

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

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The Center promotes better public policy in New England by conducting and disseminating objective, high-quality research and analysis of strategically identified regional economic and policy issues and, when appropriate, works with regional and Bank partners to advance identified policy options.

The Center's research investigates policy issues that are important to New England's economy, focusing in two primary areas: demographic and labor markets trends and state and local public finance. For more information about the Center, visit our website, www.bostonfed.org/neppc.

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Commonwealth Corporation strengthens the skills of Massachusetts youth and adults by investing in innovative partnerships with industry, education, and workforce organizations. We seek to meet the immediate and emerging needs of businesses and workers so they can thrive in our dynamic economy.

Through its work, Commonwealth Corporation is known for its expertise in: meeting the needs of workers and businesses; developing nationally recognized and innovative programming; creating multiple education and employment pathways for teens and young adults to succeed; and building the Commonwealth's workforce development capacity.

Commonwealth Corporation is a quasi-public organization within the Executive Office of Labor and Workforce Development. For more information about Commonwealth Corporation, visit our website, www.commcorp.org.

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 Berkshire 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 Berkshire
- 2. Labor Demand: Employment Trends of Jobs and Workers in Berkshire
- 3. The Pipeline: Educational Supply of Post-Secondary Degrees Granted by Institutions Located in Berkshire

As the smallest and most rural regional labor market in the state, Berkshire faces challenges that differ somewhat from those facing Massachusetts as a whole. It accounts for only 1.9 percent of the state's employment (59,700 jobs), and Berkshire's labor market performance in the past decade has differed from most other labor markets. Between 2001 and 2008, Berkshire was one of only three regions in the state to actually gain jobs, but as the Great Recession hit, the region experienced more severe job losses than did the state. And in the earliest stages of the labor market recovery, Berkshire was the only region to continue to lose jobs. In fact, while Massachusetts and most of its regional labor markets have reported employment gains across a broad range of industries, Berkshire has continued to see employment declines in a majority of its industries.

Already having the smallest residential population (accounting for only 1.8 percent of the state total in 2008-2010), Berkshire was one of only two labor markets to decline in population in the past decade. A contracting residential population, combined with a stagnant working-age population and minimal growth in the civilian labor force, raises demographic challenges for Berkshire, particularly given the region's educational attainment and age profile.

While Massachusetts is one of the most highly educated states in the nation, both the Berkshire region's residents and its workforce (which includes people who commute from other regions and states) have education levels 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 was still the most common level of educational attainment in 2008-2010, accounting for 30.7 percent of the civilian labor force. The share of the region's civilian labor force with a Bachelor's Degree or higher trailed that of Massachusetts (30.2 percent versus 41.2 percent). The share of the civilian labor force with some post-secondary education, however, was closer to that of Massachusetts (61.9 percent versus 67.8 percent) because of the region's strong

<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 a review of trends over a longer time period.

concentration of individuals with Certificates or Associate's Degrees. But while the region had a higher share of its labor force with only a High School Degree than did Massachusetts, a smaller share had less than a High School education (7.3 percent, compared with 8.7 percent for the statewide labor force).

Looking forward, the region faces the demographic challenges of an aging population and potential shortfalls in workers with the educational levels desired by employers. Berkshire is the second-oldest region in the state, trailing only the Cape & Islands. In 2008-2010, 49.4 percent of the region's civilian labor force was 45 years of age or older, while only 31.6 percent was 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 retire in the coming decades. And while the educational attainment of the region's residents increased during the past decade, declines in the population with Associate's Degrees and slow growth in those with Some College may result in a shortage of younger workers with middle skills to replace baby boomers as they retire. This may be particularly troublesome given that 83.3 percent of the region's employees are also residents of the region, meaning that Berkshire is heavily dependent on its residents for its workforce. However, people who are 34 years of age or younger represent nearly 50 percent of the region's unemployed while accounting for only 31.5 percent of the region's civilian labor force. Thus, younger workers, who are disproportionately unemployed, may provide a future supply of labor that can be educated and trained to address potential labor shortages.

To foster strong economic growth in the future, Berkshire should strive to 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 the aging workforce and the demand for educated workers. However, the post-secondary education sector in Berkshire is relatively small: In 2010, the Berkshire region had only five post-secondary educational institutions. National and state enrollment patterns Please visit www.bostonfed.org/neppc for appendices describing geography and methodology, and for additional data.

indicate that more individuals have been seeking post-secondary education over the past decade. Although Berkshire has also seen growth in full-time and part-time enrollments at lessthan-two-year, two-year, and four-year institutions (with the exception of declining parttime enrollments at four-year institutions), the region trailed the state and national rates in the past decade. Moreover, the increase in the number of students enrolled has not translated into increased degree completions. In fact, Berkshire was the only regional labor market to see declines in the number of Certificates, Associate's Degrees, and Bachelor's Degrees completed in the past decade. The majority of Associate's and Bachelor's Degrees in Berkshire have been in Arts, Humanities, & Social Sciences. Certificate completions, on the other hand, have been more volatile in both number and composition, but Health Sciences has consistently accounted for the largest share.

## **GEOGRAPHY OF THE REGIONAL** LABOR MARKETS

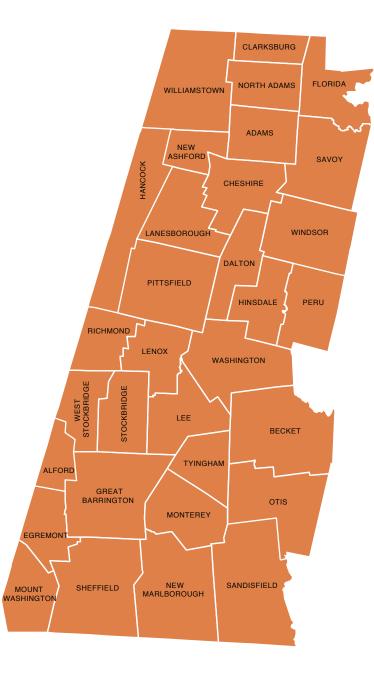
The Berkshire region labor market borders the Pioneer Valley region labor market, as well as the states of Connecticut, New York, and Vermont. It is composed of the 32 Massachusetts cities and towns that make up Berkshire County. Its larger cities and towns include Pittsfield and North Adams. Because of data limitations, in certain aspects of our analysis (such as industry/occupational distributions), Berkshire is combined with the Cape & Islands, Central Mass, Northeast, Pioneer Valley, and Southeast regions and is referred to as the region Outside Greater Boston. See the Geographic Definition Appendix for further details.



#### **Eight Regional Labor Market Areas**

- 1 Berkshire Region
- 2 Pioneer Valley Region

### **BERKSHIRE REGION**



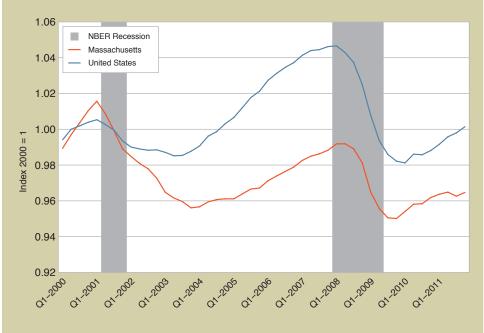
### EMPLOYMENT TRENDS AND RECESSIONS

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. Over the same period, total employment in the United States ended at only 0.4 percent below its 2001 peak (a loss of 513,700 jobs). One reason for the difference was that the short national recession at the beginning of the decade created a prolonged contraction and slow recovery in Massachusetts. By the start of the Great Recession, Massachusetts had still not recovered all of the jobs it had lost during the previous downturn. 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 recessions dated by the National Bureau of Economic Research.



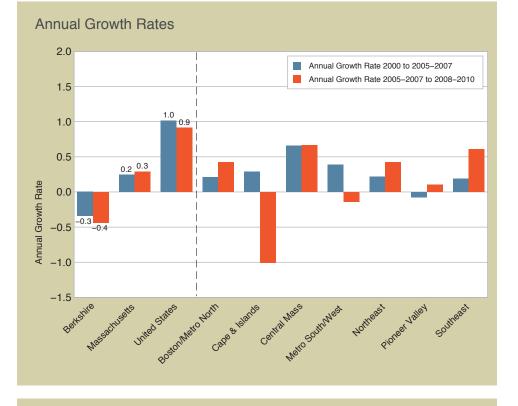
## Non–Agricultural Employment for United States and Massachusetts, Q1 2000 to Q4 2011

### POPULATION GROWTH TRENDS

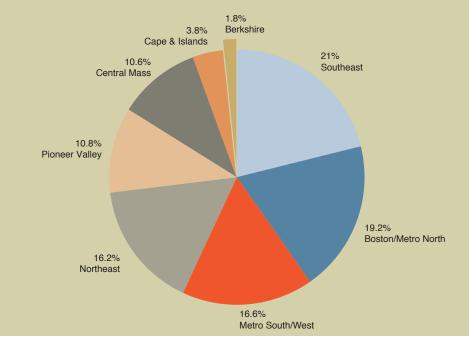
Berkshire accounted for 1.8 percent of the state's residential population at the end of the decade, making it the smallest labor market by this measure. It was also the only region to decline in residential population from 2000 to 2005-2007 and also from 2005-2007 to 2008-2010. As such, the region experienced the largest decline in population over the past decade among Massachusetts regional labor markets. In comparison, the Cape & Islands was the only other region to decline in residential population in the past decade, while Pioneer Valley's population was virtually unchanged and the other five regional labor markets experienced increases.

**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.



Massachusetts Population Distribution Across Regional Labor Markets, 2008–2010



### DEMOGRAPHIC CHARACTERISTICS OF THE RESIDENT POPULATION OF BERKSHIRE

While the total number of people living in Berkshire has declined over the past decade, certain demographic groups have grown. The small immigrant population in the region grew at an annual rate of 5.2 percent. The region became more diverse over the past decade, with strong growth among minority populations, most notably Asian and Hispanic residents. However, immigrants and racial minorities account for such small shares of the population in Berkshire that their growth was more than offset by declining native-born and White Non-Hispanic populations. Already one of the oldest regions in the state in 2000, Berkshire became considerably older as baby boomers (born between 1946 and 1964) neared retirement age by the end of the decade. In particular, the 55-64-year-old age cohort increased at an annual rate of 3.7 percent over the course of the decade. Residents who were age 65 or older, despite a small decline in absolute numbers, became the largest of all age groups by the end of the decade (replacing residents younger than 16). The region experienced modest annual growth (1.0 percent) in 16-24-year-olds but larger declines in people under 16 and those between 35 and 44 years old.

