

# Labor Market Trends in the Metro Boston Regions

By Yolanda Kodrzycki and  
Robert Clifford

New England Public Policy Center  
Federal Reserve Bank of Boston

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

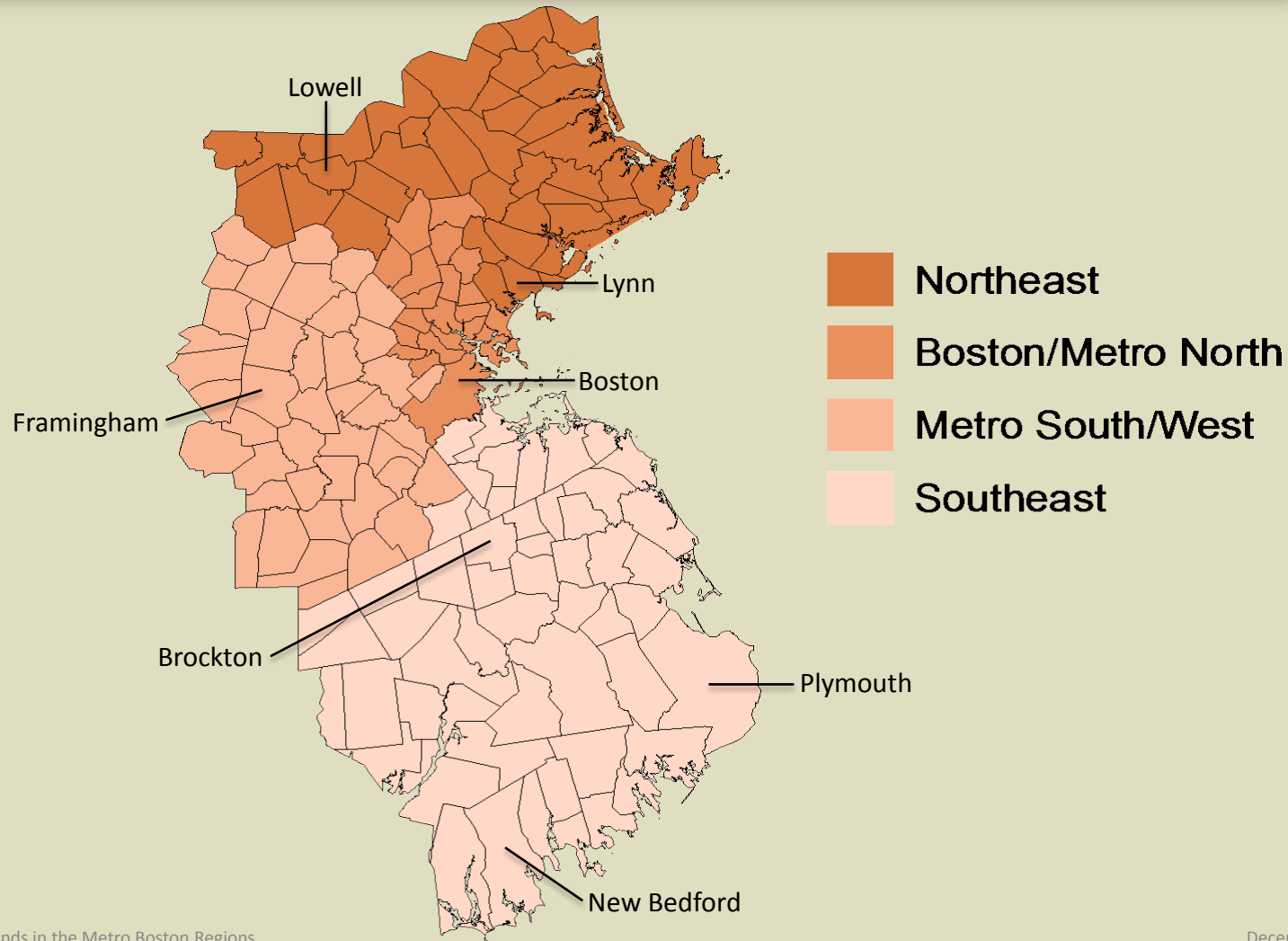
# The Collaboration

- NEPPC promotes better public policy in New England by conducting objective high-quality research and analysis of regional economic and policy issues.
- Workforce investment boards, education leaders, and local businesses had limited information by which to assess long-term challenges.
- The project goal is to provide detailed data on labor supply and demand trends to support workforce development policy discussions at a local level.

# The Results to Date: Reports and Summits

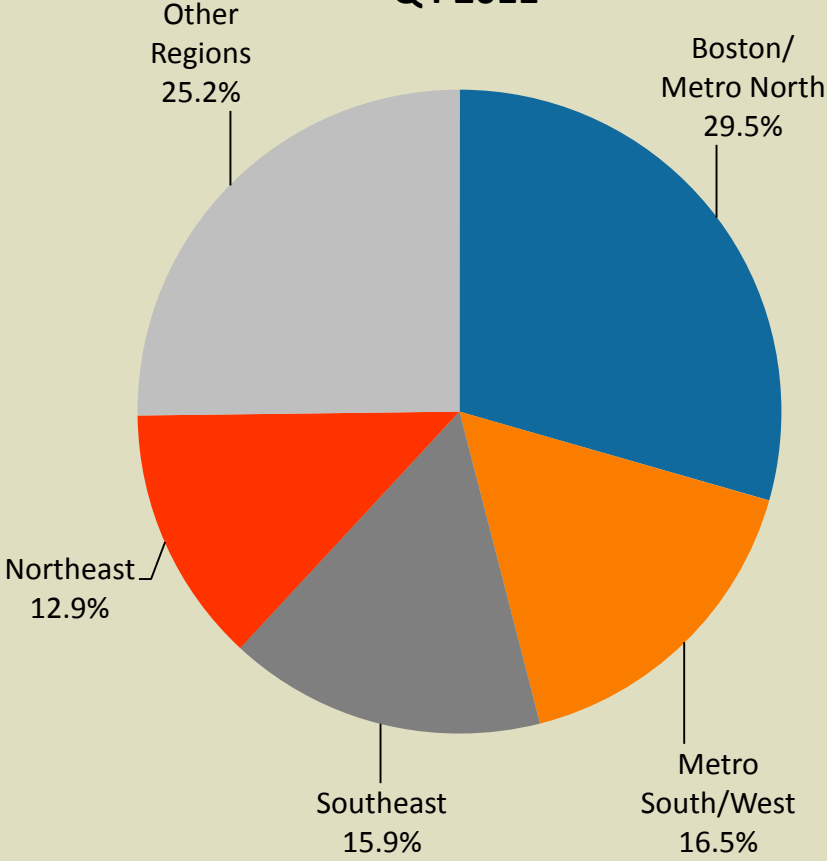
- Reports analyzing the labor market trends of the past decade for Massachusetts regions.
  - Berkshire, Boston/Metro North, Cape & Islands, Central Mass, Metro South/West, Northeast, Pioneer Valley, and Southeast
- Presented at regional summits to begin a conversation about the long-term challenges facing the regions.
- Follow-on work: additional regional presentations with select audiences and a statewide report and summit to compare findings across labor markets.
- Reports, presentations, data appendices, and more are available online at [www.bostonfed.org/neppc](http://www.bostonfed.org/neppc).

# Today: Metro Boston Regions

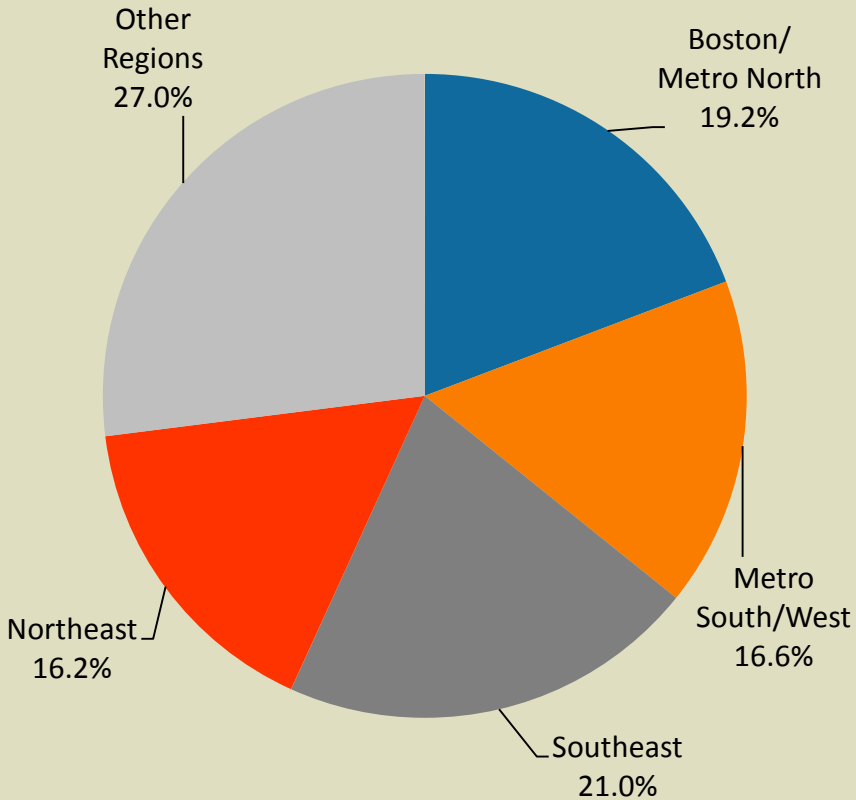


# Metro Boston accounts for three-quarters of the state economy.

### Share of Massachusetts Employment, Q4 2011



### Share of Massachusetts Population, 2008-2010



# Outline

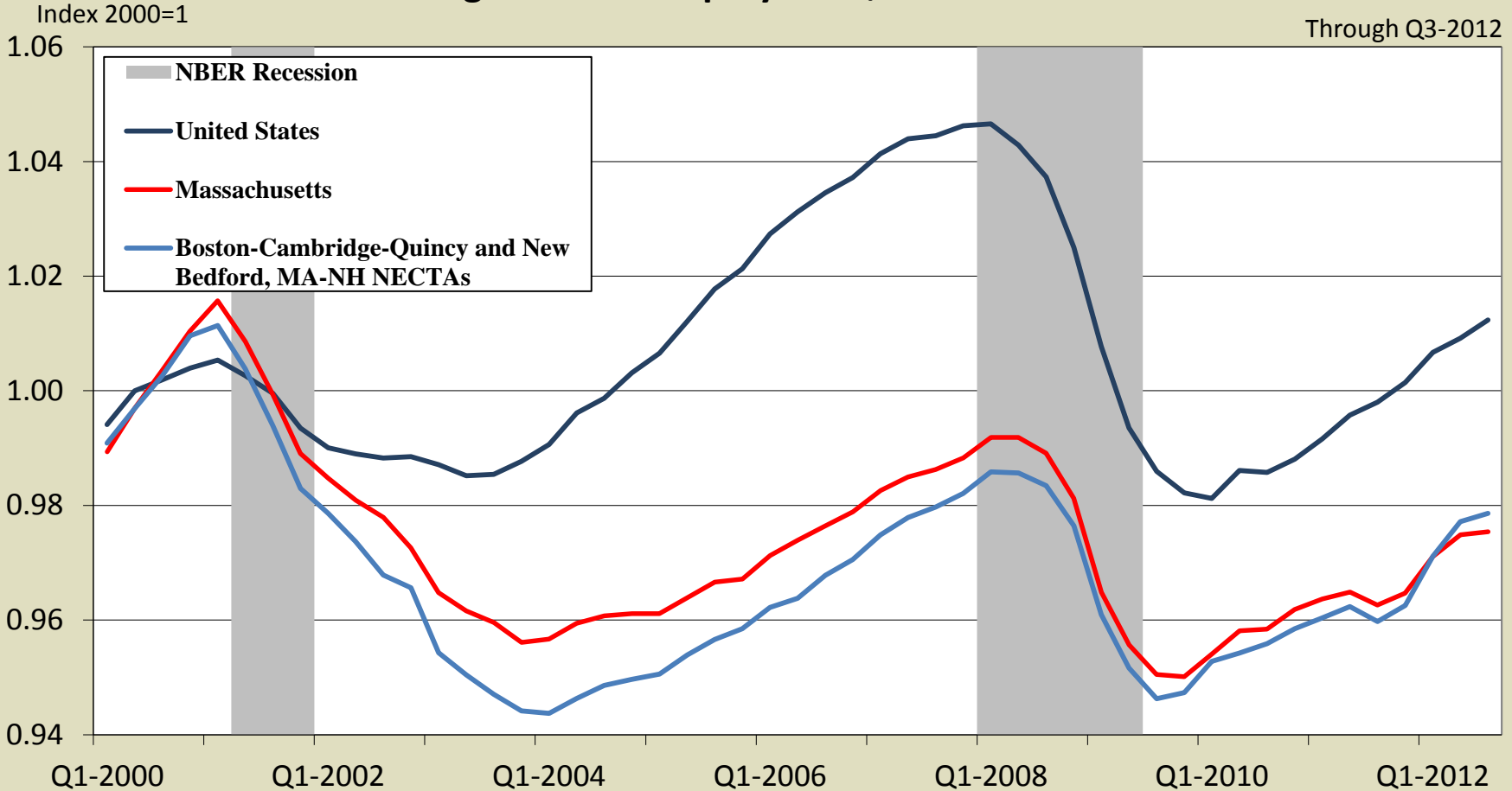
- Labor Market Performance
- Labor Supply
- Labor Demand
- The Pipeline: Educational Supply of Post-Secondary Degrees

# Labor Market Performance

- National, State, and Metropolitan Area Employment Trends
- Performance of the Regional Labor Market
- Unemployment Trends

Metro Boston and Massachusetts are still far below peak employment levels of the early 2000's.

