

Labor Market Trends in the Metro South/West Region

#### By Robert Clifford

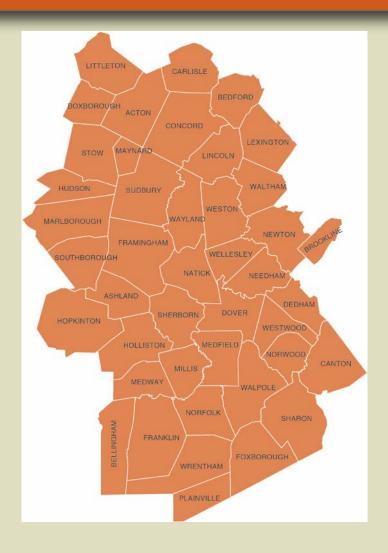
Policy Analyst at the New England Public Policy Center of the Federal Reserve Bank of Boston

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 of 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).

### Metro South/West



### Summary

- Metro South/West has had one of the strongest labor market recoveries since the Great Recession.
- The region employs one of the most highly educated work forces in the state and has a strong demand for post-secondary educated labor.
- Demographics present the biggest challenge to the region due to a rapidly aging population.
- Metro South/West residents and employees are highly mobile, and the region's ability to attract mobile populations may mitigate some challenges.

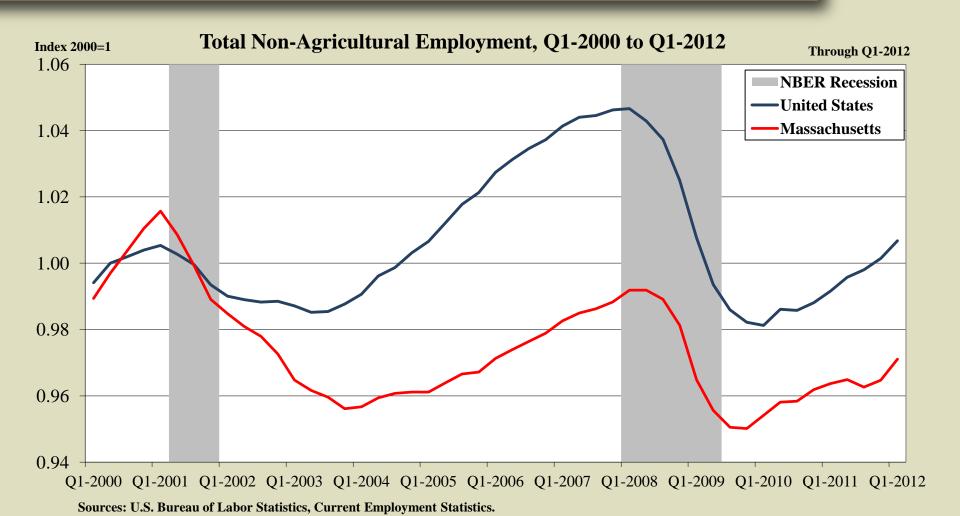
### Outline

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

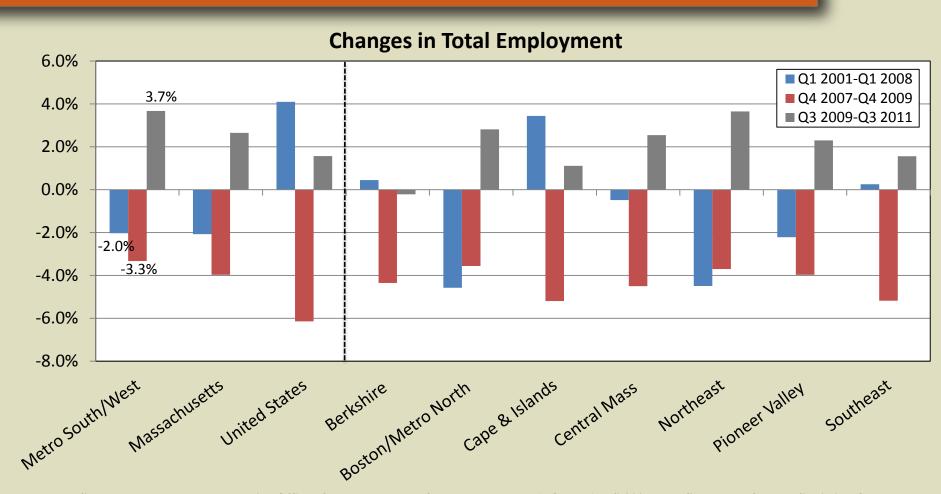
### Labor Market Performance

- National and State Employment Trends
- Performance of Regional Labor Markets
- Employment Trends by Industry in Metro South/West and Massachusetts

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



## Metro South/West leads regional employment growth through the earliest stages of the recovery...



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).

