employed and actively looking for work.



## THE UNEMPLOYED: EDUCATIONAL ATTAINMENT (2000 AND 2008-2010)

Those with a High School Degree or less accounted for 55.3 percent of the unemployed in the Southeast region in 2008-2010, well above the comparable share in Massachusetts (50.5 percent) but similar to the rate in the United States (56.0 percent). This was down from more than 60 percent in 2000. Over the course of the decade, the share of the unemployed increased for most educational attainment levels above a High School Degree (declining only for those with a Master's Degree or higher). However, people with less education continued to be disproportionately represented among the unemployed relative to their share of the civilian labor force. For example, in 2008-2010, those with less than a High School Degree accounted for the 21.1 percent of the unemployed but represented only 9.8 percent of the civilian labor force. The region's disproportional unemployment among the less educated was fairly similar to the experience of comparable populations in both Massachusetts and the United States in the past decade.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.



## COMMUTING PATTERNS OF RESIDENTS AND WORKERS: THE SOUTHEAST REGION (2008-2010)

The Southeast region is closely tied to its neighboring labor markets and has a large share of residents who work in neighboring regions. While 67.6 percent of the employed residents of the region also work in the region, the remaining third commute elsewhere, making the Southeast region the third-largest exporter of workers among regional labor markets. In 2008-2010, the most common destinations for residents who commute out of the region were: Boston/Metro North (16.3 percent of all workers living in Southeast), Metro South/West (8.9 percent), and across the border into Rhode Island (4.3 percent). Fewer employees commuted into the region (17.5 percent of all workers in the region), with commuters coming from a number of the state's regional labor markets. The largest share of those who commuted into the region for work came from Rhode Island (accounting for 5.2 percent of all workers in the Southeast region) followed by Metro South/West (4.9 percent). As a result, the Southeast region is the largest net exporter of workers among Massachusetts regional labor markets, with 117,600 more outbound than inbound commuters in 2008-2010.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

	Number	Percent of Total
Total number of employed persons living in the Southeast region...	652,693	100.0
...who work in:		
Southeast	441,244	67.6
Boston/Metro North	106,686	16.3
Metro South/West	57,855	8.9
Cape & Islands	7,195	1.1
Other parts of Massachusetts	6,915	1.1
Rhode Island	28,110	4.3
Other places outside Massachusetts	4,688	0.7
Total number of persons working in the Southeast region...	535,070	100.0
...who live in:		
Southeast	441,244	82.5
Boston/Metro North	20,692	3.9
Metro South/West	26,439	4.9
Cape & Islands	6,770	1.3
Other parts of Massachusetts	7,512	1.4
Rhode Island	27,964	5.2
Other places outside Massachusetts	4,449	0.8
Net In-Commuting (Number of Persons Employed in Region Minus Number of Persons Living in Region)	-117,623	-

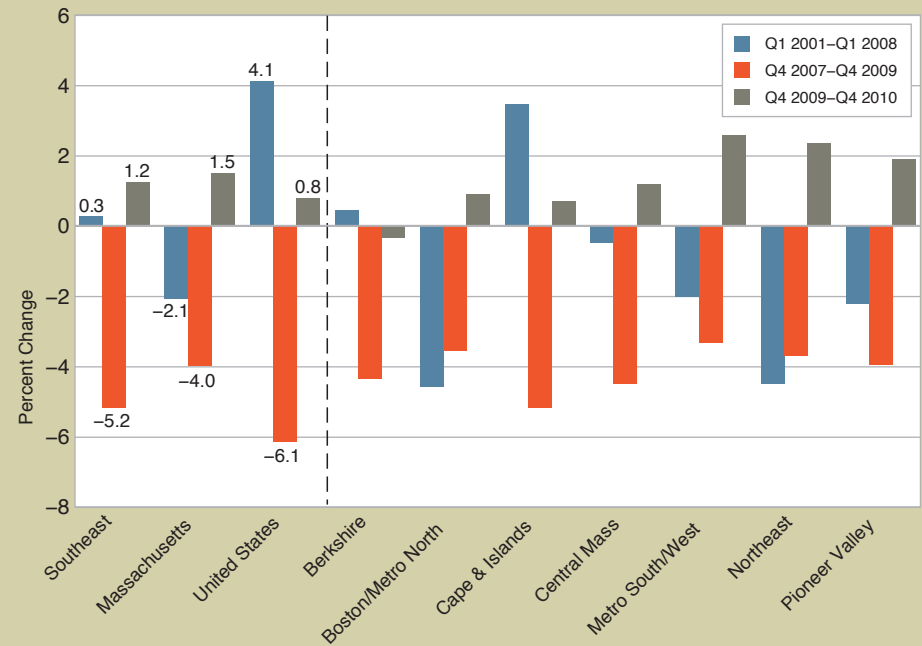
## EMPLOYMENT TRENDS

The Southeast region accounts for 21.0 percent of the state's population but just 16.2 percent of the state's employment, with roughly 511,000 jobs in the region. Over the past decade, the region's employment situation was somewhat different from that of the state. Southeast was one of only three regions to gain jobs between 2001 and 2008, increasing a modest 0.3 percent against a loss of 2.1 percent in Massachusetts. During the Great Recession, the region's employment losses were greater than the state's (5.2 percent versus 4.0 percent), but more modest than those in the United States. In the first year of recovery (Q4 2009 to Q4 2010), the Southeast region saw employment increase by 1.2 percent, slightly trailing the gain in Massachusetts (1.5 percent) but exceeding the gain in the United States (0.8 percent).

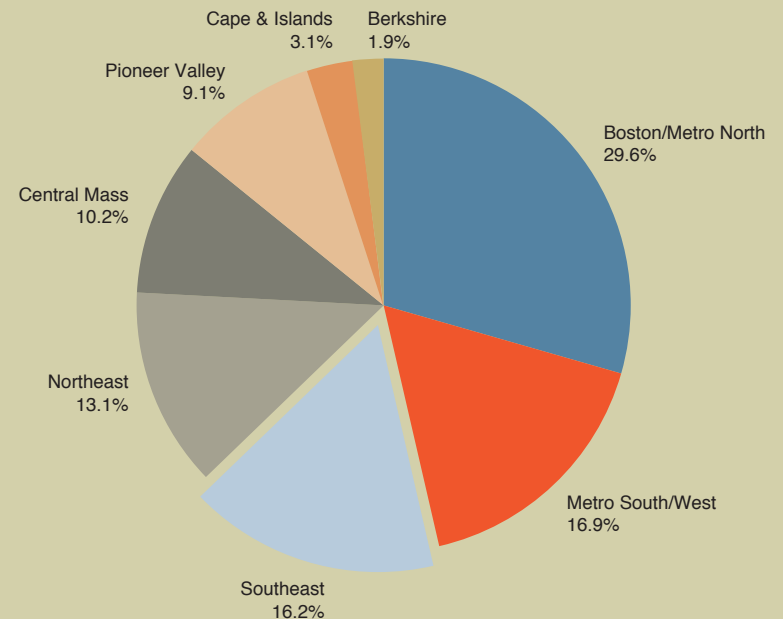
**Source:** US Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) and Massachusetts Executive Office of Labor and Workforce Development ES-202.

**Note:** ES-202 and QCEW are not seasonally adjusted. Therefore, comparisons need to be made across consistent time periods, such as the first quarter of one year to the first quarter of another. Comparisons between different quarters will be distorted, as seasonal employment in industries such as Retail Trade or Leisure & Hospitality vary considerably across regions.

### Changes in Total Employment



### Distribution of Employment Across Regional Labor Markets, Q4 2010



## DEMOGRAPHIC CHARACTERISTICS OF THE POPULATION EMPLOYED IN THE SOUTHEAST REGION

With the employed residential population in the Southeast region making up 82.5 percent of the region's workforce, the demographic characteristics of the two groups are fairly similar. Over the past decade, the region employed more immigrants while declining in the number of native-born employees. The region's workforce also became more diverse, due to growth in Black, Asian, and Hispanic employees. In particular, the number of Black employees in the region nearly doubled in the past decade, exceeding the growth in such workers in all other regional labor markets. And much like the residential population of the region, there has been a growing concentration of older employees. Employees have been obtaining increasingly higher levels of education, but a High School Degree continues to be the largest educational attainment group among the employed.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 American Community Survey PUMS data files.

**Note:** Further data for racial/ethnic and gender characteristics for total, working-age, and civilian labor force population are available in the on-line Data Appendix.

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Employed Population	529,459	535,070	5,611	0.1
<b>Gender</b>				
Male	268,299	261,335	-6,964	-0.3
Female	261,160	273,735	12,575	0.5
<b>Nativity</b>				
Native Born	460,925	450,908	-10,017	-0.2
Immigrant	68,534	84,162	15,628	2.3
<b>Race/Ethnicity</b>				
White, non-Hispanic	474,910	458,142	-16,768	-0.4
Black, non-Hispanic	13,820	27,161	13,341	7.8
Asian, non-Hispanic	10,465	16,540	6,075	5.2
Hispanic	14,038	21,059	7,021	4.6
Other race, non-Hispanic	16,226	12,168	-4,058	-3.1
<b>Age</b>				
Age 16-24	71,901	69,834	-2,067	-0.3
Age 25-34	112,272	96,321	-15,951	-1.7
Age 35-44	139,848	118,032	-21,816	-1.9
Age 45-54	122,380	132,057	9,677	0.8
Age 55-64	62,122	91,351	29,229	4.4
Age 65+	20,936	27,475	6,539	3.1
<b>Educational Attainment</b>				
Less than High School	77,674	51,612	-26,062	-4.4
High School Graduate	153,904	148,014	-5,890	-0.4
Some College, no degree	109,377	112,000	2,623	0.3
Associate's Degree	46,331	50,564	4,233	1.0
Bachelor's Degree	93,146	114,180	21,034	2.3
Master's Degree or more	49,027	58,700	9,673	2.0



## DISTRIBUTION OF EMPLOYMENT BY SUPERSECTOR (Q4 2010)

The largest supersector of employment in the Southeast region is Education & Health Services. Accounting for 26.3 percent of the jobs in the region, the supersector claims a smaller share than it does statewide, but a larger share than in the United States. The region's employment is more strongly concentrated in the Trade, Transportation, & Utilities (23.7 percent) supersector than is the case in Massachusetts and the United States. Combined, these two supersectors account for 50 percent of the region's employment, which is much higher than their 45 percent share both statewide and nationally. In comparison with Massachusetts, the region has much smaller employment concentrations in Information, Financial Activities, and Professional & Business Services. Employment in these industries tends to be concentrated in the Greater Boston regional labor markets. However, the region has higher employment concentrations than the state in Leisure & Hospitality, Manufacturing, Construction, and Other Services.

**Source:** US Bureau of Labor Statistics QCEW and Massachusetts Executive Office of Labor and Workforce Development ES-202.

**Note:** Supersectors are groupings of major industry categories. See the on-line Data Appendix for the major industries that make up each supersector.



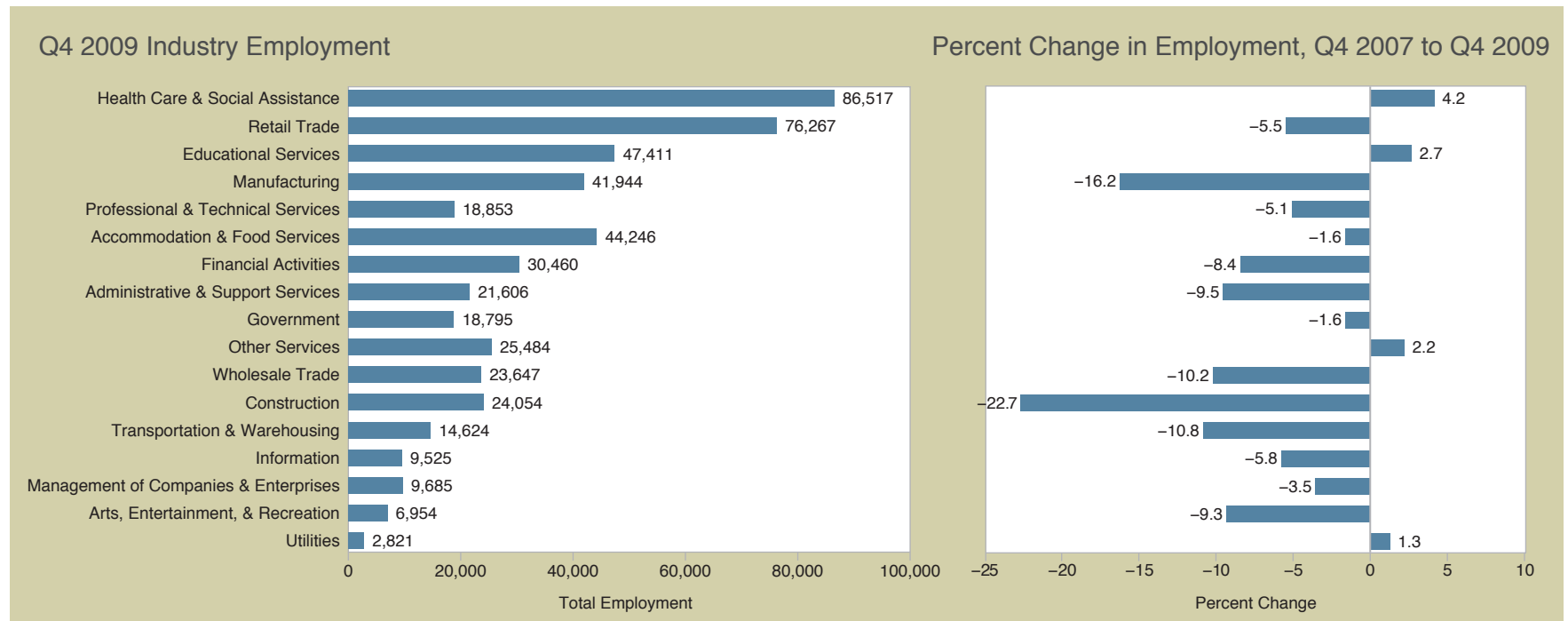
## CHANGES IN EMPLOYMENT DURING THE ECONOMIC DOWNTURN BY MAJOR INDUSTRY: THE SOUTHEAST REGION

While the Southeast region lost jobs in a number of industries between the fourth quarters of 2007 and 2009, four industries were able to avoid losses. Health Care & Social Assistance, the largest industry in the region, increased employment by 4.2 percent and added over 3,400 jobs. The gains were mostly in the sub-industries of Ambulatory Health Care Services (1,736 jobs) and Nursing & Related Care Facilities (1,260 jobs). An additional 1,800 jobs came from the remaining three industries that did not lose jobs, with the majority in Educational Services (1,200 jobs). These gains were more than offset by the 15,100-plus jobs lost in the industries hit hardest by the Great Recession: Manufacturing

(-16.2 percent) and Construction (-22.7 percent). Further employment contractions in the Trade, Transportation, & Utilities industries of Retail Trade (-5.5 percent), Wholesale Trade (-10.2 percent), and Transportation & Warehousing (-10.8 percent) resulted in an additional loss of more than 8,800 jobs. In total, the region lost nearly 27,600 jobs between 2007 and 2009, equivalent to a 5.2 percent decline in employment.

**Source:** Massachusetts Executive Office of Labor and Workforce Development ES-202.

**Note:** Industries are sorted by size in Massachusetts in Q4 2009. See the on-line Data Appendix for supersector and major industry employment trends.