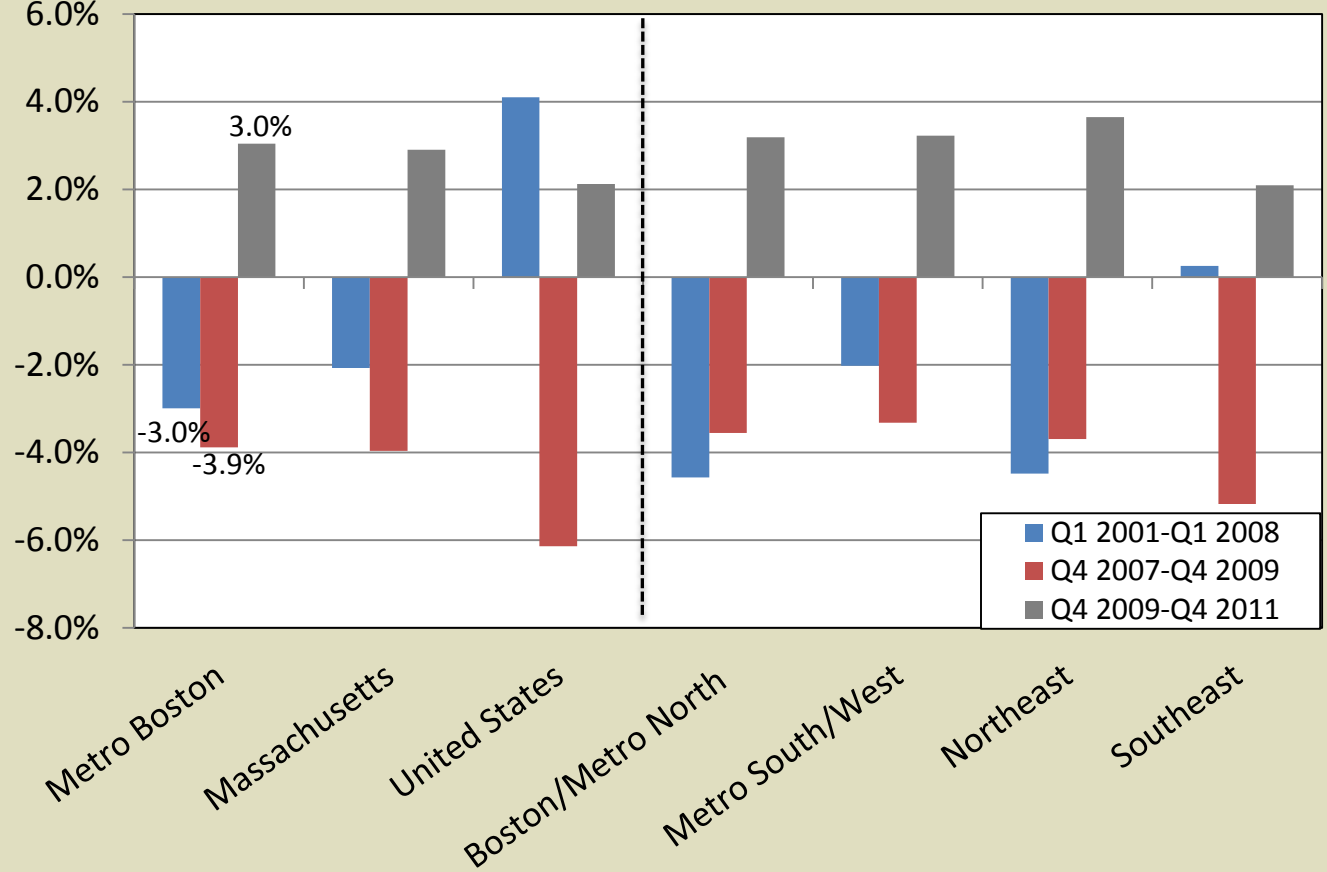
### Total Non-Agricultural Employment, Q1-2000 to Q3-2012



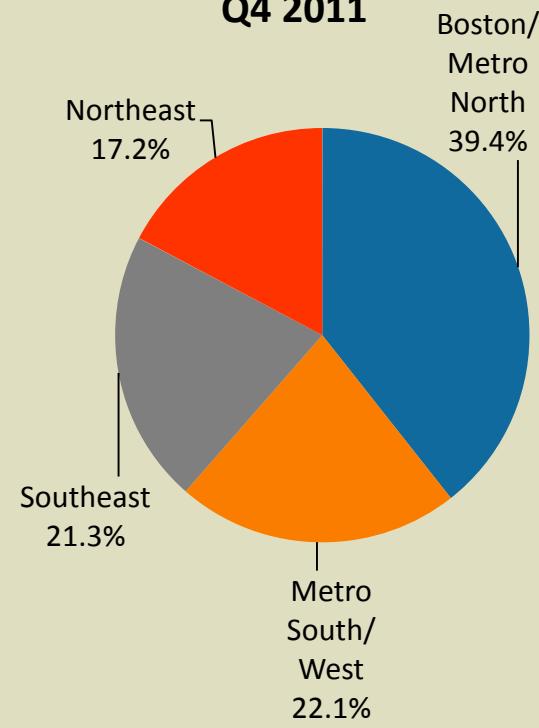
Sources: U.S. Bureau of Labor Statistics, Current Employment Statistics.

Metro Boston regions have recovered at a faster rate than the state, with the exception of the Southeast.

**Total Growth Rates in Employment**



**Share of Employment, Q4 2011**



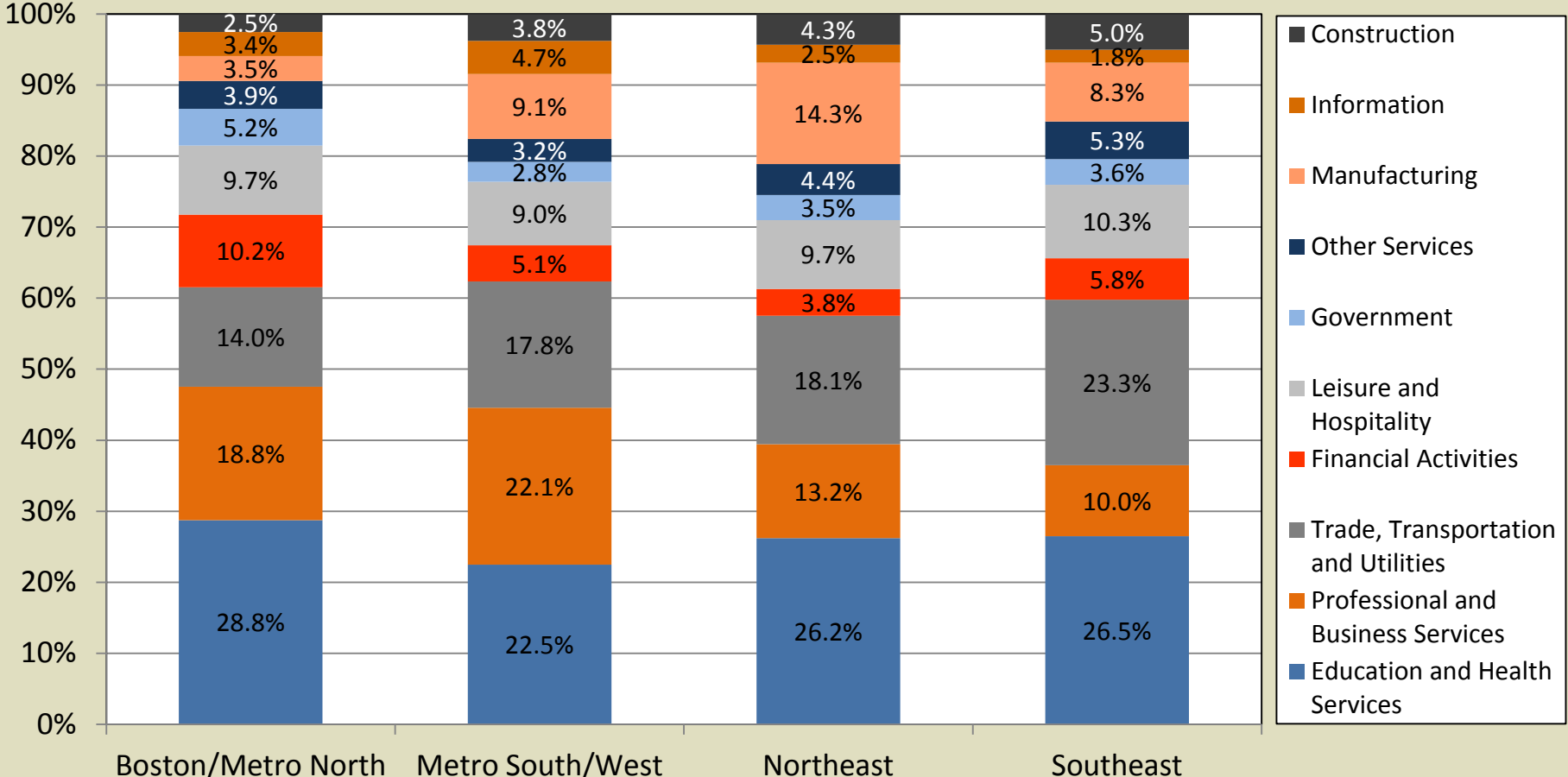
Sources: Massachusetts Executive Office of Labor and Workforce Development (EOLWD), ES-202 and U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW).

## Brief Summary of Industry Employment Trends

- Manufacturing employment in Metro Boston declined by 40 percent from the start of the decade through the Great Recession, but has started to recover in the Northeast and Southeast.
- Boston/Metro North and Metro South/West have experienced a strong recovery in Information and Professional & Technical Services, accounting for a majority of the state's growth in these industries.
- Health Care & Social Assistance was consistently one of the strongest growing industries across the regions, accounting for the largest number of new jobs in the past decade.
- Accommodation & Food Services (restaurants) and Administrative & Support Services (employment agencies) have seen some of the fastest job growth in the earliest stages of the recovery.

Professional & Business Services is a larger sector of employment in the metro regions, while Manufacturing is largest in the Northeast.

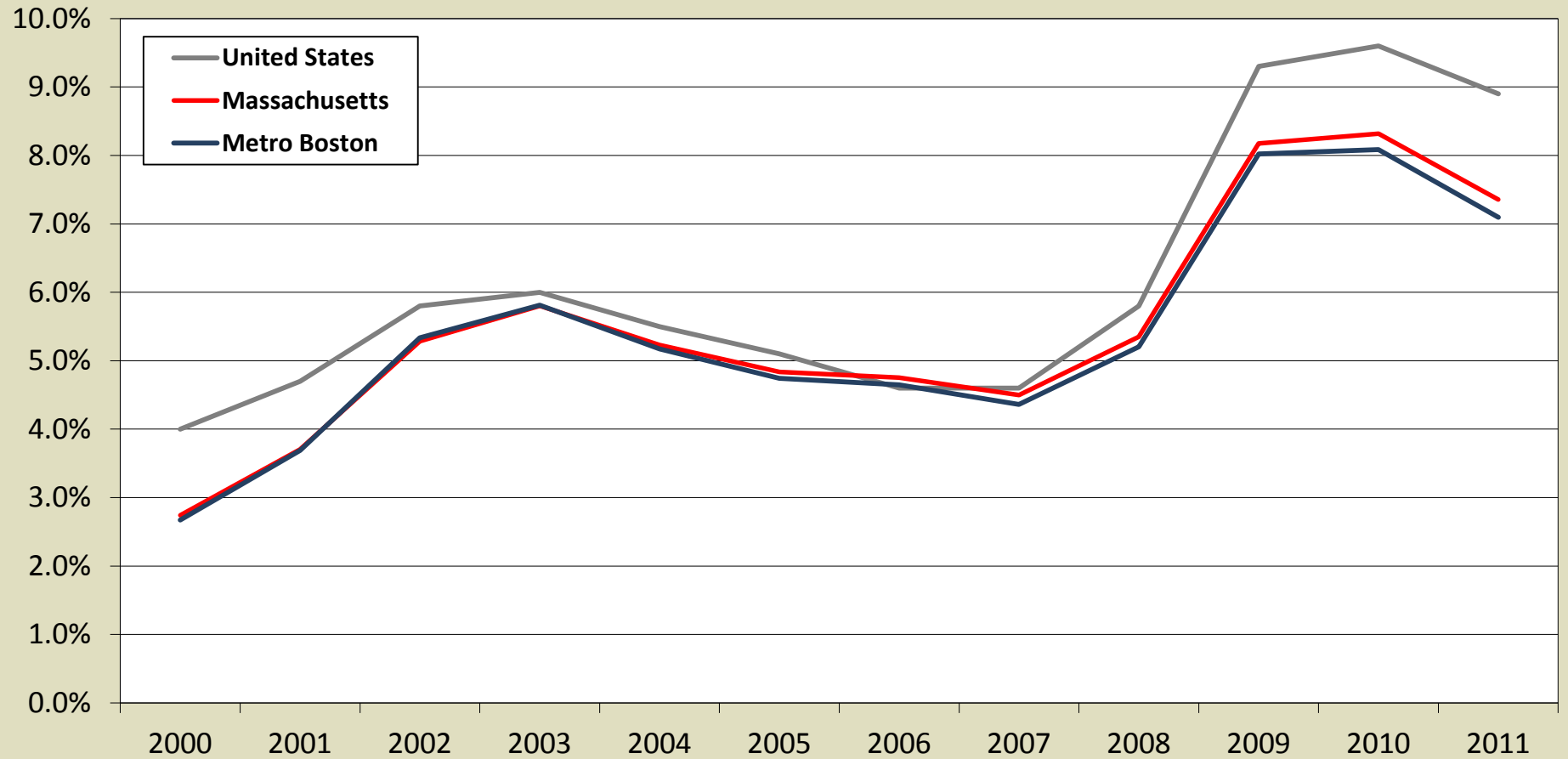
**Employment Distribution by Supersector, Q4 2011**



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

Slightly stronger employment gains in recent years have pulled Metro Boston's unemployment rate below the state average.

