



Labor Market Trends in the **Berkshire Region**

By Robert Clifford

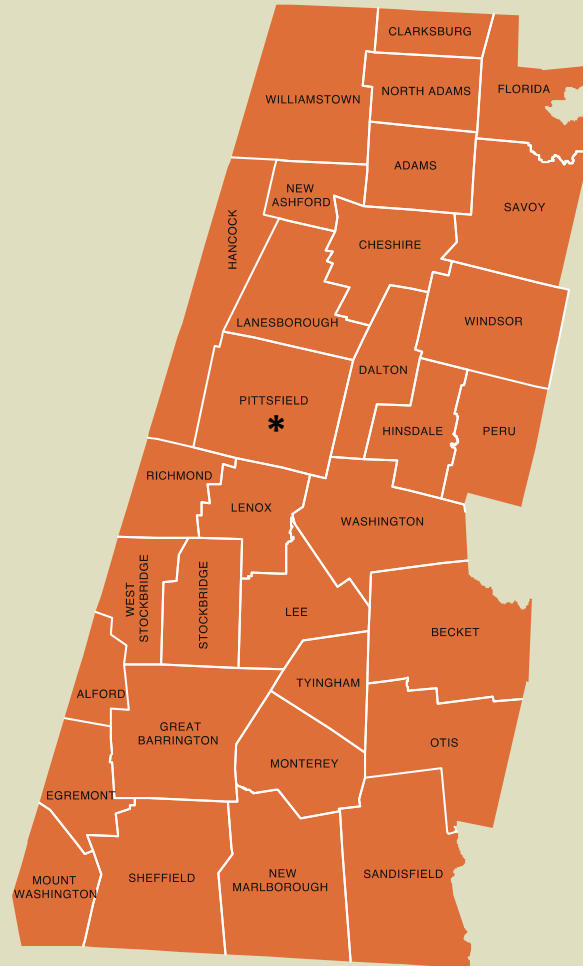
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A joint project of Commonwealth Corporation
and New England Public Policy Center of the
Federal Reserve Bank of Boston

Motivation

- Understand the long-term labor force challenges facing the regional labor markets in Massachusetts.
- Provide detailed data on labor supply and demand trends to support workforce development policy discussions at a local level.
- Build off the labor market development work of Harrington and Fogg (2008) and the demographics research of Sasser Modestino (2009, 2010).

Berkshire



Summary

- Berkshire has been slower to recover from the Great Recession than most other regional labor markets.
- An aging workforce, declines in younger workers, and a shrinking population will force the region to confront demographic challenges sooner than other regions.
- Despite having smaller shares of residents and workers with a Bachelor's Degree, Berkshire has post-secondary educational attainment levels that are comparable to the state.
- Slow enrollment growth and declining degree completions may hamper the regional supply of educated labor.

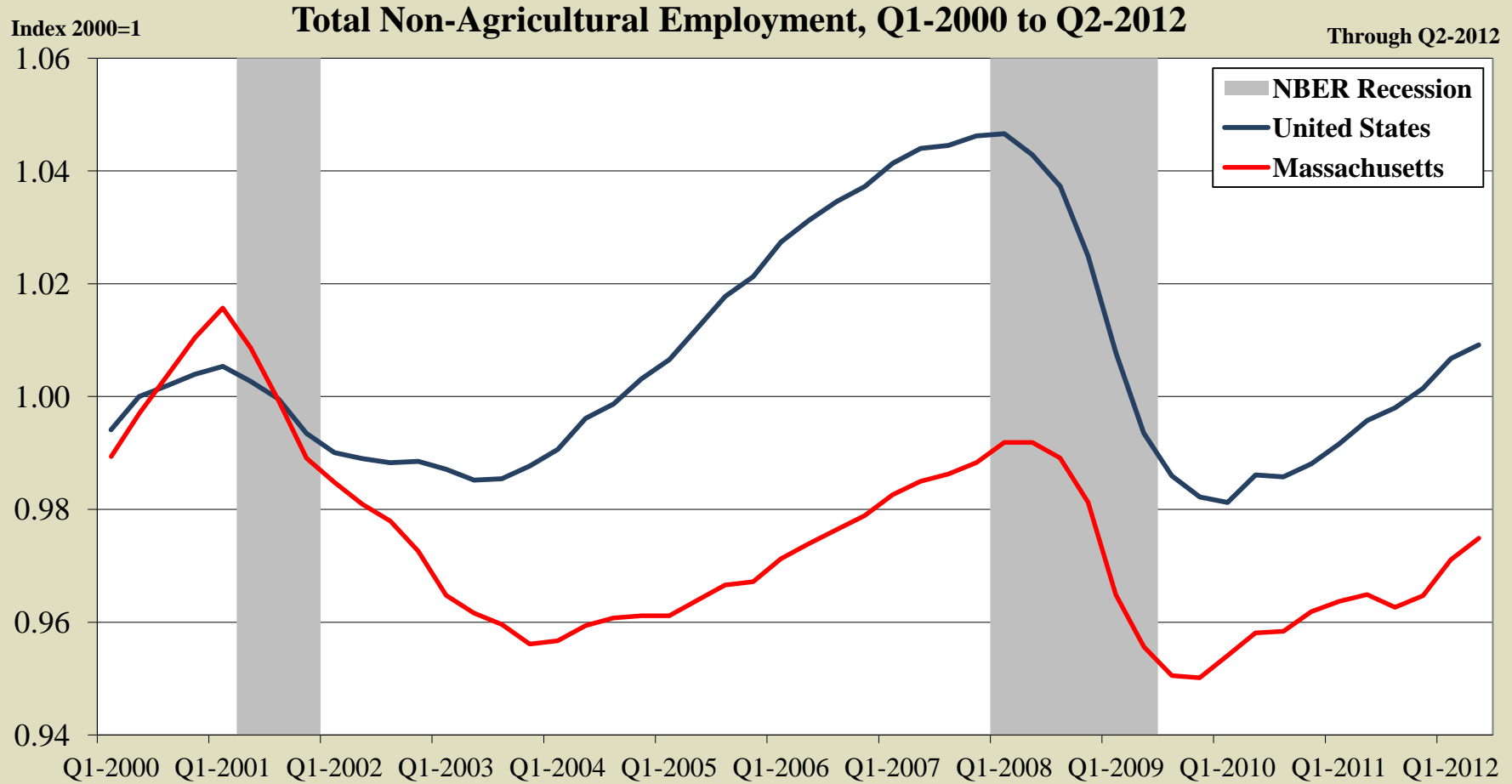
Outline

- Labor Market Performance
- Labor Supply
- Labor Demand
- The Pipeline: Educational Supply of Post-Secondary Degrees

Labor Market Performance

- National and State Employment Trends
- Performance of Regional Labor Markets
- Employment Trends by Industry in Berkshire and Massachusetts

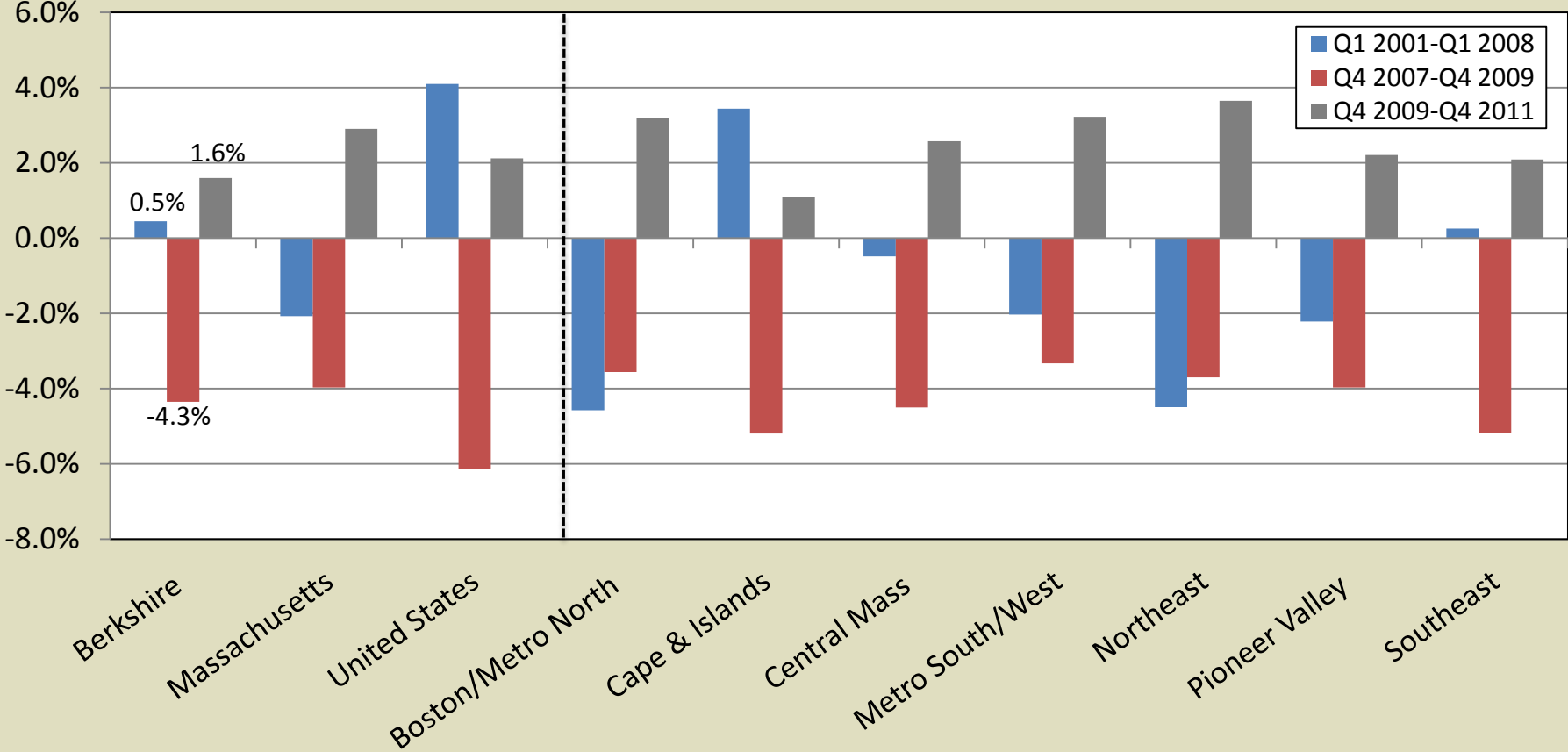
Massachusetts is still far below its peak employment levels of the early 2000's.



Sources: U.S. Bureau of Labor Statistics, Current Employment Statistics.

Berkshire's employment situation has differed somewhat from that of Massachusetts in the past decade.