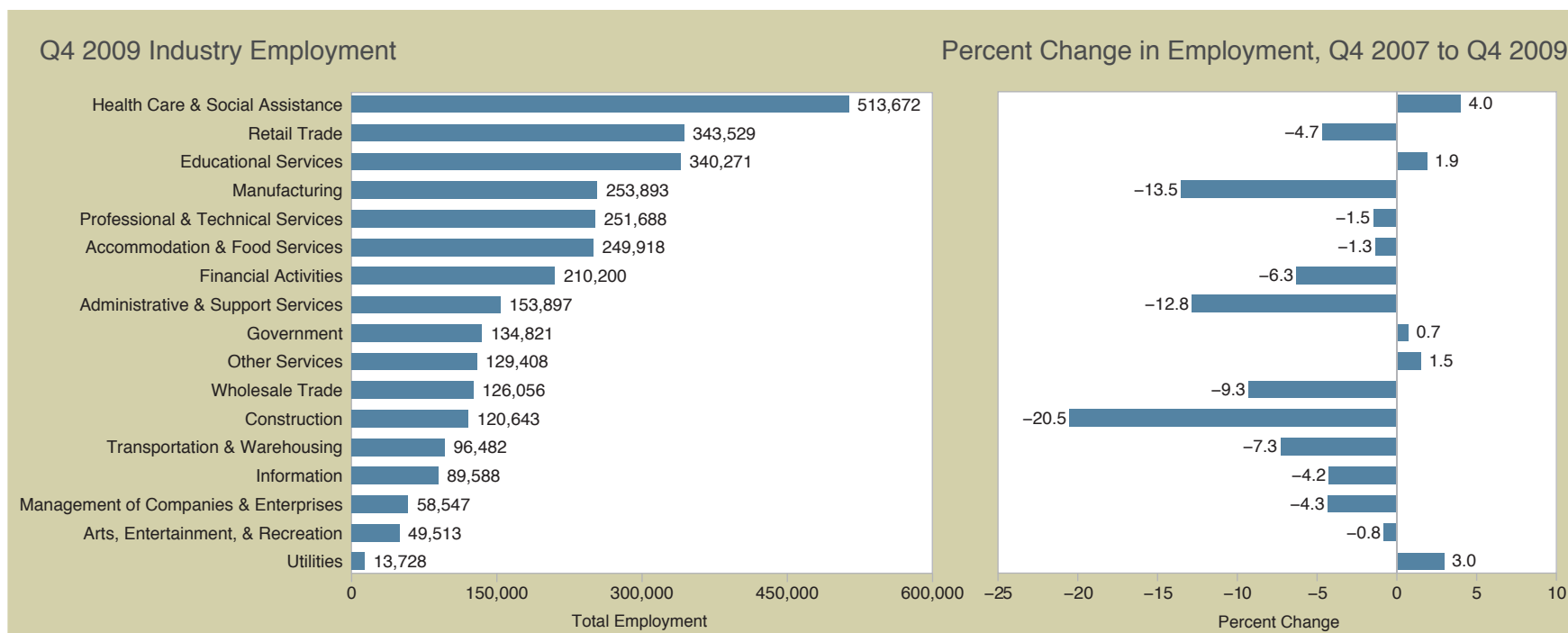
## CHANGES IN EMPLOYMENT DURING THE ECONOMIC DOWNTURN BY MAJOR INDUSTRY: MASSACHUSETTS

Massachusetts fared slightly better in the downturn than did the Southeast region. The state's strongest employment gains also came in the Health Care & Social Assistance industry (4.0 percent), as a result of strong growth in the sub-industry of Ambulatory Health Care Services (7.7 percent). Further gains in Education Services (1.9 percent) were offset by significant losses in the Administrative & Support Services (-12.8 percent), Manufacturing (-13.5 percent), and Construction (-20.5 percent) industries. Within the Trade, Transportation, & Utilities supersector, the state experienced large losses in two major industries: Retail Trade (-4.7 per-

cent) and Wholesale Trade (-9.3 percent). However, Massachusetts did not experience jobs losses as steep as in most industries as the Southeast region, and the state had stronger gains in the few industries that expanded employment. As a result, employment losses statewide (-4.0 percent or nearly 130,000 jobs) were less than those in the Southeast region in the downturn between 2007 and 2009.

**Source:** Massachusetts Executive Office of Labor and Workforce Development ES-202.

**Note:** Industries are sorted by size in Massachusetts in Q4 2009.



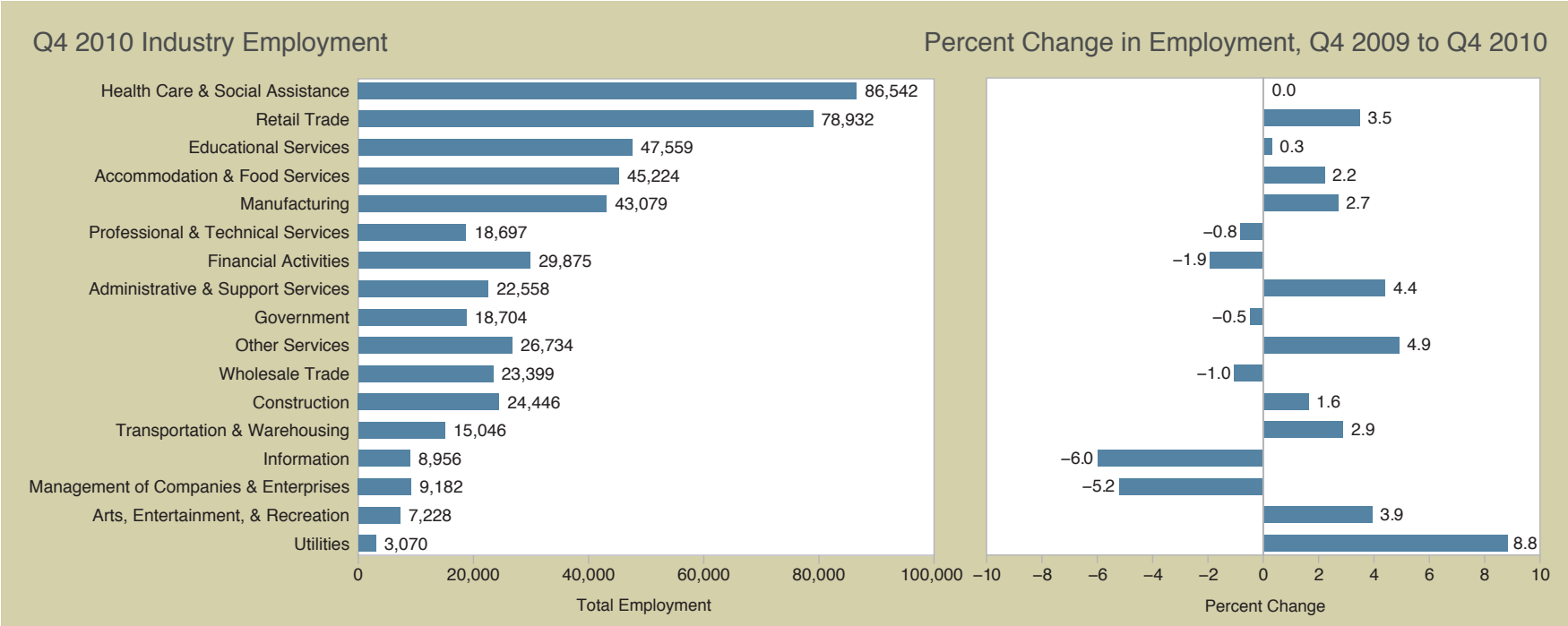
# INDUSTRIES DRIVING THE RECOVERY: THE SOUTHEAST REGION

Since the trough of the downturn, the Southeast region has experienced modest growth across a broad set of industries. Only six industries lost jobs between the fourth quarters of 2009 and 2010, with the largest declines coming from the small industries of Management of Companies & Enterprises (503 jobs, or -5.2 percent) and Information (569 jobs, or -6.0 percent). After adding jobs in the downturn, Health Care & Social Assistance employment was essentially flat. But some industries that lost jobs in the recession have started to expand employment. For example, the Trade, Transportation, & Utilities industries had some of the strongest

growth, with the largest percent gain in employment in Utilities (8.8 percent) and the largest job increase in Retail Trade (2,665 jobs). Even the industries hit hardest by the recession showed signs of recovery, with Manufacturing and Construction both adding jobs. Combined with modest growth in most other industries, the Southeast region added over 6,200 jobs, increasing employment by 1.2 percent in the first year of the recovery.

**Source:** Massachusetts Executive Office of Labor and Workforce Development ES-202.

**Note:** Industries are sorted by size in Massachusetts in Q4 2010.



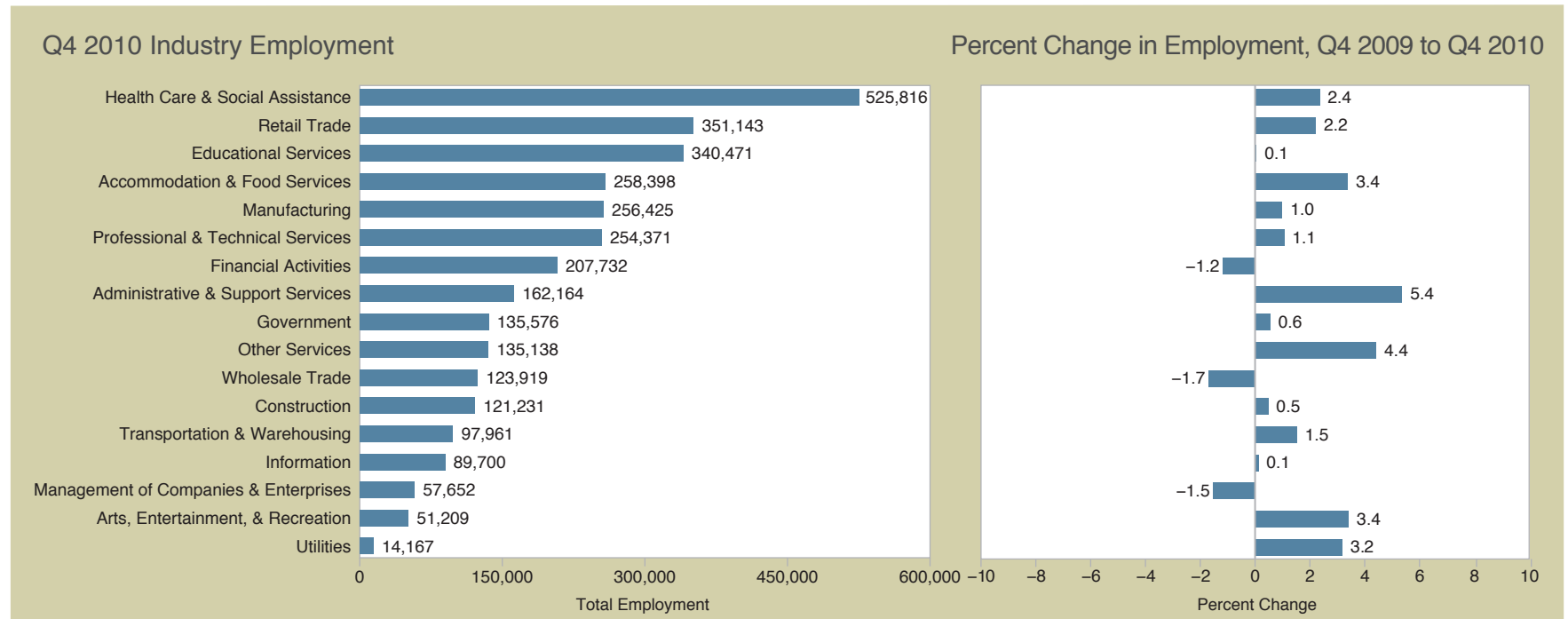
## INDUSTRIES DRIVING THE RECOVERY: MASSACHUSETTS

Massachusetts has also had a broad-based recovery. The state expanded employment in industries ranging from a 0.1 percent increase in Information and Educational Services to 5.4 percent in Administrative & Support Services between the fourth quarters of 2009 and 2010. The Health Care & Social Assistance industry added over 12,000 jobs, an increase in employment of 2.4 percent. Job growth was spread across a number of the sub-industries that make up Health Care & Social Assistance, including: Social Assistance (3,200 jobs), Ambulatory Health Care Services (3,400 jobs), and Hospitals (5,700 jobs). During the early stages of the recovery,

the state experienced slight declines in three industries: Financial Activities, Wholesale Trade, and Management of Companies & Enterprises. While both Massachusetts and the Southeast region had broad-based recoveries, the state saw fewer industries losing jobs and smaller declines in such industries relative to Southeast, resulting in a stronger gain in total employment of 1.5 percent.

**Source:** Massachusetts Executive Office of Labor and Workforce Development ES-202.

**Note:** Industries are sorted by size in Massachusetts in Q4 2010.

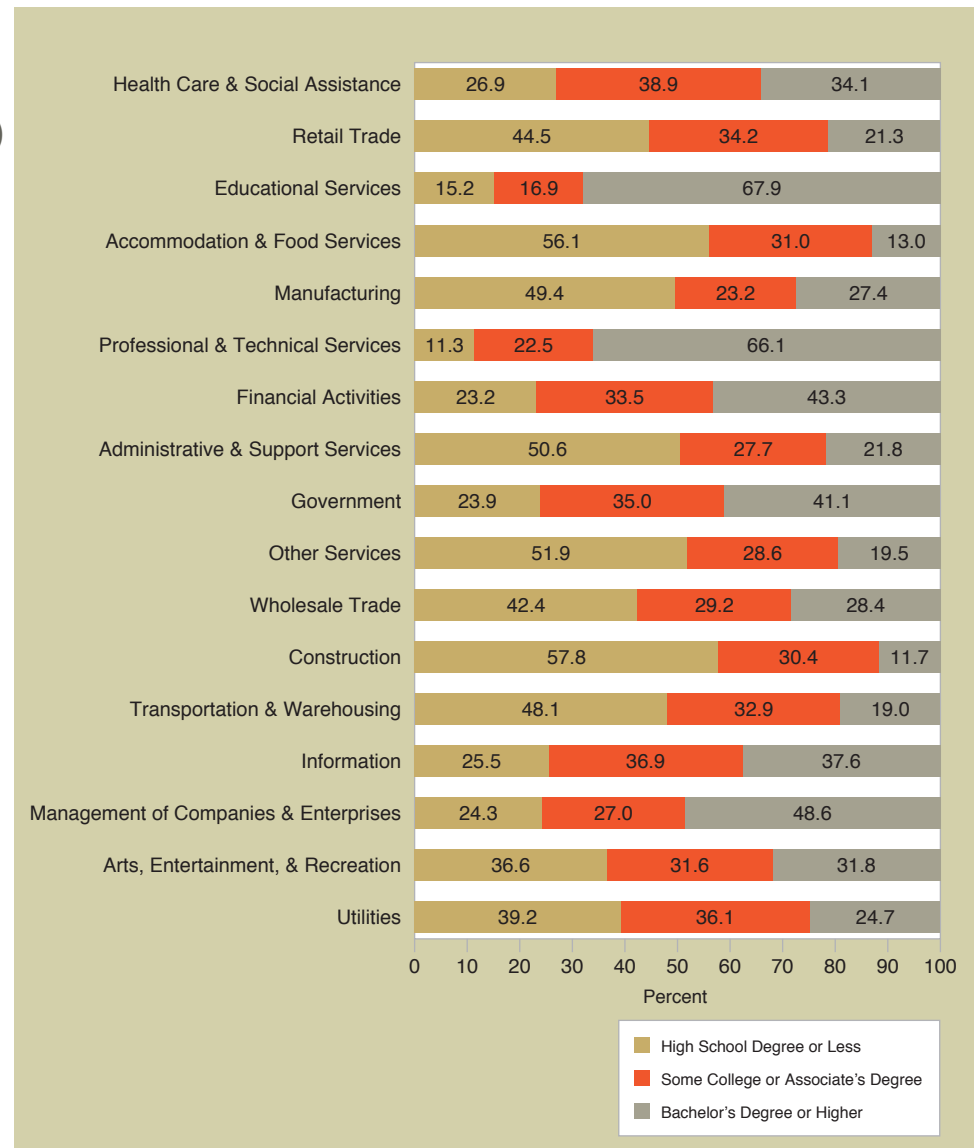


## EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR INDUSTRY IN THE SOUTHEAST REGION (2008-2010)

While the number of workers in Southeast with a Bachelor's Degree or higher increased over the past decade, many of the region's industries still had large shares of employees with a High School Degree or less. In 2008-2010, 10 of the 17 major industries in the region had a workforce where the largest share of employees had a High School Degree or less. In comparison, only six industries in the region had a Bachelor's Degree or higher as the largest educational attainment category. In a few industries, there was a clear majority of employees with a Bachelor's Degree or higher, such as Educational Services, or a clear majority with a High School Degree or less, such as Construction. However, in most industries, the educational attainment of employees was somewhat more evenly distributed, including 14 industries that had at least 25 percent of employees with Some College education or an Associate's Degree.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** Industries are sorted by size in Massachusetts in Q4 2010.