**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)
Resident Population	114,409	110,614	-3,795	-0.4
Gender				
Male	53,993	52,561	-1,432	-0.3
Female	60,416	58,053	-2,363	-0.4
Nativity				
Native Born	110,266	104,058	-6,208	-0.6
Immigrant	4,143	6,556	2,413	5.2
Race/Ethnicity				
White, non-Hispanic	108,671	100,238	-8,433	-0.9
Black, non-Hispanic	1,887	2,591	704	3.6
Asian, non-Hispanic	744	1,334	590	6.7
Hispanic	1,722	3,870	2,148	9.4
Other race, non-Hispanic	1,385	2,581	1,196	7.2
Age				
Less than age 16	23,533	19,764	-3,769	-1.9
Age 16-24	10,462	11,428	966	1.0
Age 25-34	13,513	11,717	-1,796	-1.6
Age 35-44	17,668	13,319	-4,349	-3.1
Age 45-54	17,324	18,396	1,072	0.7
Age 55-64	11,376	15,783	4,407	3.7
Age 65+	20,533	20,207	-326	-0.2

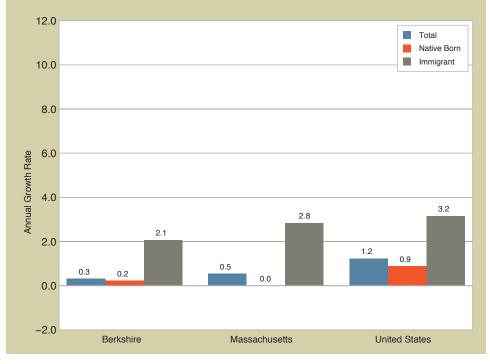
### GROWTH IN WORKING-AGE POPULATION BY NATIVITY STATUS

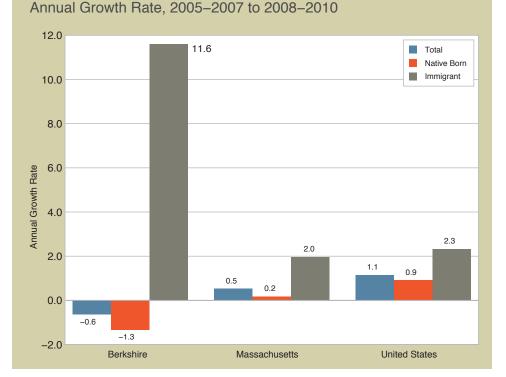
Although the Berkshire region's total population declined over the past decade, its working-age population (the potential labor supply, typically defined as people 16 years of age or older) was relatively unchanged. Between 2000 and 2005-2007, the number of working-age immigrants in the region grew at an annual rate of 2.1 percent, while the working-age native-born population increased 0.2 percent annually. As a result, the region's total working-age population actually grew at an annual rate of 0.3 percent, compared with a 0.3 percent decline in Berkshire's total residential population. Between 2005-2007 and 2008-2010, the region's working-age, native-born population declined at an annual rate of 1.3 percent, even as their counterparts in the state and nation grew. Berkshire's working-age immigrant population increased at an annual rate of 11.6 percent over the same time period, but immigrants accounted for less than 7.0 percent of the working-age population in 2008-2010 and did not offset native-born losses. As a result, towards the end of the decade, the region's working-age population declined at an annual rate of 0.6 percent, while growing both statewide and nationally.

**Source:** US Census Bureau 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





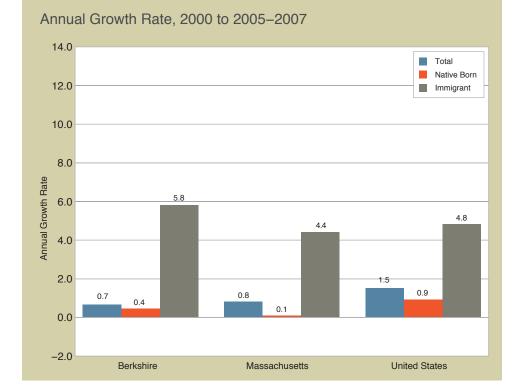
Labor Market Trends in the Berkshire Region www.bostonfed.org/neppc

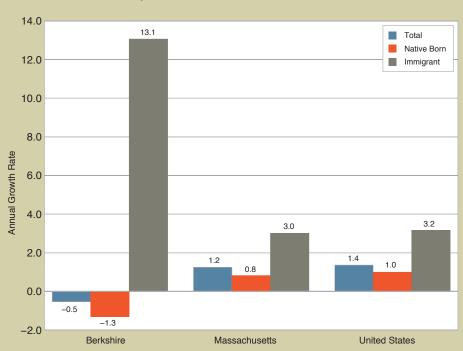
### GROWTH IN THE CIVILIAN LABOR FORCE BY NATIVITY STATUS

The civilian labor force consists of residents 16 years of age or older who are either working or unemployed but actively looking for work (a region's actual labor supply). And while residential and working-age populations have been declining or stagnating over the past decade in Berkshire, the region's civilian labor force has actually grown. With both native-born and immigrants growth between 2000 and 2005-2007, the civilian labor force grew at an annual rate of 0.7 percent, nearly keeping pace with Massachusetts but trailing the United States. However, between 2005-2007 and 2008-2010, the native-born civilian labor force declined at an annual rate of 1.3 percent, while immigrants in the labor force continued to grow (by 13.1 percent). With immigrants accounting for only 7.0 percent of Berkshire's civilian labor force in 2008-2010, their gains were not enough to offset losses of the native-born, and the civilian labor force declined at an annual rate of 0.5 percent at the end of the decade. However, growth in the earlier part of the decade was enough to result in annual civilian labor force growth of 0.3 percent over the course of the entire decade.

**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.



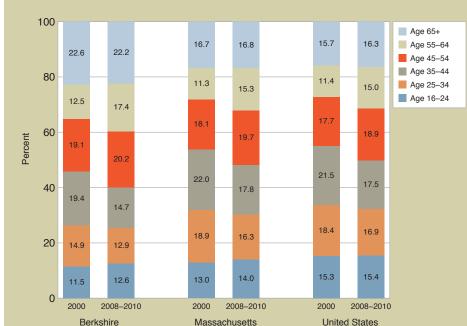


Annual Growth Rate, 2005–2007 to 2008–2010

### THE AGE PROFILE OF THE WORKING-AGE POPULATION

Massachusetts is one of the older states in the country, and Berkshire is the second oldest regional labor market in the state. Only the Cape & Islands is older. In 2008-2010, nearly 60 percent of the region's working-age population was 45 years of age or older, up from 54 percent at the beginning of the decade. The largest share of the working-age population in Berkshire was 65 or older (22.2 percent). In Massachusetts and the United States, the largest age group was 45-54-year-olds. The share of the working-age population between the ages of 25 and 34 is also particularly small in Berkshire; at 12.9 percent, it is much smaller than it is statewide (16.3 percent) or nationally (16.9 percent), indicating potential future workforce pipeline challenges.

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



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

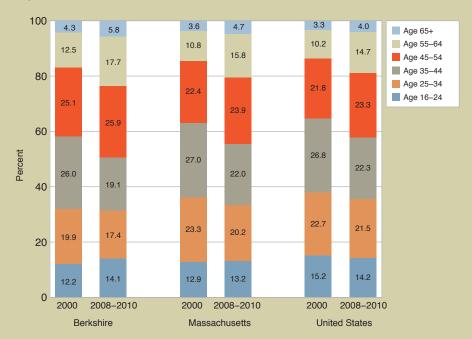
### Growth of Working-Age Population by Age in Berkshire

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Age 16-24	10,462	11,428	966	1.0
Age 25-34	13,513	11,717	-1,796	-1.6
Age 35-44	17,668	13,319	-4,349	-3.1
Age 45-54	17,324	18,396	1,072	0.7
Age 55-64	11,376	15,783	4,407	3.7
Age 65+	20,533	20,207	-326	-0.2

# THE AGE PROFILE OF THE CIVILIAN LABOR FORCE

Given the age of the region's population, it is not surprising that the civilian labor force in Berkshire is older than the state's or nation's labor force. In 2008-2010, almost 50 percent of the labor force in Berkshire was 45 years or older, far exceeding the share in Massachusetts (44.5 percent) and the United States (42.1 percent). In the past decade, there was particularly strong growth in the number and share of people in the civilian labor force who were older than 55. At the same time, there was a declining number of workers between the ages of 25 and 44, with modest growth among 16-24-year-olds. All of these trends add up to the fact that Berkshire's civilian labor force continues to be much older than that of Massachusetts and the United States.

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



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

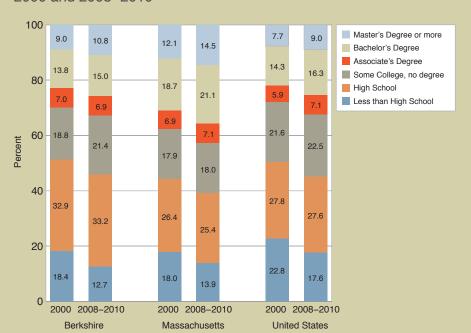
### Growth of Civilian Labor Force Population by Age in Berkshire

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Age 16-24	7,111	8,399	1,288	1.9
Age 25-34	11,610	10,388	-1,222	-1.2
Age 35-44	15,198	11,429	-3,769	-3.1
Age 45-54	14,650	15,493	843	0.6
Age 55-64	7,285	10,586	3,301	4.2
Age 65+	2,497	3,446	949	3.6

# EDUCATIONAL ATTAINMENT OF THE WORKING-AGE POPULATION

While Massachusetts is one of the states with the highest share of people with a college degree, the educational attainment of the working-age population in Berkshire more closely resembles that of the United States. Over the past decade, Berkshire saw a shift toward more people with post-secondary degrees. There was an increase in the number of working-age people with a Bachelor's Degree or higher, as well as those with Some College education, but a declining number with an Associate's Degree. At the same time, the region saw fewer people with less than a High School Degree over the course of the decade and a fairly consistent number with a High School Degree. The share of the population with a High School Degree or less declined to 45.9 percent in 2008-2010, which was nearly the same share as in the United States (45.2 percent) but well above the statewide share (39.3 percent). Although the share of the population in Berkshire with a Bachelor's Degree or higher increased to 25.8 percent by the end of the decade, it was still nearly 10 percentage points lower than the share in Massachusetts (35.6 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

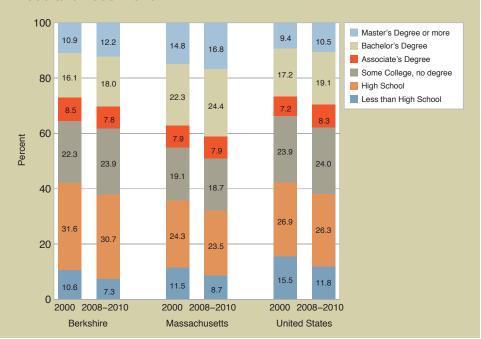
### Growth of Working-Age Population by Educational Attainment in Berkshire

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Less than High School	16,704	11,528	-5,176	-4.0
High School Graduate	29,937	30,129	192	0.1
Some College, no degree	17,125	19,470	2,345	1.4
Associate's Degree	6,390	6,262	-128	-0.2
Bachelor's Degree	12,578	13,628	1,050	0.9
Master's Degree or more	8,142	9,833	1,691	2.1

# EDUCATIONAL ATTAINMENT OF THE CIVILIAN LABOR FORCE

When looking at those actually participating in the labor force, we see higher levels of educational attainment than in the overall population. Much like the region's working-age population, the number of people in the civilian labor force in Berkshire with a Bachelor's Degree or higher is increasing while the number with a High School Degree or less is shrinking. By 2008-2010, 30.2 percent of the labor force in Berkshire had a Bachelor's Degree or higher, trailing the 41.2 percent in Massachusetts. However, 61.9 percent of the civilian labor force in Berkshire had completed at least some post-secondary education (Some College or higher). This trailed the nearly 68 percent of the Massachusetts labor force with some post-secondary education but was nearly the same as the 61.8 percent nationwide. While post-secondary educational attainment increased over the course of the decade, the most common level of educational attainment among the civilian labor force in Berkshire continued to be a High School Degree (30.7 percent in 2008-2010). While this exceeded both state and national shares, the share of individuals with less than a High School Degree in Berkshire (7.3 percent) was much smaller than it was statewide and nationally.