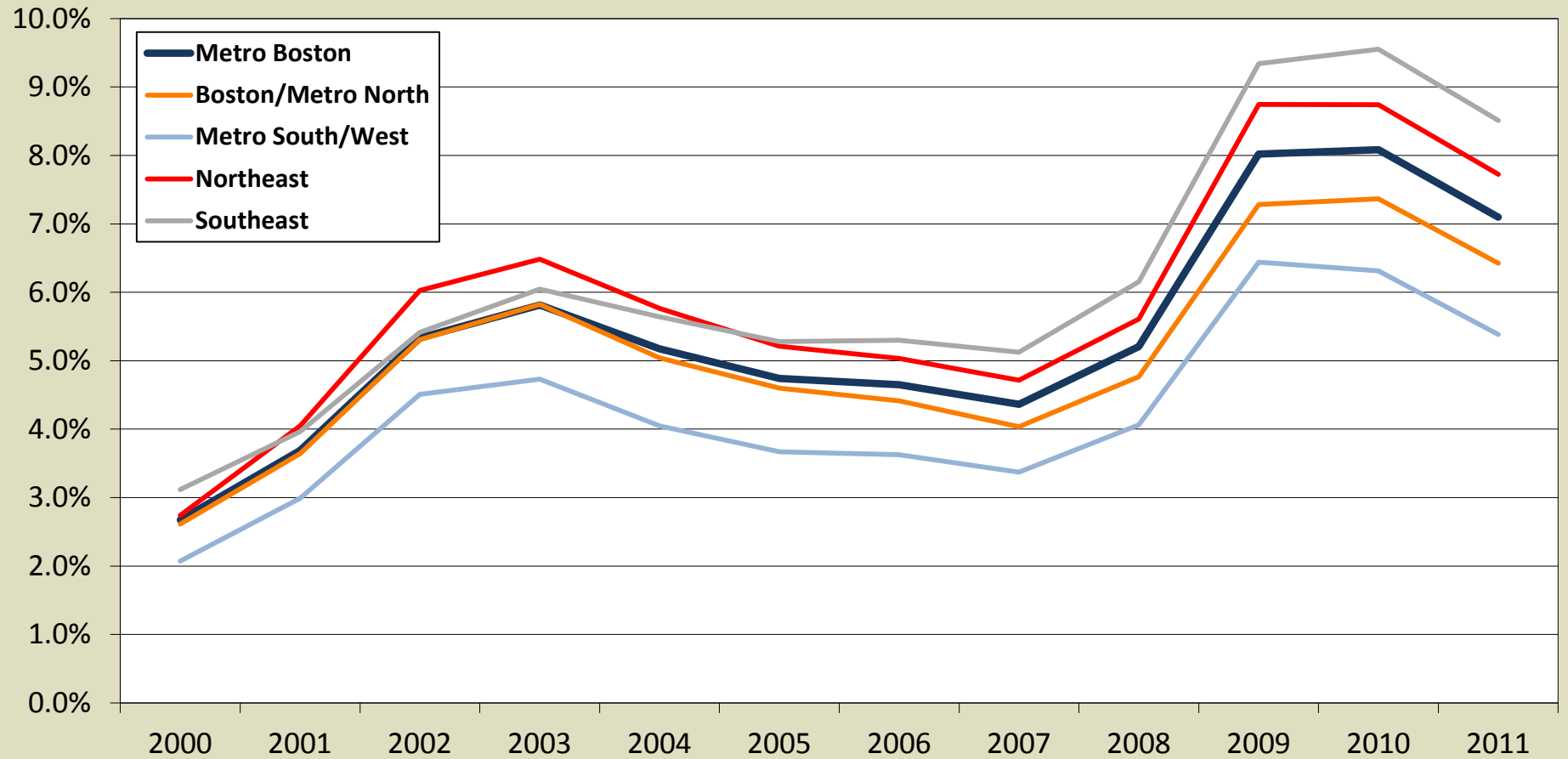
**Unemployment Rates, 2000 to 2011**



Source: U.S. Bureau of Labor Statistics, Current Population Survey and Massachusetts EOLWD, Labor Force and Unemployment Rates.

Unemployment rates peaked in 2010, ranging from 6.3 percent in Metro South/West to 9.6 percent in the Southeast.

Unemployment Rates, 2000 to 2011



Source: Massachusetts EOLWD, Labor Force and Unemployment Rates.

Strong regional employment growth has helped to keep unemployment rates below the national average.

### Employment Growth and Unemployment

	Employment Growth, Q4 2009-Q4 2011	Unemployment Rate, October 2012
United States	2.1%	7.5%
Massachusetts	2.9%	6.2%
Metro Boston	3.0%	6.1%
Boston/Metro North	3.2%	5.7%
Metro South/West	3.2%	4.7%
Northeast	3.6%	6.6%
Southeast	2.1%	7.0%

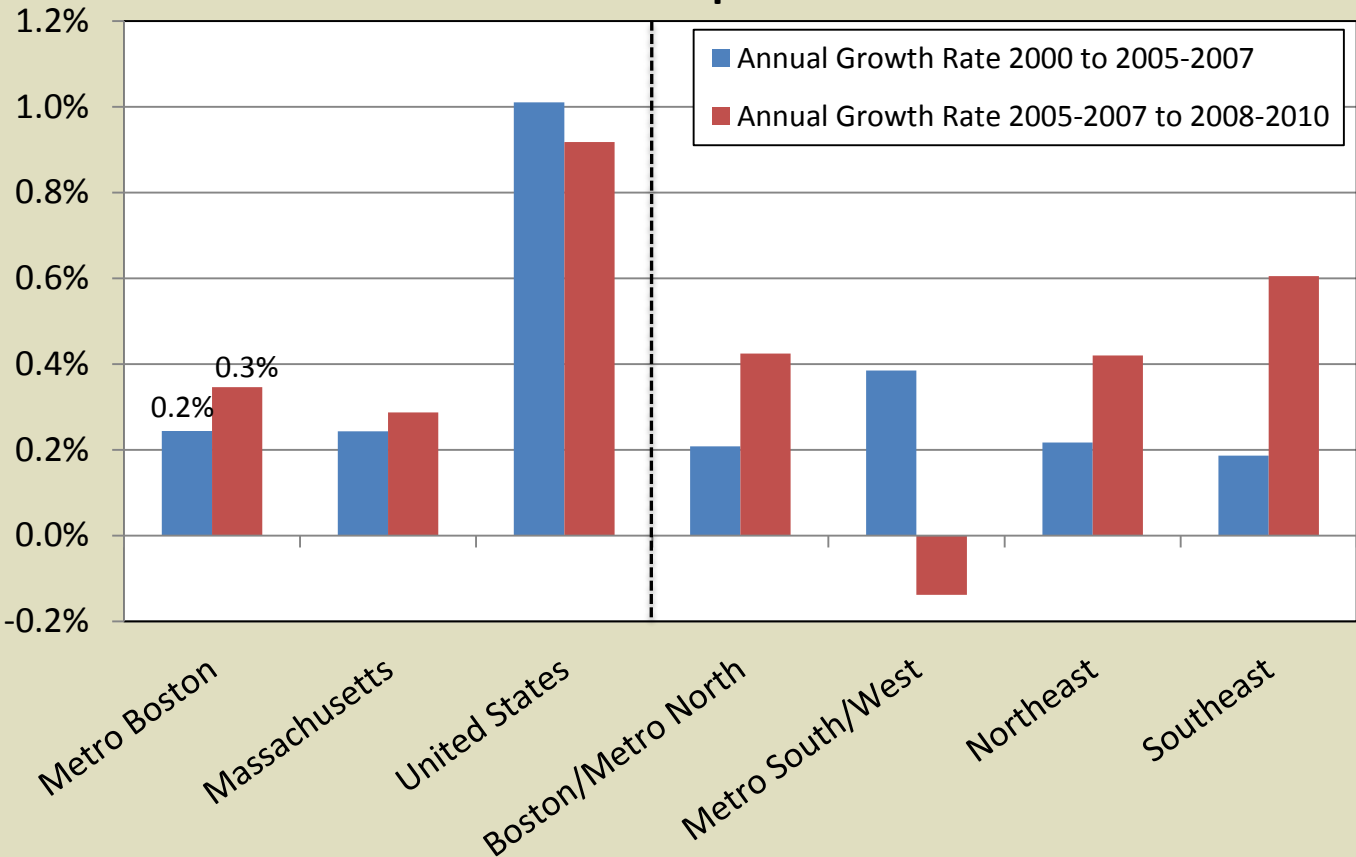
Source: U.S. Bureau of Labor Statistics, Current Population Survey and Massachusetts EOLWD, Labor Force and Unemployment Rates.

# Labor Supply

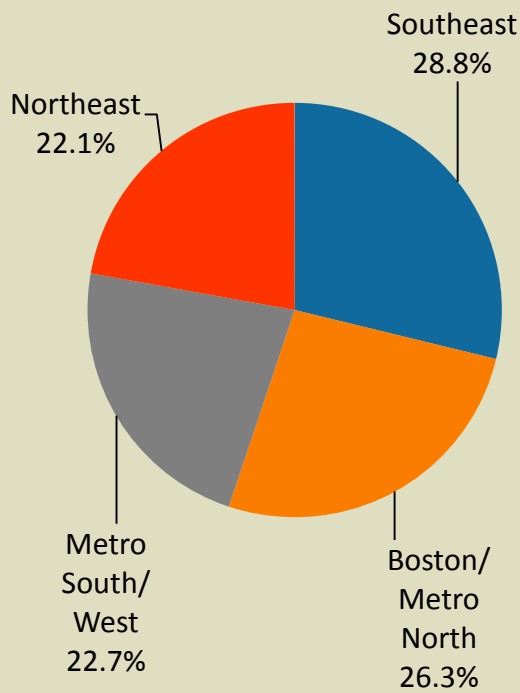
- Residential Population Changes
- Age and Education of the Civilian Labor Force
- Characteristics of the Unemployed

Metro Boston region's exceeded statewide population growth rates over the past decade, save for Metro South/West.

**Total Residential Population Growth**



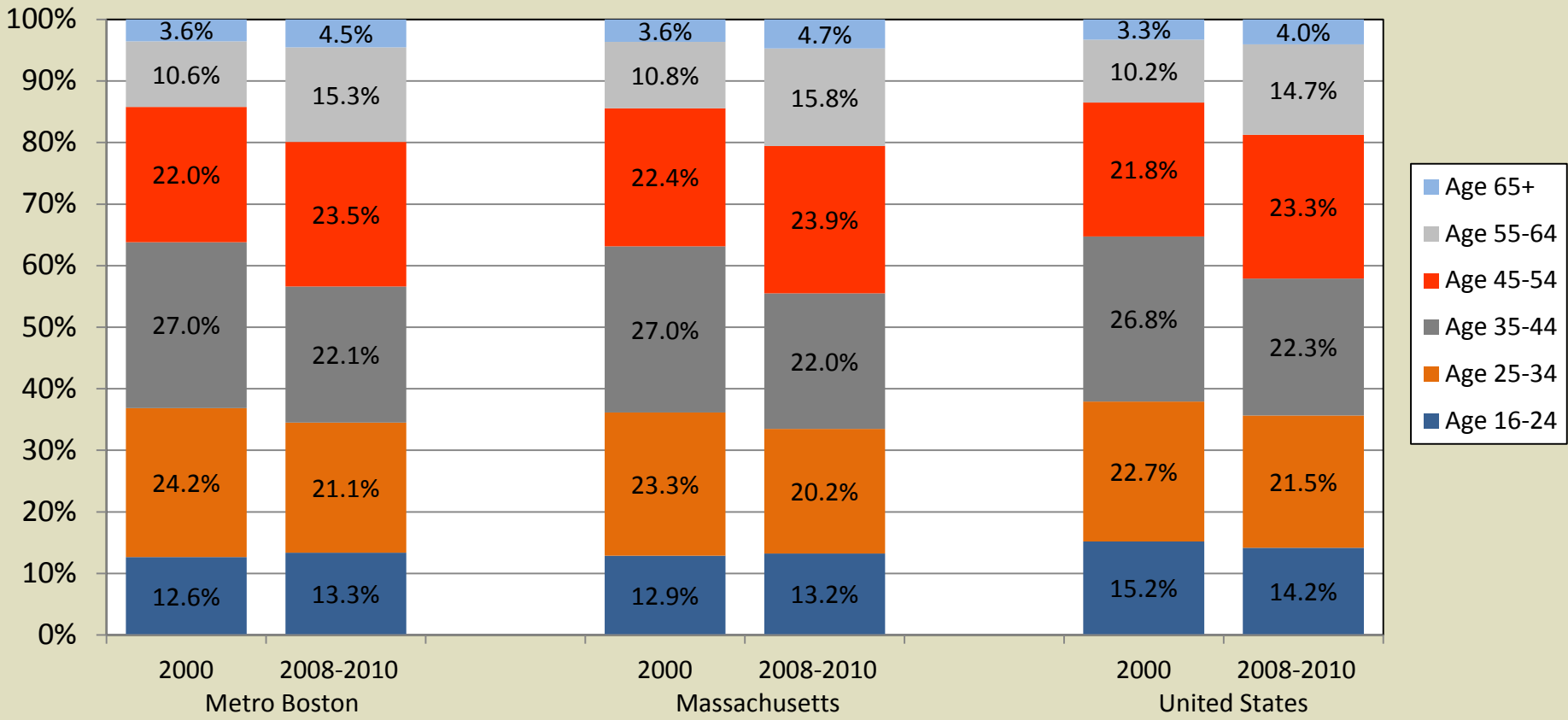
**Share of Population, 2008-2010**



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.

The labor force in Metro Boston has aged in the last decade, but remains slightly younger than the Massachusetts average.