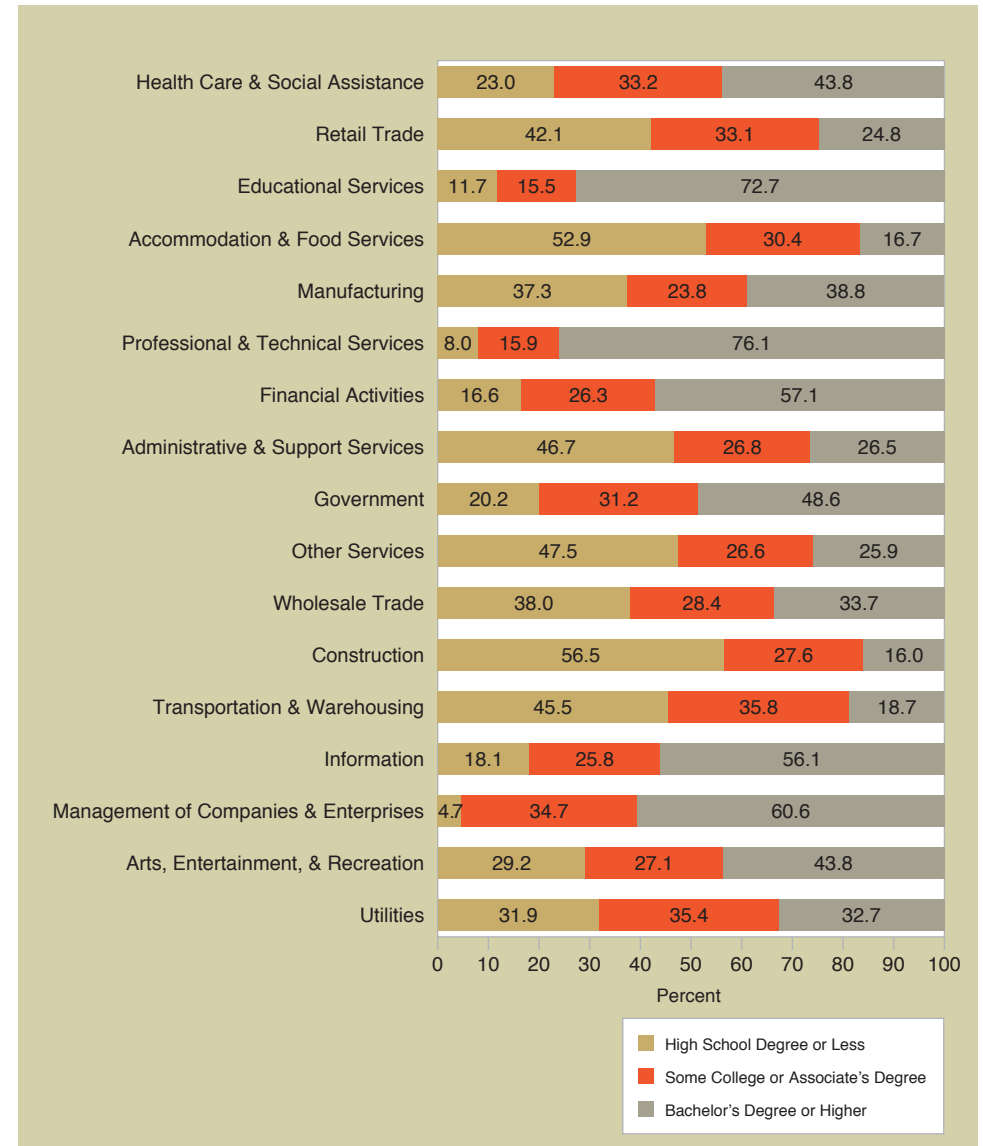


## EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR INDUSTRY IN MASSACHUSETTS (2008-2010)

The educational attainment across industries in Massachusetts was much higher than in the Southeast region in 2008-2010. In Massachusetts, 10 of the 17 major industries had a workforce where the largest share of employees had a Bachelor's Degree or higher. And in nearly every major industry statewide, the share of employees with a Bachelor's Degree or higher was greater than their industrial counterparts in the Southeast region, save for Transportation & Warehousing. Such differences may be partly explained by employers in the region hiring individuals with other forms of post-secondary education for jobs that require a Bachelor's Degree elsewhere. This is reflected by the larger concentration of employees with Some College or an Associate's Degree in the Southeast region, relative to the state, in 14 of the 17 major industries. However, every industry in Massachusetts has a lower share of employees with a High School Degree or less and a higher share of employees with some post-secondary education (Some College or higher) than in the Southeast region.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** Industries are sorted by size in Massachusetts in Q4 2010.

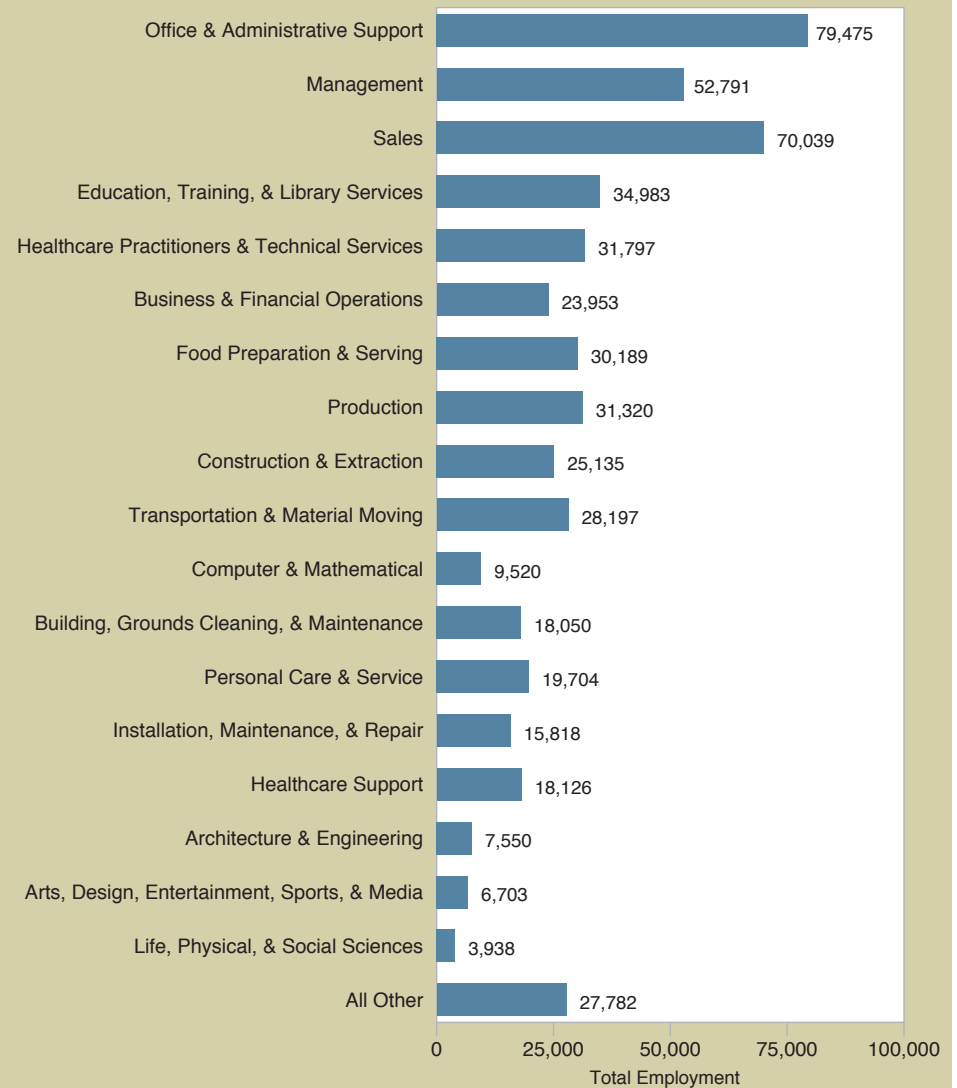


## EMPLOYMENT BY MAJOR OCCUPATION: THE SOUTHEAST REGION (2008-2010)

Industries are where people work; occupations are what people do. Occupational data help to reveal what types of workers are in demand by businesses. In the Southeast region, Office & Administrative Support was the largest occupational group in 2008-2010, accounting for 14.9 percent of the region's jobs. However, the number of jobs in this occupation was actually fewer than in 2000. Sales was the second largest occupational group, accounting for 13.1 percent of the region's jobs and have been growing over the course of the decade. Occupations that are closely associated with growing industries increased, such as Healthcare Support occupations with a very high employment concentration in Health Care & Social Assistance. Similarly, some occupations that are strongly concentrated in declining industries have contracted, such as Production occupations in the Manufacturing sector.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** All Other occupations are composed of Community & Social Services, Legal, Protective Services, Farming, Fishing, & Forestry, and Military Specific. Occupations are sorted largest to smallest by size in Massachusetts in 2008-2010. See the on-line Data Appendix for occupational employment trends.



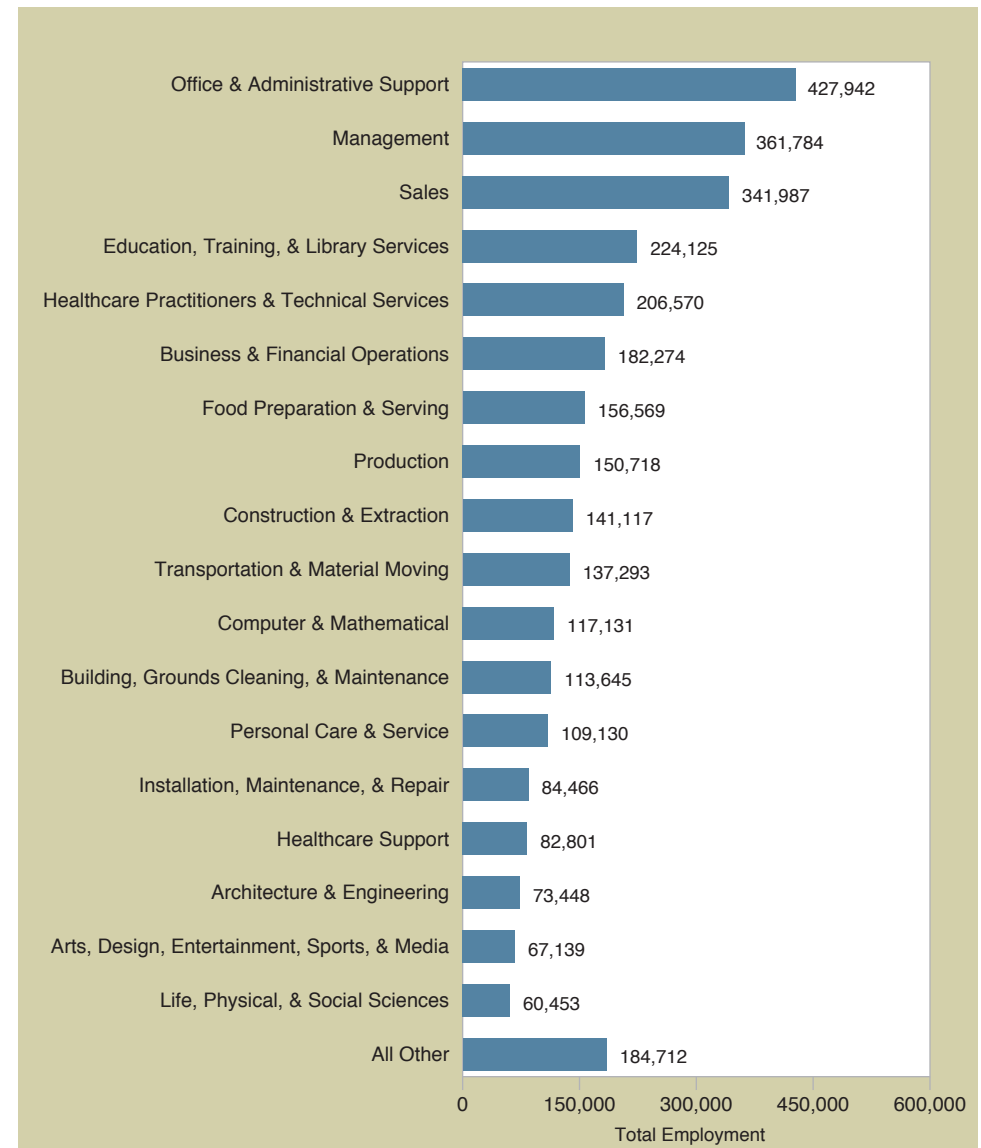


## EMPLOYMENT BY MAJOR OCCUPATION: MASSACHUSETTS (2008-2010)

Massachusetts's occupational composition, much like its industrial composition, is somewhat different from that of the Southeast region. Office & Administrative Support is the largest occupation and accounts for over 13 percent of employment in the state. However, the state has much stronger employment concentrations in Management, Business & Financial Operations, and Computer & Mathematical occupations compared with the Southeast region. The Southeast region has stronger occupational concentrations in Sales, Production, and Transportation & Material Moving. Despite such differences in occupational composition, the Southeast region and Massachusetts have seen fairly similar occupational employment trends over the past decade. The few major differences included the stronger growth statewide in Food Preparation & Serving and Life, Physical, & Social Science occupations, and the region's stronger growth in Personal Care & Service and Healthcare Support occupations.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** All Other occupations are composed of Community & Social Services, Legal, Protective Services, Farming, Fishing, & Forestry, and Military Specific. Occupations are sorted largest to smallest by size in Massachusetts in 2008-2010. See the on-line Data Appendix for occupational employment trends.



## DISTRIBUTION OF OCCUPATIONS ACROSS SUPERSECTORS OUTSIDE GREATER BOSTON (2008-2010)

Because changes in industries and occupations can impact each other, it is important to see how occupations are distributed across industries. Unfortunately, data limitations make it difficult to do so for small geographic regions. Due to the different labor market compositions of Metro South/West and Boston/Metro North relative to the other labor markets, we have split Massachusetts into two labor markets: Greater Boston (Metro South/West and Boston/Metro North) and Outside Greater Boston (the other six labor markets, including the Southeast region). Some occupations in the labor market Outside Greater Boston are concentrated in one or two industries, while other occupations are spread across a number of industries. Consider that nearly 95 percent of Education, Training, & Library Service jobs are in the Education & Health Services supersector. In contrast, Management jobs account for more than 10 percent of employment in every supersector except Construction.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** Due to sample size limitations in the Census and American Community Survey, it is not possible to provide an occupational distribution across industries for small geographic areas. Therefore, Metro South/West and Boston/Metro North were grouped to increase observations and provide an occupation/industry distribution for Greater Boston. Together they account for 46.4 percent of the state's employment. The labor market compositions of Metro South/West and Boston/Metro North are similar, with relatively strong concentrations in the occupational categories of Management and Business & Financial Operations, and in the supersectors of Professional & Business Services and Financial Activities. In comparison, the labor markets outside of the Greater Boston region (Berkshire, Pioneer Valley, Central Mass, Northeast, Southeast, and Cape & Islands) tend to have stronger concentrations in the supersectors of Trade, Transportation, & Utilities, Leisure & Hospitality, and/or Manufacturing, and in the occupational categories of Sales, Office & Administrative Support, and Production. While there are differences among the regional labor markets outside Greater Boston, industrial and occupational concentrations are likely similar enough to approximate their distributions for these labor markets.

