

# **THE STATE OF WORKING MASSACHUSETTS 2007**

***A Growing Economy;  
A Growing Divide***

**SEPTEMBER 2007**



**MASSACHUSETTS**

**BUDGET AND POLICY CENTER**

## THE STATE OF WORKING MASSACHUSETTS 2007 A GROWING ECONOMY; A GROWING DIVIDE

### EXECUTIVE SUMMARY

Five years into the recovery from the recession of 2001, real median wages have finally begun to increase in Massachusetts.<sup>1</sup> After declining more in Massachusetts than in any other state between 2003 and 2005, the trend reversed in 2006. The median wage – the wage that half of wage earners earn more than and half earn less than – increased by 2.1 percent between 2005 and 2006. This was more than the national increase of 0.4 percent and a larger increase than in 40 of the 50 states.

While the increase in median wages is a positive sign, the current economic recovery, in Massachusetts and nationally, is weak by historic standards. Even with the recent increase, the median wage in Massachusetts, at \$17.24 an hour, is still 2.9 percent lower than the \$17.76 level in 2001. Nationally the median wage, at \$14.81, is still below its 2003 level of \$14.93. While the median wage in Massachusetts has remained well above the national average, the gap narrowed in 2004 and 2005 before beginning to grow again in 2006.

In 2006, unemployment in Massachusetts was higher than the national rate for the first time since 1992. Further, the wages of low-wage workers have continued to decline: the 20<sup>th</sup> percentile wage – the wage that one in five workers earn less than – dropped 3.3 percent in 2006 and is now 7 percent below what it was in 2003. The minimum wage increase that took effect on January 1<sup>st</sup> could reverse this trend in 2007, as past increases in the minimum wage have been correlated with increases in the 20<sup>th</sup> percentile wage (see *Keeping it Real: The Effects of Increasing and Indexing the Massachusetts Minimum Wage*, available at <http://www.massbudget.org/article.php?id=261>).

There have been dramatic changes in the structure of the Massachusetts economy over the past 17 years, and those trends continued in the past year. As recently as 1990, manufacturing was the second largest industry in the state economy. Continuing a long decline, this June, manufacturing fell to sixth place out of the ten (seasonally-adjusted) “supersectors” defined by the Bureau of Labor Statistics (BLS)<sup>2</sup>: education and health services (622,200); trade, transport and utilities (574,200); professional and business services (482,900); government (431,600); leisure and hospitality (298,900); manufacturing (297,000); financial activities (224,600); construction and mining (141,500); other services (119,600); and information (87,100).

This decline in manufacturing employment has occurred despite generous tax cuts that manufacturing trade associations had predicted would be a “bold step towards restoring Massachusetts as a

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<sup>1</sup> Throughout this report, wages are expressed in constant 2006 dollars.

<sup>2</sup> The BLS categorizes industries in to 12 “supersectors”: Construction, Education and Health Services, Financial Activities, Government, Information, Leisure and Hospitality, Manufacturing, Natural Resources and Mining, Other Services, Professional and Business Services, Transportation and Utilities, and Wholesale and Retail Trades. In order to produce a large enough sample at the state level, the BLS consolidates supersectors as follows. Construction is grouped with Natural Resources and Mining; Wholesale and Retail Trade is grouped with Transportation and Utilities. Information about each supersector is available at <http://www.bls.gov/iag/iaghome.htm>. Information about the aggregation of supersectors is available at <http://www.bls.gov/sae/saenaics.htm>.

manufacturing state.”<sup>3</sup> On the positive side, Massachusetts is now seeing job growth in the high-wage professional and business services supersector where our state’s natural strengths – well educated and highly-skilled workers – are particularly important. Developing strategies that will play to our states strengths and accelerate the creation of high-wage jobs will require policy makers to prioritize the spending of economic development resources – through the tax code and direct expenditures – to ensure that those resources are used efficiently and on strategies that work. These issues were examined in more detail in MBPC’s recent paper *Building a Strong Economy: The evidence on combined reporting, public investments, and economic growth*, available at <http://www.massbudget.org/article.php?id=594>. In addition to job growth in professional and business services, the state has also seen continuing job growth in several traditionally low-wage sectors of the economy. As those trends appear likely to continue, it will be important for the state to identify ways to help employees in these sectors to increase their wages and incomes.