## The Metro South/West has a strong concentration in the Professional & Business Services industry...

#### **Employment Distribution by Supersector**



Metro South/West

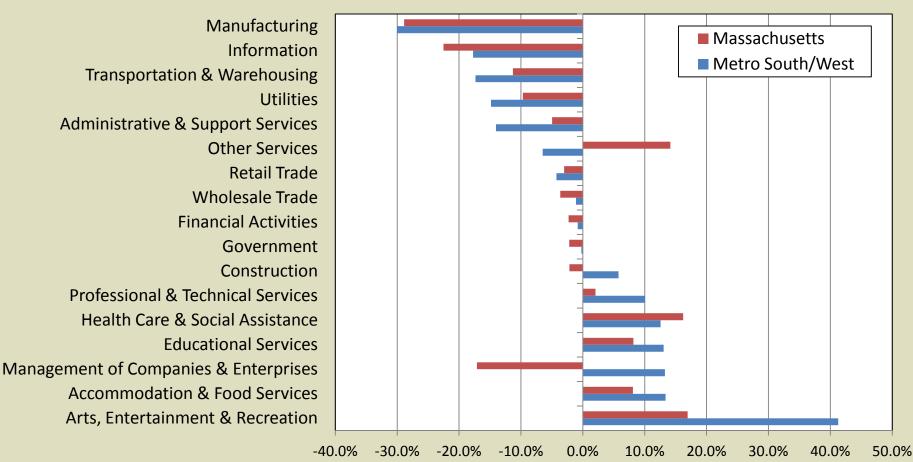
Massachusetts

**United States** 

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

## Employment changes by major industries between recessions were concentrated in high-skill industries...

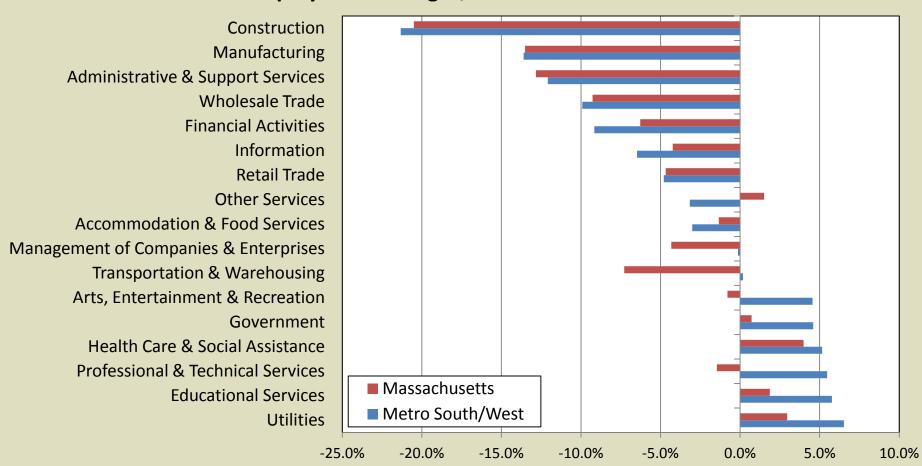
#### **Employment Changes, Q1-2000 to Q1-2008**



Sources: Massachusetts EOLWD, ES-202.

In the Great Recession the region continued to add jobs in its largest industries...

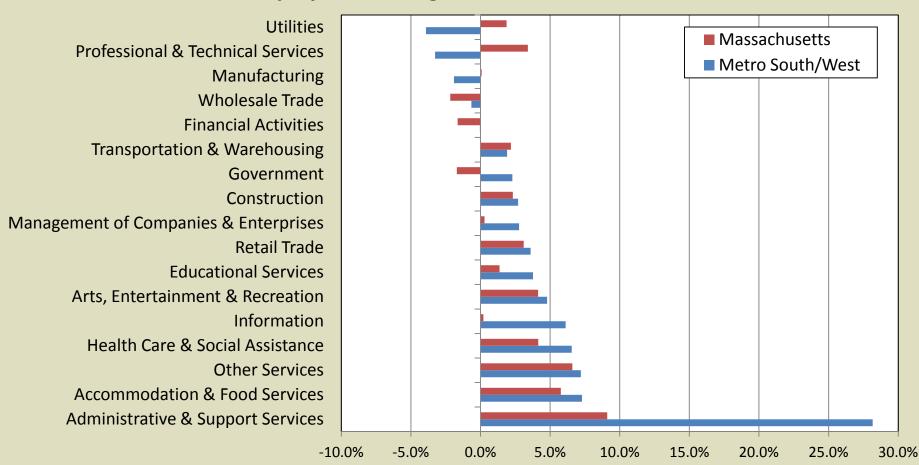
#### **Employment Changes, Q4-2007 to Q4-2009**



Sources: Massachusetts EOLWD, ES-202.