## DISTRIBUTION OF OCCUPATIONS ACROSS SUPERSECTORS OUTSIDE GREATER BOSTON (2008-2010)

	Education & Health Services	Trade, Transportation, & Utilities	Professional & Business Services	Manufacturing	Leisure & Hospitality	Financial Activities	Construction	Other	All Industries
Office & Administrative Support	22.4	26.1	10.3	9.4	3.5	13.6	2.6	12.1	100.0
Management	19.6	10.7	10.5	17.3	10.2	11.2	8.7	11.8	100.0
Sales	0.9	68.5	3.7	5.7	4.5	11.2	0.6	5.0	100.0
Education, Training, & Library Services	94.8	0.2	0.4	0.2	1.1	0.2	0.0	3.1	100.0
Healthcare Practitioners & Technical Services	86.4	6.5	4.0	0.2	0.1	0.4	0.1	2.3	100.0
Business & Financial Operations	10.0	12.1	22.4	12.7	1.4	27.9	2.7	10.8	100.0
Food Preparation & Serving	11.9	5.5	0.2	0.5	80.0	0.4	0.0	1.4	100.0
Production	3.1	11.3	3.5	73.2	1.0	0.2	0.8	6.9	100.0
Construction & Extraction	2.2	3.0	1.7	2.7	0.1	0.9	88.3	1.1	100.0
Transportation & Material Moving	4.4	62.1	4.8	13.7	4.8	1.2	3.0	6.1	100.0
Computer & Mathematical	9.8	7.5	38.4	20.7	0.8	12.4	0.1	10.5	100.0
Building, Grounds Cleaning, & Maintenance	26.9	5.1	37.0	2.4	10.8	4.0	0.5	13.3	100.0
Personal Care & Service	40.2	2.4	1.6	0.0	14.5	0.3	0.1	41.0	100.0
Installation, Maintenance, & Repair	3.3	26.3	4.6	13.5	2.5	2.6	8.4	38.7	100.0
Healthcare Support	92.6	1.0	1.4	0.1	0.6	0.2	0.0	4.1	100.0
Architecture & Engineering	2.5	5.8	31.8	50.6	0.2	0.4	3.6	5.2	100.0
Arts, Design, Entertainment, Sports, & Media	12.0	11.6	22.6	8.6	20.4	1.4	0.5	22.9	100.0
Life, Physical, & Social Sciences	36.7	2.8	28.5	18.2	0.9	1.9	0.3	10.6	100.0
All Other	28.9	3.4	17.4	0.8	3.6	1.9	0.1	43.7	100.0
All Occupations	26.8	19.4	9.4	11.9	8.3	6.3	6.1	11.6	100.0

## DISTRIBUTION OF OCCUPATIONS WITHIN SUPERSECTORS OUTSIDE GREATER BOSTON (2008-2010)

We can also consider what the distribution of occupations within a given supersector looks like. Certain occupations account for the majority of employment within a supersector. For example, Outside Greater Boston sees nearly 45 percent of its employment in the Education & Health Services supersector coming from two occupations: Education, Training, & Library Services and Health-care Practitioners & Technical Services. Further, the Construction supersector has more than two-thirds of its employment in Construction & Extraction occupations. While some occupations account for an overwhelming majority of the employment in a given supersector, others consistently account for a large share of employment in each supersector. In fact, the two largest occupational groups—Office & Administrative Support and Management—together account for a sizable share of jobs within every supersector (ranging from 18.0 percent in Leisure & Hospitality to 47.7 percent of Financial Activities).

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** Due to sample size limitations in the Census and American Community Survey, it is not possible to provide an occupational distribution across industries for small geographic areas. Therefore, Metro South/West and Boston/Metro North were grouped to increase observations and provide an occupation/industry distribution for Greater Boston. Together they account for 46.4 percent of the state's employment. The labor market compositions of Metro South/West and Boston/Metro North are similar, with relatively strong concentrations in the occupational categories of Management and Business & Financial Operations, and in the supersectors of Professional & Business Services and Financial Activities. In comparison, the labor markets outside of the Greater Boston region (Berkshire, Pioneer Valley, Central Mass, Northeast, Southeast, and Cape & Islands) tend to have stronger concentrations in the supersectors of Trade, Transportation, & Utilities, Leisure & Hospitality, and/or Manufacturing, and in the occupational categories of Sales, Office & Administrative Support, and Production. While there are differences among the regional labor markets outside Greater Boston, industrial and occupational concentrations are likely similar enough to approximate their distributions for these labor markets.

## DISTRIBUTION OF OCCUPATIONS WITHIN SUPERSECTORS OUTSIDE GREATER BOSTON (2008-2010)

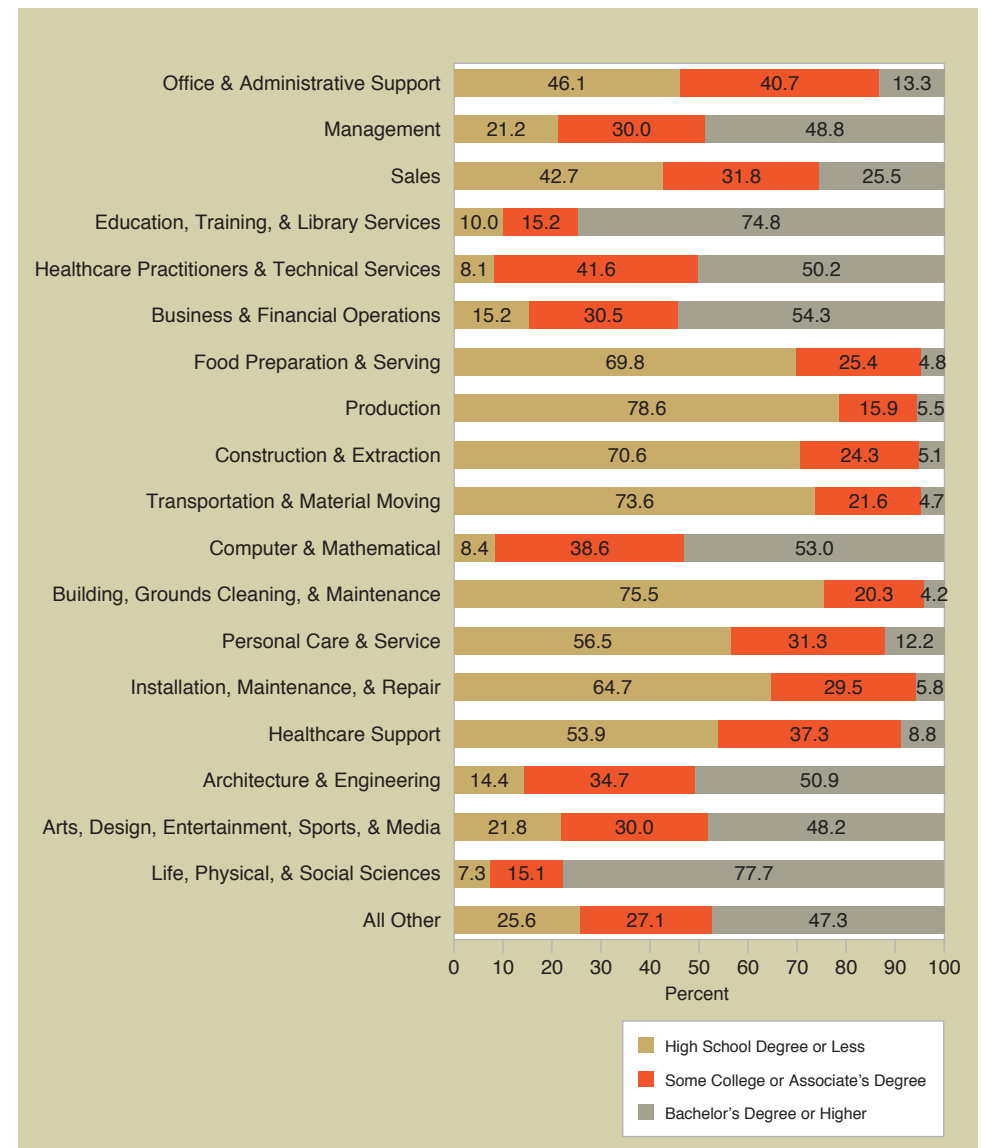
	Education & Health Services	Trade, Transportation, & Utilities	Professional & Business Services	Manufacturing	Leisure & Hospitality	Financial Activities	Construction	Other	All Industries
Office & Administrative Support	11.7	18.9	15.3	11.1	5.9	30.2	5.9	14.7	14.0
Management	7.2	5.4	11.0	14.3	12.1	17.5	14.0	10.1	9.9
Sales	0.4	40.0	4.5	5.4	6.1	20.0	1.0	4.9	11.3
Education, Training, & Library Services	24.7	0.1	0.3	0.1	0.9	0.2	0.0	1.9	7.0
Healthcare Practitioners & Technical Services	20.2	2.1	2.7	0.1	0.1	0.4	0.1	1.3	6.3
Business & Financial Operations	1.6	2.6	10.1	4.5	0.7	18.7	1.8	3.9	4.2
Food Preparation & Serving	2.4	1.5	0.1	0.2	51.6	0.3	0.0	0.7	5.4
Production	0.7	3.5	2.3	37.4	0.7	0.2	0.8	3.6	6.1
Construction & Extraction	0.4	0.7	0.8	1.1	0.0	0.7	68.1	0.5	4.7
Transportation & Material Moving	0.8	15.9	2.5	5.7	2.8	0.9	2.5	2.6	5.0
Computer & Mathematical	0.9	0.9	9.6	4.1	0.2	4.6	0.0	2.1	2.4
Building, Grounds Cleaning, & Maintenance	3.6	1.0	14.3	0.7	4.7	2.3	0.3	4.2	3.6
Personal Care & Service	5.6	0.5	0.6	0.0	6.5	0.1	0.0	13.2	3.7
Installation, Maintenance, & Repair	0.4	4.0	1.5	3.4	0.9	1.2	4.0	9.8	3.0
Healthcare Support	11.3	0.2	0.5	0.0	0.2	0.1	0.0	1.2	3.3
Architecture & Engineering	0.2	0.6	6.8	8.5	0.0	0.1	1.2	0.9	2.0
Arts, Design, Entertainment, Sports, & Media	0.7	1.0	3.9	1.2	4.0	0.4	0.1	3.2	1.6
Life, Physical, & Social Sciences	1.5	0.2	3.3	1.6	0.1	0.3	0.1	1.0	1.1
All Other	5.8	1.0	10.0	0.4	2.3	1.7	0.1	20.4	5.4
All Occupations	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR OCCUPATION IN THE SOUTHEAST REGION (2000)

By looking at the educational attainment of an occupational group, we better understand the education typically required in that field of employment. In 2000, in Office & Administrative Support occupations, 40.7 percent of employees in the Southeast region had Some College education or an Associate's Degree, but a higher percentage (46.1 percent) had a High School Degree or less. By comparison, 74.8 percent of employees in Education, Training, & Library Services had a Bachelor's Degree or higher. In total, six occupations in the region had a majority of employees with a Bachelor's Degree or higher in 2000, while eight occupations had a majority of employees with a High School Degree or less. Of note, educational attainment gives some indication of the skills requirement, but it is not a perfect proxy for skill. Some occupations require significant training, certifications, or other credentials. For example, in Installation, Maintenance, & Repair occupations, 64.7 percent of employees have a High School Degree or less, but these occupations often require apprenticeships, professional certifications, or significant on-the-job training.

**Source:** US Census Bureau 2000 Decennial Census PUMS data files.

**Note:** Occupations are sorted by size in Massachusetts in 2008-2010 American Community Survey PUMS data files.

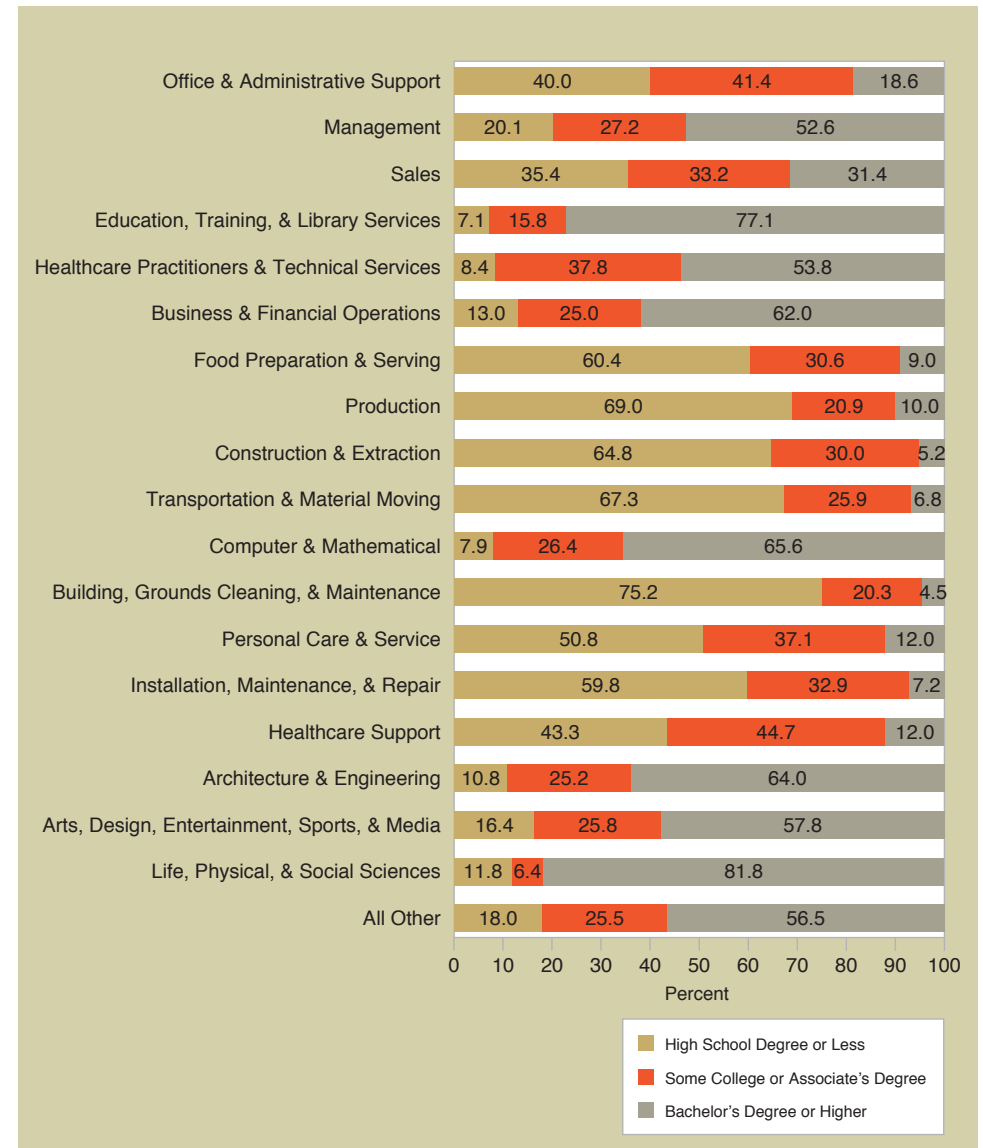


## EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR OCCUPATION IN THE SOUTHEAST REGION (2008-2010)

Over the past decade, the share of employees with a Bachelor's Degree or higher increased in nearly every major occupation in the Southeast region, save for Personal Care & Service occupations. For example, the share of Computer & Mathematical employees with a Bachelor's Degree or higher grew by over 12 percentage points to reach 65.6 percent in 2008-2010. Even occupations with a mix of educational levels, such as Office & Administrative Support, saw growth in the share of employees with a Bachelor's Degree or higher and declines in the share of employees with a High School Degree or less. The educational attainment of employees even increased in occupations where workers traditionally have less education, such as Production. As such, nine occupations in the region had a majority of employees with a Bachelor's Degree or higher in 2008-2010, while seven occupations had a majority of employees with a High School Degree or less.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** Occupations are sorted by size in Massachusetts in 2008-2010 American Community Survey PUMS data files.