Among the major findings of the *State of Working Massachusetts 2007* are the following:

#### *Employment*

- Employment in Massachusetts has grown consistently but slowly over the past three and a half years.<sup>4</sup> The level of employment in Massachusetts remains below what it was at both the start and the finish of the 2001 national recession. As of June 2007, employment in Massachusetts was 2.8 percent below its level when the recession began in March 2001 – a difference of 93,900 jobs. Moreover, employment was still 0.3 percent below where it was when the recession ended in November 2001 – a difference of 10,400 jobs.
- In June 2007, the number of leisure and hospitality supersector jobs (298,900) surpassed the number of manufacturing jobs for the first time, as the number of manufacturing jobs dropped to 297,000. If the shift holds for the year, the manufacturing supersector will be ranked sixth out of the ten supersectors of employment. As recently as 1990, 480,400 people were employed in the manufacturing supersector, making it the second largest supersector in the Commonwealth.

#### *Labor Force Demographics*

- In 2006, women made up 47.5 percent of the paid labor force in Massachusetts, compared to 46.3 percent for the United States. The labor force here, however, is less ethnically and racially diverse.
- The age and educational attainment of the workforce has changed over time. In 1991, about 12 percent of the workforce was over the age of 55; by 2006, almost 18 percent fit that category. In 1991, less than a third of the workforce held at least a bachelor’s degree; by 2006, 42.3 percent of the workforce had earned at least a bachelor’s degree.

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<sup>3</sup> “Corporate Tax Breaks Approved,” *Boston Globe*, November 16, 1995, p. 45.

<sup>4</sup> Throughout this report, the term “employment” refers to non-farm employment.

## *Wages and Unemployment*

- The real median wage in Massachusetts increased in 2006, for the first time in three years. From 2005-2006, the median hourly wage in Massachusetts grew 2.1 percent, from \$16.89 to \$17.24; the median hourly wage in the US increased by just 0.4 percent. Only 9 other states – Arkansas, Louisiana, Wyoming, West Virginia, Oklahoma, South Carolina, Florida, Maine and Vermont – experienced faster median wage growth during this period.
- The median wage fell, however, when considered over a longer time horizon. From 2003 to 2006, the median wage fell 2.9 percent, from \$17.76 to \$17.24. Only 11 other states – Delaware, Kansas, Virginia, Iowa, Illinois, Colorado, Alabama, Missouri, Connecticut, Tennessee and Minnesota – experienced larger drops in their median wages during this period.
- From 2005 to 2006, wages for workers at the 20<sup>th</sup> percentile fell from \$10.42 to \$10.08, a 3.3 percent drop. Only 3 other states – Indiana, Iowa and Colorado – experienced larger drops during this period.
- From 2003 to 2006, wages for workers at the 20<sup>th</sup> percentile fell from \$10.84 to \$10.08, a 7 percent drop. Only 1 other state – Minnesota – had a larger drop during this period.
- In 2006, the unemployment rate in Massachusetts exceeded the national unemployment rate for the first time since 1992.