## In the early stages of the labor market recovery Metro South/West has outpaced the state in most industries...

#### **Employment Changes, Q3-2009 to Q3-2011**

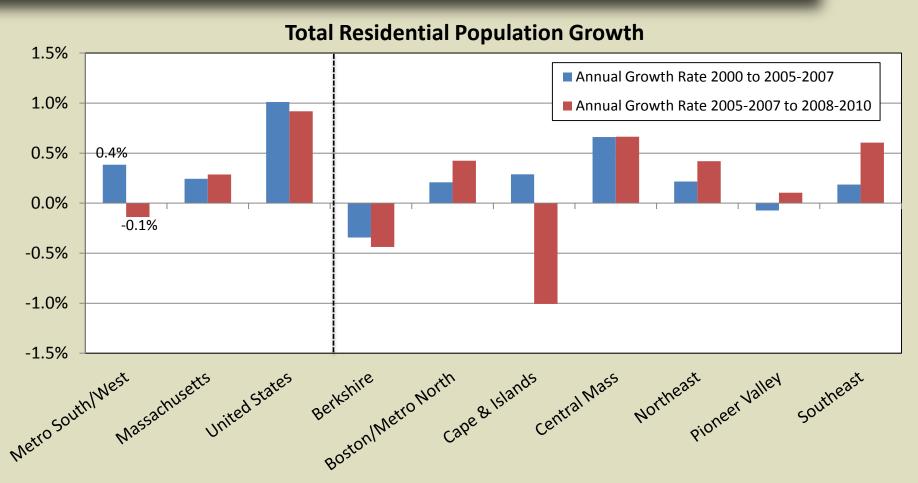


Sources: Massachusetts EOLWD, ES-202.

### **Labor Supply**

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

After growing over the first half of the decade the population of Metro South/West has declined in recent years...



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.

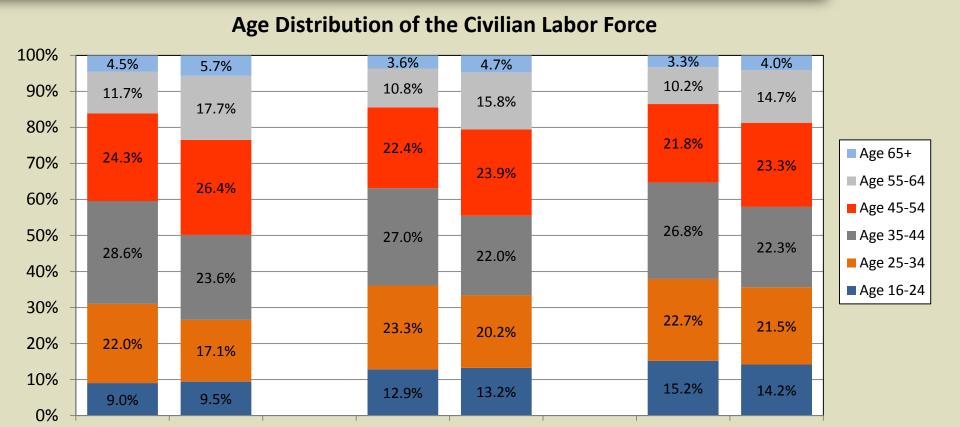
The region's population has become more diverse in the past decade...

#### **Demographic Characteristics of Metro South/West**

			Absolute	Annual
	2000	2008-2010	Change	Growth Rate
Resident Population	1,019,337	1,038,784	19,447	0.2%
<u>Gender</u>				
Male	486,222	504,845	18,623	0.4%
Female	533,115	533,939	824	0.0%
<b>Nativity</b>				
Native Born	877,860	859,444	-18,416	-0.2%
Immigrant	141,477	179,340	37,863	2.7%
Race/Ethnicity				
White, non-Hispanic	909,509	868,184	-41,325	-0.5%
Black, non-Hispanic	16,142	22,322	6,180	3.7%
Asian, non-Hispanic	47,857	75,701	27,844	5.2%
Hispanic	27,933	48,259	20,326	6.3%
Other race, non-Hispanic	17,896	24,318	6,422	3.5%