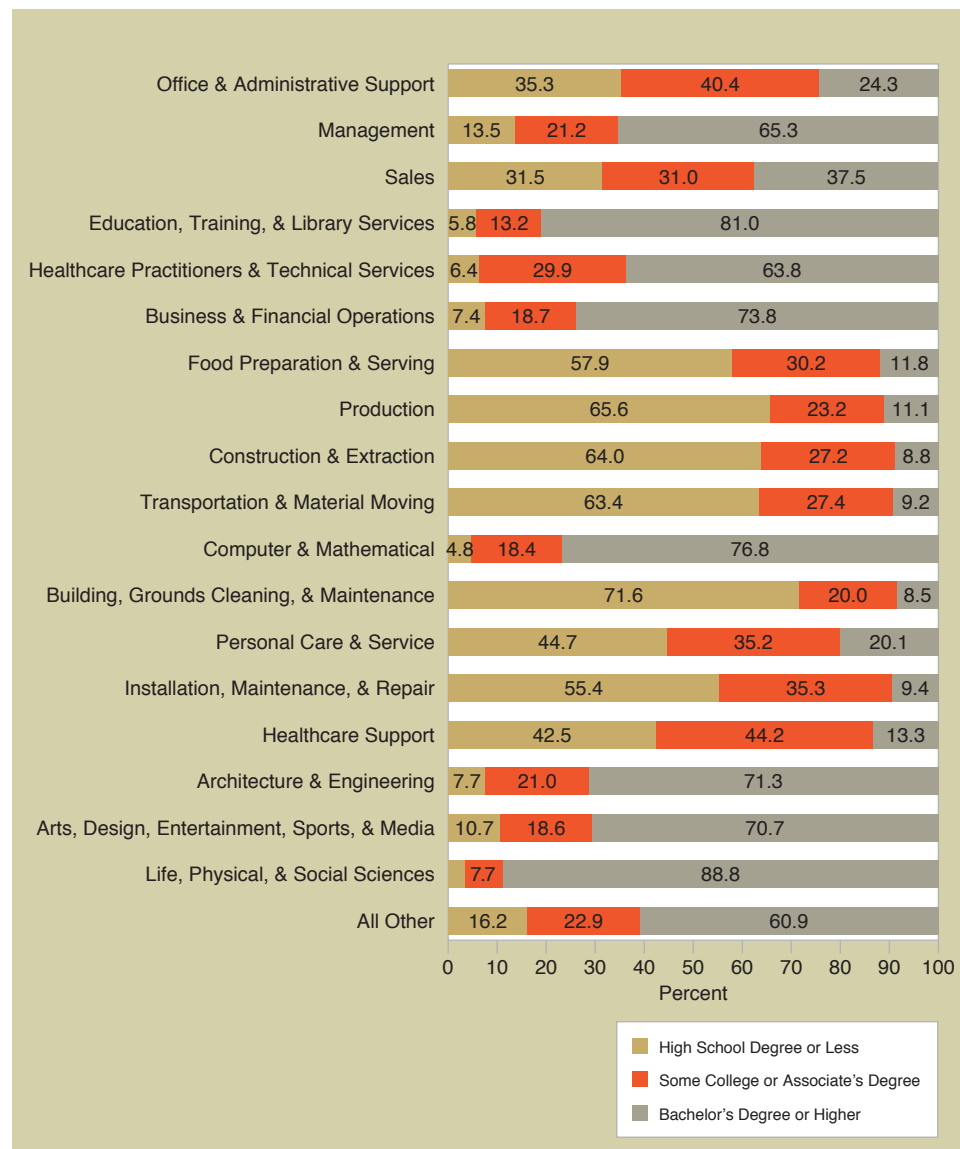


## EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR OCCUPATION IN MASSACHUSETTS (2008-2010)

Despite the increasing levels of educational attainment across occupations, the Southeast region still tends to have lower levels of educational attainment compared with Massachusetts. In fact, all 19 major occupations in Massachusetts had greater shares of employees with a Bachelor's Degree or higher compared with those in the Southeast region in 2008-2010. However, the Southeast region had much higher concentrations of employees with Some College or an Associate's Degree in 15 of the 19 major occupations. The exceptions were largely in fields such as Production, Transportation & Materials Moving, and Installation, Maintenance, & Repair occupations, where the majority of employees had a High School Degree or less. The higher concentrations of employees with Some College or an Associate's Degree may be partly attributable to regional employers hiring workers with other forms of post-secondary education for jobs that require a Bachelor's Degree elsewhere. However, every occupation had a lower share of employees with a High School Degree or less and a higher share of employees with some post-secondary education (Some College or higher) in Massachusetts than in the Southeast region.

**Source:** US Census Bureau 2008-2010 American Community Survey PUMS data files.

**Note:** Occupations are sorted by size in Massachusetts in 2008-2010 American Community Survey PUMS data files.





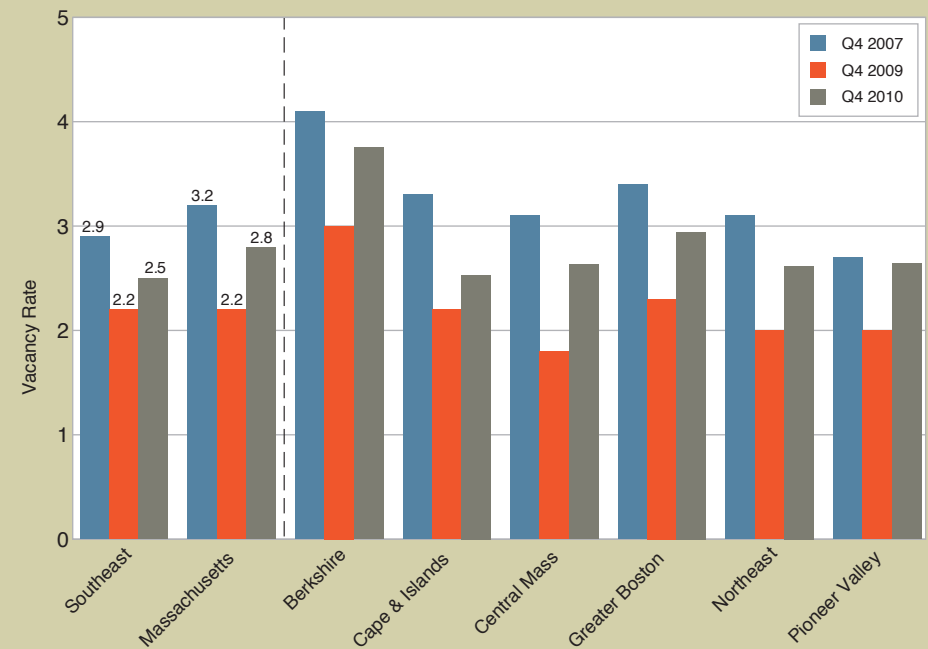
## JOB VACANCIES IN THE GREAT RECESSION AND RECOVERY

Job vacancies exist even in a healthy labor market due to turnover and constant flux in the labor market. As businesses expand, they need to hire individuals who meet specific skill requirements, and employees with skills that are in demand leave jobs for better positions. As the economy enters a downturn, job vacancies decline due to an overall decline in labor demand, an increase in the number of applicants available to fill positions, and fewer employees leaving their jobs. At the end of 2007, the job vacancy rate in the Southeast region was 2.9 percent, the second-lowest of all regional labor markets. As a result of the Great Recession, it declined to 2.2 percent by the end of 2009. As the economy started to recover, the vacancy rate rose slightly, reaching 2.5 percent at the end of 2010—but it was the lowest vacancy rate among all regional labor markets. The region accounted for more than 16.2 percent of the state’s employment but only 10.9 percent of the job vacancies.

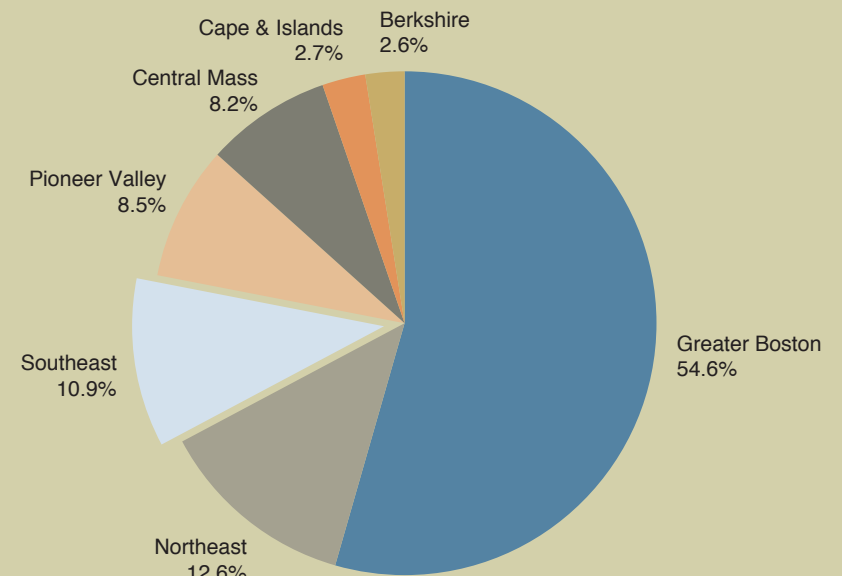
**Source:** Massachusetts Executive Office of Labor and Workforce Development Job Vacancy Survey.

**Note:** The Massachusetts Job Vacancy Survey is collected for seven regions in the state. Vacancy rates are calculated by taking the total number of job vacancies and dividing by the total number employed in the region. The Greater Boston Region covers portions of Southeast, Metro South/West, Central Mass, and Southeast regions of the regional labor market profiles. The vacancy information for the Greater Boston region is used as an approximation of the vacancies trends experienced in the Metro South/West and Boston/Metro North regions.

Job Vacancy Rates



Distribution of Job Vacancies Across Regional Labor Markets, Q4 2010



## JOB VACANCIES AND VACANCY RATES BY MAJOR OCCUPATION: THE SOUTHEAST REGION (Q4 2010)

At the end of 2010, 47.5 percent of the vacancies in the Southeast region were concentrated in three occupations (Sales, Office & Administrative Support, and Food Preparation & Serving). Sales occupations accounted for the largest share of vacancies (19.9 percent), while the highest vacancy rate in the region was in Business & Financial Operations (4.9 percent). Healthcare Support occupations also had a large number of vacancies and an above-average vacancy rate. In contrast, Office & Administrative Support was an example of an occupational group with a large share of total vacancies (13.9 percent) but a relatively low vacancy rate (1.9 percent). Not surprisingly, the vacancy rates in occupations hit hardest by the Great Recession were low in the region, such as Construction & Extraction (0.5 percent) and Production (1.1 percent).

**Source:** Massachusetts Executive Office of Labor and Workforce Development Job Vacancy Survey.

**Note:** Vacancy rates are calculated by taking the total number of job vacancies and dividing by the total number employed in the occupation. An asterisk (\*) indicates there were vacancies in the occupation that were suppressed due to disclosure issues.

	Number of Vacancies	Share of Vacancy (Percent)	Job Vacancy Rate (Percent)
Total	8,585	100.0	2.5
Sales	1,707	19.9	4.0
Office & Administrative Support	1,192	13.9	1.9
Food Preparation & Serving Related	1,176	13.7	3.6
Business & Financial Operations	575	6.7	4.9
Healthcare Practitioner & Technical	656	7.6	2.6
Computer & Mathematical	120	1.4	2.2
Management	134	1.6	0.8
Healthcare Support	556	6.5	4.2
Transportation & Material Moving	539	6.3	1.9
Education, Training, & Library	173	2.0	0.6
Personal Care & Service	214	2.5	2.1
Production	336	3.9	1.1
Architecture & Engineering	71	0.8	1.1
Building, Grounds Cleaning, & Maintenance	280	3.3	3.0
Arts, Design, Entertainment, Sports & Media	87	1.0	2.3
Community & Social Services	176	2.1	2.1
Life, Physical, & Social Services	106	1.2	4.6
Installation, Maintenance & Repair	321	3.7	2.5
Protective Service	75	0.9	0.8
Construction & Extraction	82	1.0	0.5
Legal	*	-	0.3

## JOB VACANCIES AND VACANCY RATES BY MAJOR OCCUPATION IN MASSACHUSETTS (Q4 2010)

Over 42.5 percent of vacancies in Massachusetts are concentrated among the same three occupations as in Southeast: Sales, Office & Administrative Support, and Food Preparation & Serving. However, Massachusetts has a higher vacancy rate and a larger share of vacancies concentrated in Sales occupations relative to the Southeast region. The state also has a higher concentration of vacancies in Business & Financial Operations, but that category's vacancy rate is lower than in the Southeast region. Massachusetts has much smaller shares of vacancies and lower vacancy rates in Production, Healthcare Support, Building, Grounds Cleaning, & Maintenance, and Installation, Maintenance, & Repair occupations compared with the Southeast region. In contrast, Massachusetts tends to have higher concentration of vacancies in Management, Computer & Mathematical, and Education, Training, & Library Services occupations.

**Source:** Massachusetts Executive Office of Labor and Workforce Development Job Vacancy Survey.

**Note:** Vacancy rates are calculated by taking the total number of job vacancies and dividing by the total number employed in the occupation.

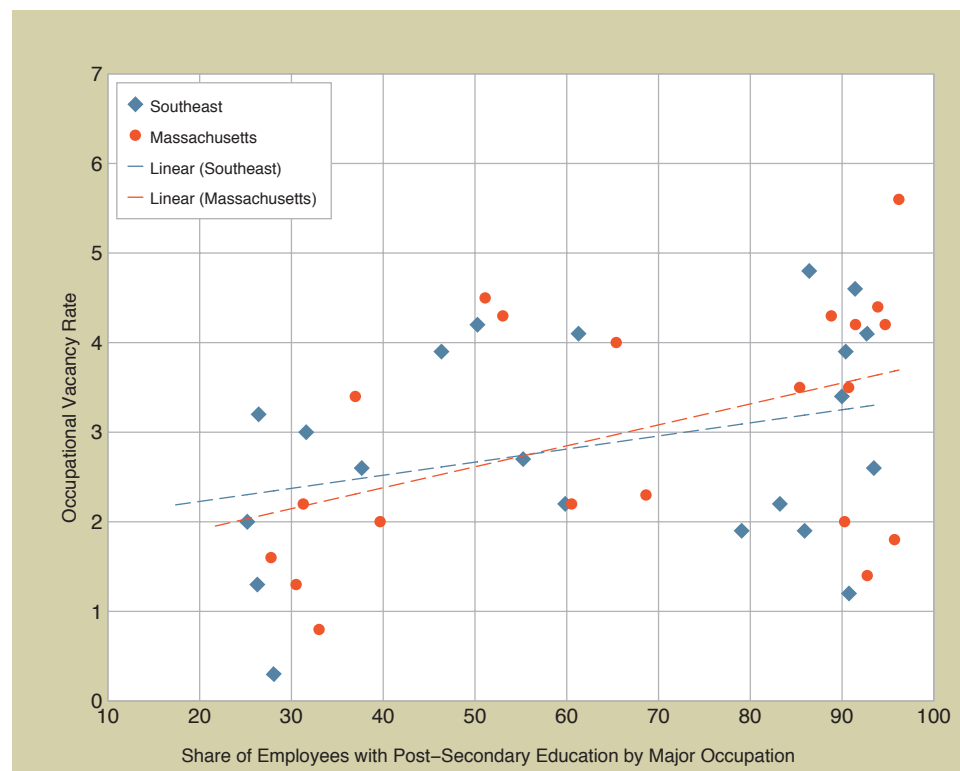
	Number of Vacancies	Share of Vacancy (Percent)	Job Vacancy Rate (Percent)
Total	78,589	100.0	2.8
Sales	16,584	21.1	5.2
Office & Administrative Support	8,650	11.0	1.6
Food Preparation & Serving Related	8,195	10.4	3.1
Business & Financial Operations	6,079	7.7	3.6
Healthcare Practitioner & Technical	5,249	6.7	2.3
Computer & Mathematical	4,950	6.3	4.0
Management	4,595	5.8	2.5
Healthcare Support	3,634	4.6	3.8
Transportation & Material Moving	3,214	4.1	2.1
Education, Training & Library	2,895	3.7	1.3
Personal Care & Service	2,055	2.6	2.4
Production	1,774	2.3	1.1
Architecture & Engineering	1,734	2.2	2.3
Building, Grounds Cleaning, & Maintenance	1,555	2.0	1.5
Arts, Design, Entertainment, Sports & Media	1,421	1.8	2.7
Community & Social Services	1,411	1.8	2.2
Life, Physical, & Social Services	1,398	1.8	2.6
Installation, Maintenance & Repair	1,160	1.5	1.2
Protective Service	1,124	1.4	1.5
Construction & Extraction	583	0.7	0.6
Legal	244	0.3	1.0

## COMPARING VACANCY RATES AND EDUCATIONAL ATTAINMENT: PEAK LABOR MARKET

Before entering the Great Recession, there was a correlation between educational attainment and job vacancies in Massachusetts and, to a lesser extent, the Southeast region. That is, occupations with workers who had higher levels of educational attainment tended to have higher vacancy rates. This is not surprising, as jobs in occupations that have larger shares of employees with a High School Degree or less can sometimes be filled by the large number of individuals who have little training, and this can be done at lower costs to employers. In contrast, jobs in highly specialized occupations that require specific educational requirements face competition both regionally and globally for the limited number of individuals who can fill such positions. Further, strong growth in industries that employ large shares of individuals with high levels of educational attainment, such as Health Care & Social Assistance and Professional & Technical Services, leads to increased vacancies and demand for employees who can fill such positions. The relationship was slightly weaker in the Southeast region due to its occupations having lower shares of employees with post-secondary education and stronger employment concentrations in sectors with lower educational attainment, such as Trade, Transportation, & Utilities and Leisure & Hospitality.