**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

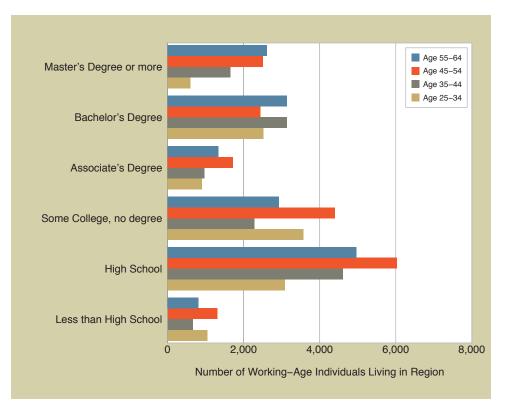
## Growth of Civilian Labor Force Population by Educational Attainment in Berkshire

	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Less than High School	6,167	4,374	-1,793	-3.7
High School Graduate	18,451	18,345	-106	-0.1
Some College, no degree	13,019	14,264	1,245	1.0
Associate's Degree	4,985	4,689	-296	-0.7
Bachelor's Degree	9,393	10,768	1,375	1.5
Master's Degree or more	6,336	7,301	965	1.6

### EDUCATIONAL ATTAINMENT BY AGE GROUP IN BERKSHIRE (2008-2010)

If we look at Berkshire's population by both age and education, we get an understanding of the workers who will be replacing the baby boomers. As the baby boomers have aged, 45-54-year-olds have become the largest age cohort in four of the six educational attainment groups. The exceptions are for those with a Bachelor's Degree or Master's Degree. As the boomers continue to near retirement age and, over time, leave the labor force, nearly every educational category faces a potential shortfall of workers. For example, in 2008-2010, there were over 1,700 people with an Associate's Degree between the ages of 45 and 54 in Berkshire but only 900 between the ages of 25 and 34. The difference of 800 individuals is equivalent to 47.6 percent of the 45-54-year-olds who may need to be replaced as they leave the workforce. A similar potential shortfall of working-age individuals exists for people with a High School Degree (2,940, or 48.8 percent). However, these gaps may actually be much smaller, since the educational requirements for most industries and occupations have been increasing, and some positions that have traditionally been filled by people with a High School Degree 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.

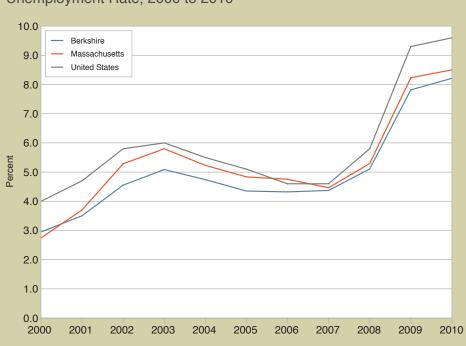


### UNEMPLOYMENT RATE TRENDS

During the Great Recession, the unemployment rate nationwide increased sharply. Beginning the decade at 2.9 percent, the unemployment rate of Berkshire climbed to nearly 5.1 percent in 2003 before declining to slightly below 4.4 percent in 2007. In the Great Recession, the region's unemployment rate jumped to 8.2 percent. While the unemployment rate remains elevated, it has consistently remained below both the state's and the nation's rates. The unemployment rate in Berkshire is currently the third lowest among all regional labor markets in Massachusetts.

**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-seasonallyadjusted unemployment rate.



### Unemployment Rate, 2000 to 2010

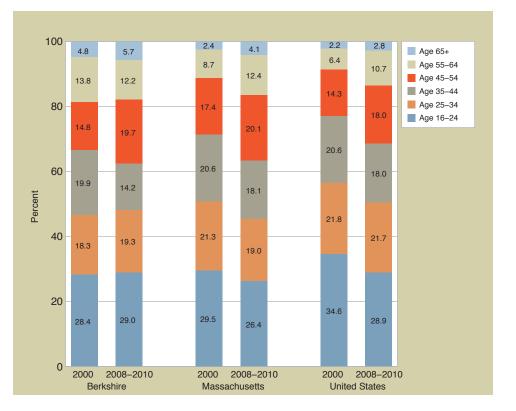
Berkshire Unemployn	nent			
	2000	2010	Relative Change	Annual Growth Rate (Percent)
Unemployed	2,068	6,039	3,971	11.3
Employed	68,092	67,492	-600	-0.1
Civilian Labor Force	70,160	73,530	3,370	0.5
Unemployment Rate	2.9	8.2	-	-

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

While only 31.5 percent of the civilian labor force in Berkshire was 34 years or younger at the end of the decade, nearly 50 percent of the region's unemployed was 34 years or younger. This was up from 46.7 percent at the beginning of the decade, despite little change in the share of the civilian labor force aged 34 or younger. As such, 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 unemployed among age cohorts (29.0 percent) but made up the second smallest age cohort in the civilian labor force (behind those age 65 and older), at only 14.1 percent. Disproportional unemployment among the young also occurs in Massachusetts and the United States.

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

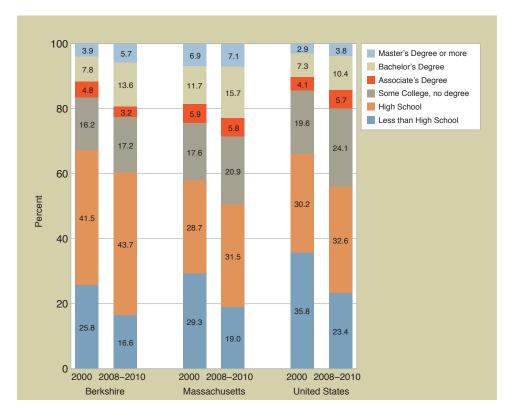
**Note:** Unemployed are individuals age 16 or older not employed and actively looking for work.



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

More than 60 percent of those unemployed in Berkshire were people with a High School Degree or less in 2008-2010, well above the share in both Massachusetts (49.5 percent) and the United States (56.0 percent). This was down from 67.3 percent in 2000, as the share of the unemployed rose for most educational attainment levels above less than a High School Degree over the course of the decade. However, people with lower levels of education still tend to be disproportionately represented among the unemployed. For example, those with a High School Degree accounted for the 43.7 percent of the unemployed in Berkshire in 2008-2010, but they were only 30.7 percent of the civilian labor force. Similarly, those with less than a High School Degree accounted for 16.6 percent of unemployed but just 7.3 percent of the civilian labor force.

**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 IN BERKSHIRE (2008-2010)

Very few people in the Berkshire region commute out of the region for work: 90.8 percent of the region's employed residents work in the region. For the small share who do commute, the Pioneer Valley region is the most common destination (5.2 percent of all workers who live in Berkshire), while a smaller share (1.8 percent) commute to the state of New York. Berkshire attracts a larger number into the region for employment. Of those employed in Berkshire, only 83.3 percent are also residents of the region. Nearly half of the inbound commuters come from Pioneer Valley (9.4 percent of all workers in Berkshire), with the second largest share coming from the state of New York (4.6 percent). As such, Berkshire is a net importer of workers, with 4,700 more employees commuting into the region than residents commuting out of the region. In fact, Berkshire is the only regional labor market outside of Greater Boston (Boston/Metro North and Metro South/West) that is a net importer of workers.

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

	Number	Percent of Total
Total number of employed persons living in Berkshire	53,061	100.0
who work in:		
Berkshire	48,167	90.8
Pioneer Valley	2,762	5.2
Other parts of Massachusetts	224	0.4
New York	958	1.8
Vermont	338	0.6
Connecticut	335	0.6
Other places outside Massachusetts	277	0.5
Total number of persons working in Berkshire	57,834	100.0
who live in:		
Berkshire	48,167	83.3
Pioneer Valley	5,431	9.4
Other parts of Massachusetts	282	0.5
New York	2,681	4.6
Vermont	764	1.3
Connecticut	255	0.4
Other places outside Massachusetts	254	0.4
Net In-Commuting (Number of Persons Employed in Region Minus Number of Persons Living in Region)	4,773	-

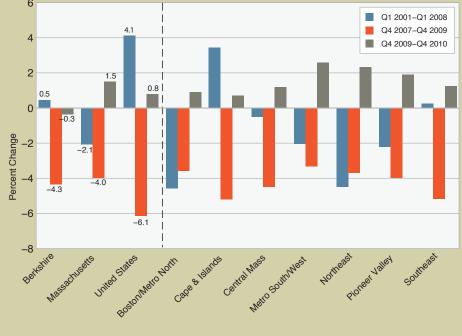
### **EMPLOYMENT TRENDS**

Along with being the smallest regional labor market by share of the state's residential population (1.8 percent), Berkshire also has the smallest share of the state's employment: 1.9 percent, or roughly 59,700 jobs. Over the past decade, the region's employment situation has been somewhat different from the state's. Berkshire was one of three regions to actually gain jobs before the Great Recession, growing a modest 0.5 percent between the first quarters of 2001 and 2008 (compared with a loss of 2.1 percent in Massachusetts). The employment loss in both the region and the state was more modest than in the United States during the Great Recession, but the region's losses slightly exceeded the state's (4.3 percent versus 4.0 percent). In the first year of recovery (Q4 2009 to Q4 2010), Berkshire was the only region to see employment continue to decrease. Falling by 0.3 percent, the region lagged far behind the labor market recoveries in Massachusetts (a gain of 1.5 percent) and the United States (a gain of 0.8 percent).

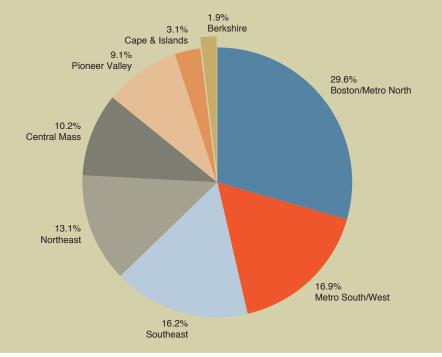
**Source:** US Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) and Massachusetts Executive Office of Labor and Workforce Development ES-202.

**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 and Leisure & Hospitality vary considerably across regions.





Distribution of Employment Across Regional Labor Markets, Q4 2010



## DEMOGRAPHIC CHARACTERISTICS OF THE POPULATION EMPLOYED IN BERKSHIRE

Because Berkshire's employed residential population makes up 83.3 percent of its workforce, the demographic characteristics of those employed in the region are fairly similar to those of its residents. Over the past decade, the region employed more immigrants, and the number of native-born employees declined. The region's workers also became more diverse from growth in Black, Asian, and Hispanic employees, with the number of Asian and Hispanic employees more than doubling in the past decade. And much like the residential population of Berkshire, there is a growing concentration of older employees. Berkshire has also seen increasingly higher levels of educational attainment among employees, but a High School Degree continues to be the most common level of educational attainment 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.