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

#### Metro South/West has one of the older labor forces in Massachusetts with 50 percent over 45 years old...



2008-2010

Massachusetts

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

2000

16

2008-2010

**United States** 

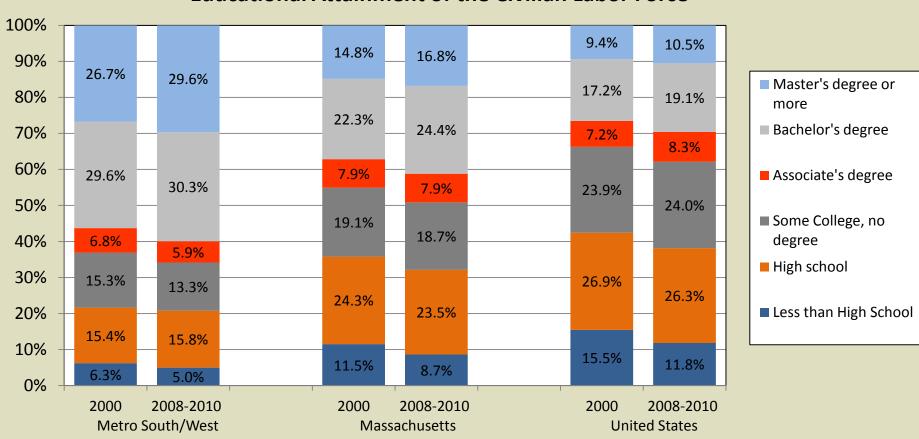
2000

Metro South/West

2008-2010

The region also has the most educated labor force with over 60 percent having a Bachelor's Degree or higher...

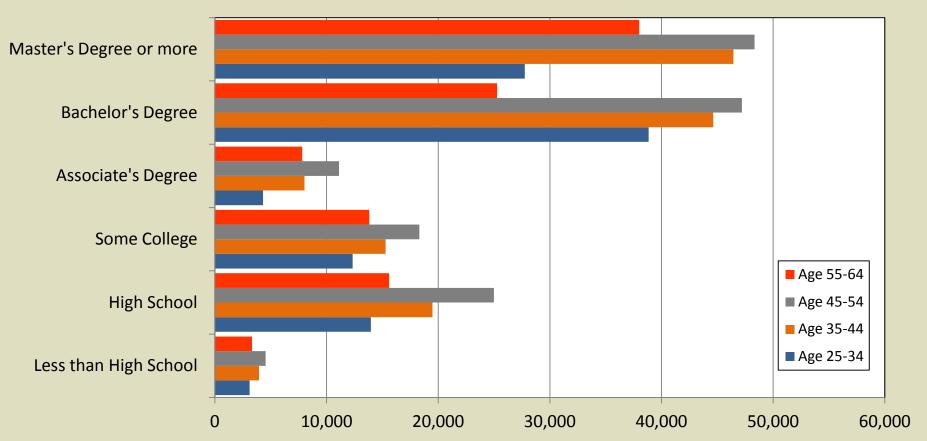
#### **Educational Attainment of the Civilian Labor Force**



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

When looking at education and age together we see the challenges an aging labor force pose for the region...

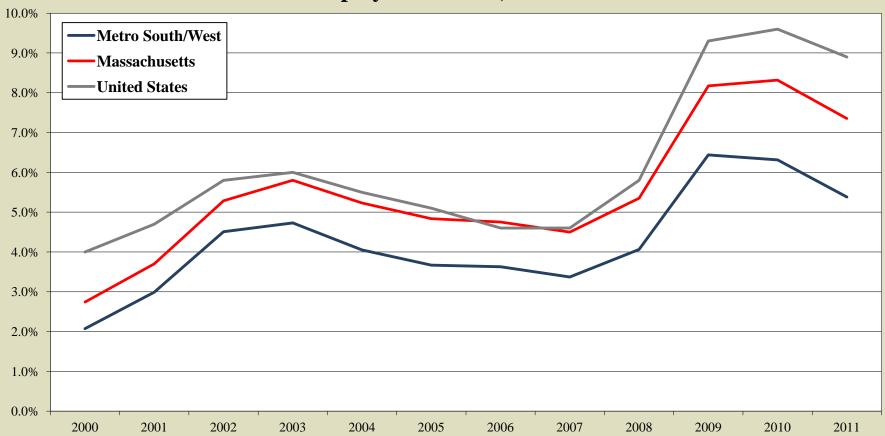
#### **Educational Attainment of the Civilian Labor Force in Metro South/West**



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

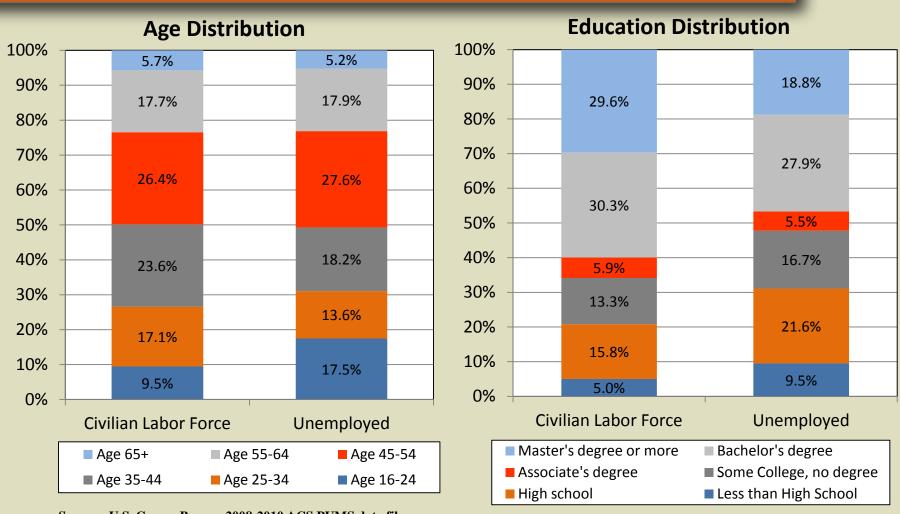
Along with strong employment gains, Metro South/West has the lowest unemployment rate of all regions...