**Source:** Massachusetts Executive Office of Labor and Workforce Development Job Vacancy Survey and US Census Bureau 2005-2007 American Community Survey.

**Note:** Occupational vacancy rates for the Southeast region in Q4 2007 proxy vacancy rates in a peak labor market, and educational attainment data by occupation in the Southeast region from the 2005-2007 American Community Survey proxy share of employees with a post-secondary education in a peak labor market. Workers have attained a post-secondary education if they have attended Some College or obtained an Associate's Degree, Bachelor's Degree, or Master's Degree or higher.

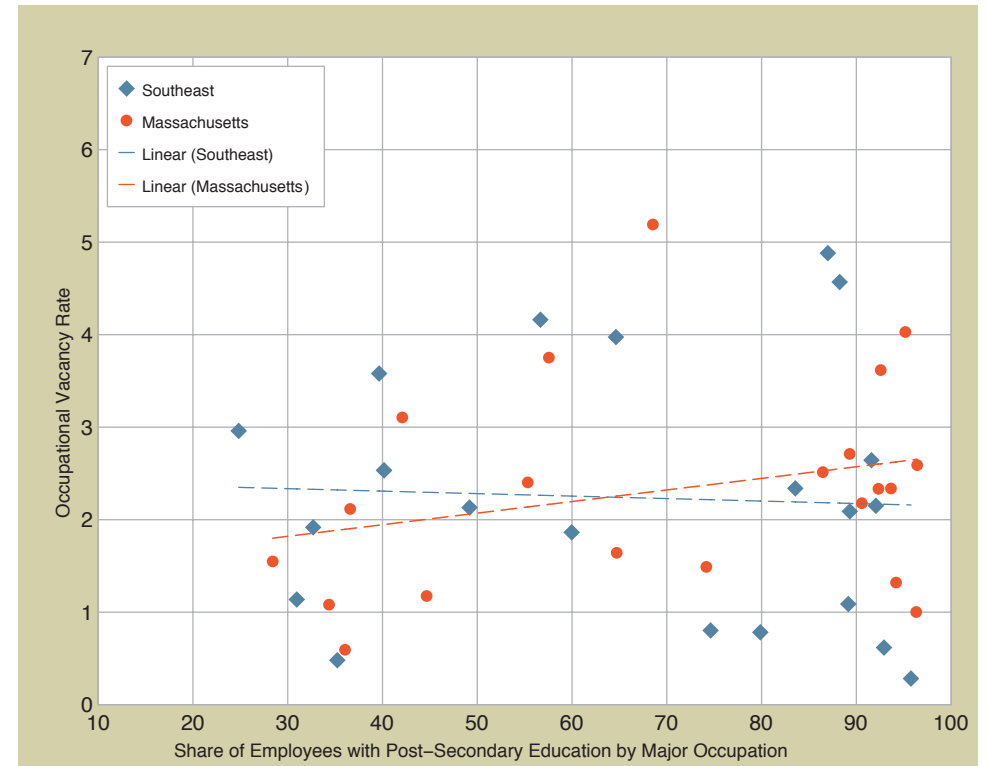


## COMPARING VACANCY RATES AND EDUCATIONAL ATTAINMENT: RECOVERING LABOR MARKET

During the Great Recession, the relationship between post-secondary educational attainment and vacancies weakened somewhat statewide, and it was nonexistent in the Southeast region by the end of 2010. This disappearance in the Southeast region (compared with the relationship only weakening statewide) was likely driven by three factors: (1) the higher educational attainment of employees in all occupations in Massachusetts relative to the region, (2) the region's lower vacancy rates in occupations with predominantly higher levels of education, such as Management and Computer & Mathematical occupations, and higher vacancy rates in occupations that typically require less education, such as Building, Grounds Cleaning, & Maintenance and Installation, Maintenance, & Repair, and (3) the Southeast region's weaker employment growth, relative to Massachusetts, in more educated industries, such as Health Care & Social Assistance and Professional & Technical Services (resulting in stronger demand for such employees statewide), and the region's stronger employment growth in industries with lower levels of educational attainment, such as Retail Trade and Manufacturing (which increased demand for those employees in the Southeast region).

**Source:** Massachusetts Executive Office of Labor and Workforce Development Job Vacancy Survey and US Census Bureau 2008-2010 American Community Survey.

**Note:** Occupational vacancy rates for the Southeast region in Q4 2010 proxy vacancy rates in a recovering labor market, and educational attainment data by occupation in the Southeast region from the 2008-2010 American Community Survey proxy share of employees with a post-secondary education in a recovering labor market.



## GROWTH IN POTENTIAL SUPPLY OF EDUCATED WORKERS: FULL-TIME ENROLLMENT TRENDS IN THE PAST DECADE

Between 2000 and 2010, the number of full-time students enrolled at less-than-two-, two-, and four-year institutions increased in the Southeast region, Massachusetts, and the United States. Enrollment in public two- and four-year institutions in the Southeast region grew more robustly than enrollment in private institutions and exceeded the growth rates of public institutions in both Massachusetts and the United States. In fact, full-time enrollment at public institutions in the region accounted for 98.3 percent of all enrollment at two-year institutions and 67.3 percent at four-year institutions in 2010, exceeding both state and national shares. In contrast, full-time enrollment at less-than-two-year institutions

increased more than sixfold over the course of the decade and was almost entirely at private institutions at the end of the decade.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

**Note:** Enrollment data are from the fall semester of the academic year. For example, 2010 enrollment is from the fall of 2009 of the 2009-2010 academic year. Enrollment data are provided by the type of institution. Students can earn different types of degrees within an institution. For example, the enrollment at a community college would be categorized as being in a two-year institution for all students enrolled that year. However, students at community colleges complete different type of programs, such as Certificates and Associate's Degrees.

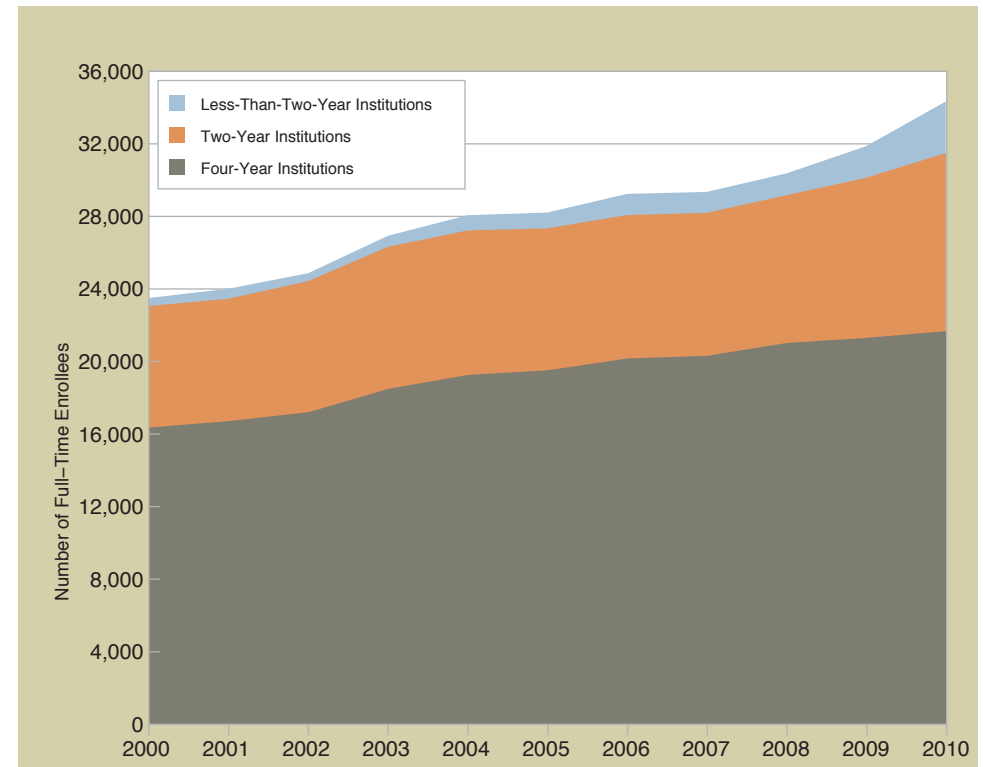
		Less-than-Two-Year Institutions			Two-Year Institutions			Four-Year Institutions		
		Southeast	MA	US	Southeast	MA	US	Southeast	MA	US
Public	Enrollment 2000	211	382	43,504	6,495	31,002	2,008,336	10,249	58,489	3,733,341
	Enrollment 2010	138	316	42,117	9,653	44,278	2,922,622	14,584	73,940	4,904,272
	Absolute Change	-73	-66	-1,387	3,158	13,276	914,286	4,335	15,451	1,170,931
	<i>Annual Growth Rate (Percent)</i>	-4.2	-1.9	-0.3	4.0	3.6	3.8	3.6	2.4	2.8
Private	Enrollment 2000	229	3,427	138,260	203	5,796	259,071	6,116	125,640	1,863,471
	Enrollment 2010	2,706	9,609	277,341	164	5,457	457,134	7,092	153,139	3,000,813
	Absolute Change	2,477	6,182	139,081	-39	-339	198,063	976	27,499	1,137,342
	<i>Annual Growth Rate (Percent)</i>	28.0	10.9	7.2	-2.1	-0.6	5.8	1.5	2.0	4.9
Total	Enrollment 2000	440	3,809	181,764	6,698	36,798	2,267,407	16,365	184,129	5,596,812
	Enrollment 2010	2,844	9,925	319,458	9,817	49,735	3,379,756	21,676	227,079	7,905,085
	Absolute Change	2,404	6,116	137,694	3,119	12,937	1,112,349	5,311	42,950	2,308,273
	<i>Annual Growth Rate (Percent)</i>	20.5	10.1	5.8	3.9	3.1	4.1	2.9	2.1	3.5

## NUMBER OF FULL-TIME ENROLLEES BY TYPE OF DEGREE GRANTING INSTITUTION IN THE SOUTHEAST REGION (2000-2010)

Four-year institutions continue to account for most of the full-time enrollment in higher education institutions in the Southeast region, but their share fell over the past decade from 69.6 percent in 2000 to 63.1 percent in 2010 due to stronger enrollment growth at both less-than-two- and two-year institutions. The strongest enrollment increases came in the smallest category, with less-than-two year institutions accounting for 8.3 percent of the region's population enrolled at post-secondary institutions in 2010, up from only 1.9 percent in 2000. Enrollment at such institutions nearly doubled between 2000 and 2005, followed by slower growth between 2005 and 2007, and another doubling between 2007 and 2010. By comparison, enrollment at two-year and four-year institutions increased at fairly stable rates over the course of the decade, with the exception of a spike in enrollment at two-year institutions in 2009 and 2010.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

**Note:** In the above stacked-area chart, the different areas represent the number of enrollees by institution type. For example, enrollment at less-than-two-year institutions was more than 2,800 in 2010, compared with nearly 21,700 enrolled at four-year institutions that year. All three areas combined represent the total number of enrollees in post-secondary educational institutions in the Southeast region, of which there were more than 34,300 in 2010. The areas are stacked in order of size in 2010, with enrollment at four-year institutions, the largest enrollment group, on the bottom and enrollment at less-than-two-year institutions, the smallest group, at the top.



## GROWTH IN POTENTIAL SUPPLY OF EDUCATED WORKERS: PART-TIME ENROLLMENT TRENDS IN THE PAST DECADE

The majority of part-time enrollees at post-secondary educational institutions are in public two-year institutions. In the Southeast region, part-time enrollment at public two-year institutions increased at a sluggish annual rate of 0.9 percent between 2000 and 2010. As such, the region's enrollment growth lagged behind the rates in Massachusetts and the United States. Reflecting a similar pattern as Massachusetts, part-time enrollment in both public and private four-year institutions in the Southeast region declined over the past decade, while growing nationwide. The fastest growth in

part-time enrollment occurred at less-than-two-year institutions. And while a majority of such enrollees are at private institutions, most of the region's growth actually came from rising public enrollment. In contrast, growth in part-time enrollment at less-than-two-year institutions came almost exclusively from private institutions in Massachusetts and the United States.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

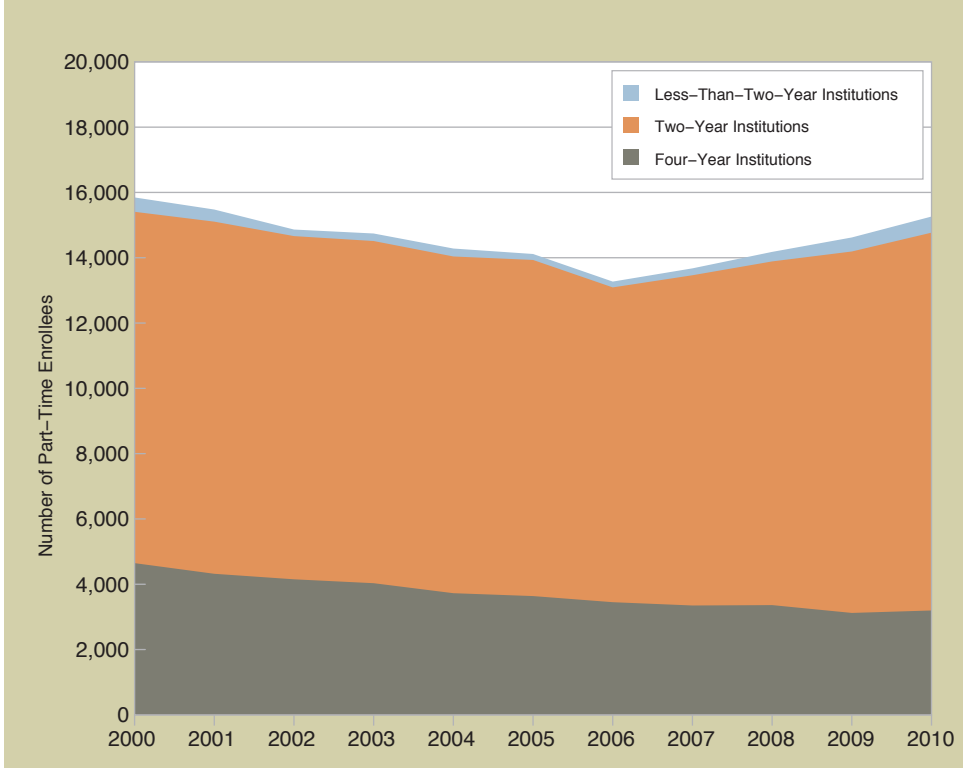
		Less-than-Two-Year Institutions			Two-Year Institutions			Four-Year Institutions		
		Southeast	MA	US	Southeast	MA	US	Southeast	MA	US
Public	Enrollment 2000	22	25	31,407	10,438	48,506	3,509,639	3,068	22,160	1,045,388
	Enrollment 2010	64	65	27,264	11,416	58,043	4,247,674	2,301	16,120	1,380,877
	Absolute Change	42	40	-4,143	978	9,537	738,035	-767	-6,040	335,489
	<i>Annual Growth Rate (Percent)</i>	11.3	10.0	-1.4	0.9	1.8	1.9	-2.8	-3.1	2.8
Private	Enrollment 2000	418	1,522	31,827	322	3,536	66,870	1,579	27,425	476,690
	Enrollment 2010	429	2,633	44,382	156	1,554	61,006	896	19,155	775,694
	Absolute Change	11	1,111	12,555	-166	-1,982	-5,864	-683	-8,270	299,004
	<i>Annual Growth Rate (Percent)</i>	0.3	5.6	3.4	-7.0	-7.9	-0.9	-5.5	-3.5	5.0
Total	Enrollment 2000	440	1,547	63,234	10,760	52,042	3,576,509	4,647	49,585	1,522,078
	Enrollment 2010	493	2,698	71,646	11,572	59,597	4,308,680	3,197	35,275	2,156,571
	Absolute Change	53	1,151	8,412	812	7,555	732,171	-1,450	-14,310	634,493
	<i>Annual Growth Rate (Percent)</i>	1.1	5.7	1.3	0.7	1.4	1.9	-3.7	-3.3	3.5



# NUMBER OF PART-TIME ENROLLEES BY TYPE OF DEGREE GRANTING INSTITUTION IN THE SOUTHEAST REGION (2000-2010)

While part-time enrollment in two-year institutions in the Southeast region increased over the past decade, this is mostly due to increases in recent years. Between 2000 and 2007, part-time enrollment in two-year institutions declined at an annual rate of 0.9 percent. But between 2007 and 2010, part-time enrollment increased at an annual rate of 4.6 percent. The small numbers of enrollments at less-than-two-year institutions was much more volatile, declining at an annual rate of 14.0 percent between 2000 and 2006 before growing at a robust 29.0 percent annually between 2006 and 2010. In comparison, part-time enrollment at four-year institutions experienced a steep rate of decline between 2000 and 2006 (-4.8 percent annually) and continued to erode through the end of the decade (-1.9 percent annually between 2006 and 2010).