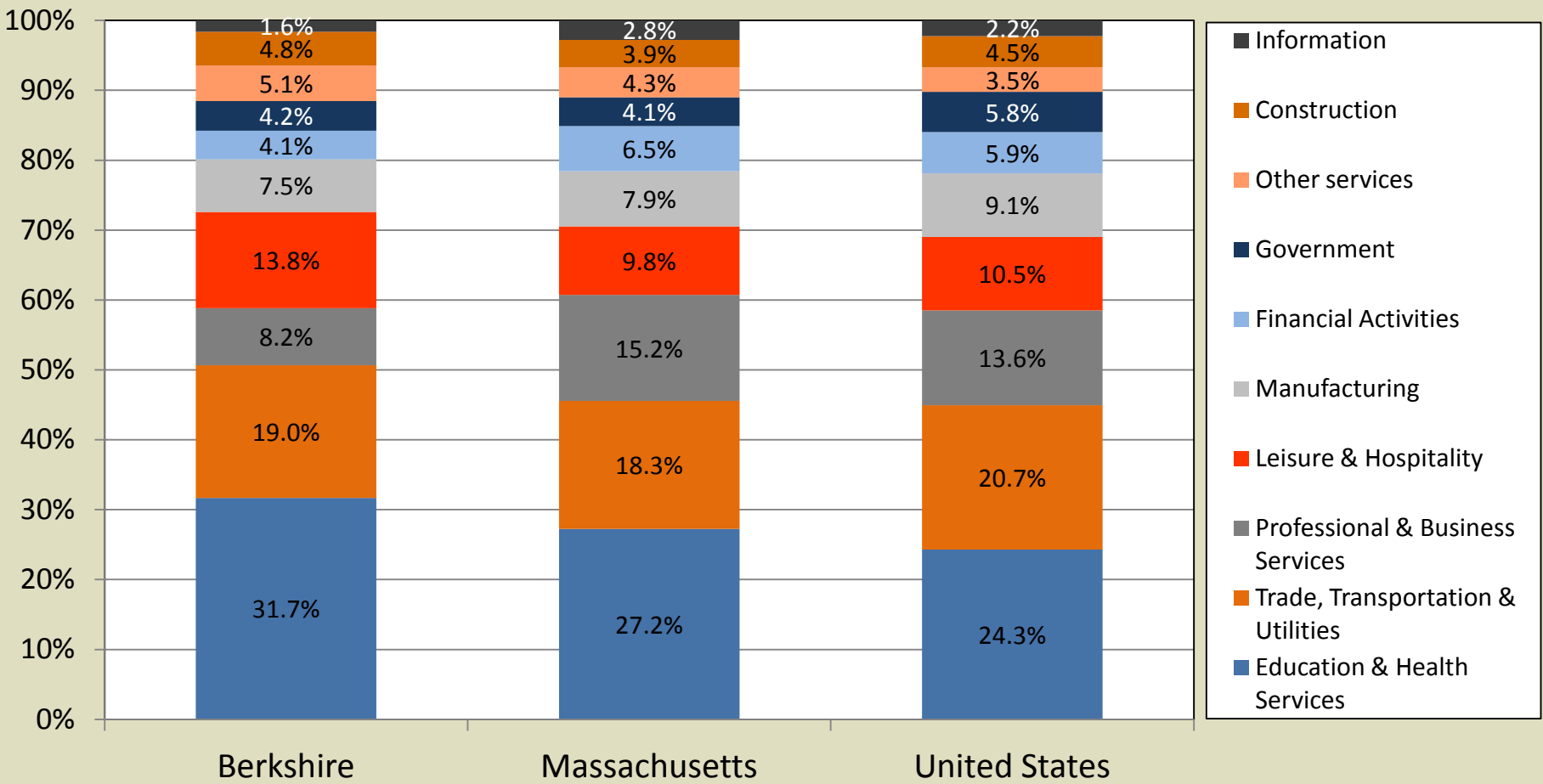
Percent Changes in Total Employment



Sources: Massachusetts Executive Office of Labor and Workforce Development (EOLWD), ES-202 and U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW).

Over 50 percent of the region's employment is concentrated in just two supersectors.

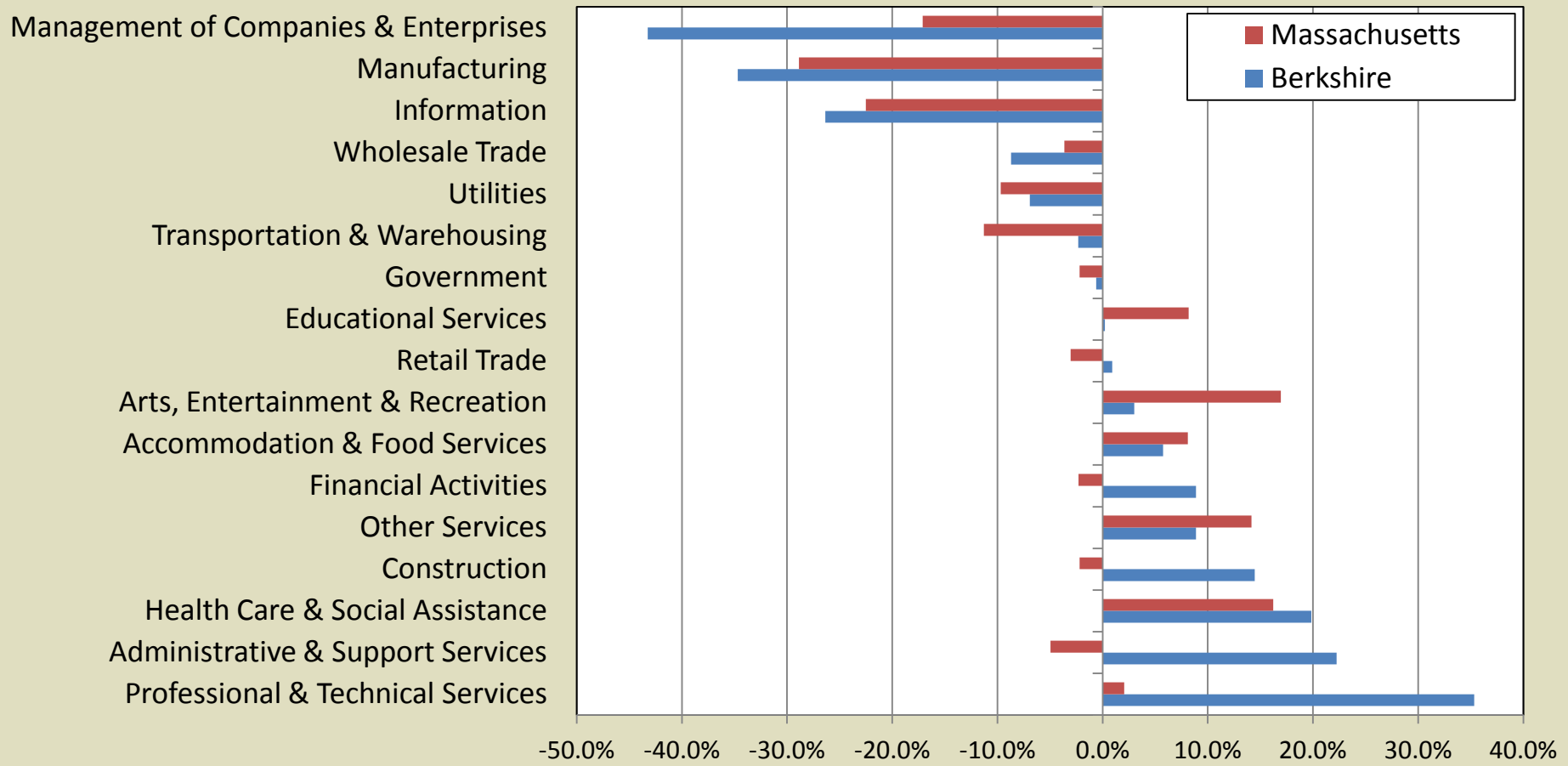
Employment Distribution by Supersector, Q4 2011



Sources: Massachusetts EOLWD, ES-202 and U.S. Bureau of Labor Statistics, QCEW.

Between recessions, Berkshire expanded employment in some industries that were flat or declining statewide.

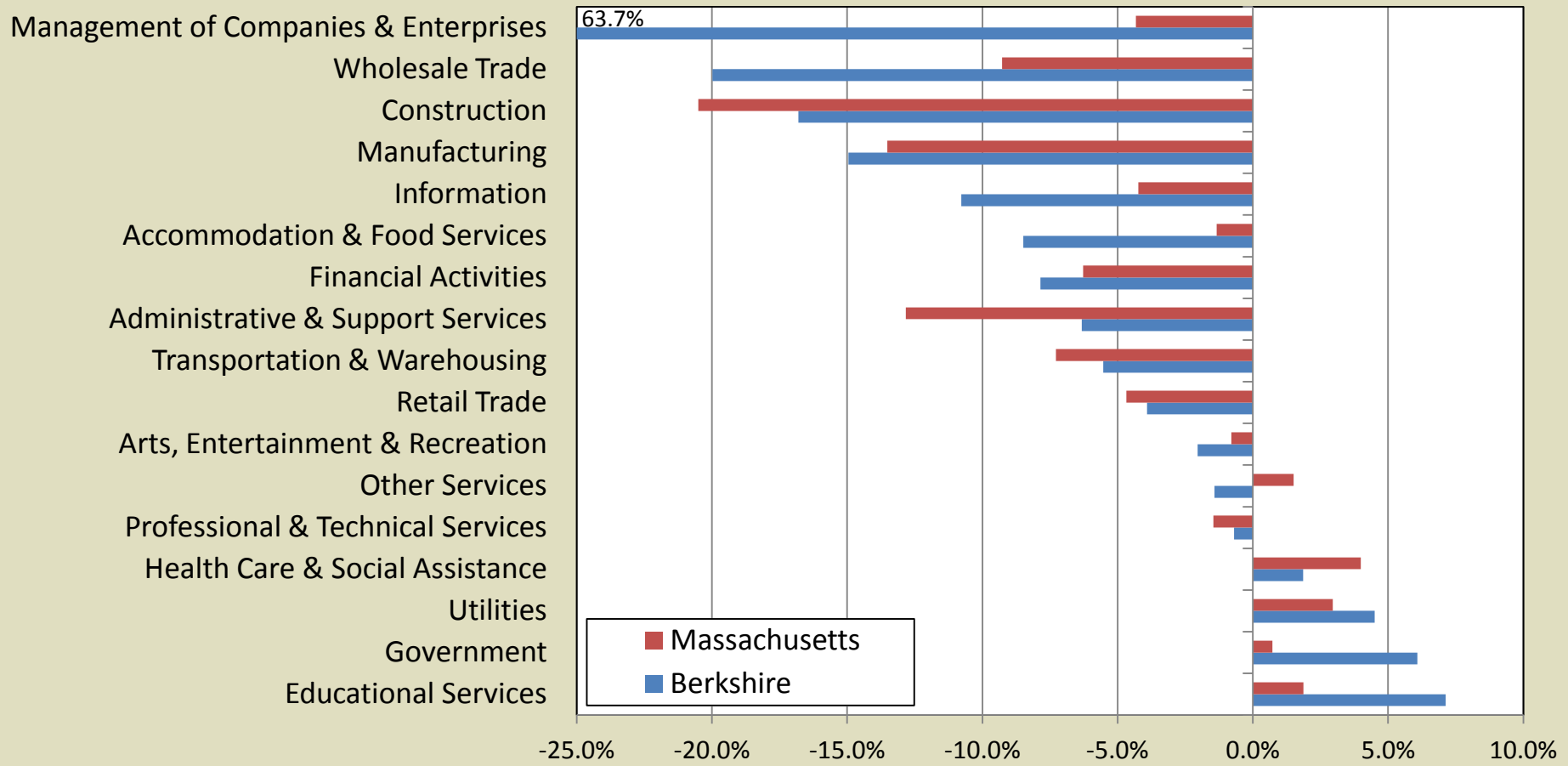
Employment Changes, Q1-2001 to Q1-2008



Sources: Massachusetts EOLWD, ES-202.

The Great Recession hit a number of the region's industries harder than their counterparts statewide.