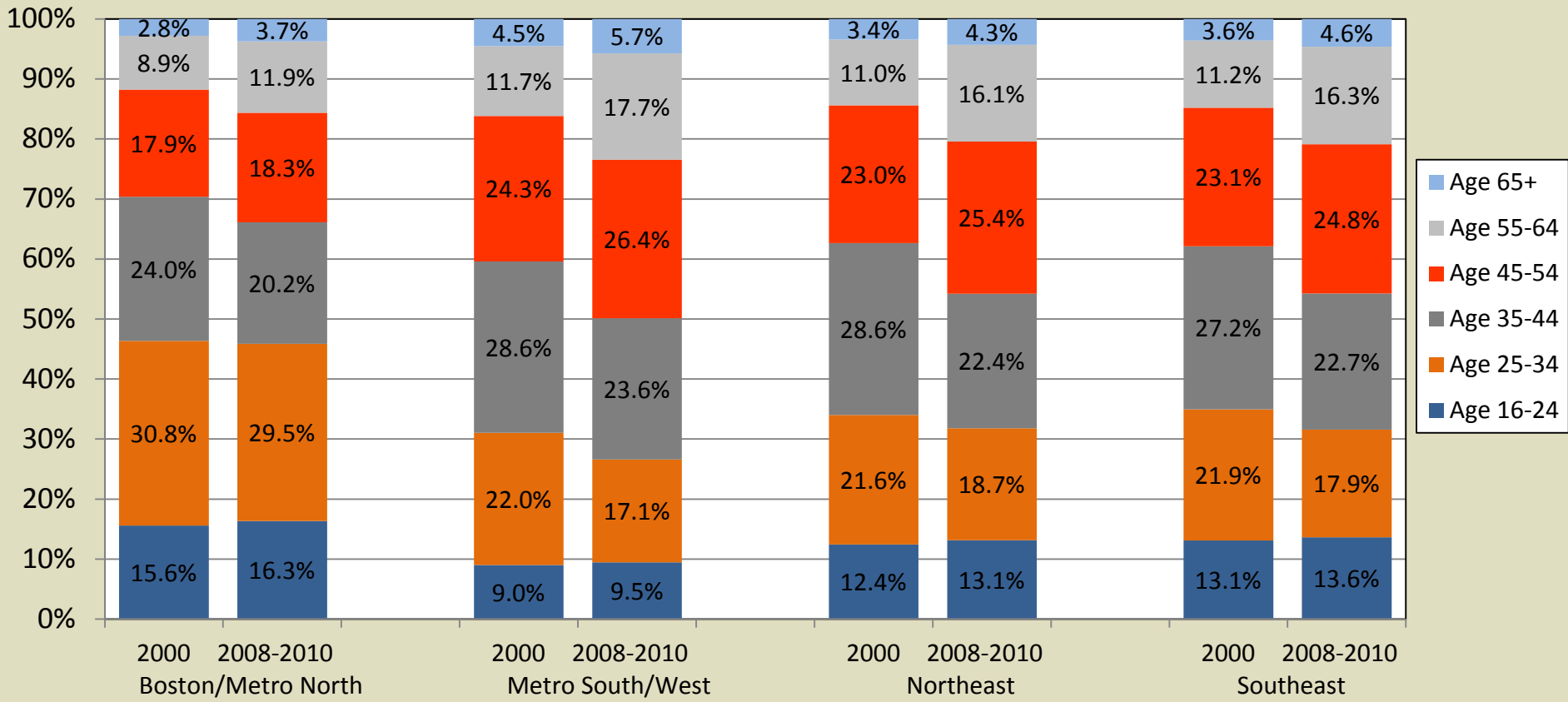
### Age Distribution of the Civilian Labor Force



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

Boston/Metro North has the youngest labor force in the state while Metro South/West has one of the oldest.

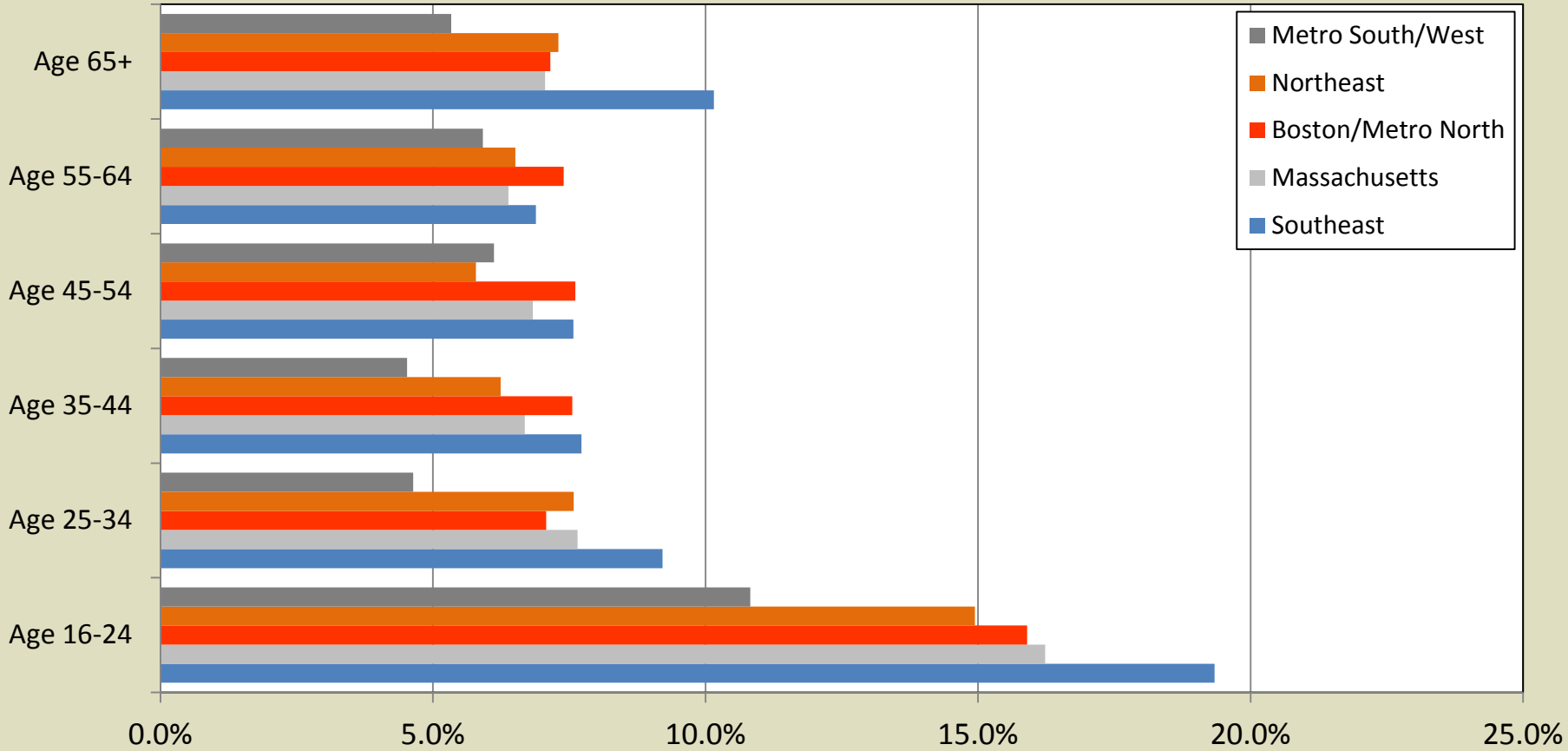
### Age Distribution of the Civilian Labor Force



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

Unemployment rates for 16-24 years old are the highest of all age cohorts, reaching 19 percent in the Southeast region.

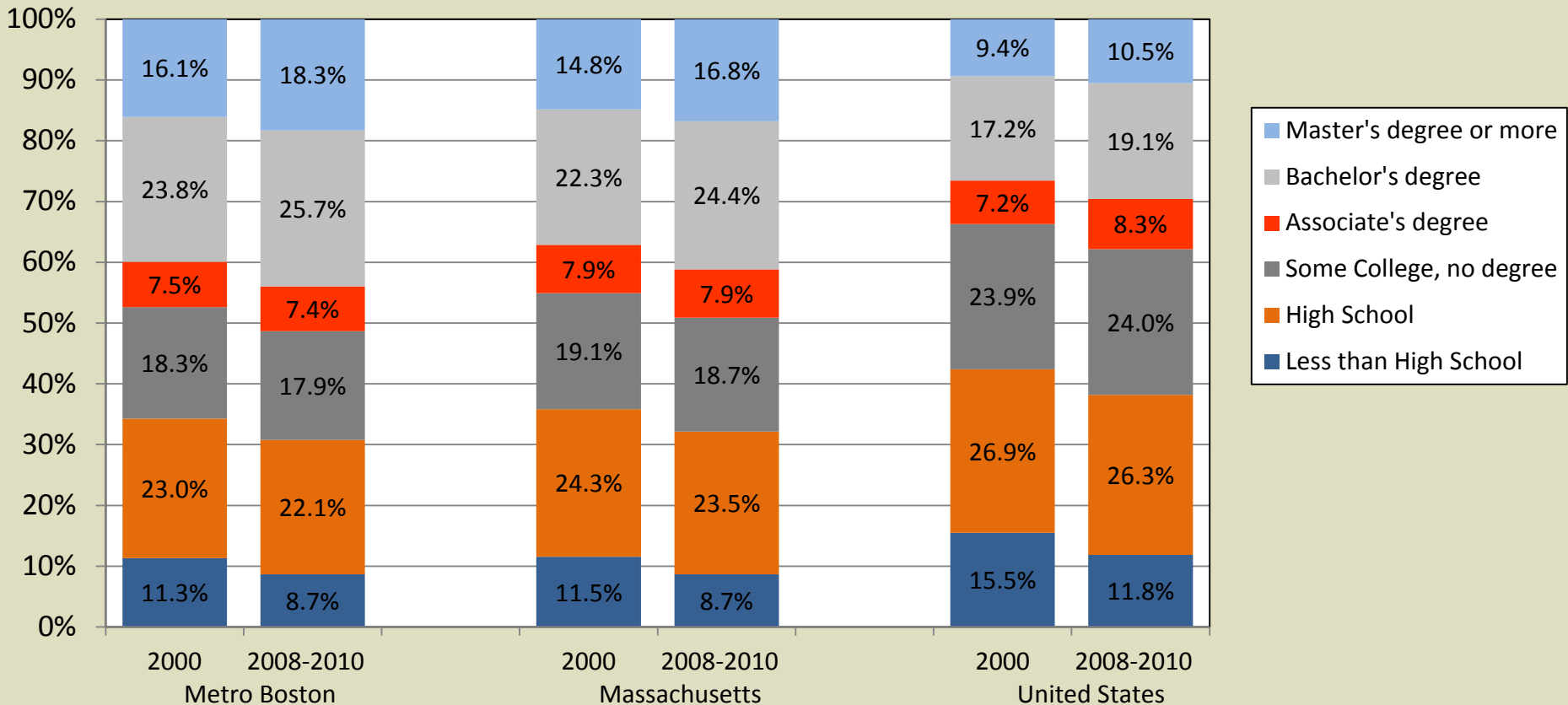
### Unemployment Rates by Age, 2008-2010



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

Metro Boston has a higher share of college-educated labor than the state, but a comparable share with less than a High School education.

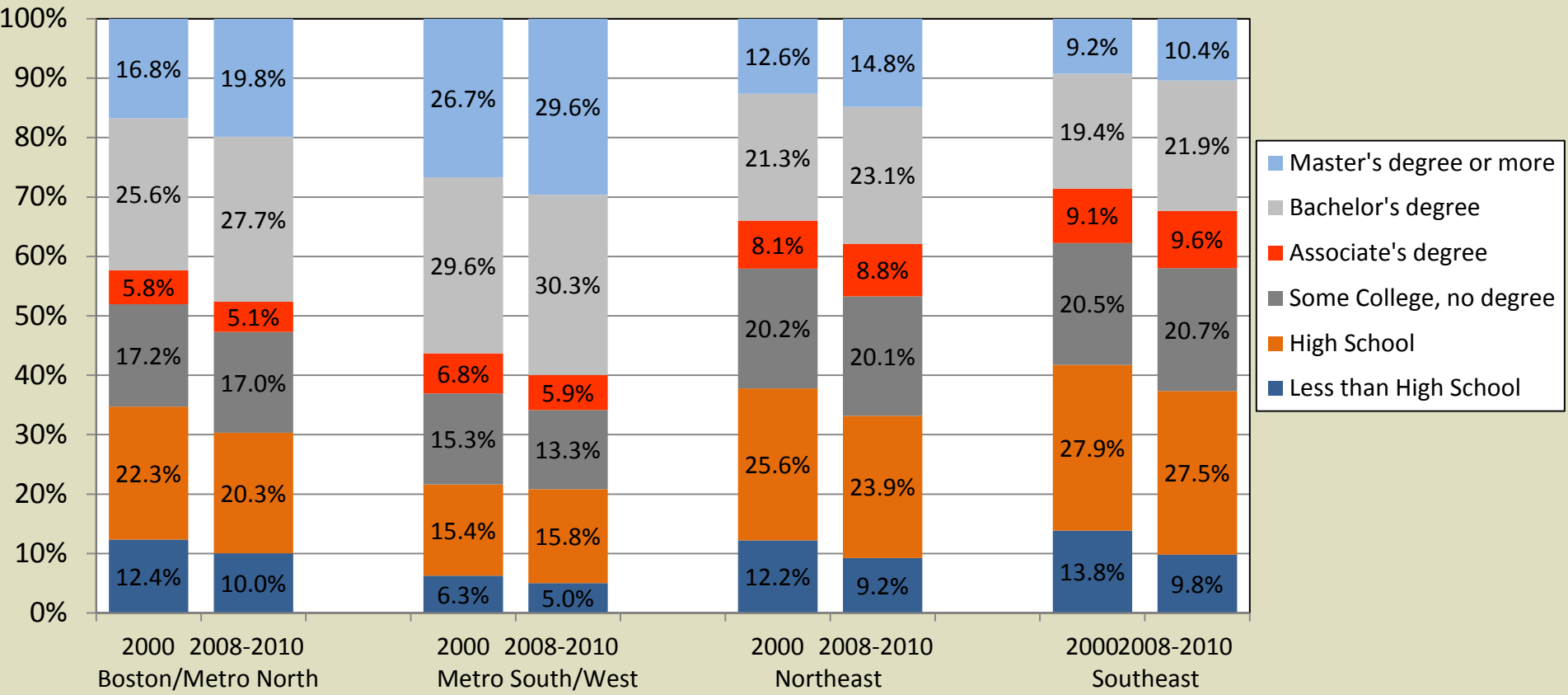
### Educational Attainment of the Civilian Labor Force



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

Except in Metro South/West, about one in ten labor force participants lacks a High School education.