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

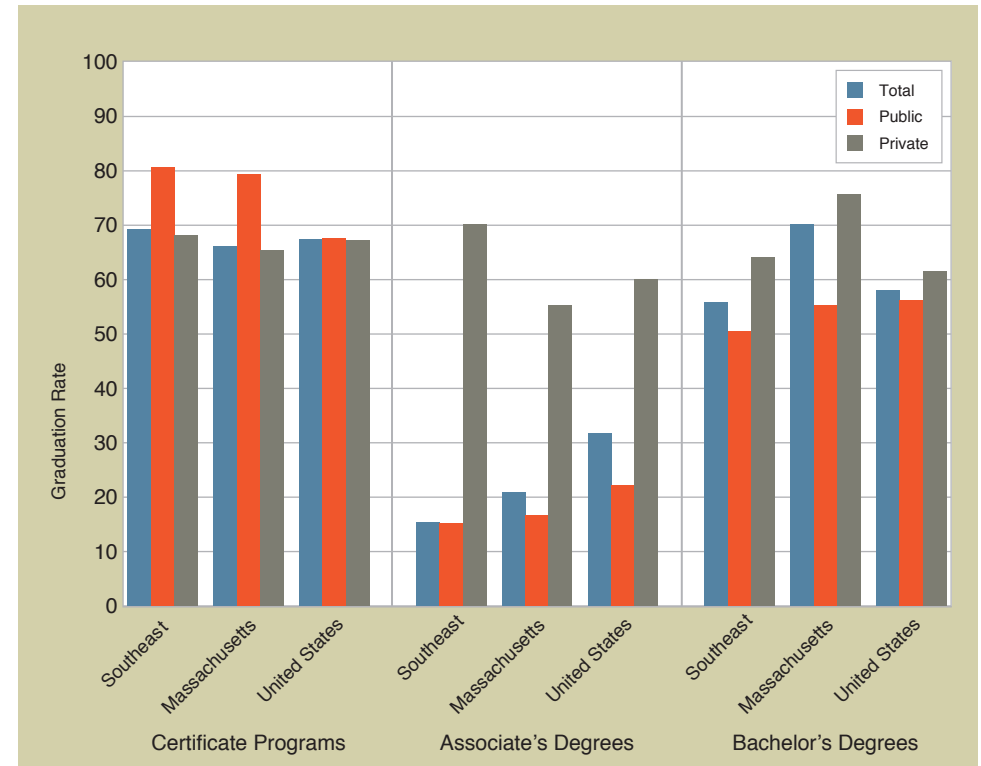


## GRADUATION RATES BY TYPE OF DEGREE (2009)

Enrollment figures indicate a potential supply of post-secondary educated labor, but the actual supply depends on how many students complete their programs and earn a degree or a Certificate. In 2009, the graduation rate for first-time full-time students at four-year institutions in the Southeast region (i.e., those who earned a Bachelor's Degree within six years) was 55.6 percent. This was lower than the statewide rate but fairly similar to the national rate. The six-year Bachelor's Degree graduation rate at public institutions (50.4 percent) was lower than those at private institutions in the region and at public institutions in Massachusetts and the United States. The three-year Associate's Degree graduation rate (15.3 percent) was also lower in the region than in Massachusetts and United States, but the graduation rates for Associate's Degrees at private institutions exceeded their counterparts statewide and nationally. The Certificate program graduation rate in the Southeast region (69.2 percent) exceeded the rates statewide and nationally. In contrast with the findings for Bachelor's Degrees, the Certificate program graduation rate of public institutions was much higher than those of private ones in both the Southeast region and Massachusetts.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

**Note:** Graduation rates are the number of first-time full-time students who completed their degree/program within 150 percent of the time expected to complete the degree/program as a share of the number of first-time full-time students that started the degree/program (i.e., a Bachelor's Degree is considered to have been earned on time if it is completed within six years or less, or 150 percent of four years). Comparisons of graduation rates to enrollments or degree completions can be misleading as the first-time full-time students are a small subset of the student population, particularly for certain degrees/programs. Graduation rates do not include part-time students and are excluded when there is an inadequate sample size of first-time full-time entrants for the degree/program to calculate a graduation rate. See the on-line Methodological Appendix for further details.



## CROSSING THE FINISH LINE: TRENDS IN DEGREE COMPLETIONS OVER THE PAST DECADE (2000-2010)

Total annual completions show the number of people who have earned a degree or Certificate in a given year. The strongest annual growth in completions over the course of the past decade in the Southeast region came from the number of students earning Certificates (6.7 percent), which nearly doubled at both public and private institutions, exceeding the growth in both Massachusetts and the United States. The region also experienced strong annual growth in the number of students earning Associate's Degrees (4.0 percent), exceeding the growth statewide (2.3 percent) while slightly trailing the annual national growth rate (4.2 percent). There was more moderate growth in the number of students com-

pleting Bachelor's Degrees at both public and private institutions in the region (2.2 percent) over the past decade. While this nearly matched the statewide trend, it trailed the 2.9 percent increase of Bachelor's Degrees completed nationwide.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

**Note:** Degree completions are for those students who completed degrees at institutions within the defined geography. The students may not actually live in the region. Completion totals are based on degrees completed in an academic year. For example, 2010 completions represent degrees completed in the 2009-2010 academic year.

		Certificates			Associate's Degrees			Bachelor's Degrees		
		Southeast	MA	US	Southeast	MA	US	Southeast	MA	US
Public	Completions 2000	379	2,273	298,282	1,599	7,487	471,339	2,081	12,718	811,076
	Completions 2010	600	3,618	460,865	2,043	9,831	670,395	2,787	16,251	1,049,058
	Absolute Change	221	1,345	162,583	444	2,344	199,056	706	3,533	237,982
	<i>Annual Growth Rate (Percent)</i>	4.7	4.8	4.4	2.5	2.8	3.6	3.0	2.5	2.6
Private	Completions 2000	889	5,221	258,503	96	3,812	135,604	1,617	29,658	431,412
	Completions 2010	1,819	8,195	430,685	454	4,366	249,258	1,822	35,972	603,141
	Absolute Change	930	2,974	172,182	358	554	113,654	205	6,314	171,729
	<i>Annual Growth Rate (Percent)</i>	7.4	4.6	5.2	16.8	1.4	6.3	1.2	1.9	3.4
Total	Completions 2000	1,268	7,494	556,785	1,695	11,299	606,943	3,698	42,376	1,242,488
	Completions 2010	2,419	11,813	891,550	2,497	14,197	919,653	4,609	52,223	1,652,199
	Absolute Change	1,151	4,319	334,765	802	2,898	312,710	911	9,847	409,711
	<i>Annual Growth Rate (Percent)</i>	6.7	4.7	4.8	4.0	2.3	4.2	2.2	2.1	2.9

## EDUCATIONAL INSTITUTIONS AWARDING THE MOST DEGREES IN THE SOUTHEAST REGION (2010)

The few public institutions in the Southeast region play a large role in the region's post-secondary educational attainment. The region's two community colleges, Bristol and Massasoit, and Quincy College (the region's other public two-year institution) accounted for 81.8 percent of Associate's Degree completions in 2010. The region's two public universities, University of Massachusetts–Dartmouth and Bridgewater State University, accounted for a majority of the region's Bachelor's Degree completions (60.5 percent) that year. The remainder of Bachelor's Degrees came from the region's five private four-year institutions. In contrast, more than 75 percent of Certificates were awarded by private institutions, led by the Sullivan and Cogliano Training Center (20.4 percent). Of the 19 Southeast institutions that granted Certificates in 2010, only four were public institutions, the largest being Bristol Community College.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

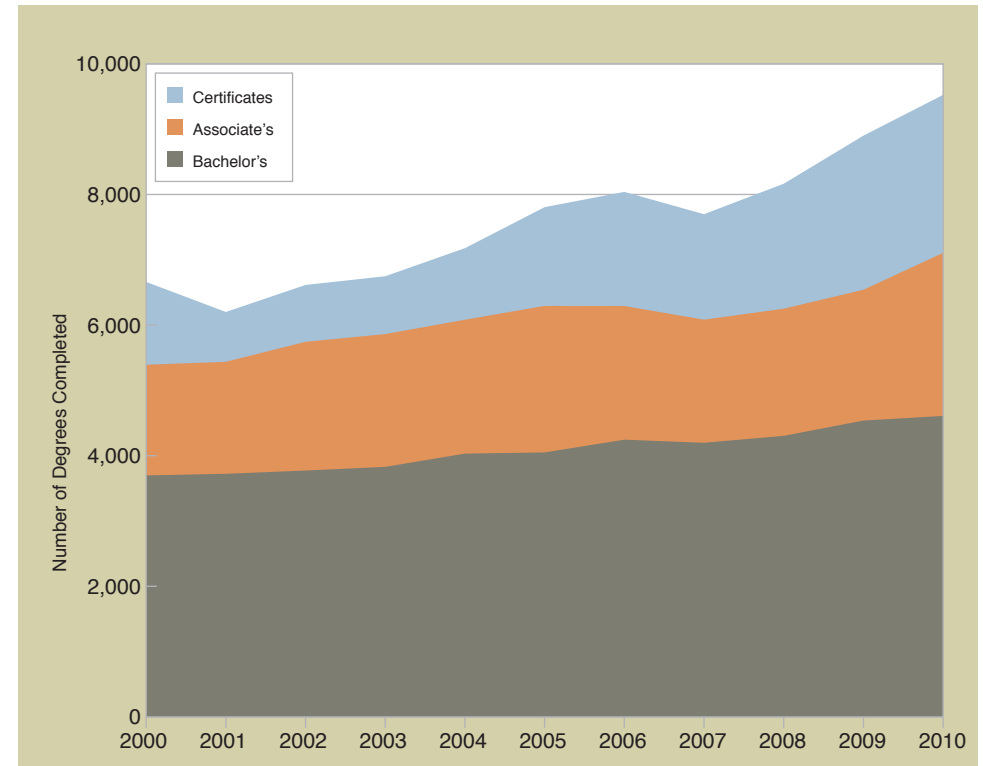
**Note:** See the on-line Data Appendix for a full list of degree completions by institution. Quincy College is a public two-year institution but is not part of the state's community college system, as it is run by the city of Quincy and not the state.

	Institution	Type	Public or Private	Degrees Awarded	Share of Degree Type Completed in Region
Certificates	Sullivan and Cogliano Training Center	< Two Years	Private	494	20.4
	Salter School-Fall River Campus	< Two Years	Private	396	16.4
	Bristol Community College	Two Year	Public	293	12.1
Associate's	Bristol Community College	Two Year	Public	854	34.2
	Massasoit Community College	Two Year	Public	717	28.7
	Quincy College	Two Year	Public	472	18.9
Bachelor's	Bridgewater State University	Four Year	Public	1,514	32.8
	University of Massachusetts - Dartmouth	Four Year	Public	1,273	27.6
	Curry College	Four Year	Private	609	13.2

## NUMBER OF DEGREE COMPLETIONS BY DEGREE TYPE: THE SOUTHEAST REGION (2000-2010)

Adding up Bachelor's and Associate's Degrees and Certificates, the total number of post-secondary degrees awarded by institutions in the Southeast region grew at an annual rate of 3.6 percent between 2000 and 2010, due largely to increases in Certificates and Associate's Degrees. This was faster than in Massachusetts (2.5 percent) and close to the growth in the United States (3.7 percent). Between 2000 and 2004, the number of Certificates completed in the Southeast region declined at an annual rate of 3.6 percent. Thereafter, the number of completions increased rapidly, growing at an annual rate of 14.1 percent between 2004 and 2010. By contrast, Associate's Degree completions grew at a strong annual rate at the beginning of the decade (5.8 percent between 2000 and 2005) before declining at an annual rate of 4.6 percent between 2005 and 2008. However, completions rebounded in 2009 and 2010, growing at an annual rate of 13.2 percent. Bachelor's Degree completions were fairly consistent, slowly growing over the course of the decade.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.



## CERTIFICATES AWARDED BY MAJOR FIELD OF STUDY (2000-2010)

In the Southeast region, the increase in the number of completed Certificates came mostly from the four largest fields of study. The number of Health Sciences certificates completed in the region more than quadrupled between 2000 and 2010, increasing from 19.7 percent to 44.3 percent of the region's Certificates. State-wide, the number of completed Health Sciences Certificates more than doubled, accounting for almost 50 percent of Certificates in 2010. The region's second largest increase in completions came in the second largest field of study, Services, which rose by more than 300 certificates between 2000 and 2010. Services Certificates include a large range of areas of specialization, including Cosme-

tology, Law Enforcement, Construction Trades, Sports & Fitness Studies, Library Sciences, Social Work, Appliance Installation & Repair, Welding Technology, and Construction Equipment Operations. Other large increases came in Engineering & Computer Sciences and Business certificates, while the numbers of completions in other fields changed little over the course of the decade.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

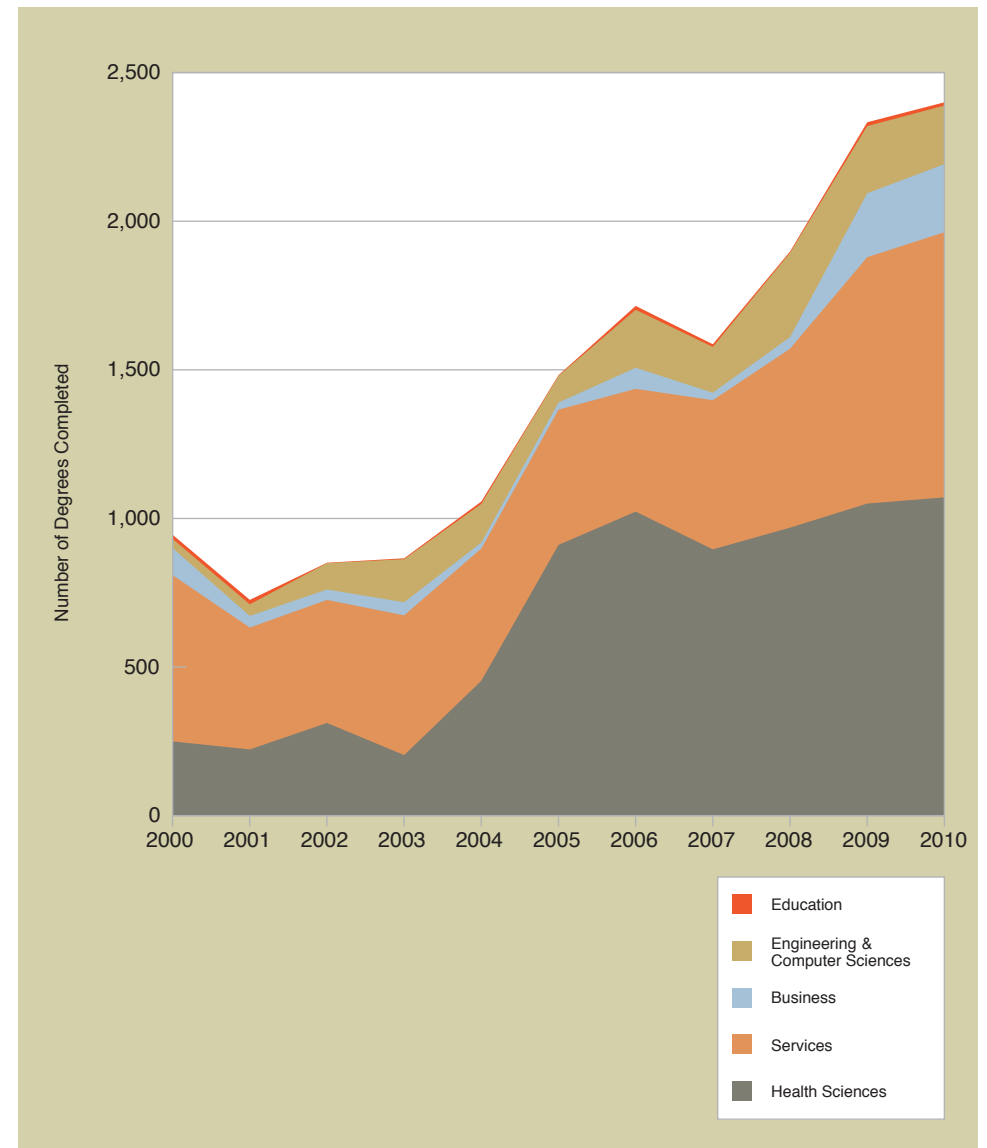
**Note:** For major fields of study by degree type for the US, see the on-line Data Appendix.