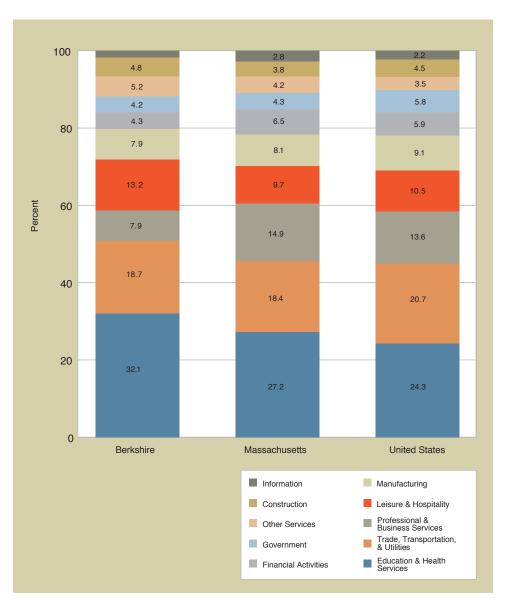
	2000	2008-2010	Absolute Change	Annual Growth Rate (Percent)
Employed Population	60,038	57,834	-2,204	-0.4
Gender	,	,	,	
Male	29,927	27,716	-2,211	-0.8
Female	30,111	30,118	-, 7	0.0
Nativity	,	, -		
Native Born	57,825	53,930	-3,895	-0.8
Immigrant	2,213	3,904	1,691	6.5
Race/Ethnicity				
White, non-Hispanic	57,756	52,816	-4,940	-1.0
Black, non-Hispanic	748	1,208	460	5.5
Asian, non-Hispanic	367	872	505	10.1
Hispanic	755	1,749	994	9.8
Other race, non-Hispanic	412	1,189	777	12.5
Age				
Age 16-24	6,940	7,336	396	0.6
Age 25-34	11,613	9,776	-1,837	-1.9
Age 35-44	15,645	11,505	-4,140	-3.4
Age 45-54	15,902	15,281	-621	-0.4
Age 55-64	7,445	10,725	3,280	4.1
Age 65+	2,493	3,211	718	2.9
Educational Attainment				
Less than High School	5,854	3,768	-2,086	-4.8
High School Graduate	18,711	16,612	-2,099	-1.3
Some College, no degree	13,500	14,557	1,057	0.8
Associate's Degree	5,410	5,122	-288	-0.6
Bachelor's Degree	10,149	10,730	581	0.6
Master's Degree or more	6,414	7,045	631	1.0

## DISTRIBUTION OF EMPLOYMENT BY SUPERSECTOR (Q4 2010)

The largest sector of employment in Berkshire is Education & Health Services. Accounting for 32.1 percent of the jobs in the region, the sector is larger than it is both statewide and nationally. Compared with the state, the region's employment is also slightly more concentrated in the Trade, Transportation, & Utilities supersector, but that supersector is proportionately smaller than in the United States. Together these two sectors account for more than 50 percent of the region's employment, which is much higher than the 45 percent share that applies 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, Berkshire has higher employment concentrations than the state and the nation in Leisure & Hospitality, 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 supersectors.

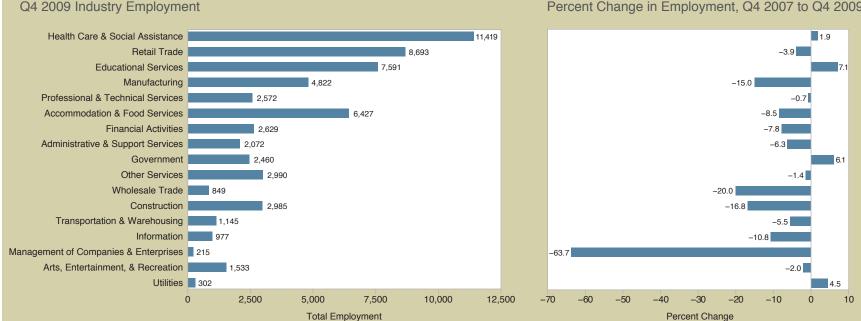


### CHANGES IN EMPLOYMENT DURING THE ECONOMIC DOWNTURN BY MAJOR **INDUSTRY: BERKSHIRE**

While Berkshire lost jobs in a number of industries between the fourth quarters of 2007 and 2009, four industries were able to avoid losses. The largest employment gains came from Educational Services, which added over 500 jobs to increase employment by 7.1 percent. The gains were mostly in the Colleges & Universities sub-industry (350 jobs). Health Care & Social Assistance, the largest industry in the region, also increased employment by 1.9 percent and added over 200 jobs. Government and Utilities added 150 jobs. These gains were more than offset by the 1,400-plus jobs lost in the industries hit hardest by the Great Recession: Manufacturing (-15.0 percent) and Construction (-16.8 percent). Further steep job cuts in Retail Trade (-3.9 percent), Management of Companies & Enterprises ( -63.7 percent), and Accommodation & Food Services (-8.5 percent) resulted in an additional loss of more than 1,300 jobs. In total, the region lost over 2,700 jobs between 2007 and 2009, a 4.3 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.



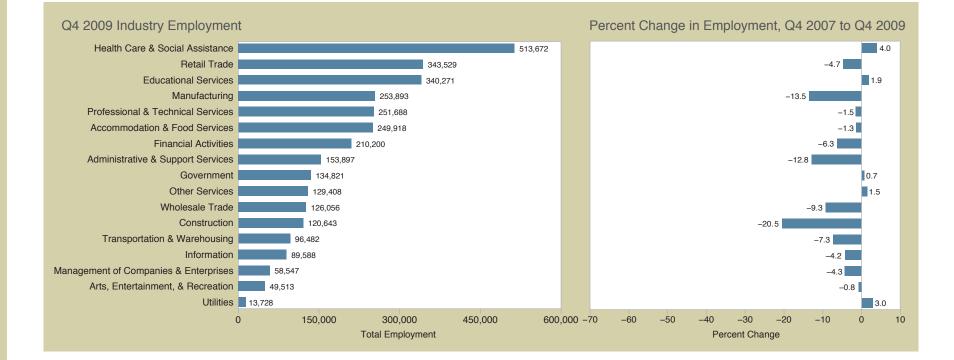
### Percent Change in Employment, Q4 2007 to Q4 2009

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

Massachusetts fared slightly better in the downturn than did Berkshire. The state's strongest employment gains 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 Educational Services (1.9 percent) were offset by significant losses in Administrative & Support Services (–12.8 percent), Manufacturing (–13.5 percent), and Construction (–20.5 percent). Within the Trade, Transportation, & Utilities supersector, the state experienced large losses in two major industries: Retail Trade (–4.7 percent) and Wholesale Trade (-9.3 percent). However, Massachusetts industries did not experience job losses as steep as did their Berkshire counterparts and 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 Berkshire in the downturn between 2007 and 2009 (-4.3 percent).

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

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

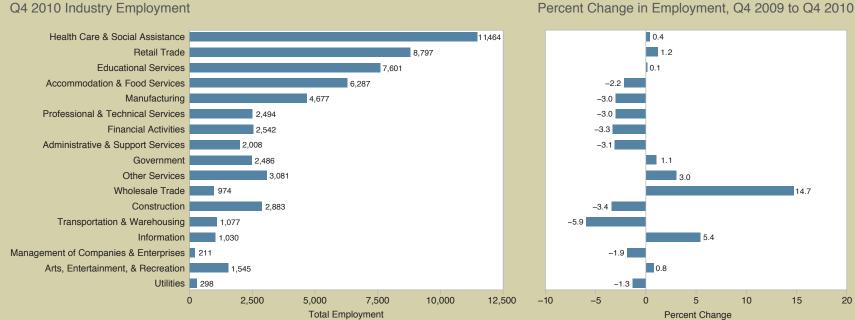


## INDUSTRIES DRIVING THE RECOVERY: BERKSHIRE

While most regional labor markets started to recover jobs between the fourth quarters of 2009 and 2010, Berkshire continued to shed jobs in a number of industries. In total, nine industries declined in employment, with the largest job losses in Construction (102 jobs, or -3.4 percent), Accommodation & Food Services (140 jobs, or -2.2 percent), and Manufacturing (145 jobs, or -3.0 percent). Some of these losses were offset by gains in eight industries, ranging from an increase of 10 jobs in Educational Services (0.1 percent) to 125 jobs in Wholesale Trade (14.7 percent). However, the job gains were not enough to offset the losses, and Berkshire shed a total of 208 jobs between the fourth quarters of 2009 and 2010, for a 0.3 percent decline.

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

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



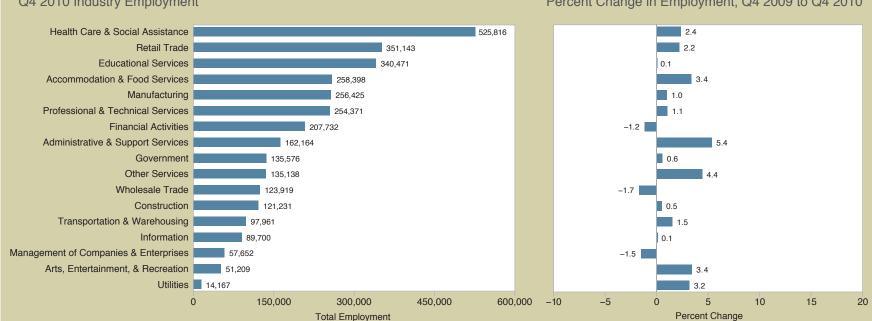
### Q4 2010 Industry Employment

### INDUSTRIES DRIVING THE RECOVERY: MASSACHUSETTS

Massachusetts as a whole has had a broad-based recovery across industries. Between the fourth quarters of 2009 and 2010, the state saw employment increases ranging from 0.1 percent in Information to 5.4 percent in Administrative & Support Services. In total jobs, the Health Care & Social Assistance industry added over 12,100 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 (3,300 jobs), and Hospitals (5,600 jobs). During the recovery, the state has experienced slight declines in only three industries: Financial Activities, Wholesale Trade, and Management of Companies & Enterprises. As a result, employment growth between the fourth quarters of 2009 and 2010 was 1.5 percent (47,000 jobs).

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

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



#### Q4 2010 Industry Employment

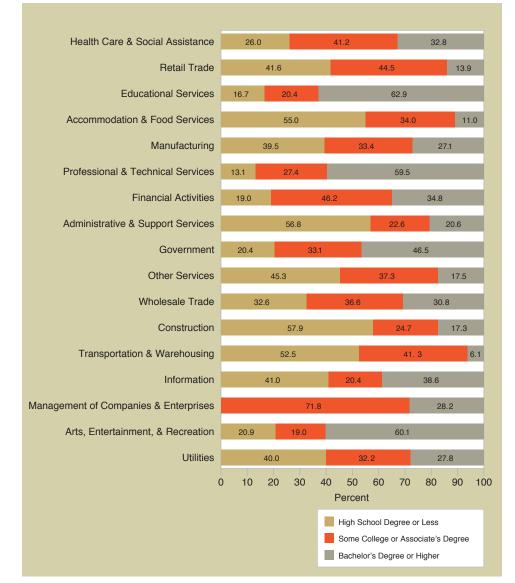
#### Percent Change in Employment, Q4 2009 to Q4 2010

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

While more workers in Berkshire obtained a Bachelor's Degree or higher over the past decade, the most common level of educational attainment among the region's employees is a High School Degree. As a result, the most common educational attainment level of employees across industries tends to be a High School Degree or less. In 2008-2010, nine of the 17 major industries in the region had a workforce where the largest share of employees had a High School Degree or less. Only four industries in Berkshire had a Bachelor's Degree or higher as the largest category. In a few industries, there was a clear majority with a High School Degree or less, such as Construction, or a clear majority of employees with a Bachelor's Degree or higher, such as Educational Services. However, in a number of industries, the educational attainment of employees was somewhat more evenly distributed, including 12 industries having 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.