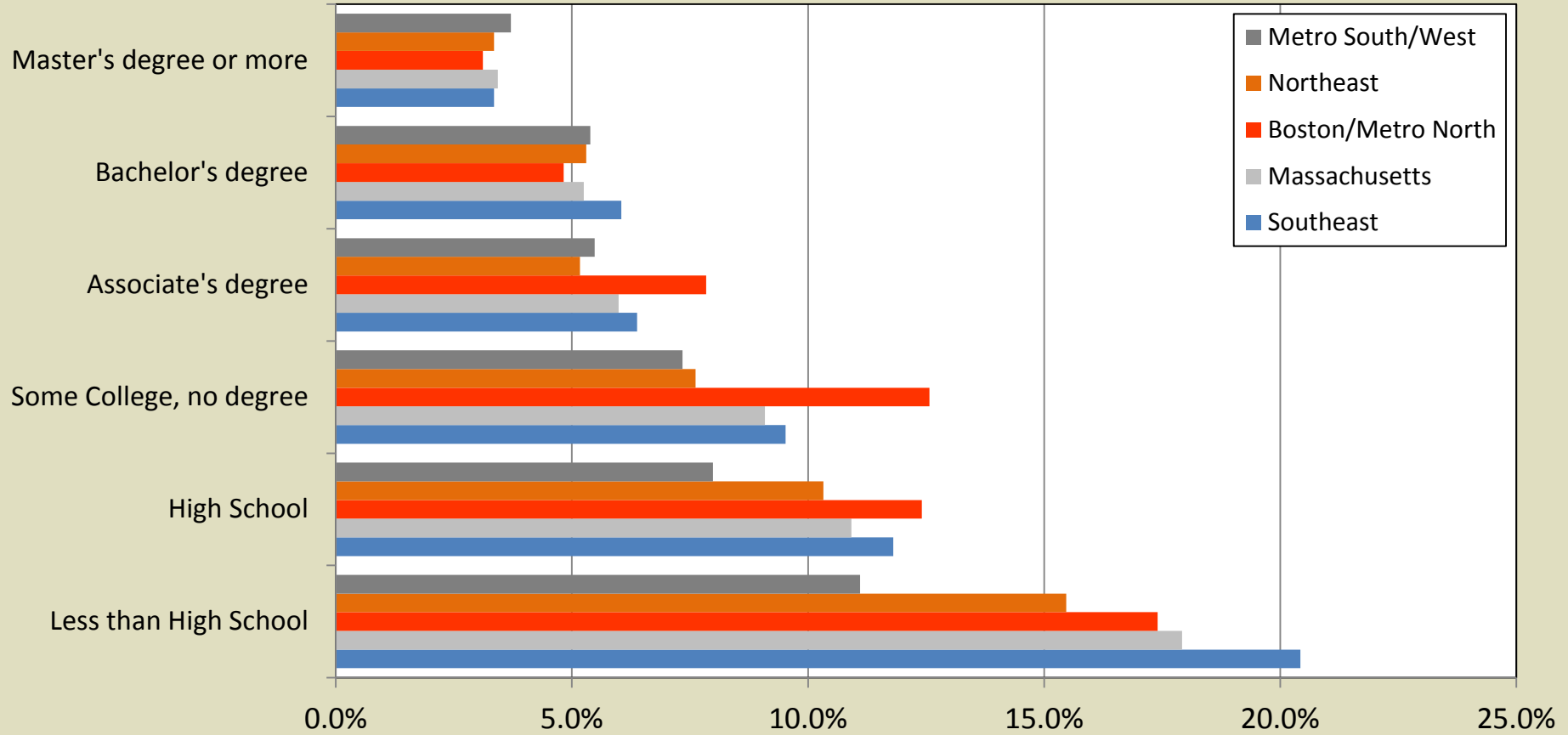
### Educational Attainment of the Civilian Labor Force



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

Those with less than a High School education have the highest unemployment rates, reaching 20 percent in the Southeast.

### Unemployment Rates by Educational Attainment, 2008-2010



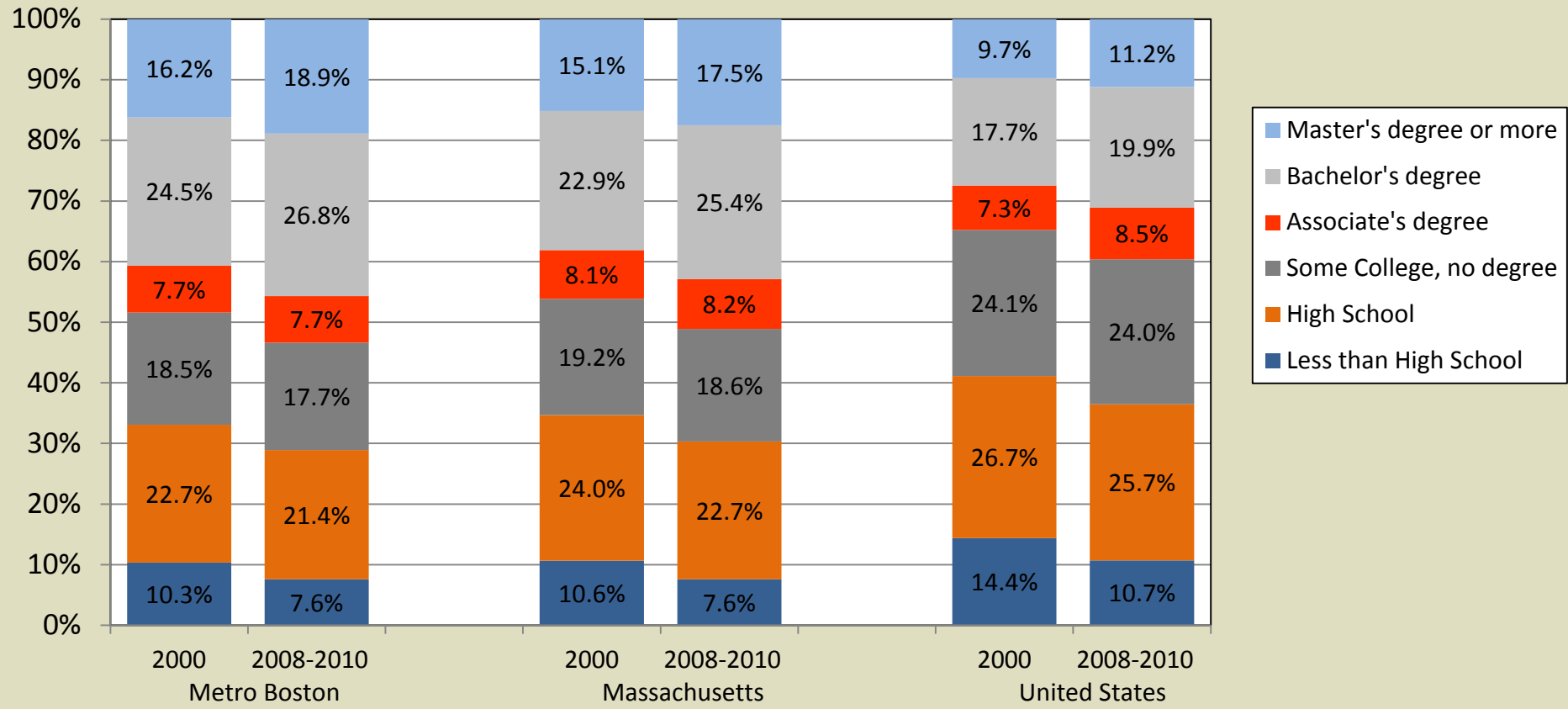
Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

# Labor Demand

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

Individuals employed in Metro Boston are more likely to have a Bachelor's Degree or higher than statewide.

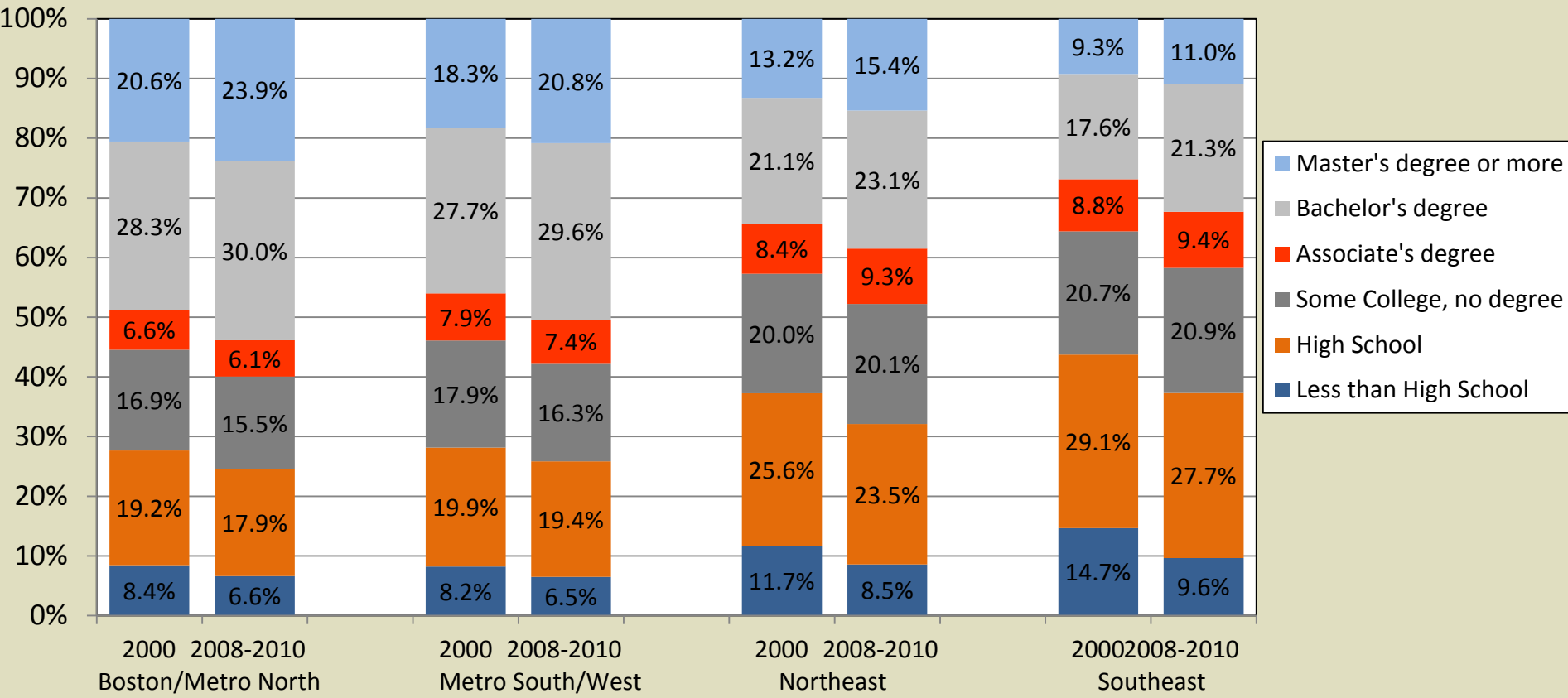
### Educational Attainment of Individuals Employed in the Region



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

Boston/Metro North has the most highly educated workforce in all of Massachusetts.

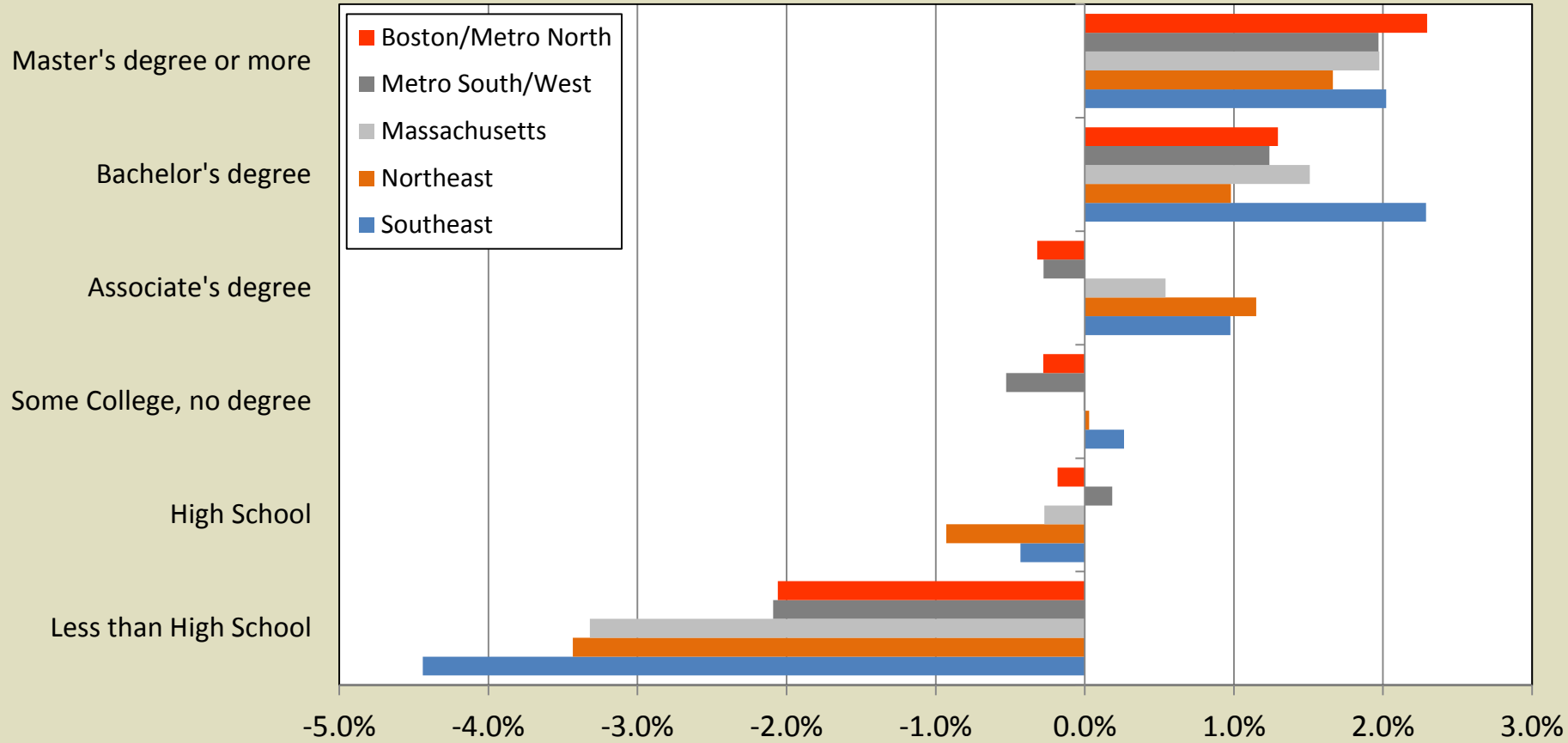
### Educational Attainment of Individuals Employed in the Regions



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

In the past decade employment opportunities have grown, almost exclusively, for workers with a college degree.