#### **Unemployment Rates, 2000 to 2011**



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

## The unemployed in Metro South/West are disproportionally younger and have lower levels of educational attainment...



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

### Metro South/West is a magnet for commuters and interconnected with a number of labor markets...

	Number	Percent of Total
Total number of employed persons living in Metro South/West	538,965	100.0%
who work in:		
Metro South/West	312,625	58.0%
Boston/Metro North	143,259	26.6%
Southeast	26,439	4.9%
Central Mass	23,306	4.3%
Northeast	18,260	3.4%
Other parts of Massachusetts	1,706	0.3%
New Hampshire	2,559	0.5%
Rhode Island	6,361	1.2%
Other places outside Massachusetts	4,450	0.8%
Total number of persons working in Metro South/West	599,083	100.0%
who live in:		
Metro South/West	312,625	52.2%
Boston/Metro North	85,621	14.3%
Southeast	57,855	9.7%
Central Mass	56,392	9.4%
Northeast	45,878	7.7%
Other parts of Massachusetts	4,964	0.8%
New Hampshire	14,430	2.4%
Rhode Island	15,028	2.5%
Other places outside Massachusetts	6,290	1.0%
Net in-commuting	60,118	-

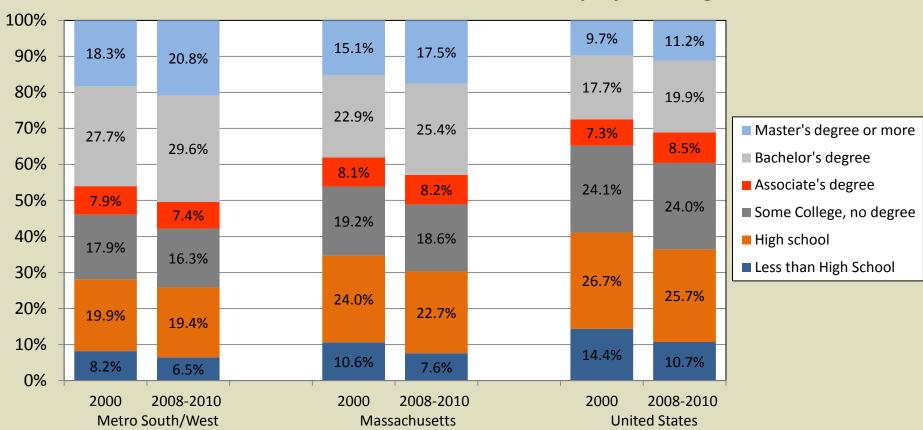
Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

### **Labor Demand**

- Educational Attainment of Employed
- Educational Attainment and Composition of Industries and Occupations
- Demand of Post-Secondary Educated Labor
   Pre- and Post-Recession

The educational attainment of those working in the region is high, far exceeding state and national levels...

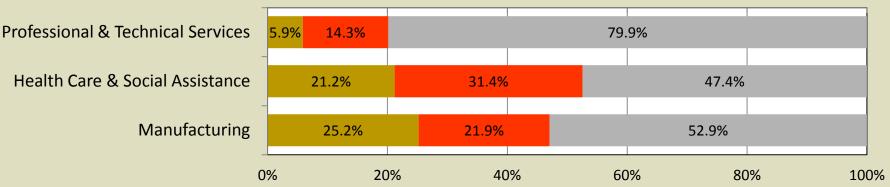
#### **Educational Attainment of Individuals Employed in Region**



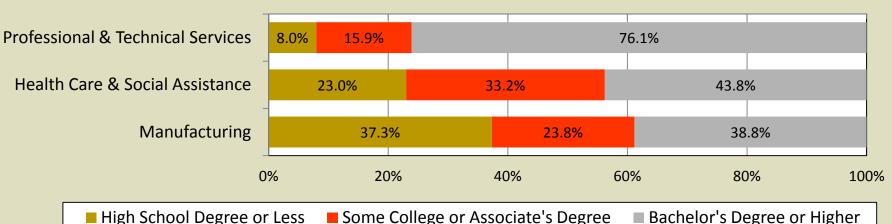
Source: U.S. Census Bureau 2000 Decennial Census PUMS data files and 2008-2010 ACS PUMS data files.