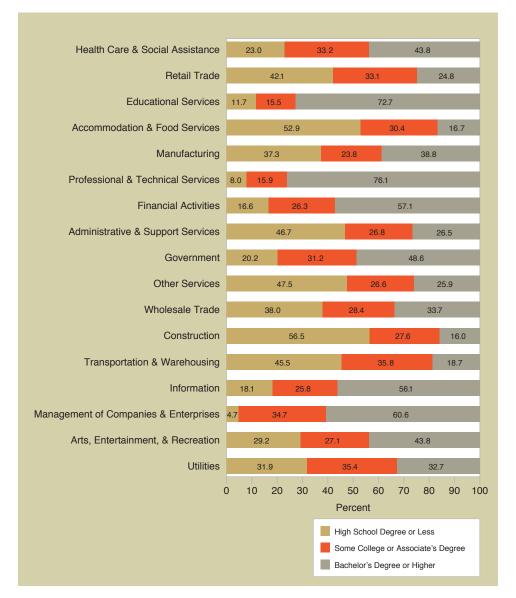


## EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR INDUSTRY IN MASSACHUSETTS (2008-2010)

The educational attainment across industries in Massachusetts was much higher than in Berkshire in 2008-2010. In Massachusetts, nine 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 (15 of the 17), the share of employees with a Bachelor's Degree or higher was greater than their industrial counterparts in Berkshire, save for Construction and Arts, Entertainment, & Recreation. In comparison, only five industries in Massachusetts had a higher share of employees with a High School Degree or less than did Berkshire. With a less even distribution of educational attainment across industries, Massachusetts also had lower shares of employees with Some College education or an Associate's Degree in a number of industries (12 of 17). However, the share of employees with a post-secondary education (Some College or Higher) in Massachusetts was higher than in Berkshire in 12 of the 17 major industries.

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

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

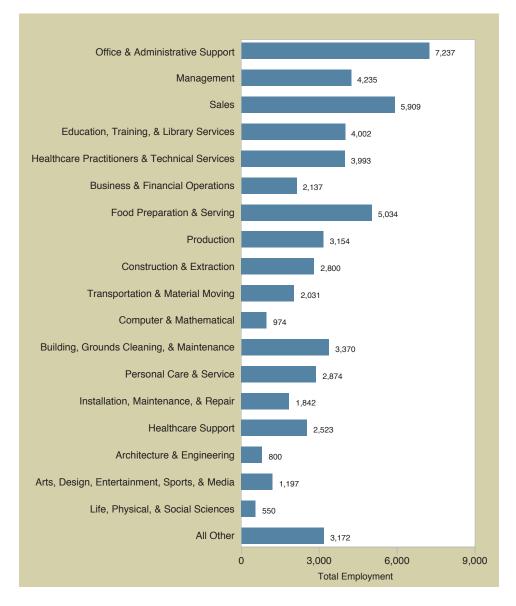


### EMPLOYMENT BY MAJOR OCCUPATION: BERKSHIRE (2008-2010)

Industries are where people work, and occupations are what people do. Looking at the occupational composition of Berkshire helps to reveal what types of workers are in demand by businesses. In Berkshire, Office & Administrative Support is the largest occupational group, accounting for 12.5 percent of the region's jobs. However, the number of jobs in the occupation in 2008-2010 was actually fewer than the number in 2000. Sales occupations, the second largest occupational group in the region, have also decreased over the course of the decade. But Food Preparation & Serving, the third largest occupation, was one of the fastest growing occupations in Berkshire during the same period. Occupations that are closely associated with growing industries have increased; one example is Healthcare Practitioners & Technical Services, which has high employment concentrations in the Health Care & Social Assistance industry. 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. See the on-line Data Appendix for occupational employment trends.

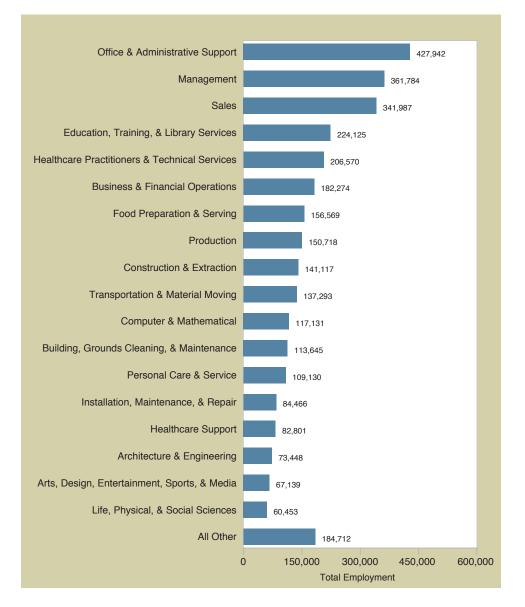


## EMPLOYMENT BY MAJOR OCCUPATION: MASSACHUSETTS (2008-2010)

Massachusetts's occupational composition, much like its industrial composition, is somewhat different from that of Berkshire. Office & Administrative Support is the largest occupation group, as in Berkshire, and accounts for over 13 percent of employment. However, the state has much stronger employment concentrations in Management, Business & Financial Operations, and Computer & Mathematical occupations. Berkshire has stronger occupational concentrations in Food Preparation & Serving and in Building, Grounds Cleaning, & Maintenance. Occupational employment trends over the past decade were quite different in Berkshire and in Massachusetts. For example, in Berkshire only seven of the 19 occupational groups increased employment over the decade, while 11 of them expanded in Massachusetts. Comparing occupational growth across geographies, we see that 14 of the 19 occupations in Massachusetts experienced stronger growth or slower declines than their occupational counterparts in Berkshire between 2000 and 2008-2010.

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. 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 this difficult to do for small geographic areas. 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 Berkshire). In the Outside Greater Boston labor market, some occupations 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 Services jobs are in the Education & Health Services supersector. In contrast, Management occupations account for at least 10 percent of employment in nearly every supersector. 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. With stronger concentrations in Management occupations, Business & Financial Operations, Professional & Business Services, and the Financial Activities sector, the labor market composition of Metro South/West and Boston/Metro North is fairly similar. When combined, these two regions account for 46.4 percent of the state's employment. In comparison, the labor markets outside of the Greater Boston region (Berkshire, Pioneer Valley, Central Mass, Northeast, Southeast, and the Cape & Islands) tend to have stronger concentrations in sectors such as Trade, Transportation, & Utilities, Leisure & Hospitality, and/or Manufacturing, and in occupations such as 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 nearly 45 percent of employment in the Education & Health Services supersector comes from two occupations: Education, Training & Library Services and Healthcare 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 roughly 20 percent or more of all employment within every supersector (ranging from 18.0 percent in Leisure & Hospitality to 47.7 percent in 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. With stronger concentrations in Management occupations, Business & Financial Operations, Professional & Business Services, and the Financial Activities Sector, the labor market composition of Metro South/West and Boston/Metro North is fairly similar. When combined these two regions account for 46.4 percent of the state's employment. In comparison, the labor markets outside of the Greater Boston region (Berkshire, Pioneer Valley, Central Mass, Northeast, Southeast, and the Cape & Islands) tend to have stronger concentrations in sectors such as Trade, Transportation, & Utilities, Leisure & Hospitality, and/or Manufacturing, and in occupations such as 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)

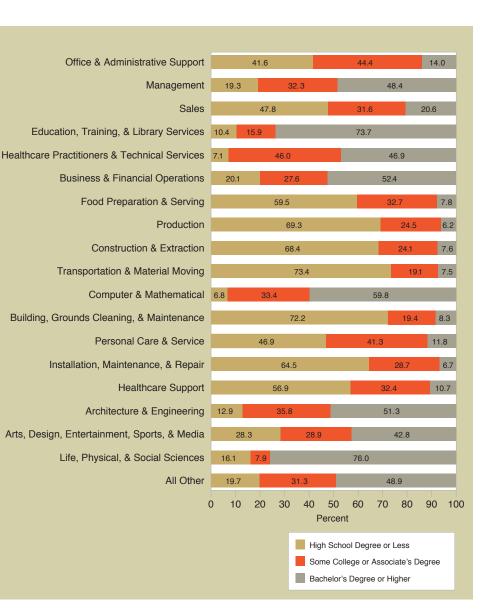
	Education & Health Services	Trade, Transportation, & Utilities	Professional & Business Services	Manufacturing	Leisure & Hospitality	Financial Activities	Construction	Other	All Industries
Office & Administrative Support	11.7	18.9	15.3	11.1	5.9	30.2	5.9	14.7	14.0
Management	7.2	5.4	11.0	14.3	12.1	17.5	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 BERKSHIRE (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, 44.4 percent of employees in Berkshire had Some College education or an Associate's Degree, and a slightly smaller percentage (41.6 percent) had a High School Degree or less. By comparison, 73.7 percent of employees in Education, Training, & Library Services had a Bachelor's Degree or higher, while 73.4 percent of employees in Transportation & Material Moving had a High School Degree or less. Educational attainment also gives some indication of skill requirements, but it is not a perfect proxy for skill. Some occupations require significant training or other certifications. For example, in Installation, Maintenance, & Repair occupations, 64.5 percent of employees have a High School Degree or less, but these occupations often require apprenticeships, professional certifications, or significant on-thejob 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.

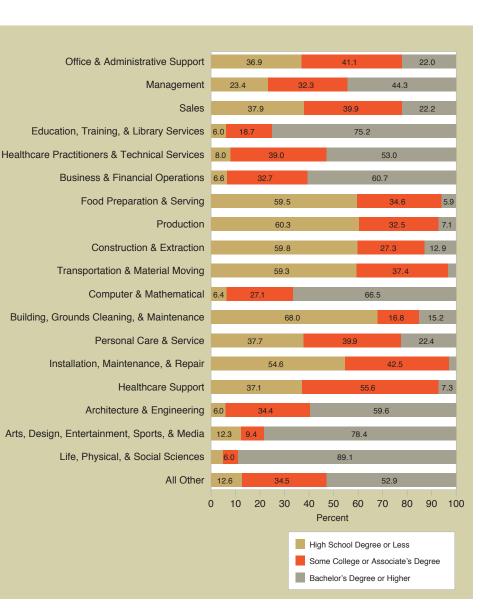


# EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR OCCUPATION IN BERKSHIRE (2008-2010)

Over the past decade, the share of employees with a Bachelor's Degree or higher increased in 14 of the 19 major occupations in Berkshire. For example, the share of Business & Financial Operations employees with a Bachelor's Degree or higher grew by over 8 percentage points to reach 60.7 percent in 2008-2010. Even occupations with a mix of educational levels, such as Office & Administrative Support, saw declines in the share of employees with a High School Degree or less and growth in the share of employees with a Bachelor's Degree or higher. The educational attainment of employees even increased in occupations where workers traditionally have less education, such as Production. As such, eight occupations in the region had a majority of employees with a Bachelor's Degree or higher in 2008-2010, while six occupations had a majority of employees with a High School Degree or less. Berkshire also employs a large number of workers with Some College education or an Associate's Degree; a quarter or more of employees in 15 of the 19 occupations in the region had such educational levels in 2008-2010.

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.

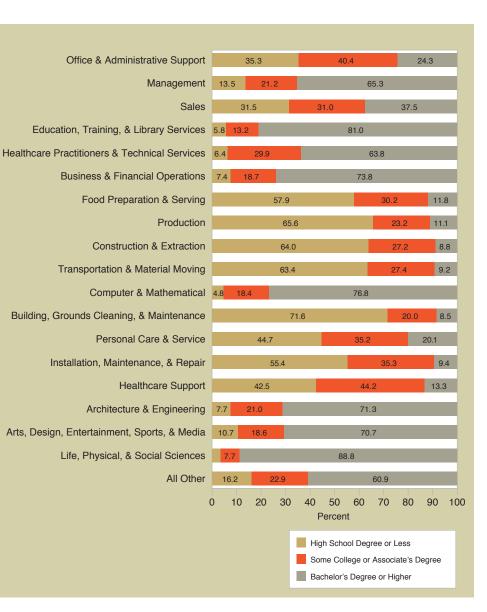


## EDUCATIONAL ATTAINMENT OF EMPLOYEES BY MAJOR OCCUPATION IN MASSACHUSETTS (2008-2010)

Despite the increasing levels of educational attainment across occupations in Berkshire, the region still tends to have lower levels of educational attainment compared with Massachusetts. Of the 19 major occupation groups in Massachusetts, 14 have greater shares of employees with a Bachelor's Degree or higher compared with those in Berkshire. These include occupations that have a majority of employees with high levels of education (e.g., Management), mixed educational attainment (e.g., Office & Administrative Support and Sales), and predominantly lower education levels (e.g., Food Preparation & Serving). However, Berkshire has higher concentrations of employees with Some College or an Associate's Degree in 16 of the 19 major occupations. As a result, only nine occupations in Massachusetts have higher shares of employees with at least some post-secondary education (Some College or higher) than in Berkshire.