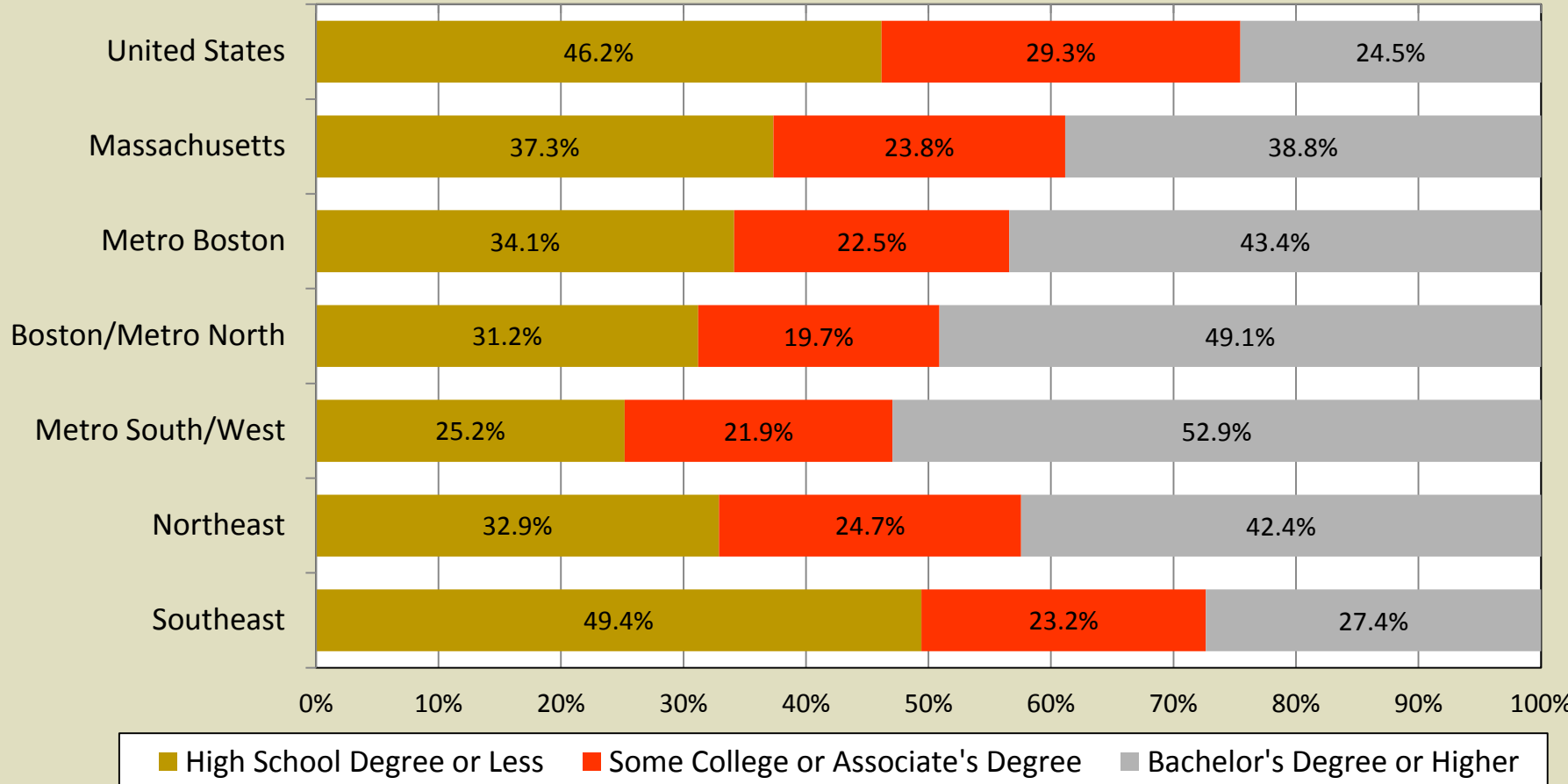
### Annual Growth in the Employed by Education, 2000 to 2008-2010



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

Nearly half of the manufacturing workers in Boston/Metro North and Metro South/West have at least a four-year degree.

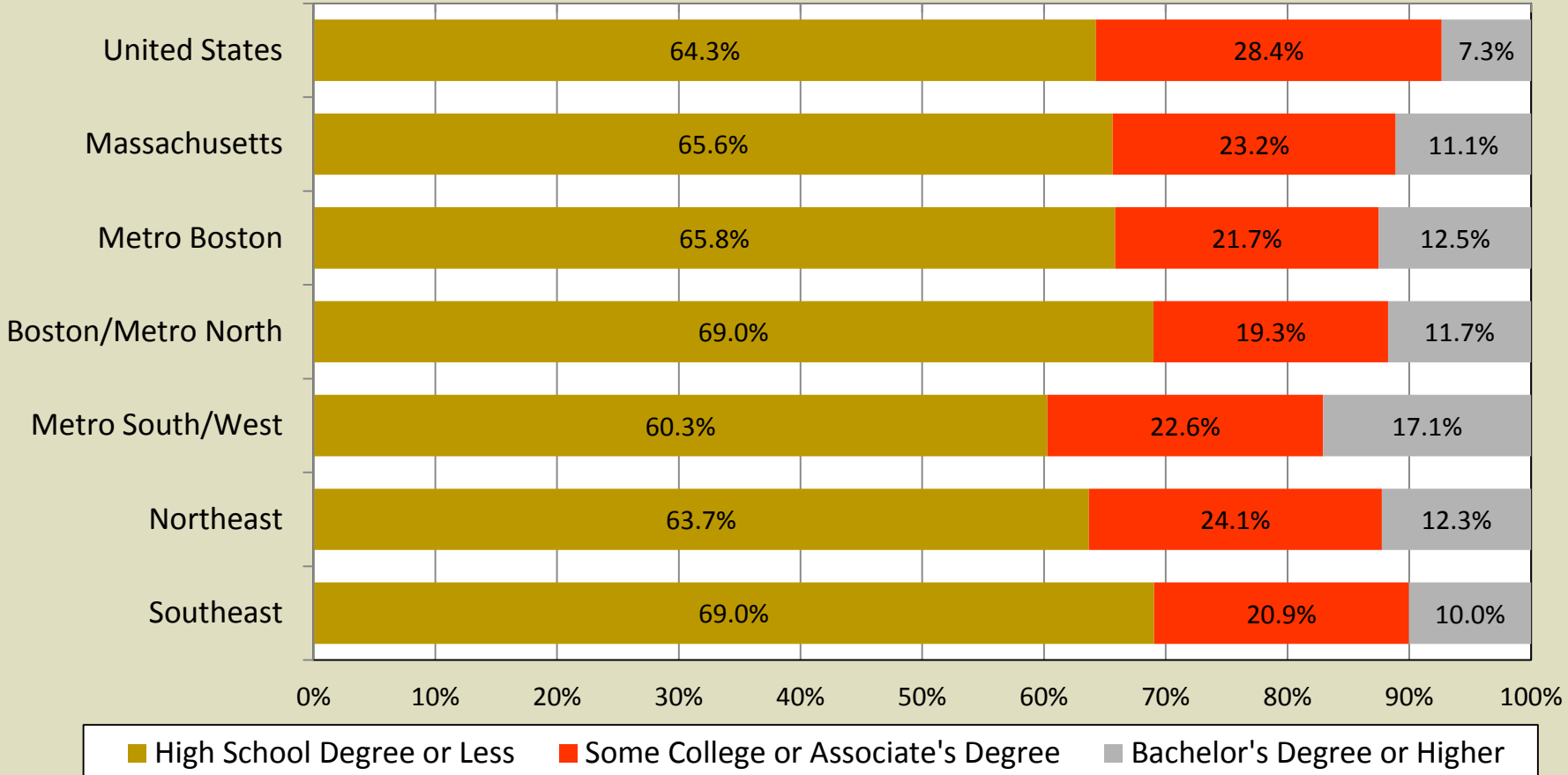
**Educational Attainment of Employees in Manufacturing, 2008-2010**



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

As in the U.S., the majority of production workers in Metro Boston have a High School education or less.

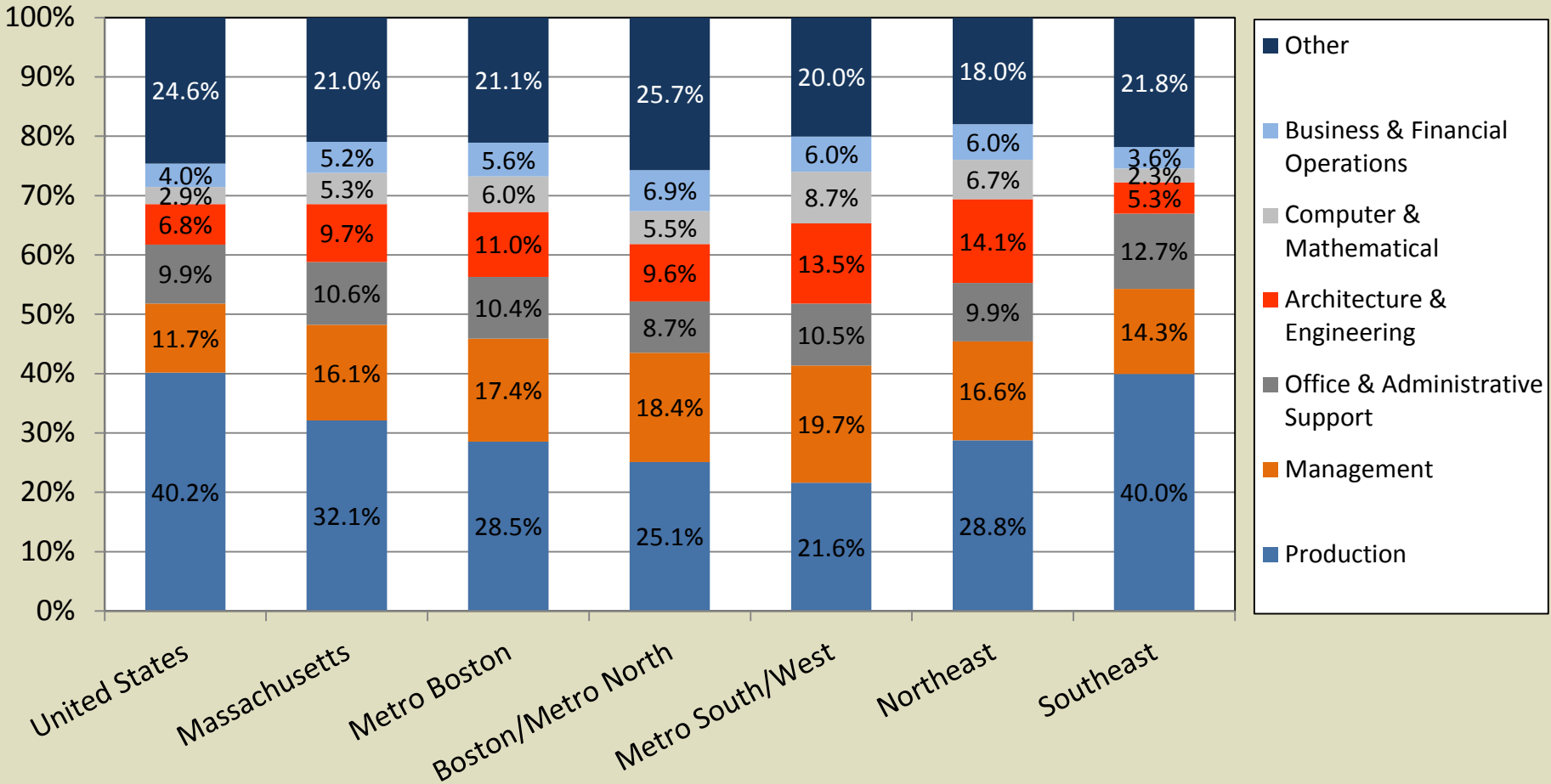
**Educational Attainment of Employees in Production Occupations, 2008-2010**



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

How production intensive the industry is determines the regional differences in the skills of Manufacturing employees.