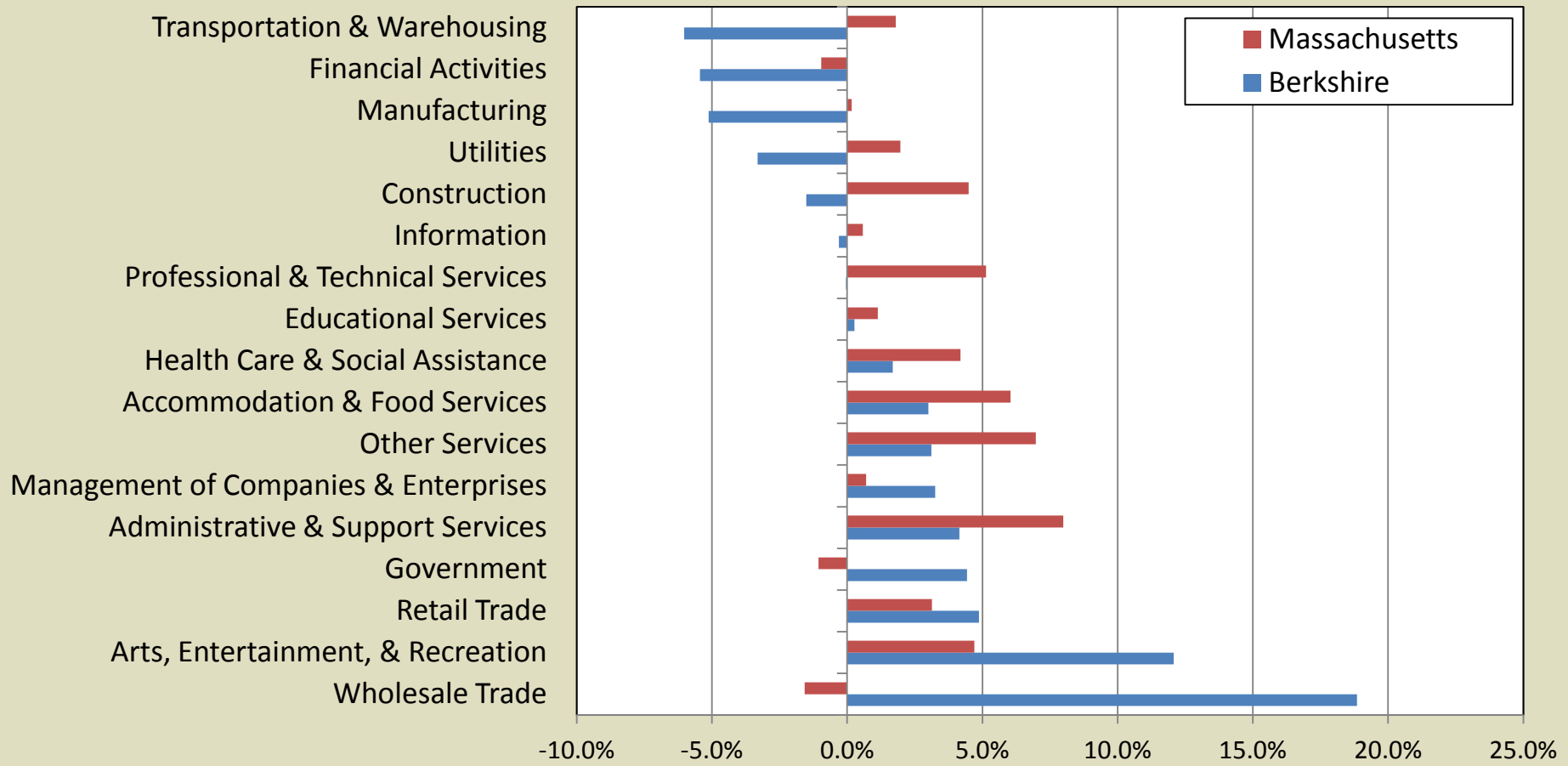
Employment Changes, Q4-2007 to Q4-2009



Sources: Massachusetts EOLWD, ES-202.

In the recovery to date, the region has continued to lose jobs in some industries and trail statewide employment gains in others.

Employment Changes, Q4-2009 to Q4-2011



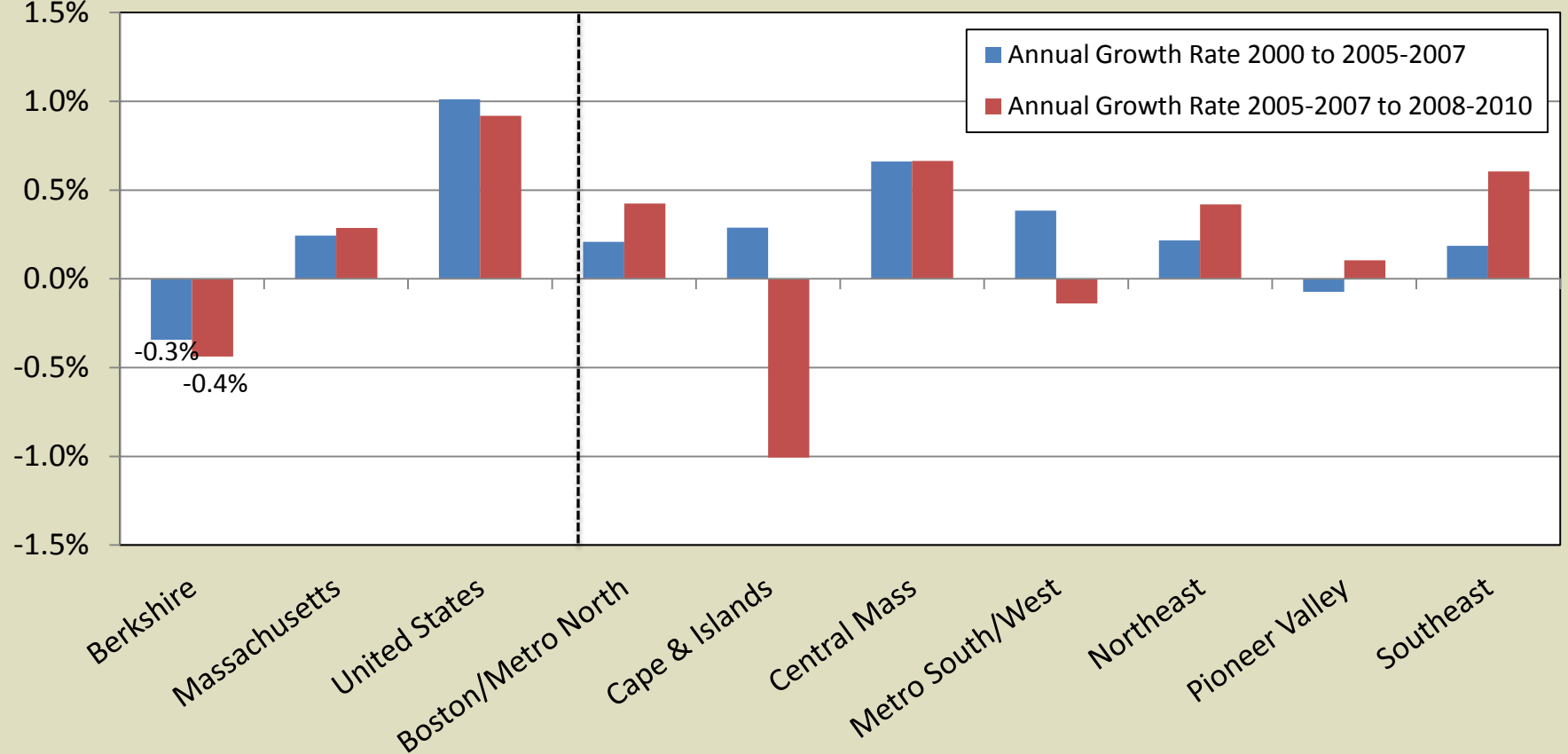
Sources: Massachusetts EOLWD, ES-202.

Labor Supply

- Residential Population Changes and Characteristics
- Age and Education of the Civilian Labor Force
- Trends and Characteristics of the Unemployed
- Commuting Patterns

Berkshire was the only regional labor market to persistently decline in population over the course of the decade.

Total Residential Population Growth



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

Growth in immigrant and minority populations was not enough to offset losses of native born and white, non-Hispanic residents.

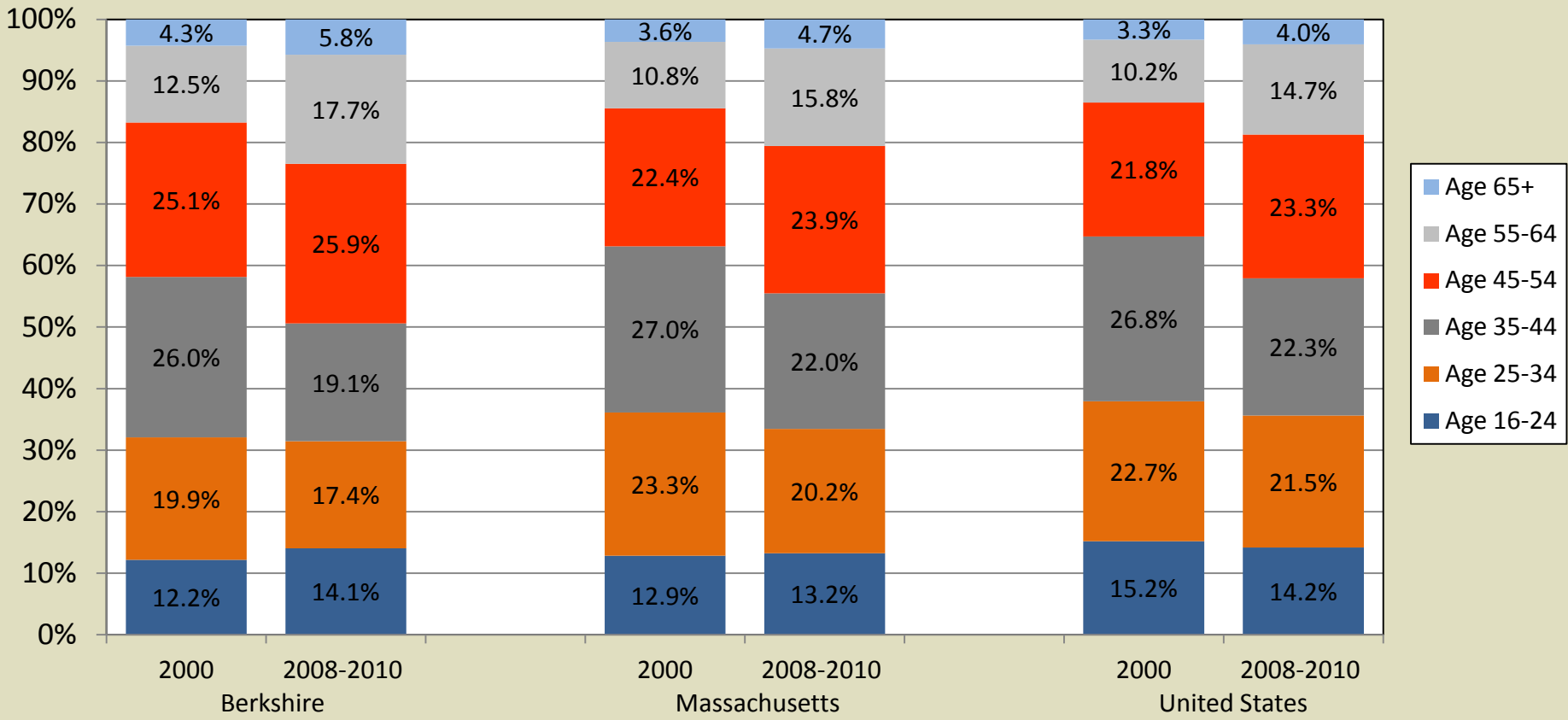
Demographic Characteristics of Berkshire

	2000	2008-2010	Absolute Change	Annual Growth Rate
Resident Population	114,409	110,614	-3,795	-0.4%
<u>Gender</u>				
Male	53,993	52,561	-1,432	-0.3%
Female	60,416	58,053	-2,363	-0.4%
<u>Nativity</u>				
Native Born	110,266	104,058	-6,208	-0.6%
Immigrant	4,143	6,556	2,413	5.2%
<u>Race/Ethnicity</u>				
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%

Source: U.S. Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 ACS PUMS data files.