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.

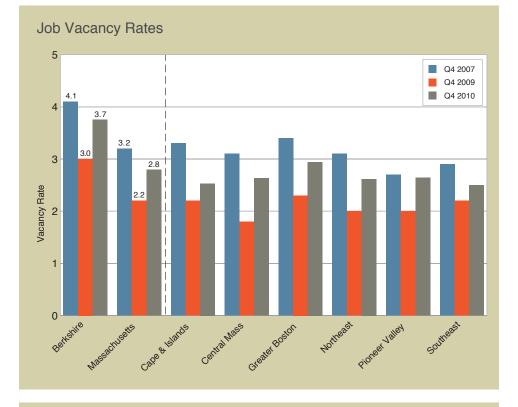


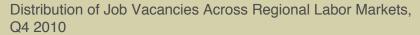
#### JOB VACANCIES IN THE GREAT RECESSION AND RECOVERY

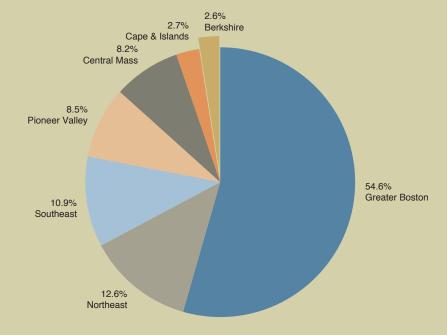
Job vacancies exist even in a healthy labor market due to turnover and constant flux in the labor market. As businesses expand, they need to hire individuals who meet specific skill requirements, and employees with skills that are in demand leave jobs for better positions. As the economy enters a downturn, job vacancies decline due to an overall decline in labor demand, there is an increase in the number of applicants available to fill positions, and there is less turnover as employees stay longer in jobs. At the end of 2007, preceding the Great Recession, the job vacancy rate in Berkshire was 4.1 percent, the highest of all regional labor markets. This high vacancy rate persisted through the Great Recession, then declined to 3.0 percent by the end of 2009. It then rose to 3.7 percent by the end of 2010, as the economy started to recover. As of the fourth quarter of 2010, Berkshire accounted for 1.9 percent of the state's employment but 2.6 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 the Northeast, 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 VACANCIES AND VACANCY RATES BY MAJOR OCCUPATION IN BERKSHIRE (Q4 2010)

At the end of 2010, 68.0 percent of the job vacancies in Berkshire were concentrated in four occupations: Sales, Office & Administrative Support, Food Preparation & Serving, and Healthcare Practitioners & Technical. Sales positions accounted for the largest share of vacancies (38.4 percent) and the highest vacancy rate (13.4 percent) of all occupations in Berkshire. However, some of these positions, especially in retail, are seasonal in nature. Other occupations with above-average vacancy rates included Healthcare Practitioners & Technical, Computer & Mathematical, Transportation & Material Moving, and Building, Grounds Cleaning, & Maintenance occupations. Some occupational groups such as Office & Administrative Support accounted for a large number of vacancies (10.2 percent of the region's total) but had a relatively low vacancy rate (2.2 percent). Not surprisingly, the vacancy rates in occupations hit hardest by the Great Recession, such as Construction & Extraction (0.3 percent), were low in Berkshire.

**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	2,017	100.0	3.7
Sales	775	38.4	13.4
Office & Administrative Support	205	10.2	2.2
Food Preparation & Serving Related	193	9.6	2.9
Business & Financial Operations	16	0.8	0.8
Healthcare Practitioner & Technical	199	9.9	4.7
Computer & Mathematical	*	*	4.7
Management	31	1.5	1.1
Healthcare Support	72	3.6	2.4
Transportation & Material Moving	95	4.7	4.5
Education, Training & Library	20	1.0	0.4
Personal Care & Service	*	*	1.1
Production	69	3.4	1.9
Architecture & Engineering	*	*	1.6
Building, Grounds Cleaning, & Maintenance	110	5.5	4.3
Arts, Design, Entertainment, Sports & Media	19	0.9	2.1
Community & Social Services	34	1.7	2.5
Life, Physical, & Social Services	*	*	7.1
Installation, Maintenance & Repair	33	1.6	1.8
Protective Service	15	0.7	1.3
Construction & Extraction	*	*	0.3

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

Similar to Berkshire, the largest number of job vacancies and the highest vacancy rate in Massachusetts are in Sales occupations. However, Massachusetts has a lower vacancy rate and share of vacancies coming from Sales occupations, relative to Berkshire, and much higher vacancy rates and shares in Business & Financial Operations. The state also has much smaller shares of vacancies and lower vacancy rates in Healthcare Practitioner & Technical, Production, and Building, Grounds Cleaning, & Maintenance occupations compared with Berkshire. However, Massachusetts tends to have a higher concentration of vacancies and vacancy rates in Management, Healthcare Support, and Education, Training, & Library 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.

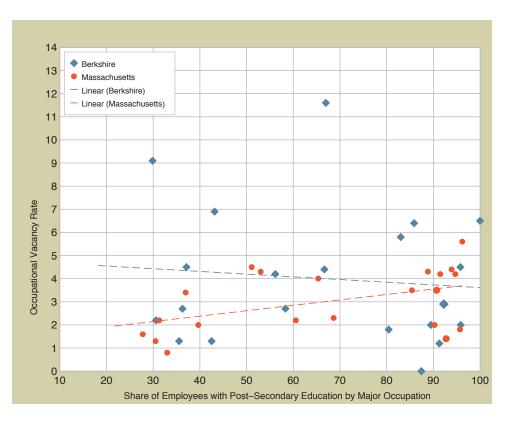
	Number of Vacancies	Share of Vacancy (Percent)	Job Vacancy Rate (Percent)
Total	78,589	100.0	2.8
Sales	16,584	21.1	5.2
Office & Administrative Support	8,650	11.0	1.6
Food Preparation & Serving Related	8,195	10.4	3.1
Business & Financial Operations	6,079	7.7	3.6
Healthcare Practitioner & Technical	5,249	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 the Great Recession, there was a positive correlation between educational attainment and job vacancies in Massachusetts. That is, occupations with workers who had higher levels of educational attainment had higher vacancy rates. This is not surprising, as some occupations that have larger shares of employees with a High School Degree or less can sometimes be filled by a number of individuals with little training and at low cost 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, has led to increased vacancies and demand for employees that can fill such positions. However, the relationship between post-secondary educational attainment and vacancies did not exist in Berkshire due to its occupations tending to have low shares of employees with post-secondary education, stronger employment concentrations in sectors with lower educational attainment (such as Leisure & Hospitality and Trade, Transportation, & Utilities), and higher vacancy rates in these low-educational-attainment industries.

**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 Berkshire in Q4 2007 proxy vacancy rates in a peak labor market and educational attainment data by occupation in Berkshire 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.

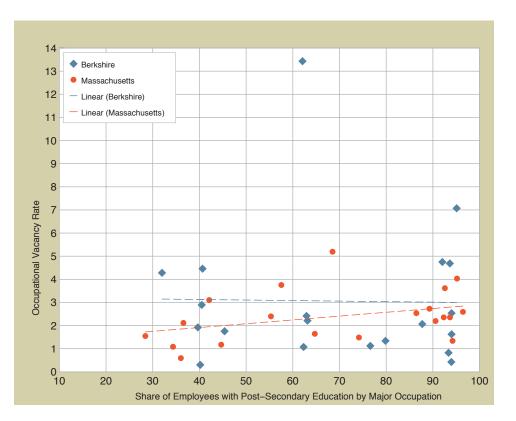


## COMPARING VACANCY RATES AND EDUCATIONAL ATTAINMENT: RECOVERING LABOR MARKET

During the recession, the relationship between post-secondary educational attainment and vacancies weakened somewhat statewide and remained nonexistent in Berkshire. In Massachusetts, the relationship weakened as vacancy rates for occupations with large shares of post-secondary-educated workers bounced back modestly in the early stages of the recovery. However, a number of the occupations that employ a lower share of post-secondary-educated labor have continued to see vacancy rates at about 2.0 percent pre- and postrecession, indicating that the statewide labor market is continuing to demand more post-secondary educated labor in the recovery. In Berkshire, with the recovery yet to take hold, some occupations that employ the largest shares of post-secondary educated labor (e.g., Business & Financial Operations, Architecture & Engineering, and Education, Training, & Library occupations) had vacancy rates below 2 percent at the end of the first year of the recovery. At the same time, vacancy rates have remained elevated in some of the occupations that employ lower shares of post-secondary-educated labor (e.g., Building, Grounds Cleaning, & Maintenance and Transportation & Material Moving). Even as the region continued to lose jobs, occupations across the educational attainment spectrum had persistent vacancies.

**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 Berkshire in Q4 2010 proxy vacancy rates in a recovering labor market and educational attainment data by occupation in Berkshire 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 Berkshire, Massachusetts, and the United States. However, enrollment growth at each type of institution in Berkshire trailed that of both the state and the nation. There are no private two-year institutions in Berkshire, so enrollment at two-year institutions in the region lagged because of slow growth at public two-year institutions. In contrast, regional growth in full-time enrollment at less-than-two-year institutions trailed due to slower growth at private institutions. Enrollment at four-year institutions faltered mainly due to the much smaller enrollment growth at private institutions (0.1 percent) in the region, much lower than the growth experienced both statewide and nationally. However, growth in full-time enrollment at public four-year institutions in Berkshire (3.1 percent) outpaced both the state and national trends.