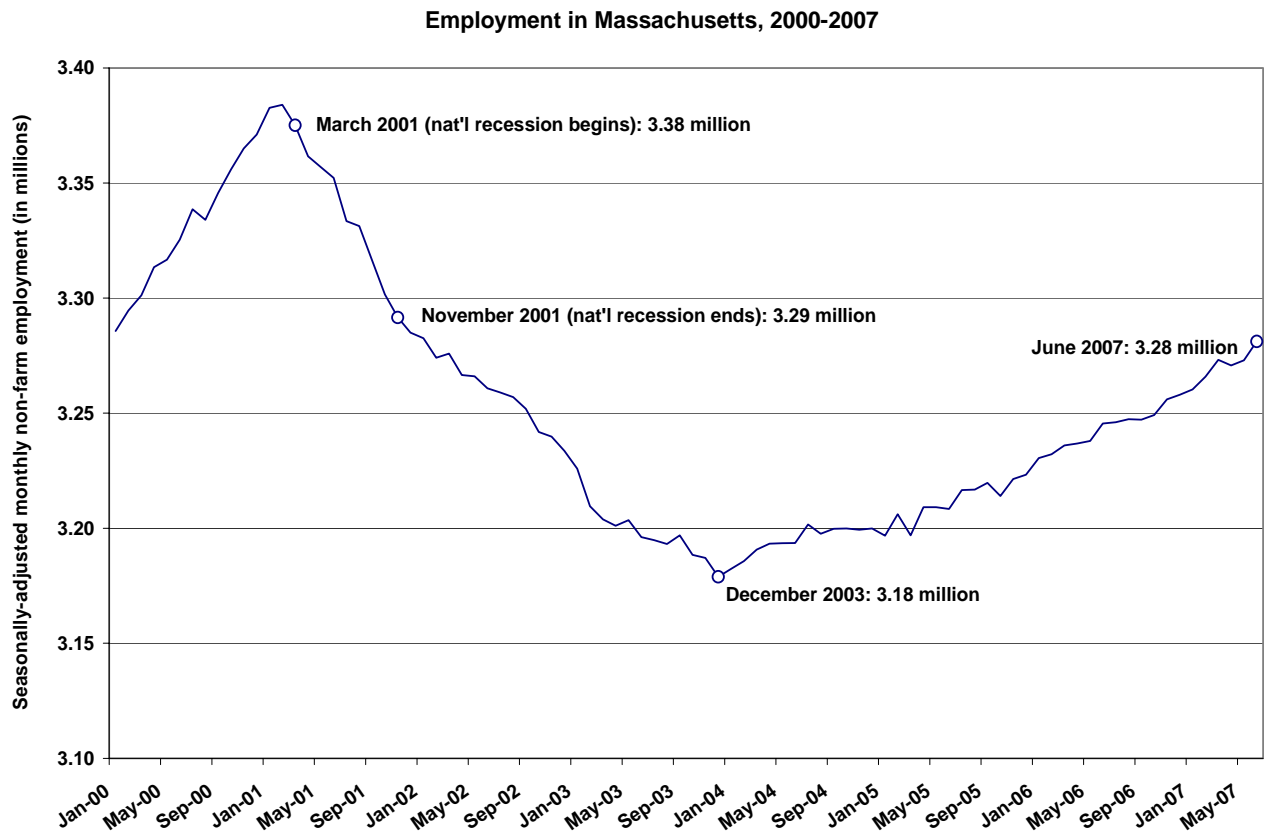
## **INTRODUCTION**

This report – the fourth edition of the Massachusetts Budget and Policy Center’s *State of Working Massachusetts* – examines trends in employment, labor force demographics, wages and incomes in more detail. This edition of *State of Working Massachusetts*, like prior editions, is based largely on U.S. Census Bureau and other data compiled by the Economic Policy Institute, a non-partisan research organization based in Washington, DC, in connection with its *State of Working America* report. Portions of prior editions, such as the glossary on labor force statistics, are reproduced in this edition.

## **EMPLOYMENT**

During the national recession of March to November 2001, the Commonwealth suffered the greatest job losses in the nation and continued to experience substantial employment declines in its immediate aftermath, before beginning to add jobs in 2003. As of June 2007, total non-farm employment in Massachusetts was 3,281,200 jobs. While that level of employment is the result of relatively sustained employment growth over the past three and a half years, the level of employment in Massachusetts remains below what it was at both the start and the finish of the 2001 national recession. Only Michigan and Louisiana have experienced deeper job losses than Massachusetts since 2001.

Figure 1.



As Figure 1 suggests, the overall trend in employment in Massachusetts since the beginning of the national recession can be separated into three periods: (1) the recession itself, which lasted from March through November 2001; (2) the nearly two-year period immediately following the end of the recession, during which, in the aggregate, employment continued to decline in Massachusetts; and (3) the period from December 2003 until the present, during which employment has started to rise once again, albeit modestly. Specifically, over the course of the 2001 national recession, total employment in Massachusetts fell from 3.38 to 3.29 million jobs, a drop of 2.7 percent. After the recession ended, employment in Massachusetts maintained its downward trend, sinking another 3.3 percent to 3.18 million jobs by December 2003. Employment climbed 3.1 percent between December 2003 and June 2007, rising by 102,300 jobs to 3.28 million.