## Industries in Metro South/West employ greater shares of employees with Bachelor's Degrees or higher than statewide...

#### **Educational Attainment of Employees by Major Industry in Metro South/West**



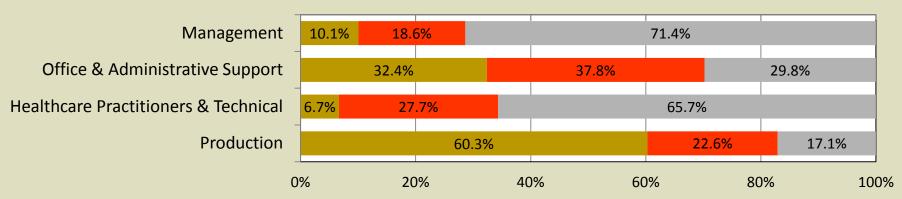
#### **Educational Attainment of Employees by Major Industry in Massachusetts**



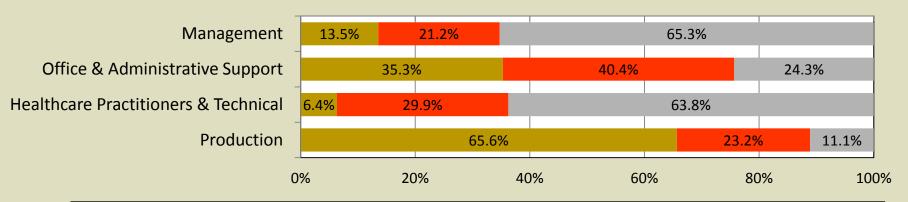
Source: U.S. Census Bureau 2008-2010 ACS PUMS data files.

## Occupations in Metro South/West are also occupied by higher shares of employees with Bachelor's Degrees...

#### **Educational Attainment of Employees by Occupation in Metro South/West**



#### **Educational Attainment of Employees by Occupation in Massachusetts**

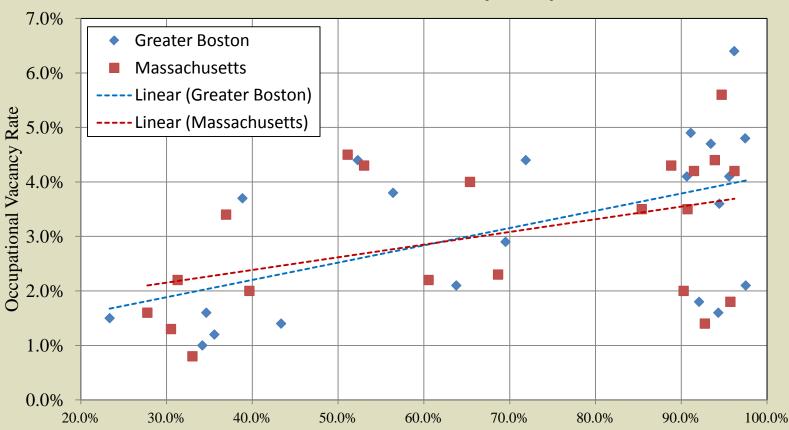


■ High School Degree or Less
■ Some College or Associate's Degree
■ Bachelor's Degree or Higher

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

Prior to the recession there were higher vacancy rates in the more highly educated occupations than in the less educated...

#### Job Vacancies and Educational Attainment by Occupation, Pre-Recession

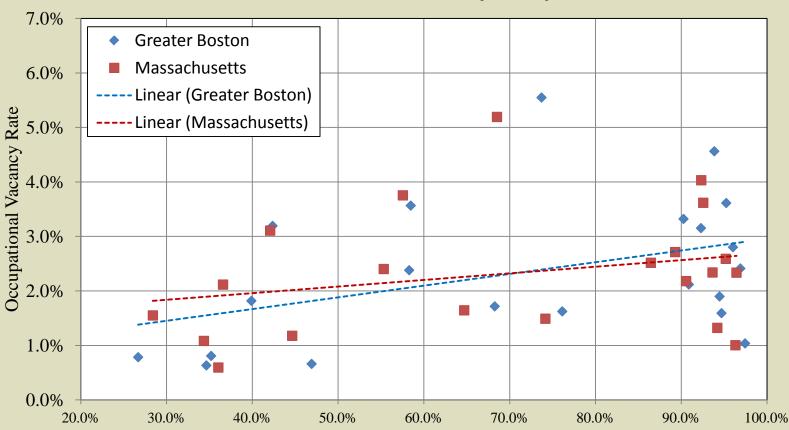


Share of Employees with a Post-Secondary Education by Major Occupation

Source: Massachusetts EOLWD, Job Vacancy Survey.