**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.

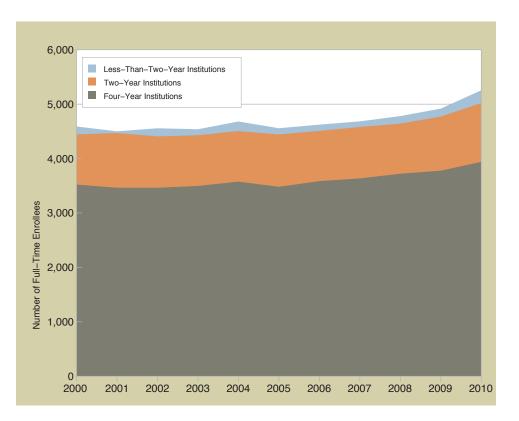
		Less-tha	n-Two-Year Insti	tutions	Two	-Year Institution	S	Fou	r-Year Institution	s
		Berkshire	MA	US	Berkshire	MA	US	Berkshire	MA	US
	Enrollment 2000	0	382	43,504	921	31,002	2,008,336	1,083	58,489	3,733,341
li	Enrollment 2010	0	316	42,117	1,080	44,278	2,922,622	1,467	73,940	4,904,272
Publ	Absolute Change	0	-66	-1,387	159	13,276	914,286	384	15,451	1,170,931
	Annual Growth Rate (Percent)	NA	-1.9	-0.3	1.6	3.6	3.8	3.1	2.4	2.8
	Enrollment 2000	146	3,427	138,260	0	5,796	259,071	2,440	125,640	1,863,471
ate	Enrollment 2010	235	9,609	277,341	0	5,457	457,134	2,473	153,139	3,000,813
Prive	Absolute Change	89	6,182	139,081	0	-339	198,063	33	27,499	1,137,342
	Annual Growth Rate (Percent)	4.9	10.9	7.2	NA	-0.6	5.8	0.1	2.0	4.9
	Enrollment 2000	146	3,809	181,764	921	36,798	2,267,407	3,523	184,129	5,596,812
_	Enrollment 2010	235	9,925	319,458	1,080	49,735	3,379,756	3,940	227,079	7,905,085
Total	Absolute Change	89	6,116	137,694	159	12,937	1,112,349	417	42,950	2,308,273
	Annual Growth Rate (Percent)	4.9	10.1	5.8	1.6	3.1	4.1	1.1	2.1	3.5

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

Four-year institutions account for most of the full-time enrollment in higher education institutions in Berkshire (75.0 percent in 2010). Enrollment at such institutions declined slightly between 2000 and 2005, before growing at an annual rate of 2.5 percent through the end of the decade. Enrollment at two-year institutions also did not grow until later in the decade and were actually at the same level in 2008 as they were in 2000. However, from 2008 to 2010, full-time enrollment at two-year institutions increased at an annual rate of 8.3 percent. Enrollment at less-thantwo-year institutions was more volatile over the course of the decade, starting out with nearly 150 full-time enrollments in 2000, then dropping to 31 in 2001, and ending the decade with 235 full-time enrollees. In recent years, enrollment at such institutions has jumped, growing at an annual rate of 31.6 percent between 2007 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 in less-than-two-year Institutions was 235 in 2010, compared with more than 3,900 at four-year institutions that year. All three areas combined represent the total number of enrollees in post-secondary educational institutions in Berkshire, of which there were more than 5,250 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

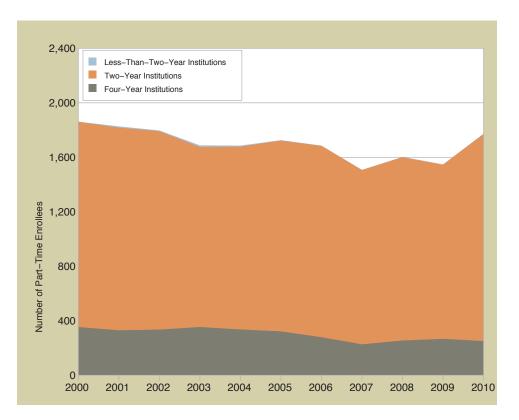
The majority of students enrolled part-time at post-secondary educational institutions are attending public two-year institutions. In Berkshire, part-time enrollment at public two-year institutions increased at a sluggish annual rate of 0.1 percent between 2000 and 2010. The region's enrollment lagged 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 Berkshire has declined over the past decade, while growing nationwide. A majority of part-time students at four-year institutions are enrolled in the region's public institutions; in contrast, the majority of part-time enrollments at fouryear institutions statewide are at private institutions.

		Less-than	-Two-Year Insti	tutions	Two	-Year Institutior	าร	Fou	Ir-Year Institutior	าร
		Berkshire	MA	US	Berkshire	MA	US	Berkshire	MA	US
	Enrollment 2000	0	25	31,407	1,507	48,506	3,509,639	309	22,160	1,045,388
<u>li</u>	Enrollment 2010	0	65	27,264	1,521	58,043	4,247,674	208	16,120	1,380,877
Public	Absolute Change	0	40	-4,143	14	9,537	738,035	-101	-6,040	335,489
	Annual Growth Rate (Percent)	NA	10.0	-1.4	0.1	1.8	1.9	-3.9	-3.1	2.8
	Enrollment 2000	1	1,522	31,827	0	3,536	66,870	45	27,425	476,690
ate	Enrollment 2010	0	2,633	44,382	0	1,554	61,006	43	19,155	775,694
Private	Absolute Change	-1	1,111	12,555	0	-1,982	-5,864	-2	-8,270	299,004
	Annual Growth Rate (Percent)	NA	5.6	3.4	NA	-7.9	-0.9	-0.5	-3.5	5.0
	Enrollment 2000	1	1,547	63,234	1,507	52,042	3,576,509	354	49,585	1,522,078
a	Enrollment 2010	0	2,698	71,646	1,521	59,597	4,308,680	251	35,275	2,156,571
Total	Absolute Change	-1	1,151	8,412	14	7,555	732,171	-103	-14,310	634,493
	Annual Growth Rate (Percent)	NA	5.7	1.3	0.1	1.4	1.9	-3.4	-3.3	3.5

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

While part-time enrollment in two-year institutions in Berkshire increased over the course of the past decade, it is mostly due to increases in recent years. Between 2000 and 2007, part-time enrollment in two-year institutions actually declined at an annual rate of 2.3 percent. But between 2007 and 2010, part-time enrollment increased, growing at an annual rate of 5.9 percent. In comparison, part-time enrollment at four-year institutions in Berkshire experienced an even steeper decline between 2000 and 2007 (6.2 percent) followed by a more modest increase in enrollments between 2007 and 2010 (3.4 percent). As a result, part-time enrollment at two-year institutions in Berkshire in 2010, up from 80.9 percent in 2000.

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

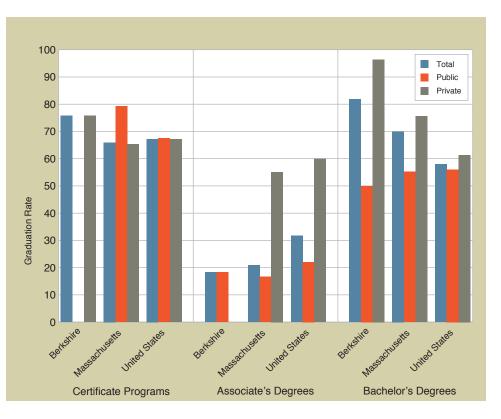


#### GRADUATION RATES BY TYPE OF DEGREE (2009)

Enrollment indicates 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, 81.9 percent of Berkshire's first-time full-time students who enrolled in Bachelor's Degree programs in 2003 had earned a Bachelor's Degree within six years, exceeding both the statewide and national graduation rates. But the six-year Bachelor's Degree graduation rate at public institutions (50.0 percent) was lower than at private institutions in the region, as well as lower than at public institutions in Massachusetts and the United States. The three-year Associate's Degree graduation rate at public institutions (18.3 percent) was fairly similar to the statewide rate but trailed that of the United States. The Certificate program graduation rate in Berkshire (75.8 percent) was based solely on private institutions and exceeded both statewide and national rates.

**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 (e.g., 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. From 2000 to 2010, the number of people earning Certificates, Associate's Degrees, and Bachelor's Degrees granted by institutions in Massachusetts and the United States increased, while Berkshire actually registered fewer program and degree completions in all three categories. In fact, Berkshire was the only regional labor market to produce fewer Certificates, Associate's Degrees and Bachelor's Degrees over the course of the decade. The region's decline in Associate's Degrees was driven by a drop in such degrees from public institutions, combined with slow growth in completions at private institutions. The decline in completions of Certificates and Bachelor's Degrees was the result of slumping completions at both public and private institutions. In comparison, both Massachusetts and the United States experienced completion growth at both private and public institution for all three post-secondary educational attainment categories.

**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		Ass	ociate's Degree	S	Bac	Bachelor's Degrees			
		Berkshire	MA	US	Berkshire	MA	US	Berkshire	MA	US		
	Completions 2000	83	2,273	298,282	247	7,487	471,339	327	12,718	811,076		
<u>ic</u>	Completions 2010	69	3,618	460,865	221	9,831	670,395	315	16,251	1,049,058		
Public	Absolute Change	-14	1,345	162,583	-26	2,344	199,056	-12	3,533	237,982		
	Annual Growth Rate (Percent)	-1.8	4.8	4.4	-1.1	2.8	3.6	-0.4	2.5	2.6		
	Completions 2000	143	5,221	258,503	116	3,812	135,604	600	29,658	431,412		
rivate	Completions 2010	127	8,195	430,685	125	4,366	249,258	577	35,972	603,141		
Pri	Absolute Change	-16	2,974	172,182	9	554	113,654	-23	6,314	171,729		
	Annual Growth Rate (Percent)	-1.2	4.6	5.2	0.8	1.4	6.3	-0.4	1.9	3.4		
	Completions 2000	226	7,494	556,785	363	11,299	606,943	927	42,376	1,242,488		
Total	Completions 2010	196	11,813	891,550	346	14,197	919,653	892	52,223	1,652,199		
1 D	Absolute Change	-30	4,319	334,765	-17	2,898	312,710	-35	9,847	409,711		
	Annual Growth Rate (Percent)	-1.4	4.7	4.8	-0.5	2.3	4.2	-0.4	2.1	2.9		

# EDUCATIONAL INSTITUTIONS AWARDING THE MOST DEGREES IN BERKSHIRE (2010)

Two public institutions and three private institutions in Berkshire granted post-secondary degrees in 2010. Two-thirds of the region's Certificates came from the private Mildred Elley School, with the remaining one-third coming from Berkshire Community College. Berkshire Community College also produced over 60 percent of the region's Associate's Degrees in 2010, while the only other institution to grant such degrees was Bard College at Simon's Rock, a private institution. Bard College also produced about 50 Bachelor's Degrees in 2010, but the majority of such degree completions in Berkshire were at Williams College (58.9 percent). The Massachusetts College of Liberal Arts, the only public Bachelor's Degree granting institution in Berkshire, accounted for the remaining 35.3 percent of Bachelor's Degree completions in the region.

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

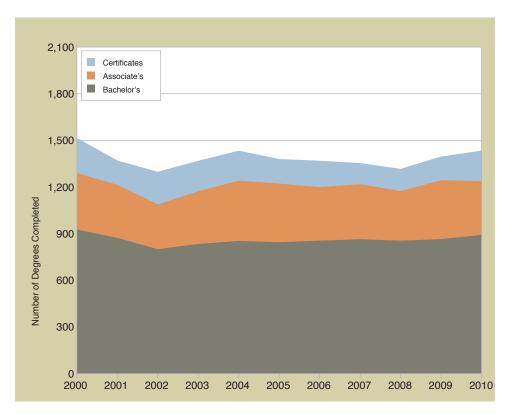
**Note:** The Charles H. McCann Technical School, a public less-than-two-year institution, also appears in the Integrated Post Secondary Education Data System as a Certificate-granting institution in Berkshire in 2010. However, the school is categorized as a "not primarily post-secondary education institution," as most of the institution is dedicated to K-12 education. These "not primarily post-secondary education institution Data System surveys prior to 2010. As a result, we have only limited enrollment and completion data for the Charles H. McCann Technical School over the course of the decade. To be consistent in comparing completions and enrollment over time, we dropped this institution from the enrollment, graduation, and completions section of the profile so as not to distort comparisons in growth over the course of the decade. See the on-line Data Appendix for a full list of degree completions by institution.