#### *Employment Trends by Supersector*

The trend in job growth has not been uniform across the constituent parts of the Massachusetts economy, as employment patterns have varied widely among the Commonwealth's ten supersectors and the sectors that comprise them.<sup>5</sup>

<sup>5</sup> The BLS categorizes industries in to 12 "supersectors": Construction, Education and Health Services, Financial Activities, Government, Information, Leisure and Hospitality, Manufacturing, Natural Resources and

As Figure 2 indicates, employment in two supersectors – the education and health services supersector and a supersector the BLS categorizes as “other services” – rose both during the 2001 recession and its immediate aftermath and have continued to climb during the Commonwealth’s more general recovery since December 2003. In fact, employment in the education and health services supersector, as of June 2007, was up by 73,100 jobs, or 13.3 percent since March 2001; this was the ninth largest expansion nationwide in this supersector during this period.

Employment growth in the leisure and hospitality supersector has also outpaced most other states since March 2001; employment has increased from 281,000 jobs in March 2001 to 298,900 jobs in June 2007, a 6.4 percent increase. This was the eighth largest expansion nationwide in this industry during this period. Of note, government employment has fallen somewhat in Massachusetts since the start of the 2001 recession. Between March 2001 and June 2007, government in Massachusetts shed some 7,600 jobs, a drop of 1.7 percent. Just two other states, Michigan and Louisiana, have shed more government jobs over this period.

**Figure 2.**

**Changes in Massachusetts Employment by Industry, 2001-2007**

*All amounts in thousands; all figures are seasonally adjusted*

Industry Sector	March 2001	November 2001	December 2003	June 2007	Aggregate Change (Amount & Percentage)							
					March 2001 to November 2001		November 2001 to December 2003		December 2003 to June 2007		March 2001 to June 2007	
Education and Health Services	549.1	559.3	577.6	622.2	10.2	1.9%	18.3	3.3%	44.6	7.7%	73.1	13.3%
Leisure and Hospitality	281	278.1	288.4	298.9	(2.9)	-1.0%	10.3	3.7%	10.5	3.6%	17.9	6.4%
Other Services	115.3	116.5	116.8	119.6	1.2	1.0%	0.3	0.3%	2.8	2.4%	4.3	3.7%
Construction & Mining	139	141.2	138	141.5	2.2	1.6%	(3.2)	-2.3%	3.5	2.5%	2.5	1.8%
Government	439.2	440.2	420.1	431.6	1.0	0.2%	(20.1)	-4.6%	11.5	2.7%	(7.6)	-1.7%
Financial Activities	231.4	230.1	221	224.6	(1.3)	-0.6%	(9.1)	-4.0%	3.6	1.6%	(6.8)	-2.9%
Professional & Business Services	502.2	465.4	442.4	482.9	(36.8)	-7.3%	(23.0)	-4.9%	40.5	9.2%	(19.3)	-3.8%
Trade, Transportation & Utilities	597.3	585.9	571	574.2	(11.4)	-1.9%	(14.9)	-2.5%	3.2	0.6%	(23.1)	-3.9%
Information	116.3	105.4	88.8	88.7	(10.9)	-9.4%	(16.6)	-15.7%	(0.1)	-0.1%	(27.6)	-23.7%
Manufacturing	404.3	369.5	314.8	297	(34.8)	-8.6%	(54.7)	-14.8%	(17.8)	-5.7%	(107.3)	-26.5%
<b>Total Nonfarm Employment</b>	<b>3,375.1</b>	<b>3,291.6</b>	<b>3,178.9</b>	<b>3,281.2</b>	<b>(83.5)</b>	<b>-2.5%</b>	<b>(112.7)</b>	<b>-3.4%</b>	<b>102.3</b>	<b>3.2%</b>	<b>(93.9)</b>	<b>-2.8%</b>

Narrowing the focus to the past two years, Figure 3 shows employment growth in all supersectors except manufacturing.

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Mining, Other Services, Professional and Business Services, Transportation and Utilities, and Wholesale and Retail Trades. In order to produce a large enough sample at the state level, the BLS consolidates supersectors as follows. Construction is grouped with Natural Resources and Mining; Wholesale and Retail Trade is grouped with Transportation and Utilities. Information about each supersector is available at <http://www.bls.gov/iag/iaghome.htm>. Information about the aggregation of supersectors is available at <http://www.bls.gov/sae/saenaics.htm>.