With nearly 50 percent of the labor force age 45 or older, Berkshire is one of the oldest labor forces in the state.

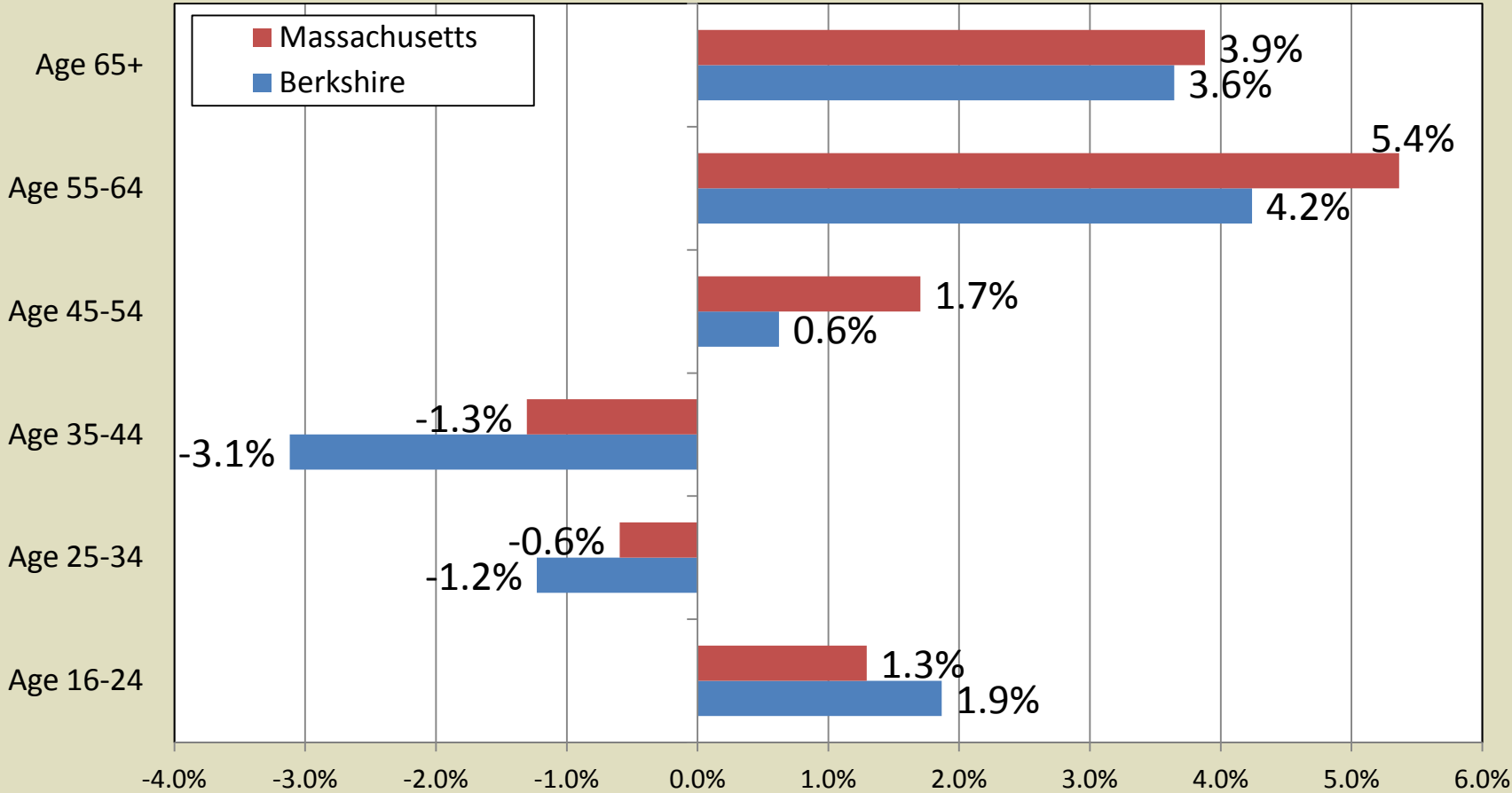
Age Distribution of the Civilian Labor Force



Source: U.S. Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 ACS PUMS data files.

This was the result of rapid declines in younger age cohorts combined with fast growth among older cohorts in the region.

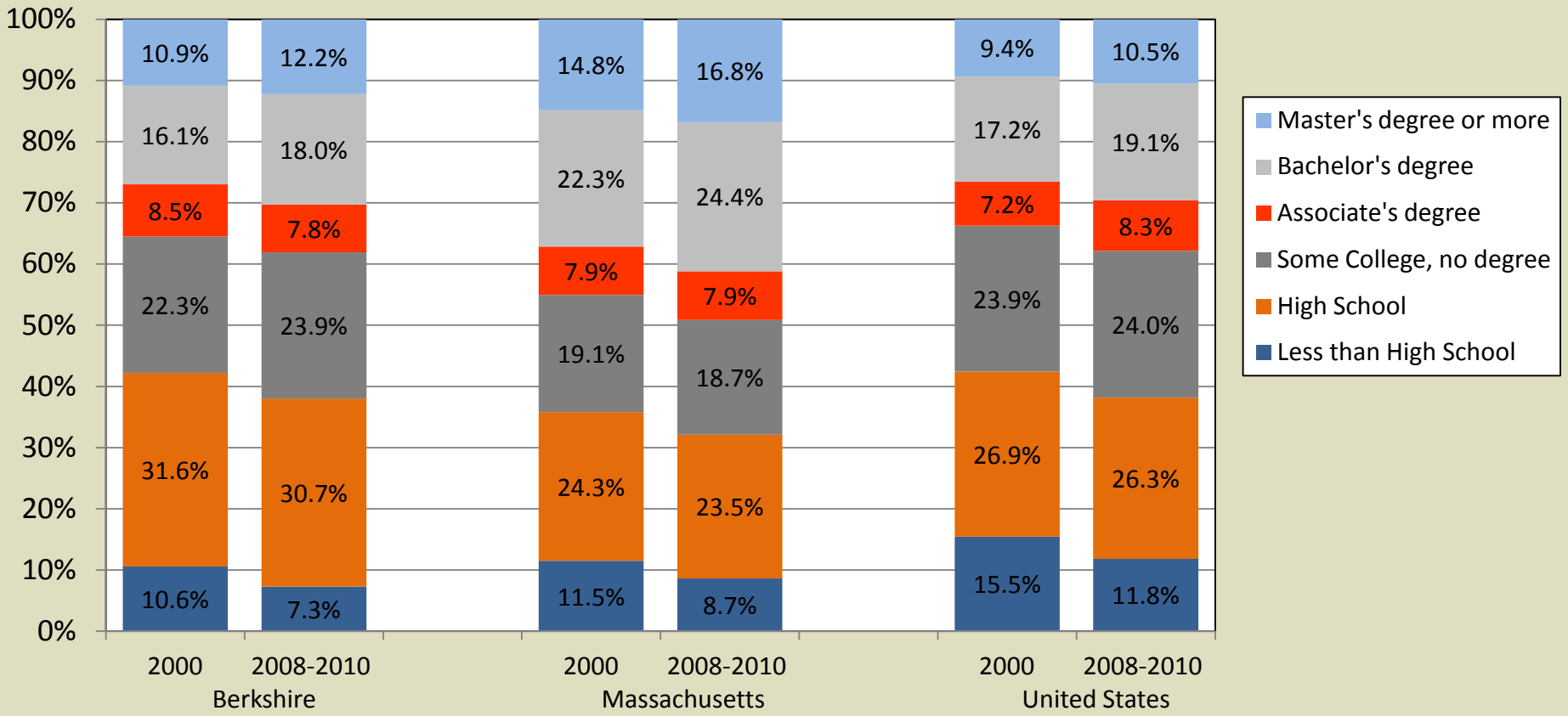
Annual Growth in the Civilian Labor Force by Age, 2000 to 2008-2010



Source: U.S. Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 ACS PUMS data files.

Education levels have risen in the past decade, but high school remains the most common level in attainment in Berkshire.

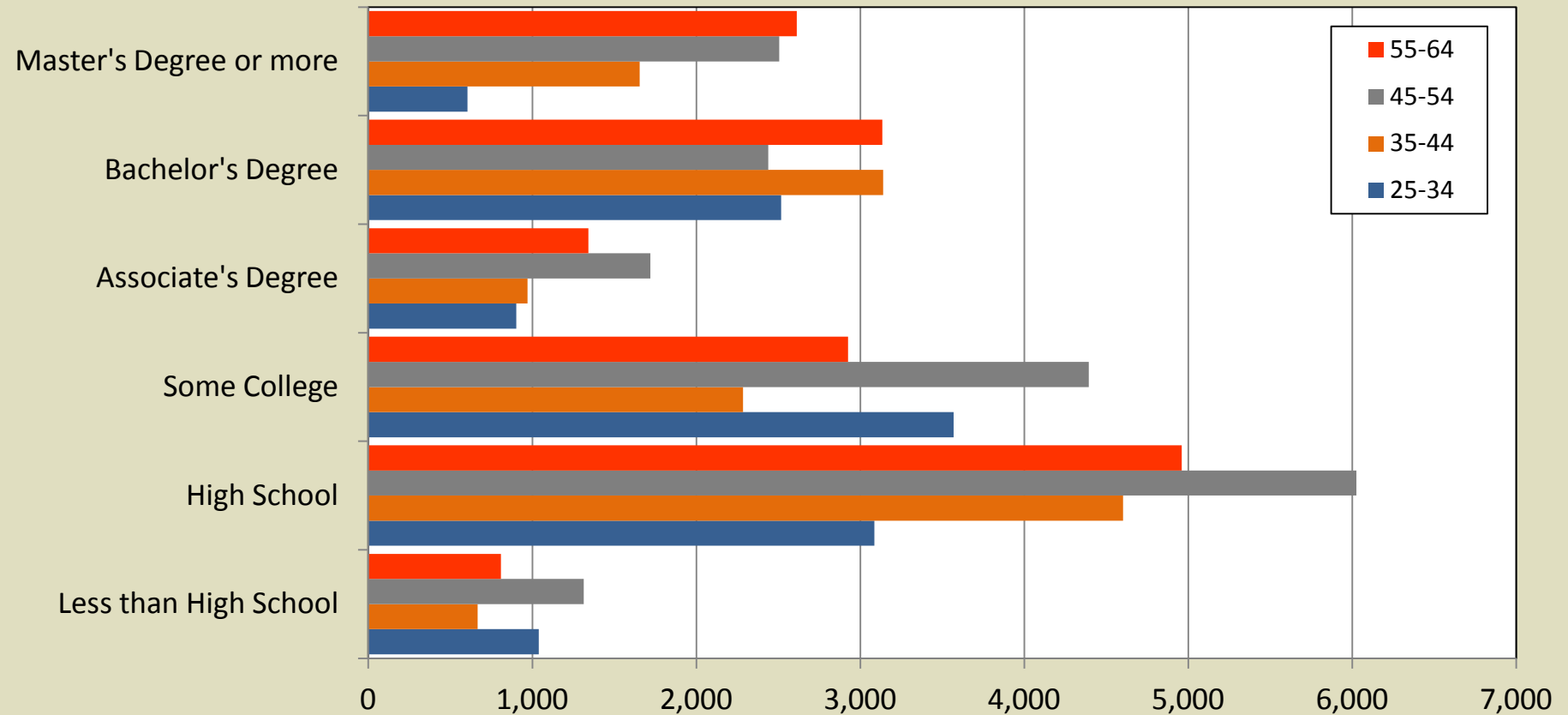
Educational Attainment of the Civilian Labor Force



Source: U.S. Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 ACS PUMS data files.