	Institution	Туре	Public or Private	Degrees Awarded	Share of Degree Type Completed in Region
ates	Mildred Elley School Inc.	< Two Years	Private	127	64.8
Certificates	Berkshire Community College	Two Year	Public	69	35.2
S	NA	_	_	_	NA
e's	Berkshire Community College	Two Year	Public	221	63.9
Associate's	Bard College at Simon's Rock	Four Year	Private	125	36.1
Asse	NA	-	-	-	NA
Š	Williams College	Four Year	Private	525	58.9
Bachelor's	Massachusetts College of Liberal Arts	Four Year	Public	315	35.3
ä	Bard College at Simon's Rock	Four Year	Private	52	5.8

### NUMBER OF DEGREE COMPLETIONS BY DEGREE TYPE: BERKSHIRE (2000-2010)

Adding up Bachelor's and Associate's Degrees and Certificates, the total number of people awarded a post-secondary degree by institutions in Berkshire declined at an annual rate of 0.6 percent between 2000 and 2010. In comparison, post-secondary completions increased at a rate of 2.5 percent in Massachusetts and 3.7 percent in the United States. While Associate's and Bachelor's Degree completions fell in the past decade, the decline largely occurred early in the decade. Between 2000 and 2002, Bachelor's Degree completions declined at an annual rate of 7.1 percent; this was followed by annual growth of 1.4 percent to 2010. Associate's Degrees, similarly, declined at an annual rate of 10.9 percent between 2000 and 2002, followed by 2.3 percent annual growth through the end of the decade. Certificate completions were more volatile over the course of the decade, beginning the decade with a high of 226 completions before oscillating over the years, reaching a decade low of 136 in 2008 and increasing to 196 in 2010.

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



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

In Berkshire, the increase in the number of Certificates granted mostly came in Health Sciences and Services. Health Sciences, the largest field of study, had the largest increase in completions, increasing the major's share of Certificate completion in the region from 33.2 percent in 2000 to 55.6 percent in 2010. While the Health Sciences field accounts for a larger share of Certificate completions in Berkshire than it does statewide, the regional annual growth of completions in this field actually trailed the statewide rate (3.8 percent versus 10.5 percent). The completion of Certificates in Services grew at the fastest pace in the region and more than doubled in the past decade, but that field of study accounted for a smaller share of Certificates than was the case statewide in 2010 (20.4 percent versus 33.7 percent). Services Certificates include a large range of areas of specialization, including Cosmetology, Law Enforcement, Construction Trades, Sports & Fitness Studies, Library Sciences, Social Work, Appliance Installation & Repair, Welding Technology, and Construction Equipment Operations. Growth rates in the completions of Certificates in Health Sciences and Services were offset by steep drops in the completion of Engineering & Computer Sciences, Legal, and Business Certificates.

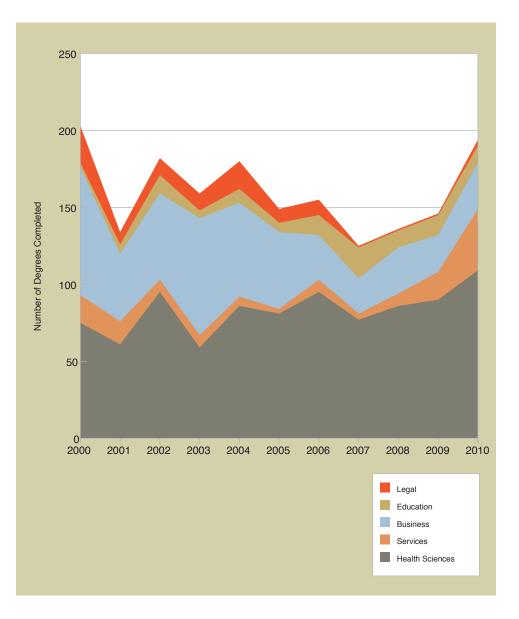
**Source:** National Center for Education Statistics, Integrated Post Secondary Education Data System.

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

		Berks	hire		Massachusetts				
	20	2000		10	20	00	2010		
Major Field of Study	Certificates Completed	Major's Share of Total (Percent)							
Health Sciences	75	33.2	109	64.0	2,080	27.8	5,638	47.7	
Services	18	8.0	40	17.0	2,479	33.1	3,984	33.7	
Engineering & Computer Sciences	23	10.2	2	0.8	1,013	13.5	752	6.4	
Business	83	36.7	30	12.1	709	9.5	513	4.3	
Arts, Humanities, & Social Sciences	0	0.0	0	0.0	271	3.6	424	3.6	
Legal	24	10.6	4	1.6	132	1.8	189	1.6	
Education	3	1.3	11	4.5	129	1.7	87	0.7	
Science & Mathematics	0	0.0	0	0.0	248	3.3	80	0.7	
Other	0	0.0	0	0.0	81	1.1	146	1.2	
Total	226	100.0	196	100.0	7,494	100.0	11,813	100.0	

### ANNUAL COMPLETIONS BY TOP FIVE CERTIFICATE MAJORS IN BERKSHIRE (2000-2010)

The number and composition of Certificates awarded by Berkshire institutions fluctuated considerably from year-to-year. Completions in the Services field were especially volatile, reaching a low of three in 2005 and a high of 40 in 2010. The Business and Legal fields of study were among the more common for graduates at the start of the decade, but they experienced a considerable drop in completions in the middle of the decade and never rebounded. In contrast, Health Sciences Certificates in the region grew at an annual rate of 3.8 percent between 2000 and 2010. However, this is largely due to an increase in Certificates in the field between 2007 and 2010, when completions increased at an annual rate of 12.3 percent. This growth, and the consistently large share of Certificates in Health Sciences, may potentially reflect an increasing demand for employees with such education and training from growing industries including Health Care & Social Assistance.



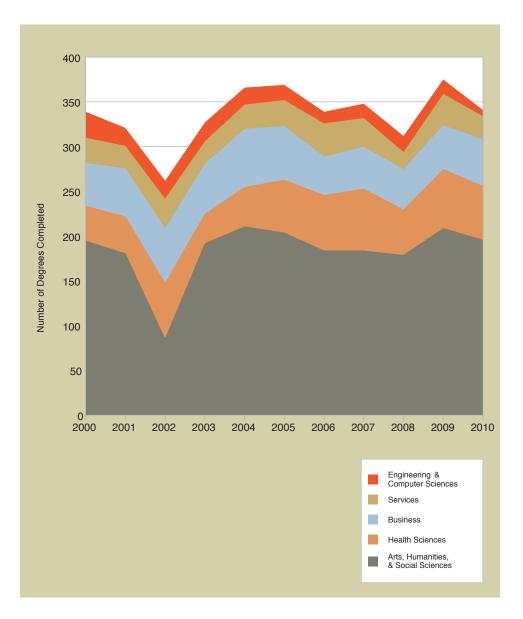
#### ASSOCIATE'S DEGREES AWARDED BY MAJOR FIELD OF STUDY (2000-2010)

Arts, Humanities, & Social Sciences was the largest field of study for students earning an Associate's Degree in the region. It accounted for 56.6 percent of all Associate's Degrees completed in Berkshire in 2010, and the 196 degrees completed in the field was virtually unchanged from the number of completions in 2000. Similarly, the number of Business and Services degree completions was little changed. The region experienced a steep drop in completions in the Science, Engineering, Technology, and Mathematics (STEM) fields of Engineering & Computer Sciences and Science & Mathematics. The only field of study with a notable increase in completions in Berkshire between 2000 and 2010 was Health Sciences, with an annual rate of growth of 4.4 percent (nearly the same rate as Massachusetts). In contrast, Massachusetts also saw Associate's Degree completions grow in Arts, Humanities, & Social Sciences, Services, Business, Education, Science & Mathematics, and Legal.

		Berks	hire			Massach	usetts	
	20	2000		10	20	2000		10
Major Field of Study	Associate's Completed	Major's Share of Total (Percent)						
Arts, Humanities, & Social Sciences	195	53.7	196	56.6	3,130	27.7	3,833	27.0
Health Sciences	39	10.7	60	17.3	2,302	20.4	3,559	25.1
Services	28	7.7	26	7.5	1,216	10.8	2,389	16.8
Business	48	13.2	52	15.0	2,198	19.5	2,250	15.8
Engineering & Computer Sciences	29	8.0	7	2.0	1,561	13.8	1,162	8.2
Education	0	0.0	0	0.0	293	2.6	442	3.1
Science & Mathematics	24	6.6	5	1.4	231	2.0	260	1.8
Legal	0	0.0	0	0.0	189	1.7	117	0.8
Other	0	0.0	0	0.0	179	1.6	185	1.3
Total	363	100.0	346	100.0	11,299	100.0	14,197	100.0

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

As with Certificates, the number of students earning Associate's Degrees in the largest majors has been volatile in Berkshire. For example, at the start of the decade Arts, Humanities, & Social Science completions fell sharply, but they quickly rebounded to reach a decade high of 211 in 2004. Thereafter, completions in the field declined through 2008 before rebounding modestly in 2009 and 2010. Completions in Health Sciences, the second largest field of study, ebbed and flowed from year to year before reaching a peak of 69 in 2007 and moderating slightly to 60 in 2010. Similar movements occurred in the Business and Services fields. Engineering was the only field of study to see a perennial drop in completions, starting the decade at a peak of 29 completions and dropping to only seven in 2010.



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

Arts, Humanities & Social Sciences is the most common field of study for a Bachelor's Degree in Berkshire and Massachusetts, and the field accounted for a much larger share of completions in Berkshire (65.5 percent) than statewide (44.8 percent) in 2010. Over the past decade, students earning Arts, Humanities & Social Sciences degrees declined at an annual rate 0.5 percent in Berkshire while growing 2.2 percent statewide. Combine this with only a small increase in Science & Mathematics completions (the second largest major) and a sizeable drop in Business completions (the third largest major), and it is not surprising the region produced fewer Bachelor's Degrees in 2010 than in 2000. In contrast, Massachusetts experienced notable growth of Bachelor's Degree completions in nearly every major field of study, save for a decline in Education degrees.

		Berks	hire			Massach	usetts	
	20	2000		10	200	00	2010	
Major Field of Study	Bachelor's Completed	Major's Share of Total (Percent)						
Arts, Humanities, & Social Sciences	617	66.6	584	65.5	18,891	44.6	23,405	44.8
Business	88	9.5	67	7.5	7,596	17.9	9,990	19.1
Science & Mathematics	161	17.4	162	18.2	3,818	9.0	5,054	9.7
Engineering & Computer Sciences	25	2.7	25	2.8	3,726	8.8	3,997	7.7
Health Sciences	0	0.0	5	0.6	2,938	6.9	3,589	6.9
Services	0	0.0	0	0.0	2,495	5.9	3,170	6.1
Education	14	1.5	16	1.8	1,922	4.5	1,362	2.6
Legal	0	0.0	0	0.0	176	0.4	190	0.4
Other	22	2.4	33	3.7	797	1.9	1,466	2.8
Total	927	100.0	892	100.0	42,376	100.0	52,223	100.0

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

Although the total number of Bachelor's Degrees completed in Berkshire declined over the past decade, the number of completions in the major fields of study year-to-year fluctuated less than was the case with Certificates and Associate's Degrees. For example, completions in Arts, Humanities, & Social Sciences declined at an annual rate of 3.9 percent between 2000 and 2002, followed by 2.1 percent growth to reach peak completions in 2007, and subsequently declining 2.6 percent annually through 2010. Science & Mathematics completions followed a similar pattern, hitting a trough in 2002 and peak in 2006, followed by a moderate drop-off toward the end of the decade. Business degrees saw a more persistent annual decline in completions through most of the decade, falling at an annual rate of 9.1 percent between 2000 and 2007, followed by moderate completion increases in recent years. Completions in the smaller fields of study, Engineering & Computer Science and Education, were more volatile from yearto-year.