**Figure 3.****Changes in Massachusetts Employment by Industry, 2005-2007***All amounts in thousands; all figures are seasonally adjusted*

Industry Sector	June 2005	June 2006	June 2007	Aggregate Change (Amount & Percentage)			
				June 2005 to June 2007		June 2006 to June 2007	
Education and Health Services	588.8	606.1	622.2	33.4	5.7%	16.1	2.7%
Leisure and Hospitality	292.7	295.2	298.9	6.2	2.1%	3.7	1.3%
Other Services	118.2	119.3	119.6	1.4	1.2%	0.3	0.3%
Construction & Mining	141.3	142.8	141.5	0.2	0.1%	-1.3	-0.9%
Government	424.1	429.3	431.6	7.5	1.8%	2.3	0.5%
Financial Activities	220.8	223.5	224.6	3.8	1.7%	1.1	0.5%
Professional & Business Services	460.4	473	482.9	22.5	4.9%	9.9	2.1%
Trade, Transportation & Utilities	570	569.6	574.2	4.2	0.7%	4.6	0.8%
Information	86.7	87.2	88.7	2	2.3%	1.5	1.7%
Manufacturing	305.4	299.5	297	-8.4	-2.8%	-2.5	-0.8%

Two areas in which job growth has been strong over the last two years are the education and health services and the professional and business services supersector. Employment in the education and health services supersector grew even during the recession and has continued to grow since then. Employment in the professional and business services supersector declined until June 2003 and then began to grow, although less rapidly than growth in this supersector nationwide.

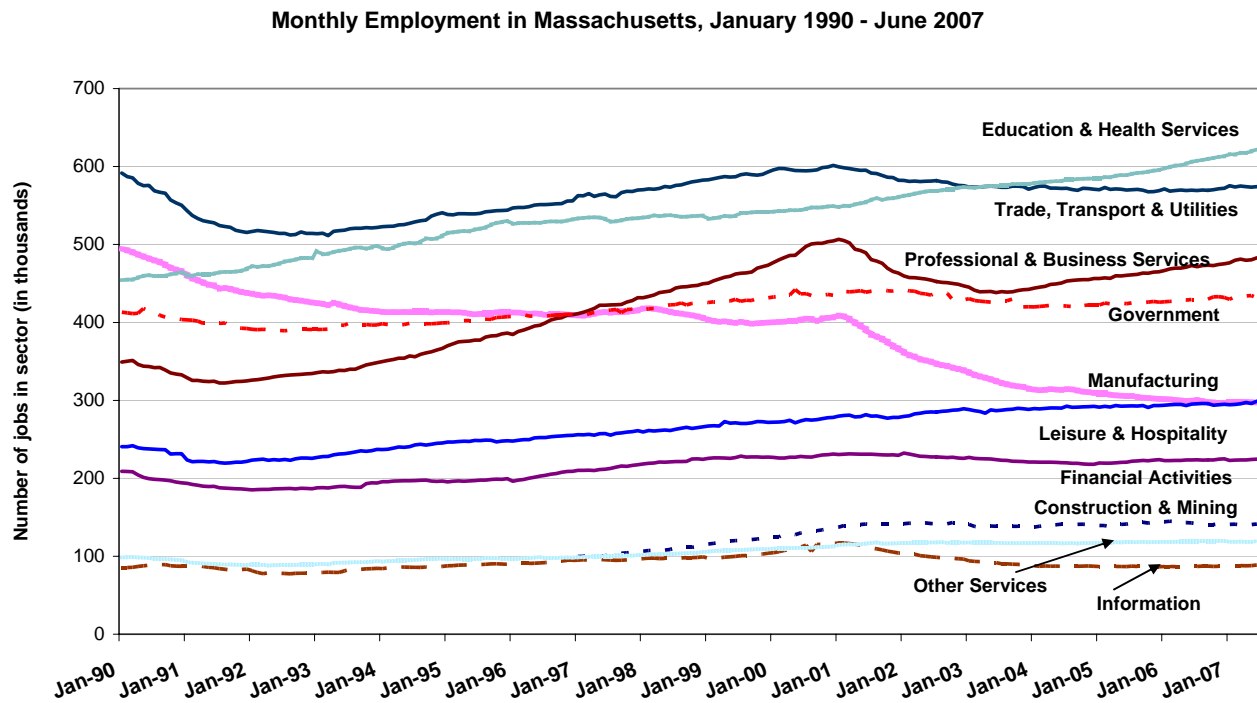
*Composition of Employment Since 1990*

As it had since April 2003, the education and health services supersector accounted for the single largest share of employment in Massachusetts in 2006, as it employed 18.7 percent of the entire employed population in the Commonwealth that year. As Figure 4 shows, employment in the trade, transportation and utilities supersector made up the second largest share of the total non-farm employment, providing 570,000 jobs in 2006. The third largest share was attributable to the professional and business services supersector, which constituted 14.5 percent of total employment and provided 471,800 jobs. Together, these three supersectors comprise just over half of total employment in Massachusetts.