In the early stages of the labor market recovery this pattern weakened but basically continued to hold...

#### Job Vacancies and Educational Attainment by Occupation, Post-Recession



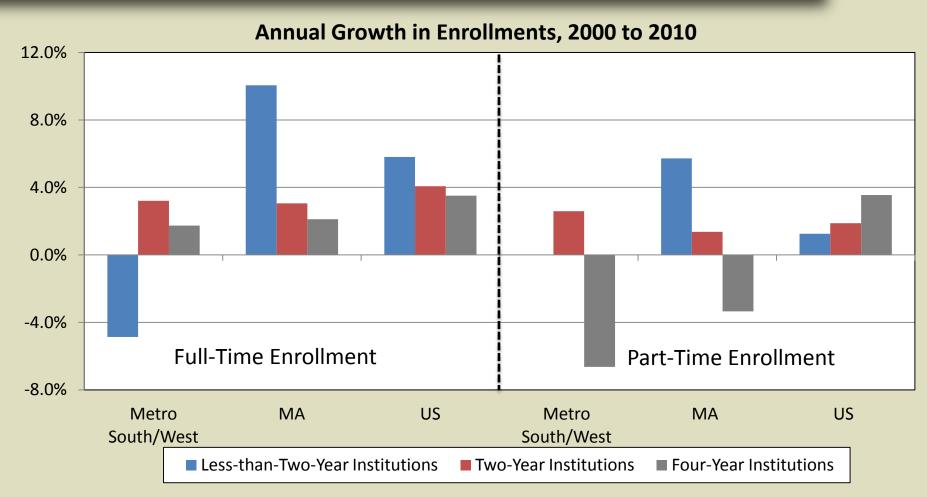
Share of Employees with a Post-Secondary Education by Major Occupation

Source: Massachusetts EOLWD, Job Vacancy Survey.

# The Pipeline: Educational Supply of Post-Secondary Degrees

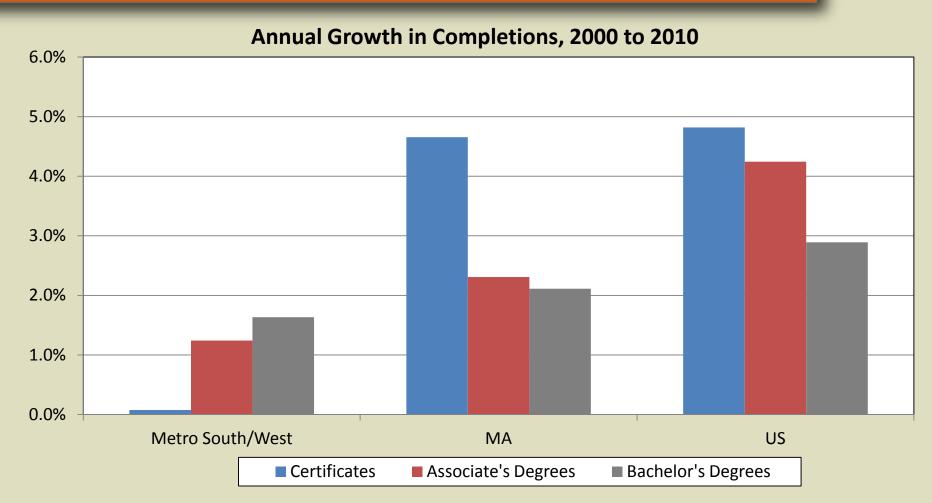
- Enrollment Patterns
- Degree Completions
- Major Fields of Study by Degree Type

Over the past decade enrollment growth at two-year institutions in Metro South/West exceeded that of other institutions...



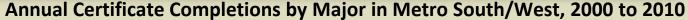
Source: National Center for Education Statistics, Integrated Post-Secondary Educational Data System.

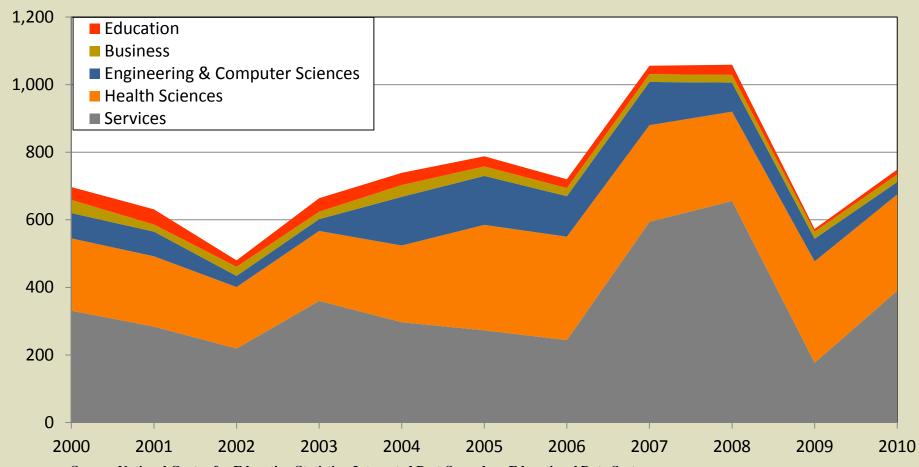
Over the last decade completions of programs and degrees in Metro South/West have trailed state and national trends...