The trends in educational attainment and aging leave the region with potential shortfalls of workers in nearly every category.

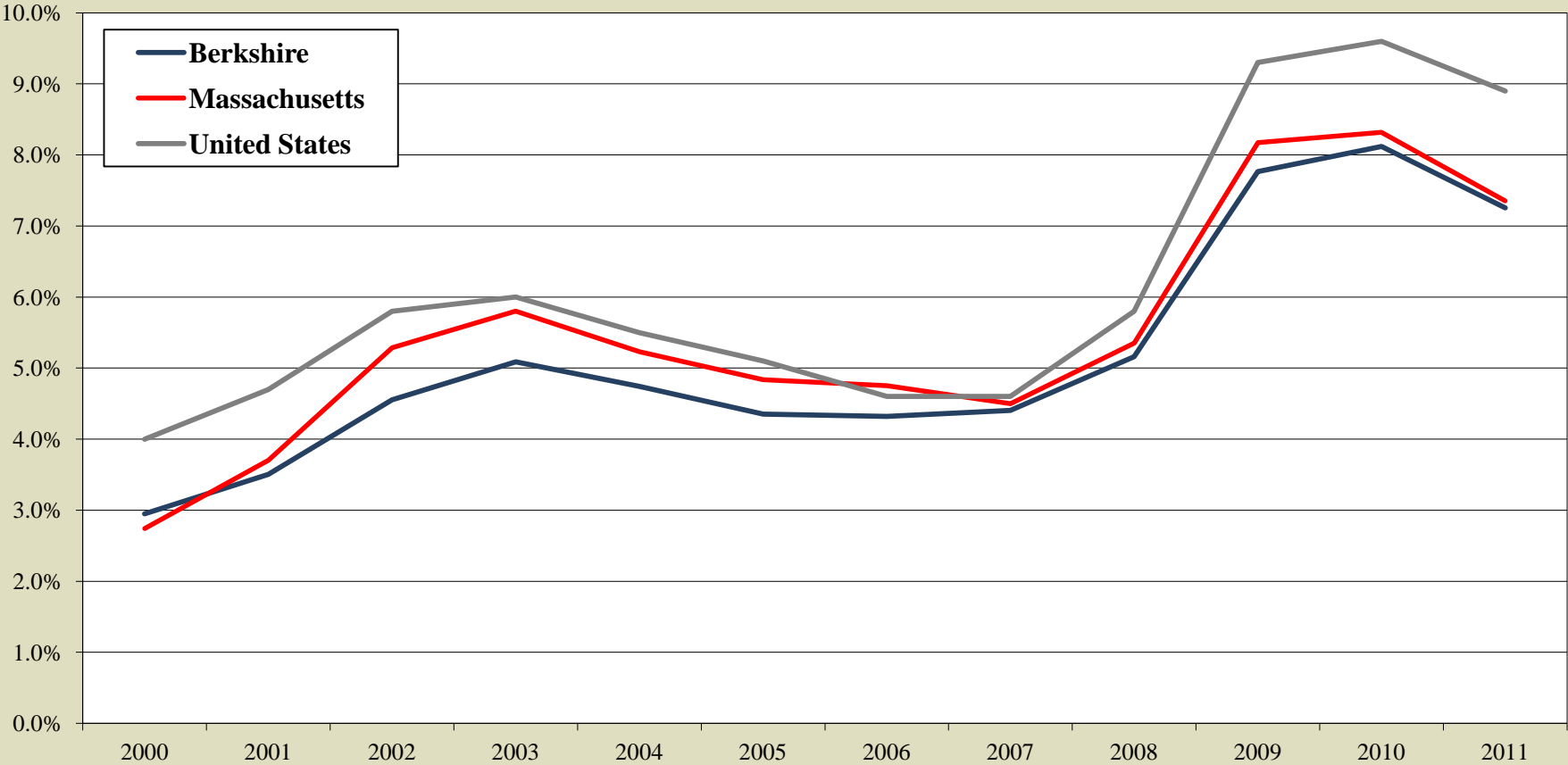
Educational Attainment of the Working-Age Population (16+) in Berkshire



Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

As Berkshire's employment gains have trailed the state, the region's unemployment rate has come closer to the state average.

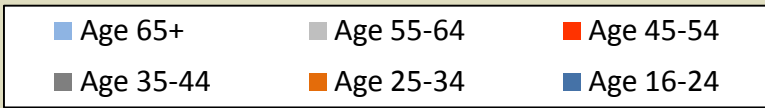
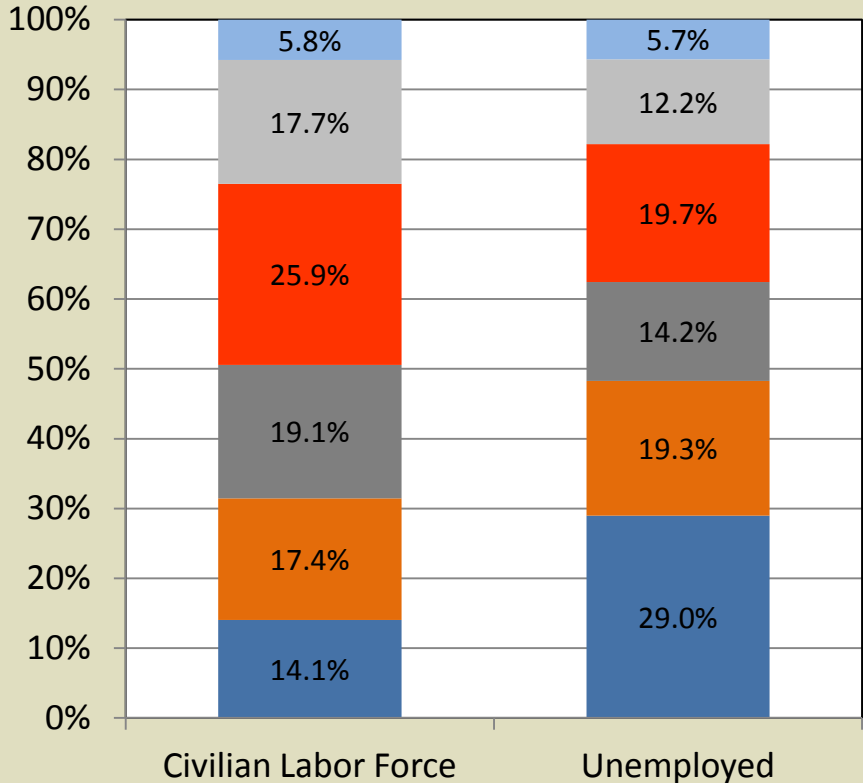
Unemployment Rates, 2000 to 2011



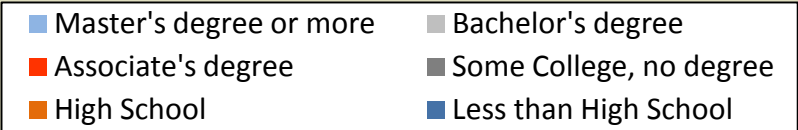
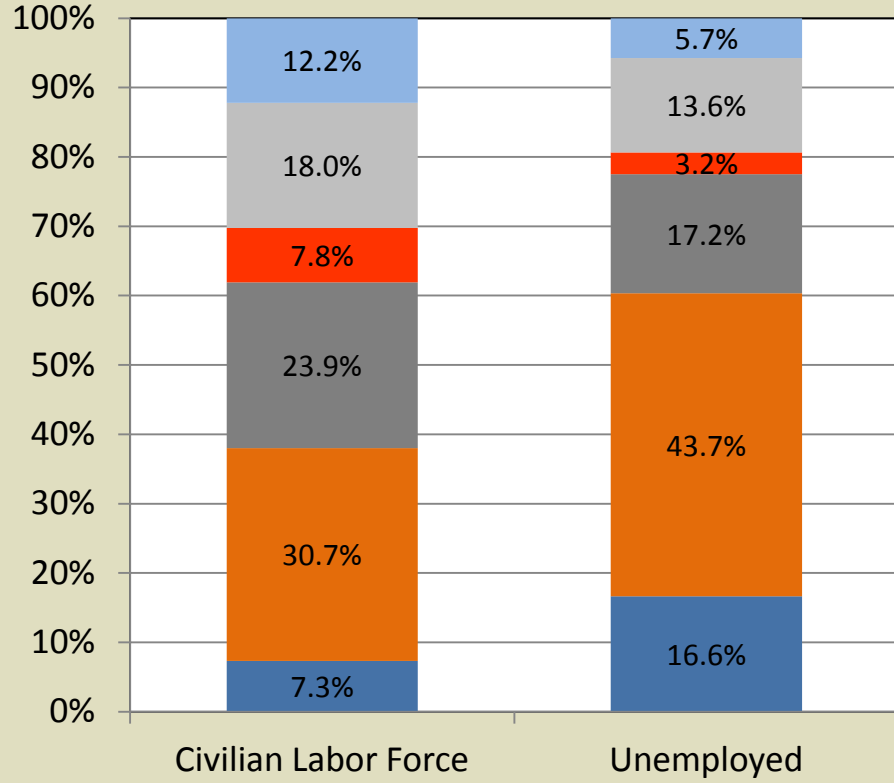
Sources: Massachusetts EOLWD and U.S. Bureau of Labor Statistics, Current Population Survey.

The unemployed in Berkshire are disproportionately younger and have lower levels of educational attainment.