**Distribution of Major Fields of Study for Bachelor's Degrees Completed in 2010**



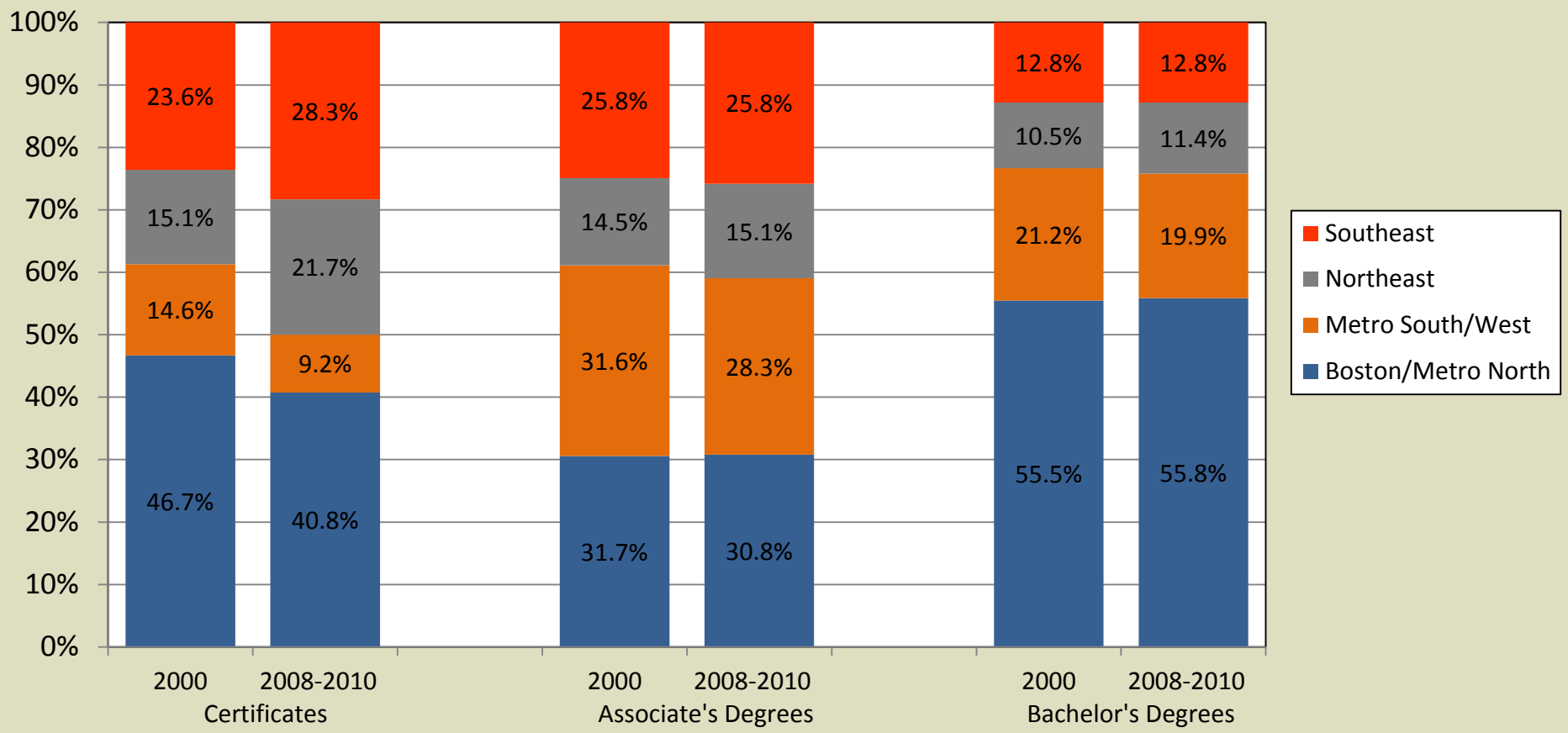
Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

# The Pipeline: Educational Supply of Post-Secondary Degrees

- Degree Completions
- Major Fields of Study

Boston/Metro North and Metro South/West are responsible for a majority of the region's Associate's and Bachelor's Degrees.

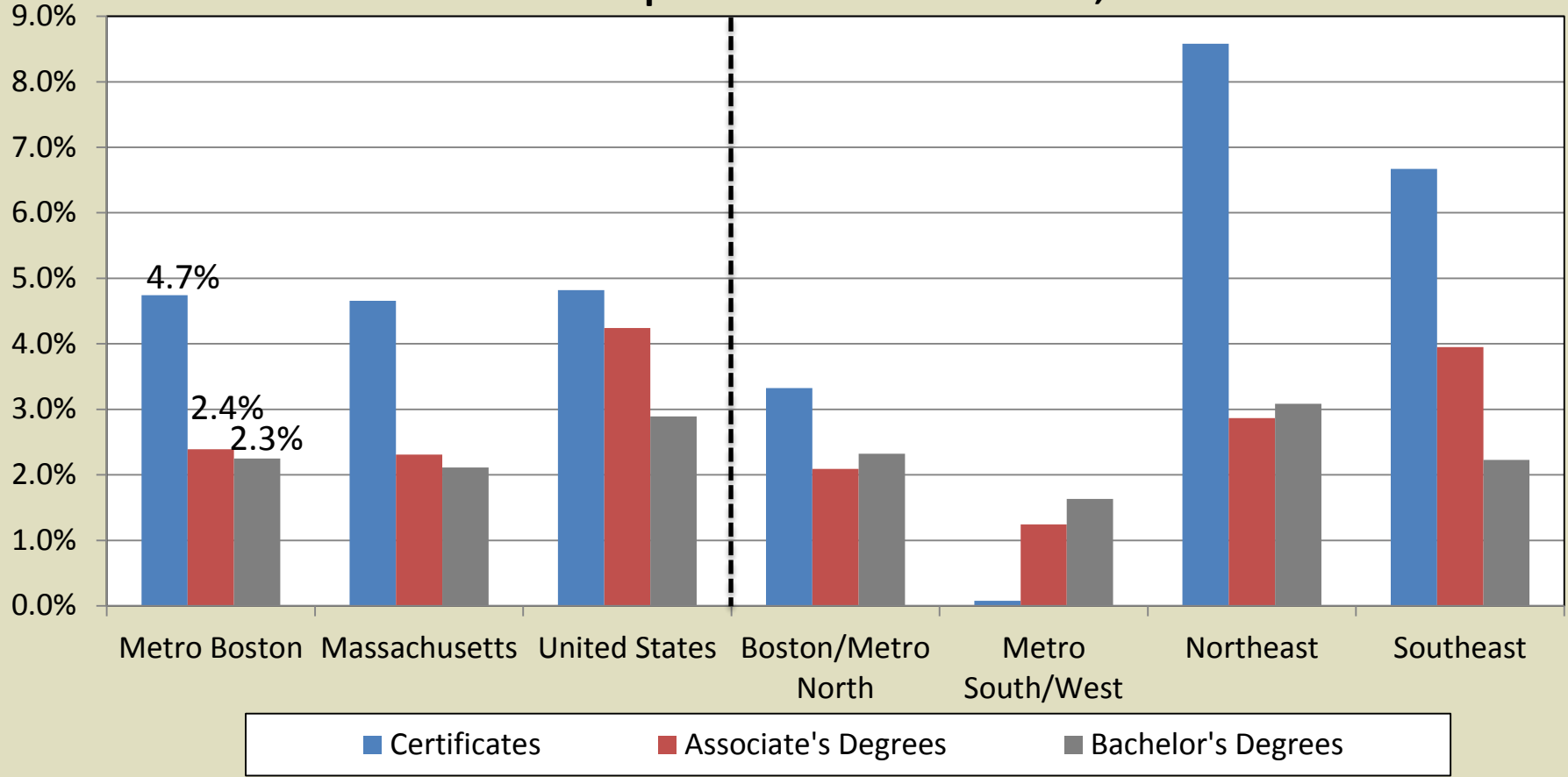
### Distribution of Certificates and Degrees by Regional Labor Market



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

The Northeast and Southeast experienced much faster growth in the completions of Certificates and Associate's Degrees.

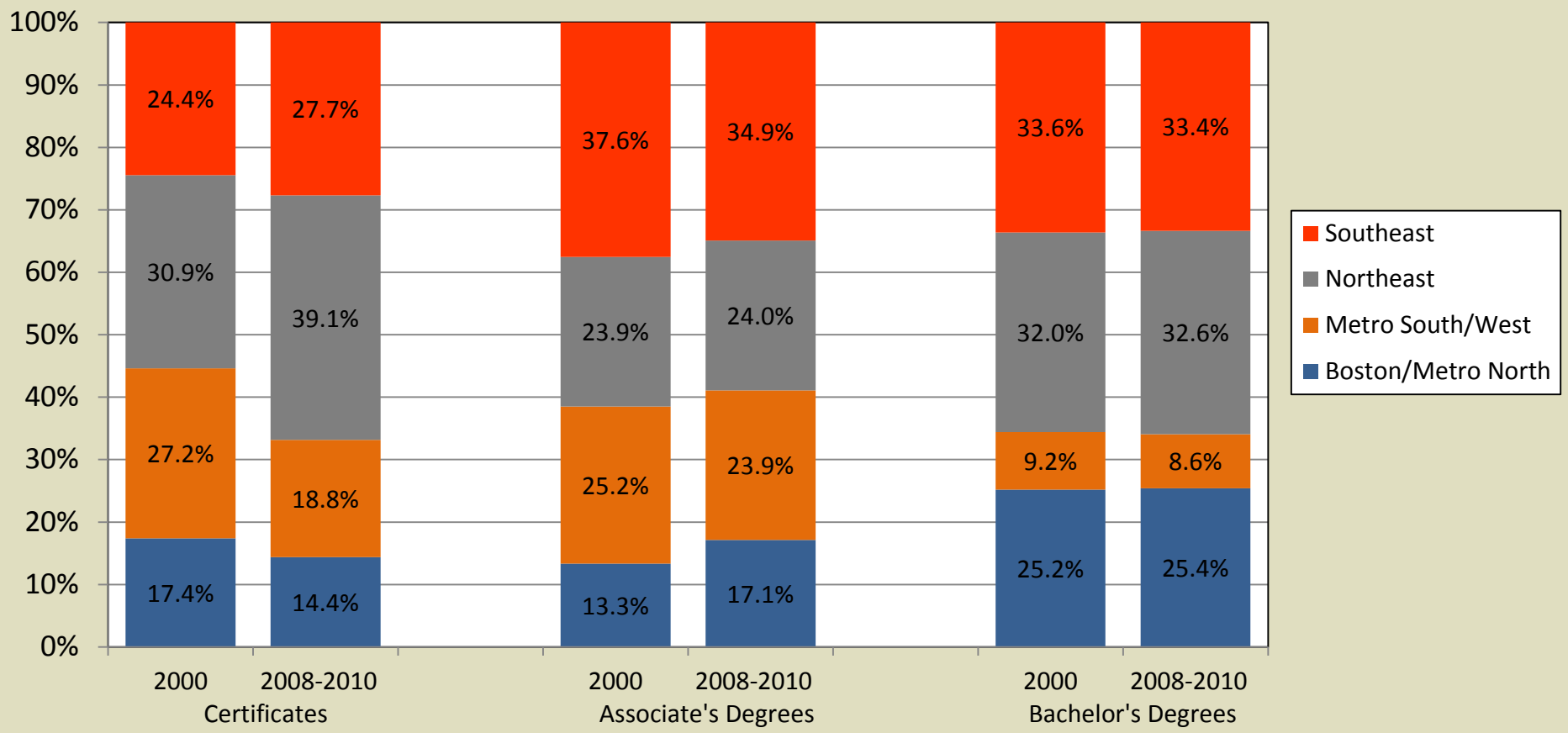
**Annual Growth in Completions at All Institutions, 2000 to 2010**



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

A majority of the region's public post-secondary certificate and degree completions have been in the Northeast and Southeast.

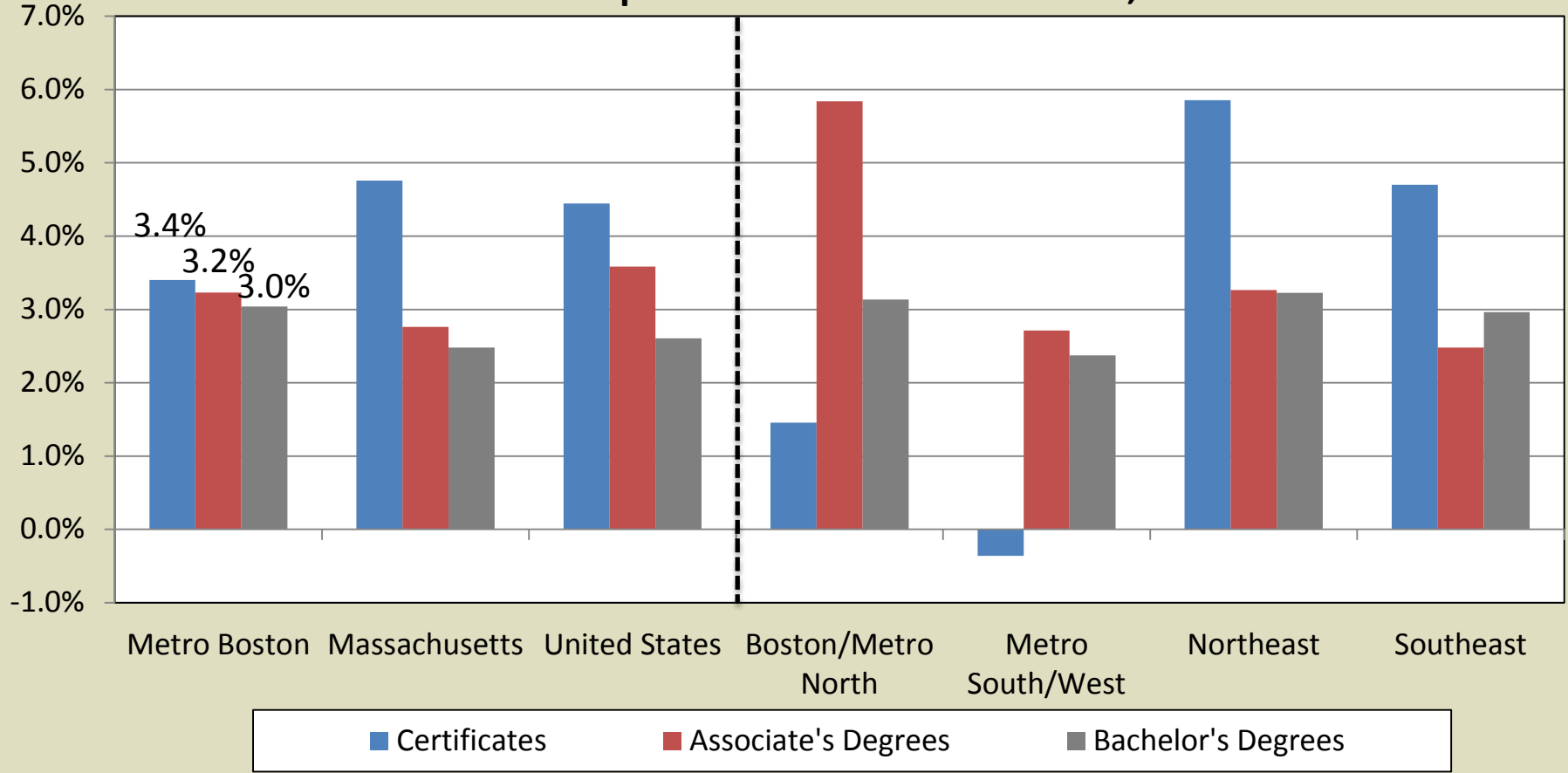
### Distribution of Public Certificates and Degrees by Regional Labor Market



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

The growth in completions of Associate's and Bachelor's Degrees at public institutions in most regions exceeded statewide trends.