As Figure 4 indicates, manufacturing employment has fallen considerably since 1990. In that year, 480,400 people were employed in the manufacturing supersector in Massachusetts, making it the second largest supersector in the Commonwealth, with 16.1 percent of the employed population. By 2006, manufacturing employment comprised just 9.2 percent of total non-farm employment, leaving the supersector ranked fifth out of ten. Monthly data for the first seven months of 2007 indicate that employment in the leisure and hospitality supersector surpassed manufacturing employment for the first time in June.<sup>6</sup>

<sup>6</sup> Employment in June is high relative to other months in both industries. However, the bulge in June manufacturing employment typically outpaces that in leisure and hospitality. Therefore, it is reasonable to

Figure 4.



The long-term decline in manufacturing has persisted despite the enactment, in 1995, of a significant tax cut for manufacturing companies, which was fully implemented in 2001 after a phase-in period. Known as the “single sales factor apportionment formula,” this tax cut altered the manner in which Massachusetts’ corporate income tax is determined for manufacturing companies. It was justified on the grounds that it would remove an impediment to employment growth in the Commonwealth’s manufacturing supersector. Indeed, in the view of its proponents, “single sales factor” was a “bold step towards restoring Massachusetts as a manufacturing state.”<sup>7</sup> Yet, as Figure 5 makes clear, the single sales factor apportionment formula (designated as “SSF” in the figure) did not restore Massachusetts as a manufacturing state, as larger national and international forces continued to drive down manufacturing employment. This tax cut has, however, cost the Commonwealth hundreds of millions of dollars. According to the Department of Revenue, the presence of a single sales factor apportionment formula for manufacturers is expected to reduce corporate income taxes by \$89.9 million in FY 2007 alone.

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expect the rank of the manufacturing supersector to drop to sixth place (out of ten supersectors of employment) in 2007.

<sup>7</sup> “Corporate Tax Breaks Approved,” *Boston Globe*, November 16, 1995, p. 45.