Age Distribution



Education Distribution



Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

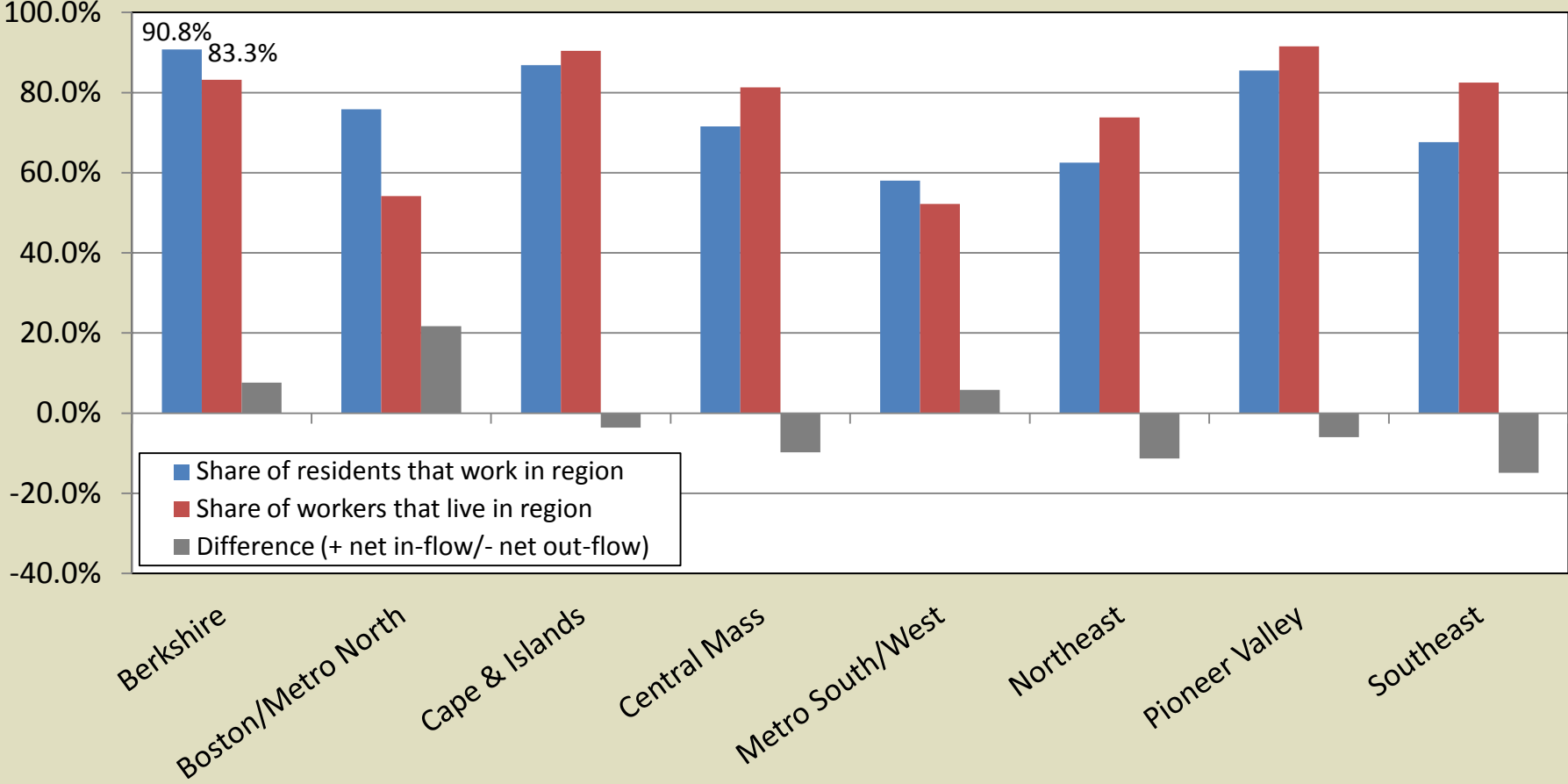
Though a large majority of those employed in the region are residents, Berkshire has a net in-flow of commuters.

	Number	Percent of Total
Total number of employed persons living in Berkshire...	53,061	100.0%
...that 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%
...that 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	4,773	-

Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

Berkshire is one of only three regional labor markets in the state that has a net in-flow of workers.

Commuting Patterns by Regional Labor Market



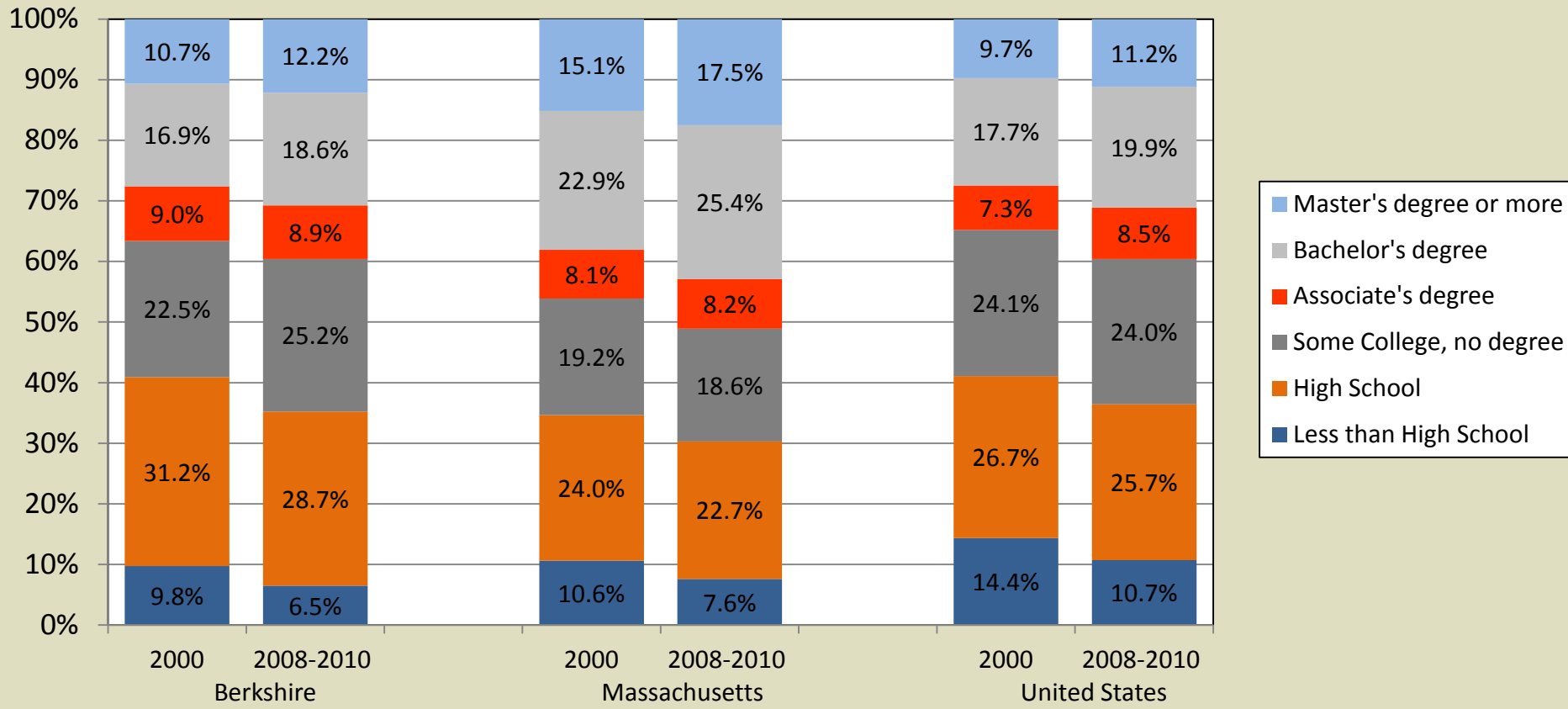
Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

Labor Demand

- Educational Attainment of Employed
- Educational Attainment and Composition of Industries and Occupations

Nearly two-thirds of the region's workers have some form of post-secondary education.

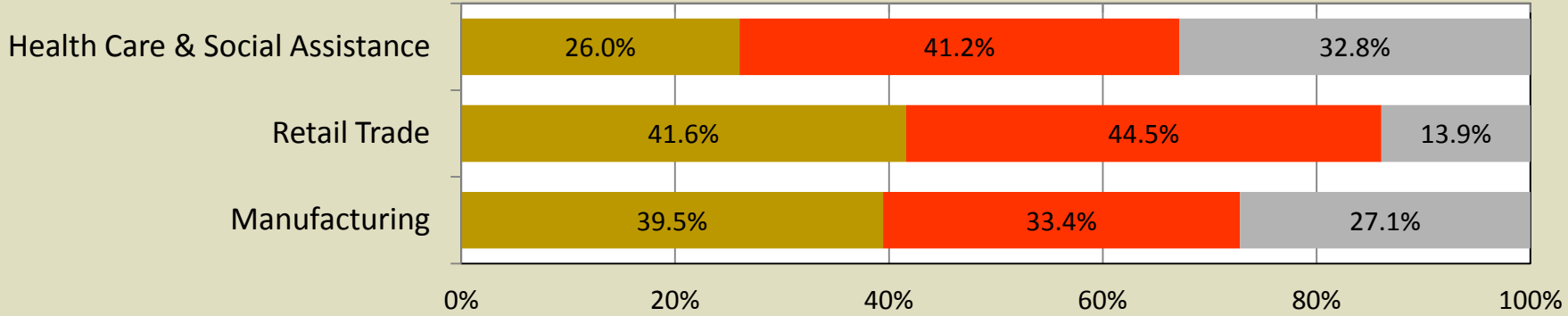
Educational Attainment of Individuals Employed in Region



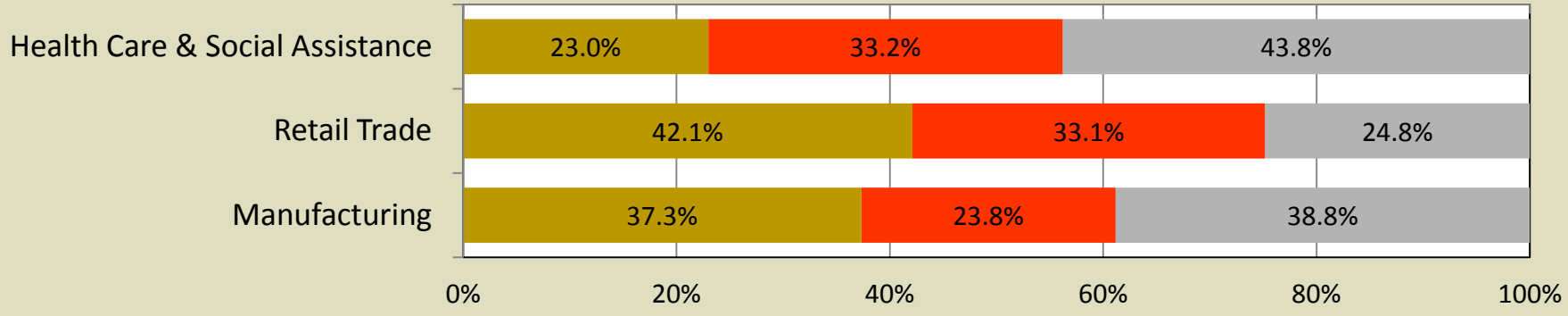
Source: U.S. Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 ACS PUMS data files.

Berkshire industries have small shares of employees with a Bachelor's Degree or Higher, but large shares of "middle-skill" workers.