Major Field of Study	Southeast				Massachusetts			
	2000		2010		2000		2010	
	Certificates Completed	Major's Share of Total (Percent)	Certificates Completed	Major's Share of Total (Percent)	Certificates Completed	Major's Share of Total (Percent)	Certificates Completed	Major's Share of Total (Percent)
Health Sciences	250	19.7	1,071	44.3	2,080	27.8	5,638	47.7
Services	559	44.1	892	36.9	2,479	33.1	3,984	33.7
Engineering & Computer Sciences	31	2.4	197	8.1	1,013	13.5	752	6.4
Business	91	7.2	229	9.5	709	9.5	513	4.3
Arts, Humanities, & Social Sciences	14	1.1	8	0.3	271	3.6	424	3.6
Legal	13	1.0	7	0.3	132	1.8	189	1.6
Education	14	1.1	11	0.5	129	1.7	87	0.7
Science & Mathematics	3	0.2	0	0.0	248	3.3	80	0.7
Other	3	0.2	4	0.2	81	1.1	146	1.2
<b>Total</b>	<b>1,268</b>	<b>100.0</b>	<b>2,419</b>	<b>100.0</b>	<b>7,494</b>	<b>100.0</b>	<b>11,813</b>	<b>100.0</b>

## ANNUAL COMPLETIONS BY TOP FIVE CERTIFICATE MAJORS IN THE SOUTHEAST REGION (2000-2010)

The number and type of Certificates awarded by Southeast institutions fluctuated considerably from year to year during the past decade. For example, from 2000 to 2010, Health Sciences Certificates in the Southeast region grew at an annual rate of 15.7 percent. However, between 2000 and 2003 the region produced almost the same number of degrees annually before the number jumped more than fivefold between 2003 and 2006. Thereafter, Health Sciences completions changed little, finishing the decade with completion levels similar to those in 2006. The consistently large number of graduates with Health Sciences Certificates may reflect increasing demand for employees with such education and training from growing industries such as Health Care & Social Assistance. In comparison, the number of Services Certificates declined through between 2000 and 2006 (-4.9 percent), followed by rapid growth through the end of the decade (21.2 percent). Completions of Business and Engineering & Computer Sciences certificates fluctuated through most of the decade before increasing rapidly in recent years.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.



## ASSOCIATE'S DEGREES AWARDED BY MAJOR FIELD OF STUDY (2000-2010)

Most of the growth in Associate's Degrees granted by institutions in the Southeast region came from the Health Sciences field. Between 2000 and 2010, Health Sciences degrees grew at annual rate of 10.0 percent, and the field accounted for the largest share of the region's Associate's Degrees (31.7 percent) at the end of the decade. Massachusetts saw more modest gains in students earning Health Sciences degrees in the past decade (4.5 percent) and in 2010 its largest share of Associate's Degrees continued to be in the field of Arts, Humanities, & Social Sciences (27.0 percent). The Southeast region also experienced stronger growth in Education

degrees, which tripled between 2000 and 2010, while statewide completions increased by just over 50 percent. With state and regional completion patterns similar in most other major fields of study, Associate's Degree completions in Health Sciences and Education drove the region's stronger growth in total completions over the course of the decade.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

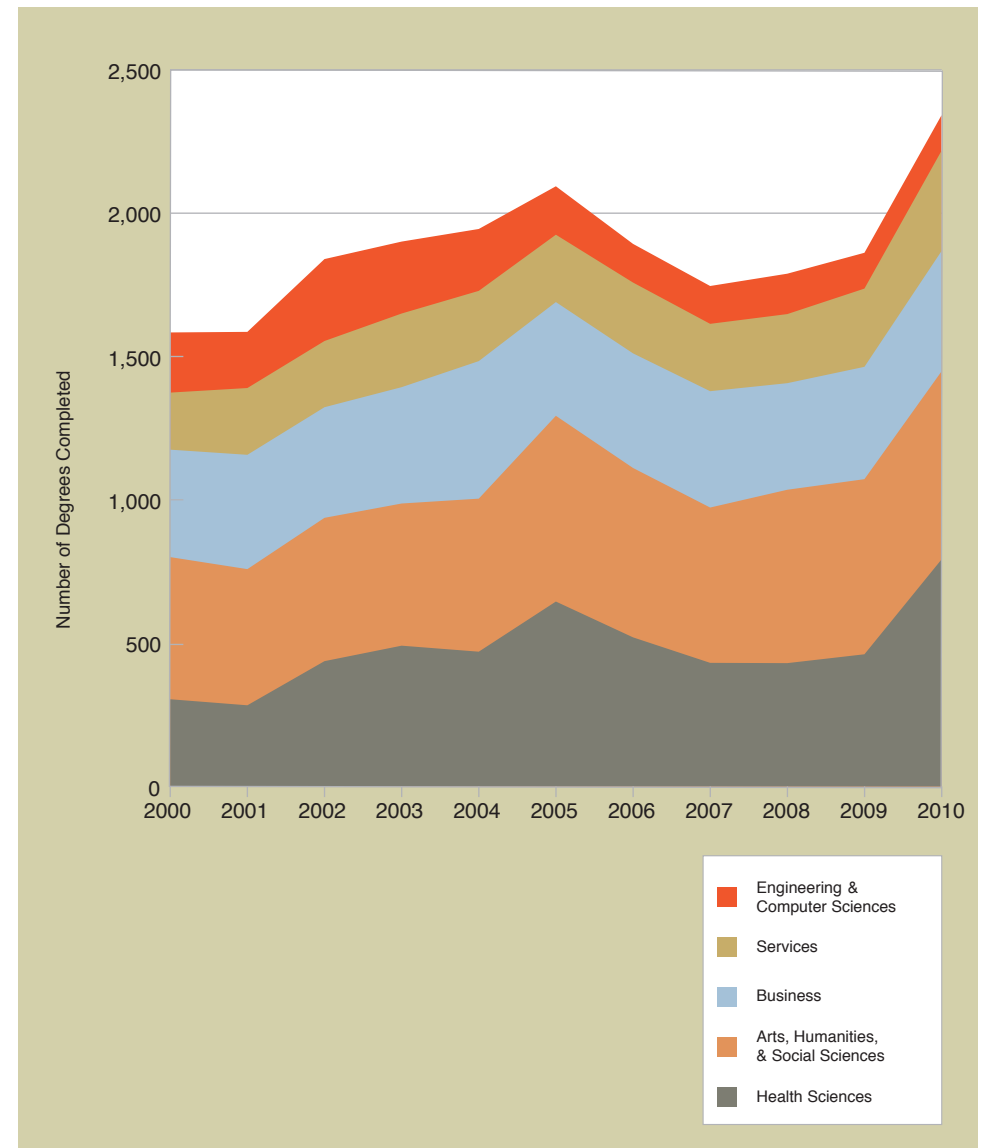
Major Field of Study	Southeast				Massachusetts			
	2000		2010		2000		2010	
	Associate's Completed	Major's Share of Total (Percent)	Associate's Completed	Major's Share of Total (Percent)	Associate's Completed	Major's Share of Total (Percent)	Associate's Completed	Major's Share of Total (Percent)
Arts, Humanities, & Social Sciences	496	29.3	656	26.3	3,130	27.7	3,833	27.0
Health Sciences	304	17.9	792	31.7	2,302	20.4	3,559	25.1
Services	199	11.7	350	14.0	1,216	10.8	2,389	16.8
Business	375	22.1	420	16.8	2,198	19.5	2,250	15.8
Engineering & Computer Sciences	210	12.4	124	5.0	1,561	13.8	1,162	8.2
Education	30	1.8	95	3.8	293	2.6	442	3.1
Science & Mathematics	3	0.2	0	0.0	231	2.0	260	1.8
Legal	29	1.7	7	0.3	189	1.7	117	0.8
Other	49	2.9	53	2.1	179	1.6	185	1.3
<b>Total</b>	<b>1,695</b>	<b>100.0</b>	<b>2,497</b>	<b>100.0</b>	<b>11,299</b>	<b>100.0</b>	<b>14,197</b>	<b>100.0</b>



## ANNUAL COMPLETIONS BY TOP FIVE ASSOCIATE'S DEGREE MAJORS IN THE SOUTHEAST REGION (2000-2010)

While the number of students earning Associate's Degrees in the largest majors increased over the course of the decade in the Southeast region, degree completions in such fields were somewhat varied over the years. The number of completions in Arts, Humanities, & Social Sciences and Health Sciences increased at a more rapid pace in the first half of the decade before dropping off between 2005 and 2007 and then increasing through the end of the decade. In comparison, Services degree completions increased at a more modest annual rate (3.4 percent) between 2000 and 2005, before increasing at the fastest annual rate of the largest fields of study (8.3 percent) between 2005 and 2010. Such volatility actually resulted in the region producing fewer Associate's Degrees in 2009 than in 2005 in nearly all major fields of study, with the exception of Services. In fact, without the large increase in Health Sciences degree completions between 2009 and 2010, the Southeast region would have produced fewer Associate's Degrees in 2010 than in 2005.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.



## BACHELOR'S DEGREES AWARDED BY MAJOR FIELD OF STUDY (2000-2010)

Nearly 60 percent of the Bachelor's Degrees awarded by institutions in the Southeast region are in two fields of study: Arts, Humanities, & Social Sciences (41.2 percent) and Business (22.3 percent). The share of Business graduates in the region is slightly higher than the share in Massachusetts (19.1 percent) while the share of Arts, Humanities, & Social Sciences degrees statewide is slightly lower (44.8 percent). In contrast with Massachusetts, the institutions in the region have a slightly lower concentration of degrees in the Science, Engineering, Technology, and Mathematics (STEM) fields, with smaller shares of degrees in both Science

& Mathematics and Engineering & Computer Sciences. Instead, Bachelor's Degrees in the Southeast region tend to be more concentrated in Health Sciences, Services, and Education than is the case statewide. While most major fields of study had an increasing number of completions over the course of the decade, the Southeast region experienced declines in the Education and Legal fields.

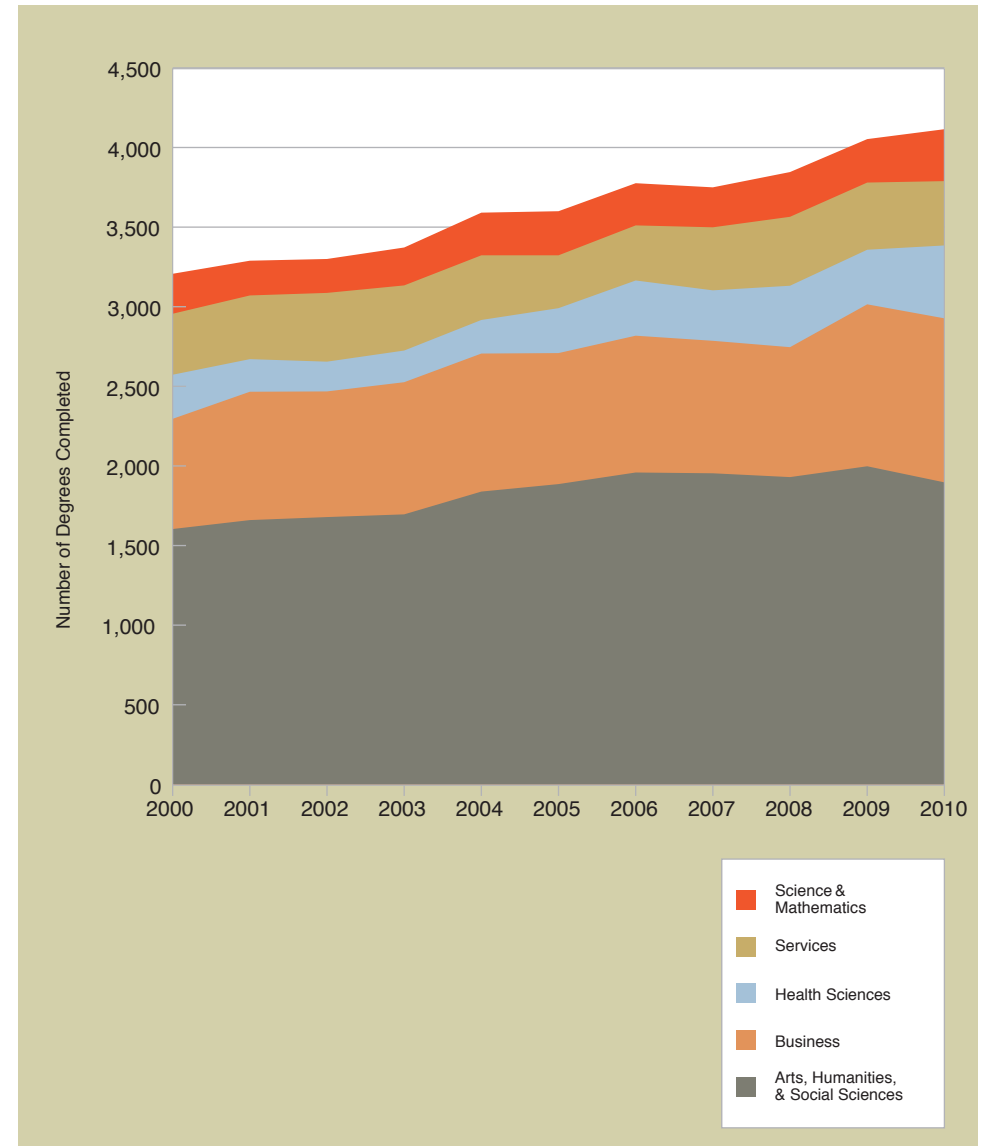
**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

Major Field of Study	Southeast				Massachusetts			
	2000		2010		2000		2010	
	Bachelor's Completed	Major's Share of Total (Percent)	Bachelor's Completed	Major's Share of Total (Percent)	Bachelor's Completed	Major's Share of Total (Percent)	Bachelor's Completed	Major's Share of Total (Percent)
Arts, Humanities, & Social Sciences	1,604	43.4	1,897	41.2	18,891	44.6	23,405	44.8
Business	692	18.7	1,030	22.3	7,596	17.9	9,990	19.1
Science & Mathematics	251	6.8	326	7.1	3,818	9.0	5,054	9.7
Engineering & Computer Sciences	138	3.7	184	4.0	3,726	8.8	3,997	7.7
Health Sciences	277	7.5	458	9.9	2,938	6.9	3,589	6.9
Services	383	10.4	404	8.8	2,495	5.9	3,170	6.1
Education	326	8.8	279	6.1	1,922	4.5	1,362	2.6
Legal	6	0.2	1	0.0	176	0.4	190	0.4
Other	11	0.3	30	0.7	797	1.9	1,466	2.8
<b>Total</b>	<b>3,698</b>	<b>100.0</b>	<b>4,609</b>	<b>100.0</b>	<b>42,376</b>	<b>100.0</b>	<b>52,223</b>	<b>100.0</b>

## ANNUAL COMPLETIONS BY TOP FIVE BACHELOR'S DEGREE MAJORS IN THE SOUTHEAST REGION (2000-2010)

From 2000 to 2006, the number of Bachelor's Degrees in the Arts, Humanities, & Social Sciences field awarded by institutions in the Southeast region grew fairly steadily. It then leveled off through the end of the decade, with annual completions ending slightly below 2,000. In contrast, the number of completions in the Business field was consistently at about 800 between 2000 and 2008, before jumping to over 1,000 in both 2009 and 2010. However, the fastest growing major field of study in the region was actually Health Sciences. Beginning the decade with 277 graduates, the field declined in popularity to reach a decade low of 187 degrees in 2002. Thereafter, degree completions in the field increased nearly every year and grew at an annual rate of 11.8 percent between 2002 and 2010. As a result, Health Sciences degrees grew at an annual rate of 5.2 percent between 2000 and 2010, more than double the 2.0 percent annual completion growth rate in the field statewide.

**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.





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