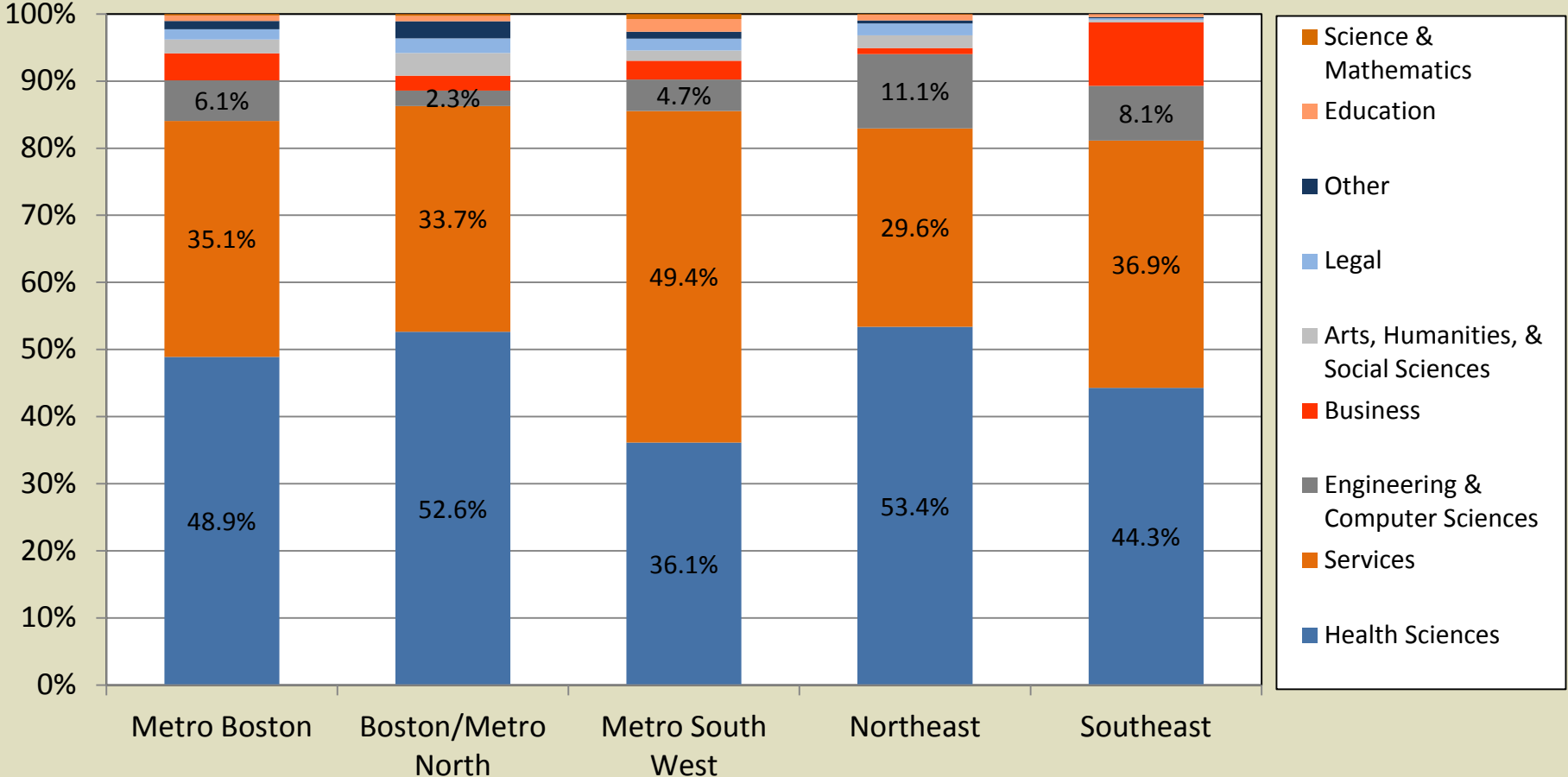
**Annual Growth in Completions at Public Institutions, 2000 to 2010**



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

Health Sciences and Services account for more than 80 percent of the Certificates completed in Metro Boston.

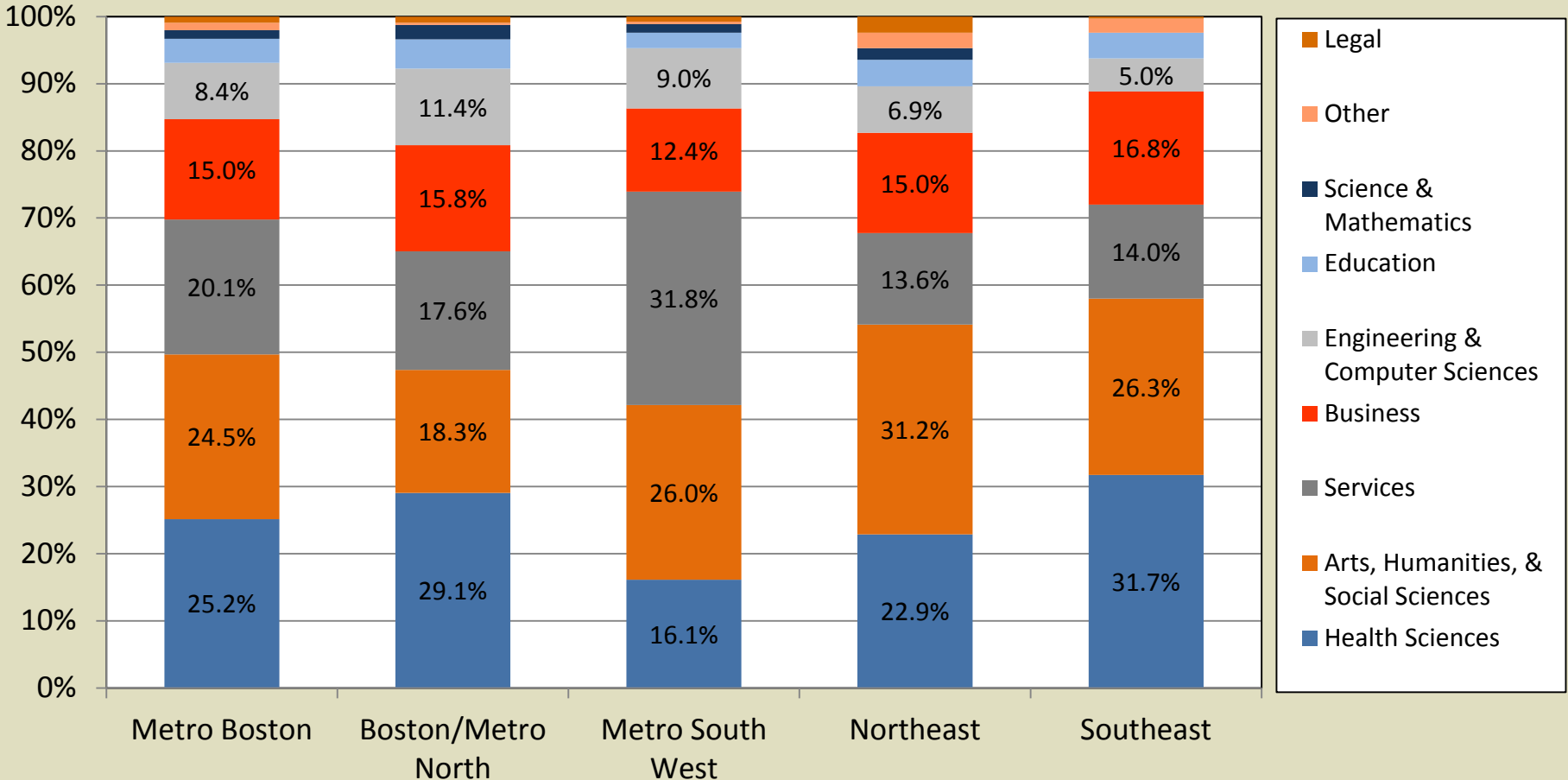
**Distribution of Major Fields of Study for Certificates Completed in 2010**



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

Associate's Degree completions are spread across majors such as Health Sciences, Arts, Humanities, & Social Sciences, and Services.

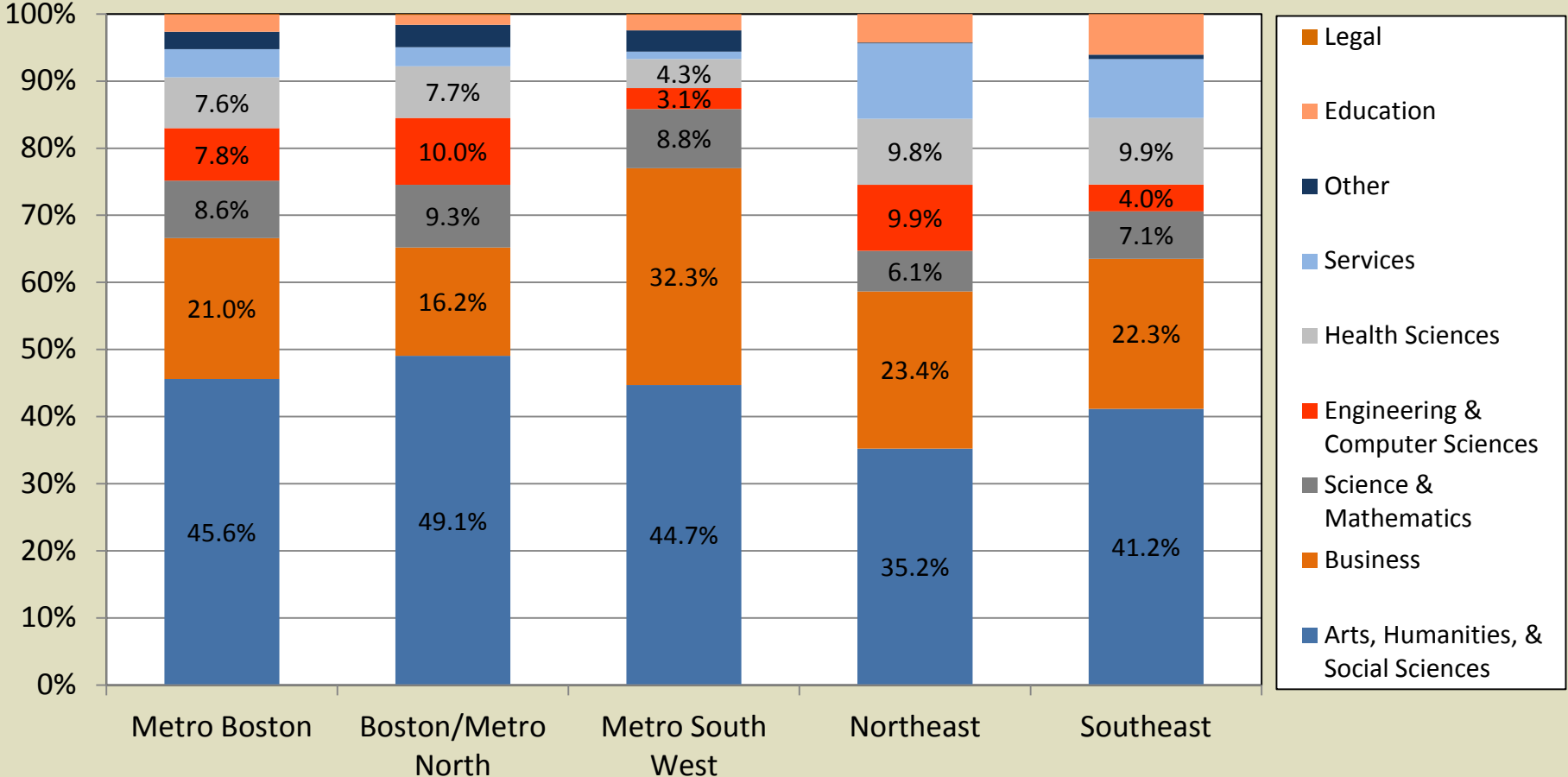
### Distribution of Major Fields of Study for Associate's Degrees Completed in 2010



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

Arts, Humanities, & Social Sciences is the most common field of study of Bachelor's Degrees across all regions.

**Distribution of Major Fields of Study for Bachelor's Degrees Completed in 2010**



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

# Summary

- There is significant variation in labor market trends across regions:
  - Metro South/West has one of the oldest labor force and Boston/Metro North the youngest.
  - The Southeast has the highest share of workers with High School Degree or less in the state, while Boston/Metro North has the most educated workforce.
  - Private post-secondary education is more prominent in Boston/Metro North and Metro South/West compared with public education in the Northeast and Southeast
- Metro Boston is home to a large share of the state's young and less educated, who are more likely to be unemployed face significant barriers to full employment.

# Questions and Challenges

- What is the most pressing challenge facing the Metro Boston area? Does this differ across the region's labor markets?
- Should workforce development initiatives focus on Metro Boston as a whole or these four sub-regions?
- Are students getting certificates and degrees in the right fields of study? If not, what should be done to “fix” the misalignment?
- What can be done to improve employment prospects for the young and less educated?