Educational Attainment of Employees by Selected Major Industries in Berkshire



Educational Attainment of Employees by Selected Major Industries in Massachusetts

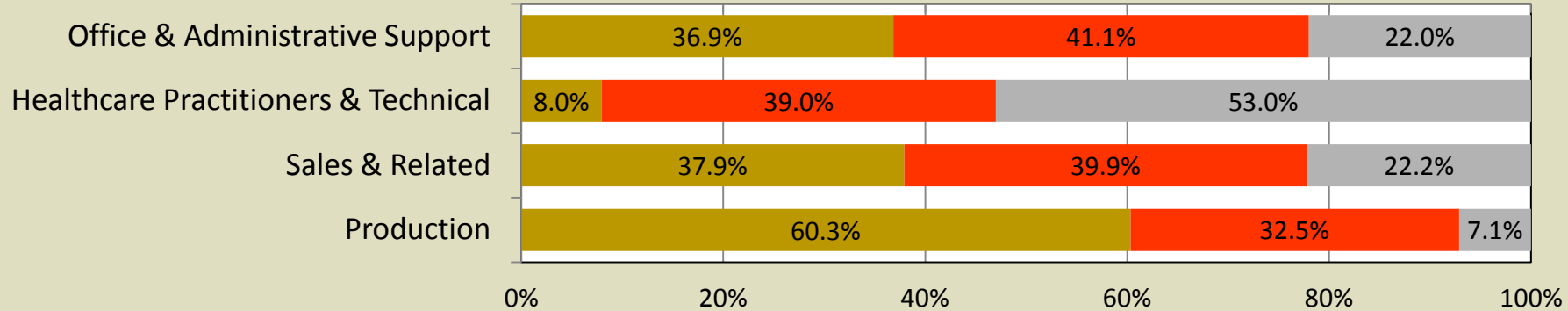


■ High School Degree or Less
 ■ Some College or Associate's Degree
 ■ Bachelor's Degree or Higher

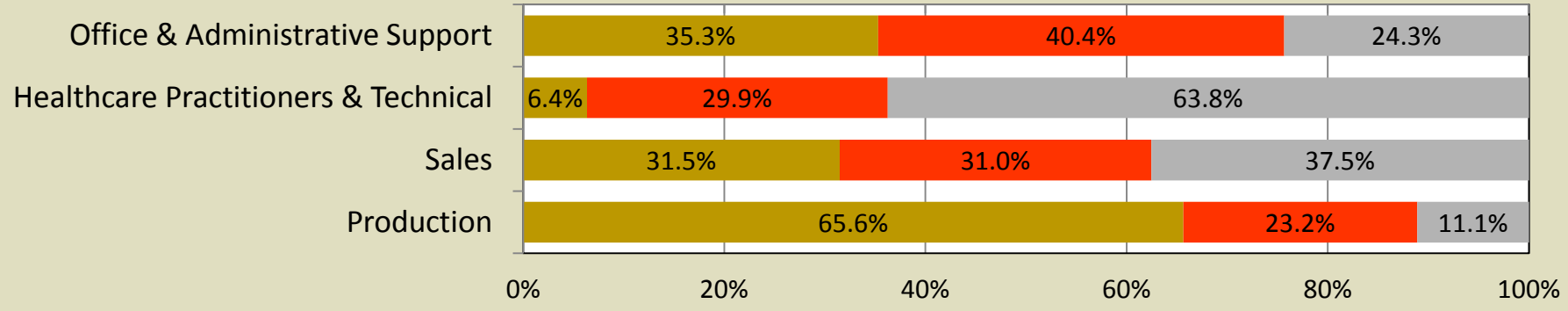
Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

As a result post-secondary education levels of employees in Berkshire are much closer to their statewide counterparts.

Educational Attainment of Employees by Selected Occupations in Berkshire



Educational Attainment of Employees by Selected Occupation in Massachusetts



■ High School Degree or Less
 ■ Some College or Associate's Degree
 ■ Bachelor's Degree or Higher

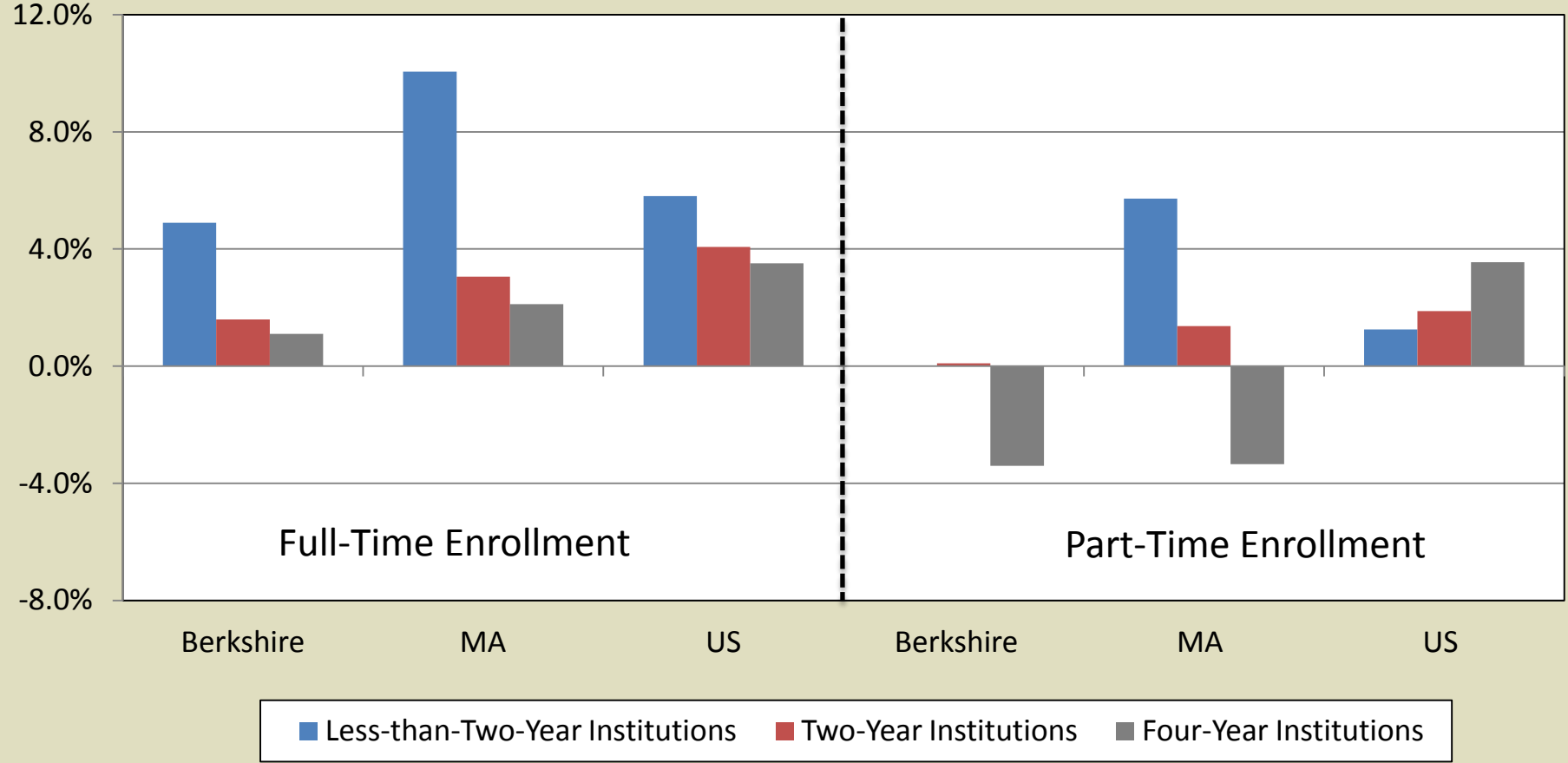
Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

The Pipeline: Educational Supply of Post-Secondary Degrees

- Enrollment Patterns
- Degree Completions
- List of Institutions by Degree Type
- Major Fields of Study by Degree Type

Enrollments at institutions in Berkshire have trailed both state and national trends in the past decade.

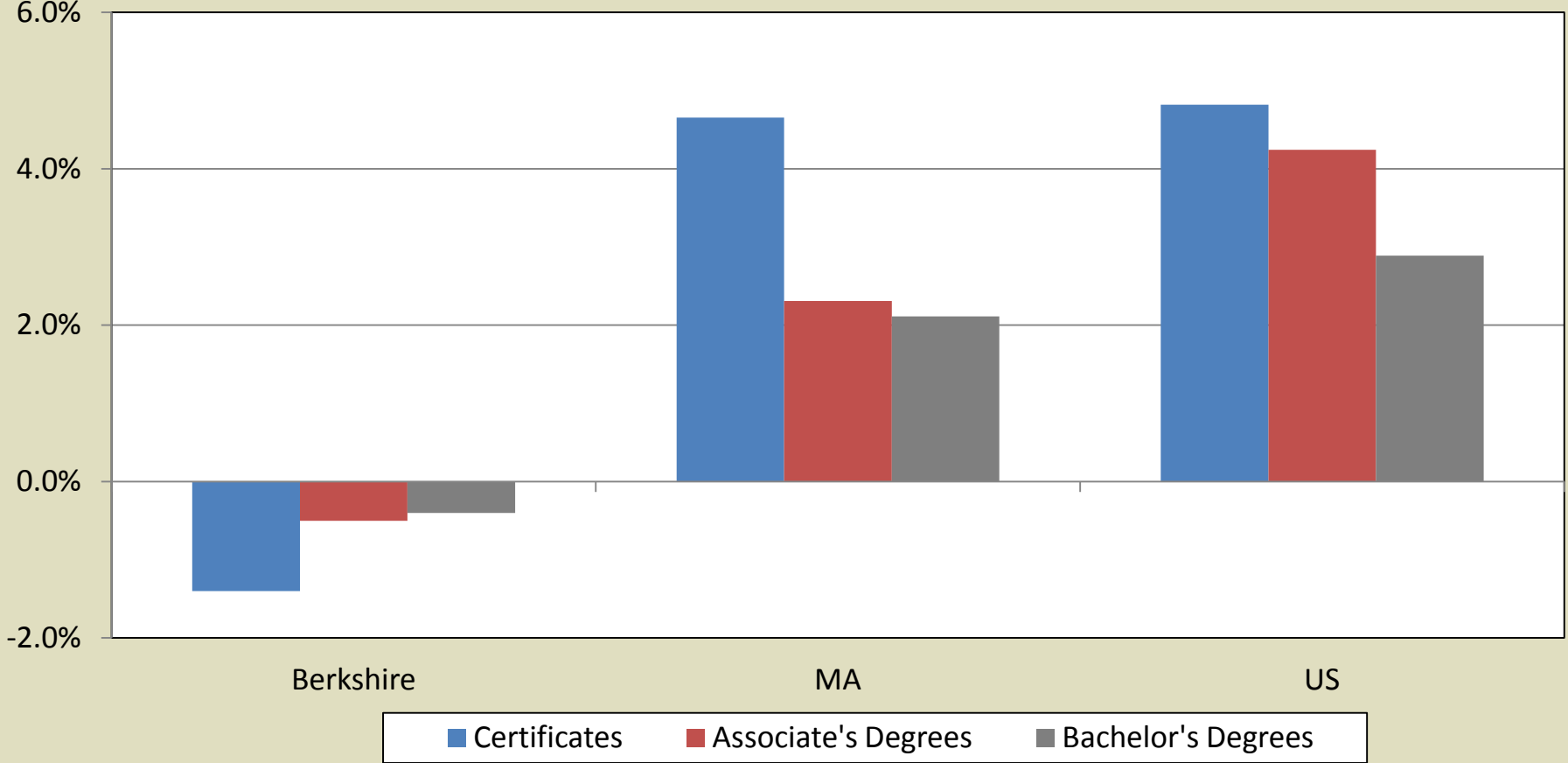
Annual Growth in Enrollments, 2000 to 2010



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

Berkshire was the only regional labor market seeing a decline in post-secondary degree or program.

Annual Growth in Completions, 2000 to 2010



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

There were only five higher education institutions granting certificates and degrees in 2010.