Figure 5.<sup>8</sup>

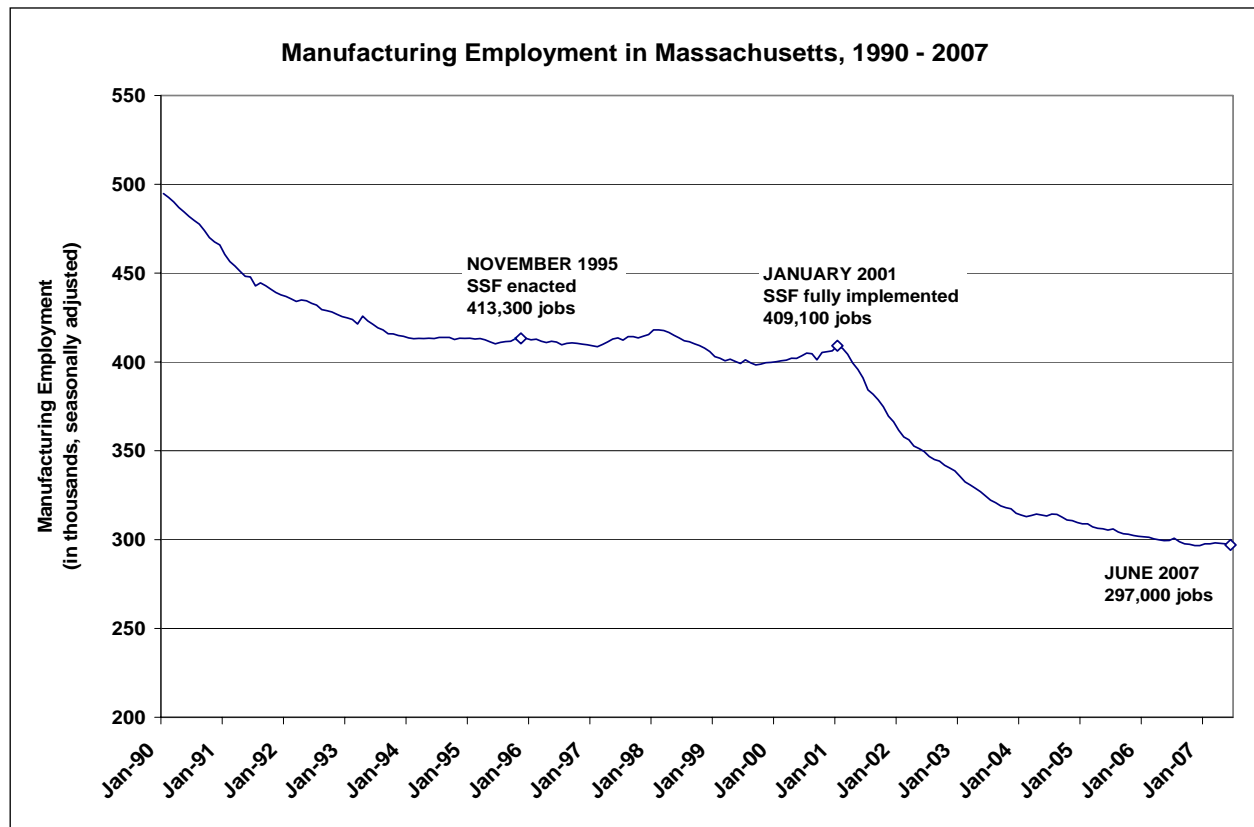
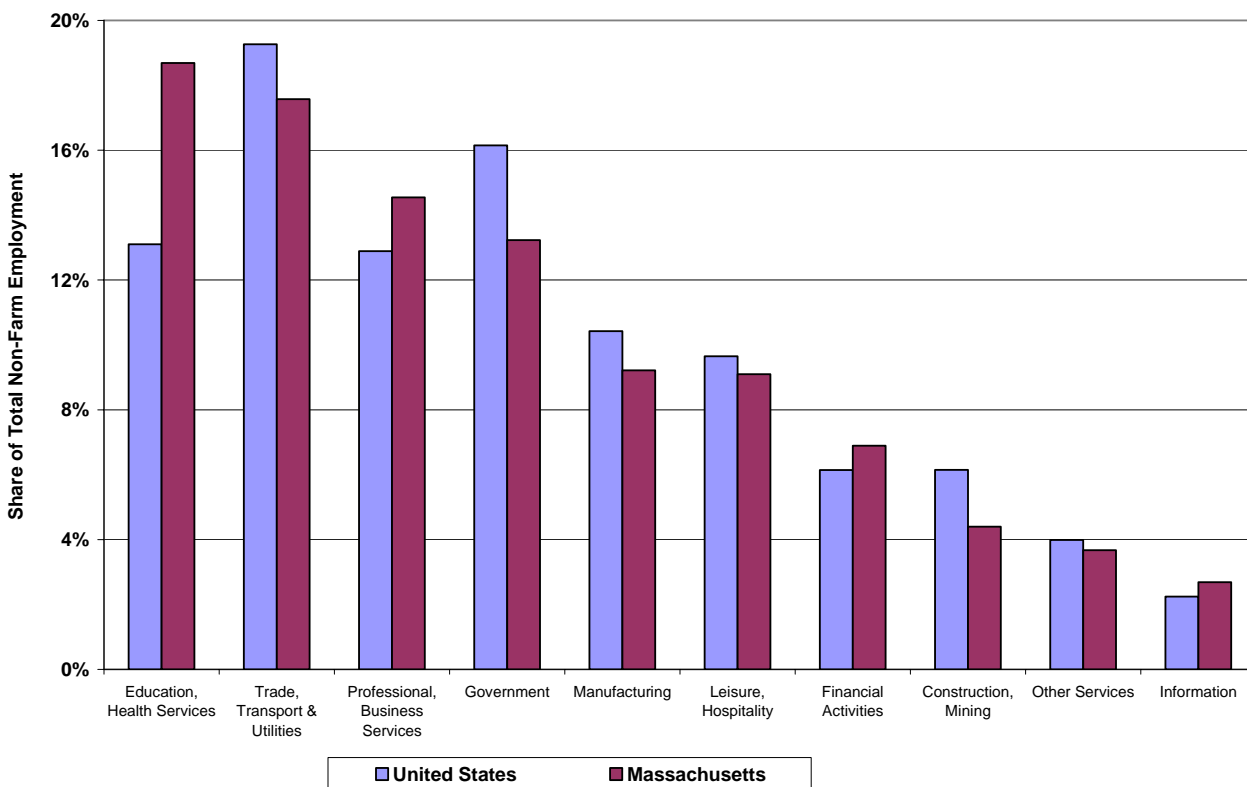