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

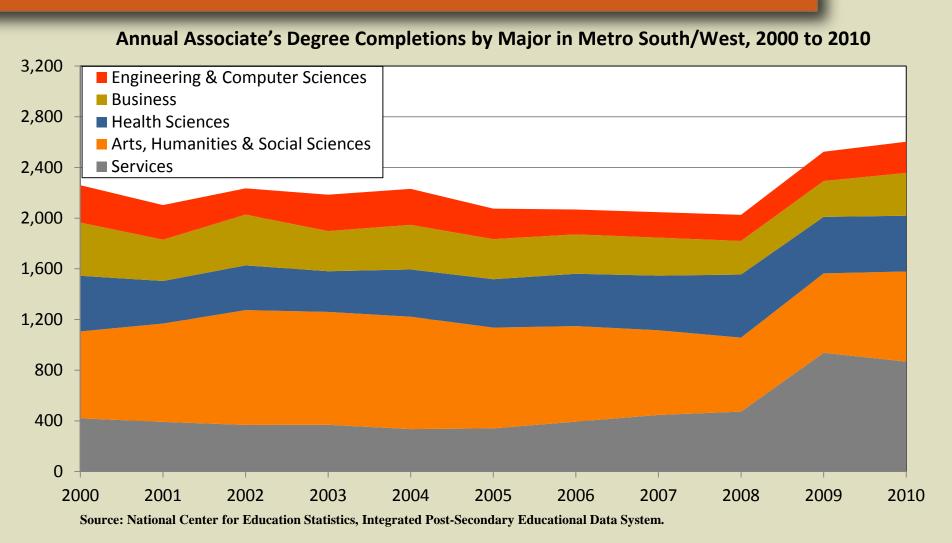
## The number and types of Certificates in Metro South/West vary widely from year to year...



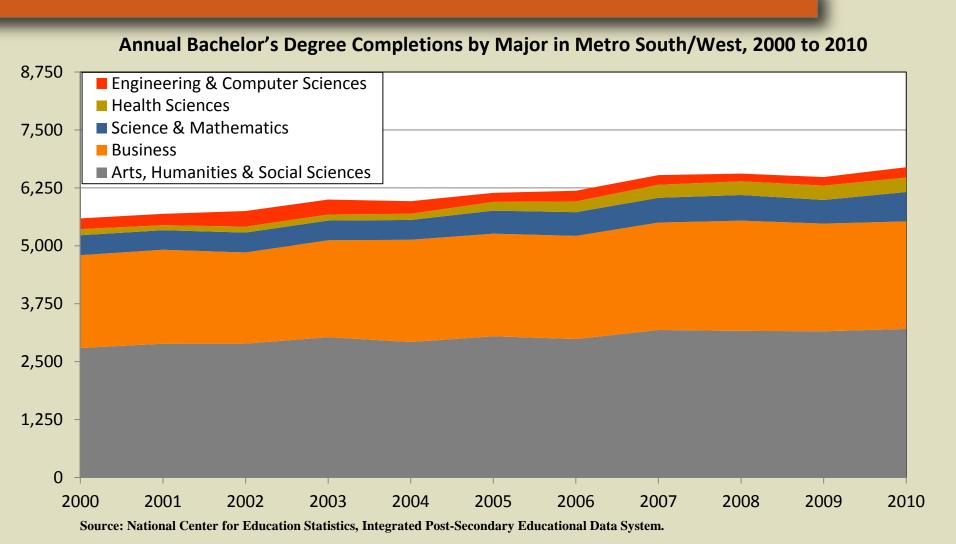


Source: National Center for Education Statistics, Integrated Post-Secondary Educational Data System.

Associate's Degree completions have surged in recent years in two fields: Arts, Humanities & Social Sciences and Services...



Bachelor's Degree completions are largely concentrated in two majors: Arts, Humanities & Social Sciences and Business...



### Summary

- The recovery in employment has been stronger in Metro South/West than in other Massachusetts regions.
- Firms in the region employ one of the most highly educated workforces in the state and continue to demand more post-secondary educated labor.
- With one of the oldest civilian labor forces in the state,
   Metro South/West faces the demographic challenges of an aging population.
- Given these trends, what needs to be done to ensure workers, communities and businesses in the Metro South/West continue to thrive economically?

### Thank You