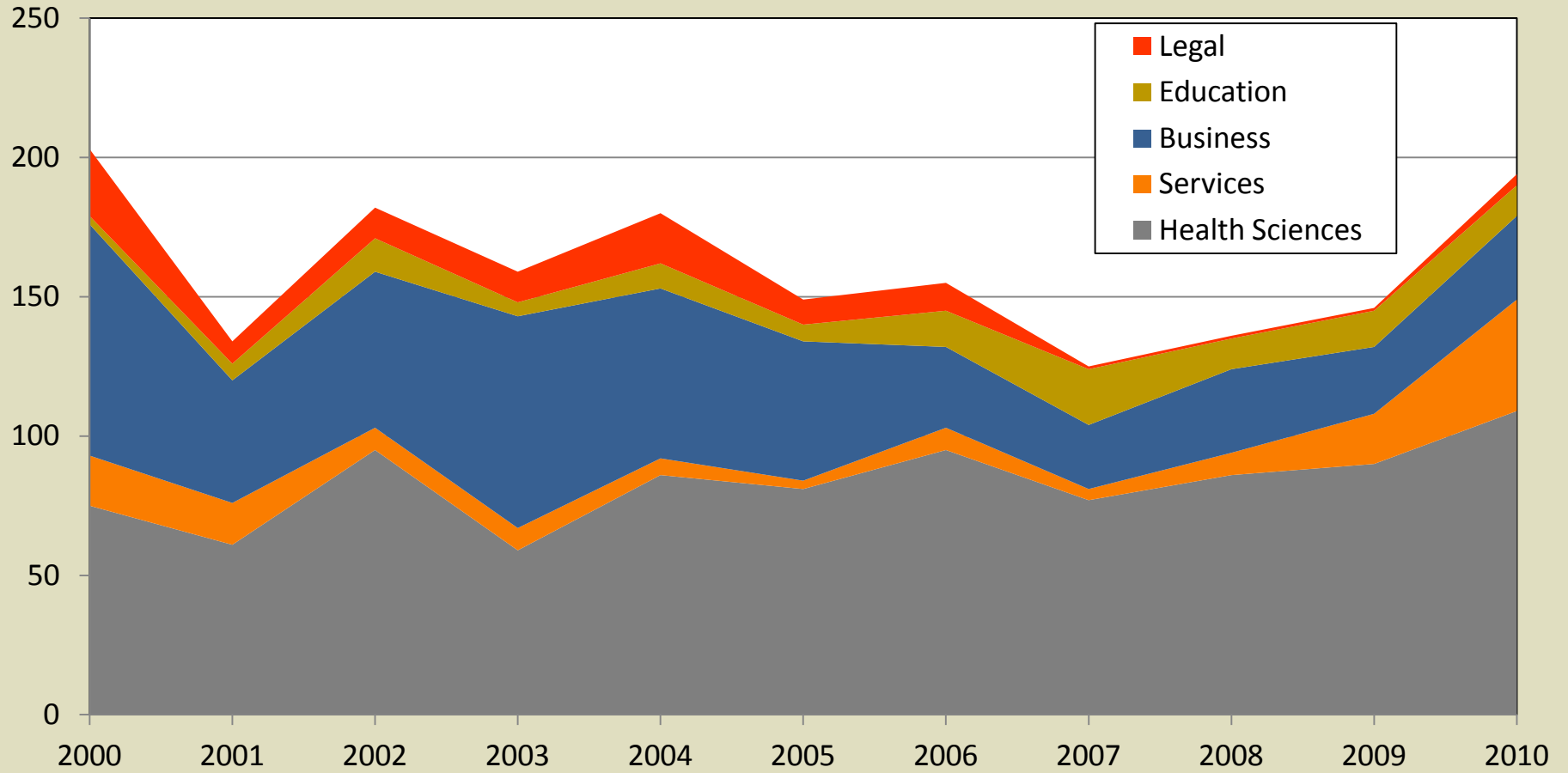
Top Institutions Granting Degrees in Berkshire, 2010

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

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

While Certificate completions are volatile, Health Sciences was consistently the most common field of study in the past decade.

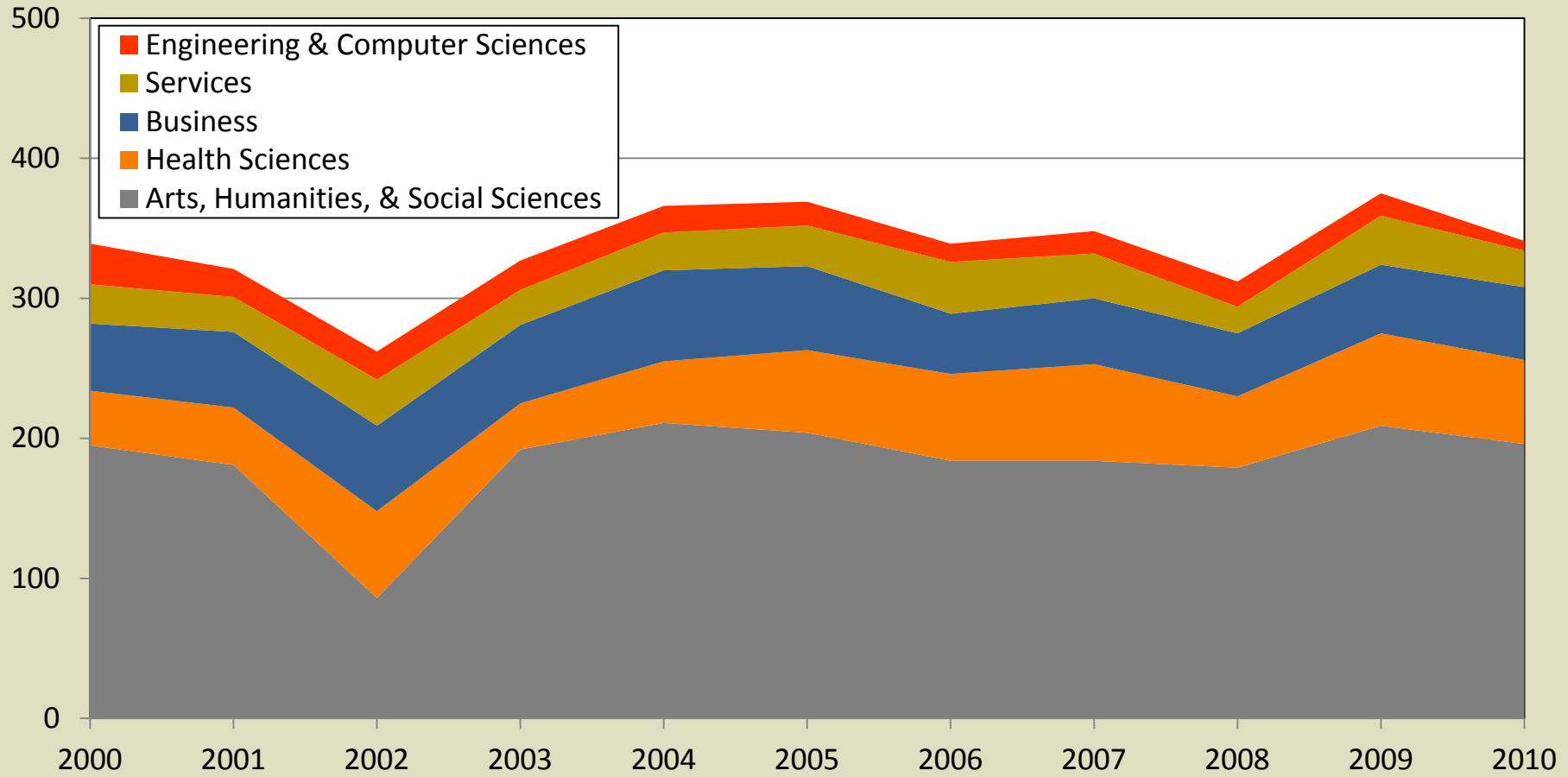
Annual Certificate Completions by Major in Berkshire, 2000 to 2010



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

Arts, Humanities, & Social Sciences accounted for over 50 percent of Associate's Degrees completed in most years.

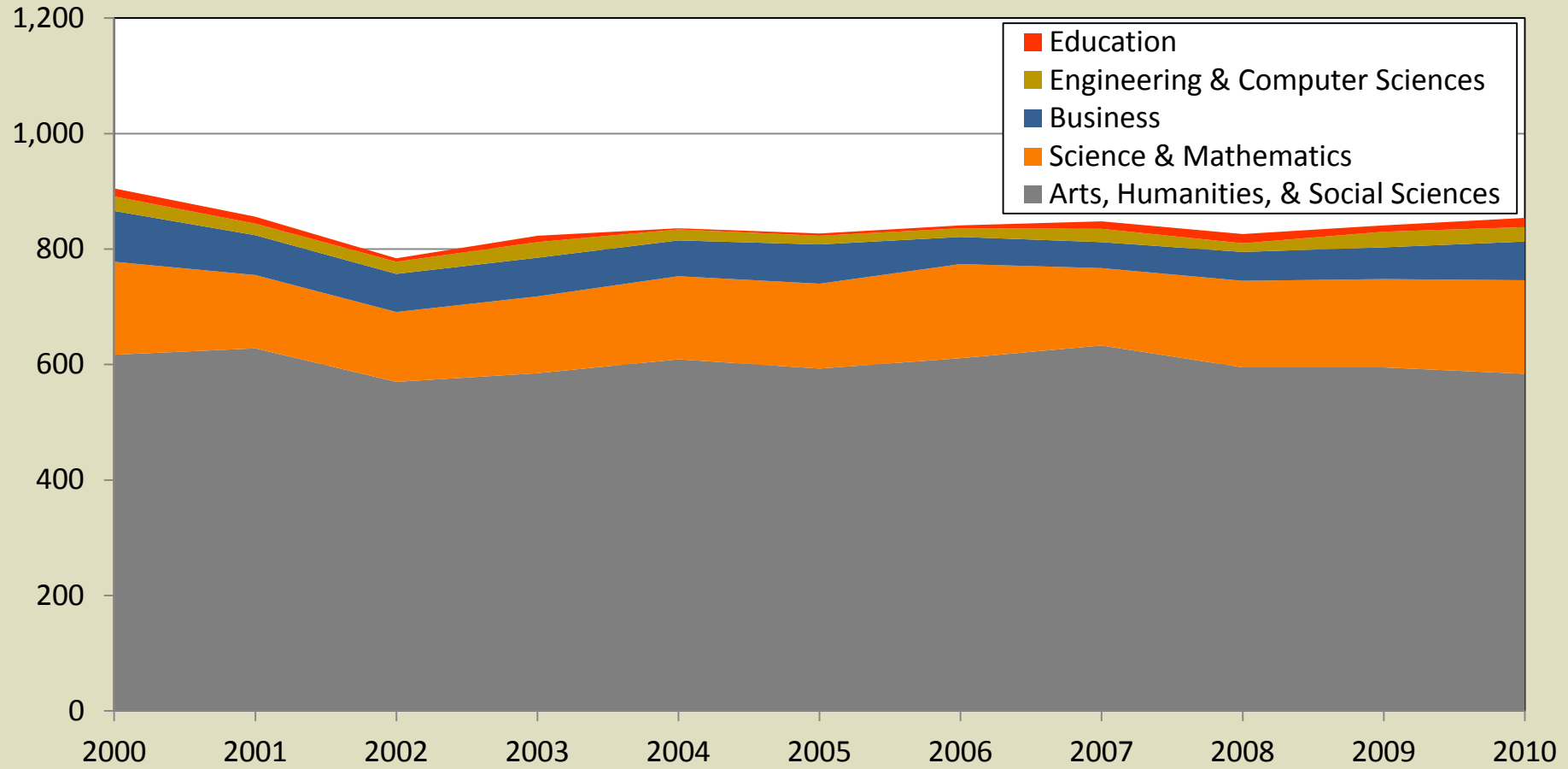
Annual Associate's Degree Completions by Major in Berkshire, 2000 to 2010



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

A large majority of the Bachelor's Degrees completed in Berkshire are in Arts, Humanities, & Social Sciences.

Annual Bachelor's Degree Completions by Major in Berkshire, 2000 to 2010



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

Summary

- The Great Recession continues to weigh on the region with slow employment growth and elevated unemployment.
- While Berkshire has a lower share of residents and workers with a Bachelor's Degree, the region has a larger share of workers with "middle-skills" relative to Massachusetts.
- With one of the oldest labor forces in the state, large declines of younger workers, and little change in the regional supply of post-secondary educated labor, demographics present a challenge for the Berkshire regional labor market.
- Given such trends, what should be done to ensure the future economic vitality of the Berkshire region moving forward?

Thank You



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