Figure 6 highlights differences in the composition of jobs in Massachusetts and the US. Most notably, the education and health services supersector and the professional and business services supersector comprise a larger share of all jobs in Massachusetts than they do in the country. Moreover, government employment as a share of all employment is lower in Massachusetts than in the country as a whole. In Massachusetts, government employment accounted for 13.2 percent of total employment; nationwide, it comprised 16.1 percent of total employment, rendering it the second largest supersector for the country as a whole.

<sup>8</sup> In 2006, the BLS revised the jobs data downward in each year since 1990. Prior to the revisions, the November 1995 and January 2001 manufacturing jobs totals were 418,400 and 409,200 respectively.

**Figure 6.**

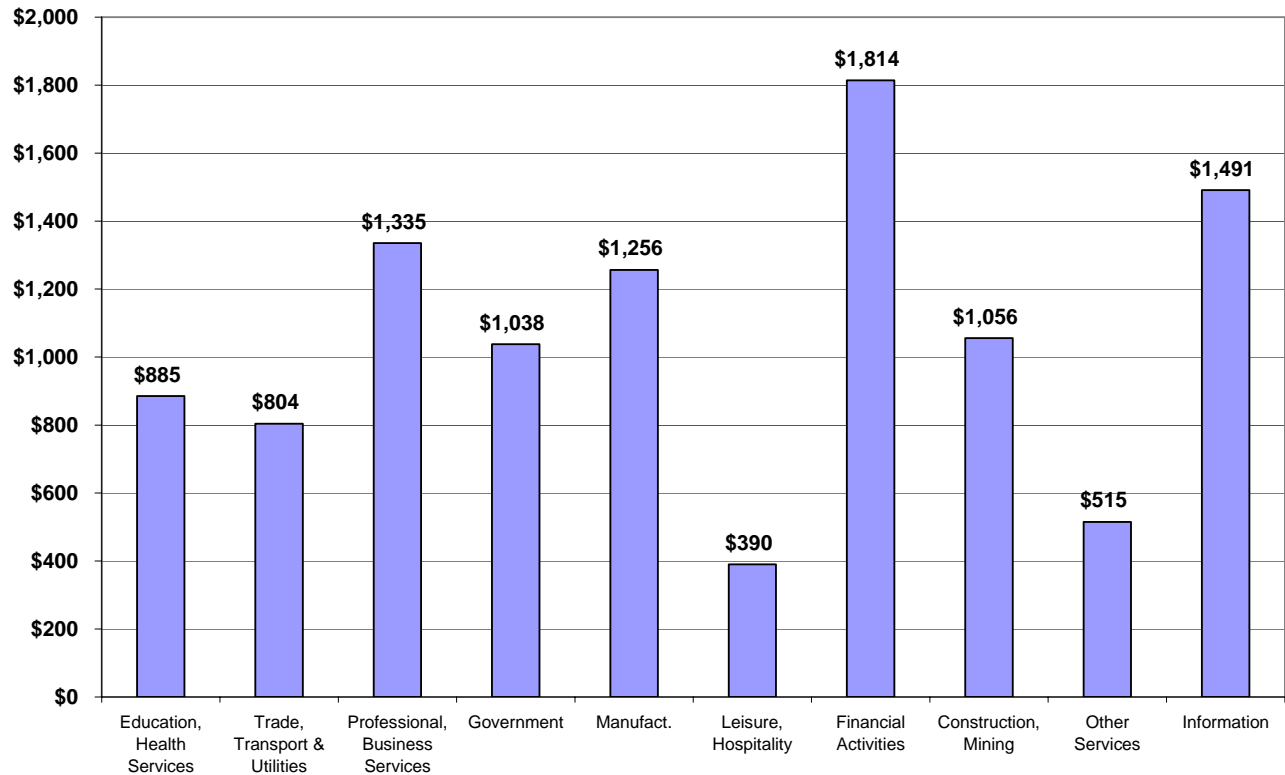
**Composition of Employment in Massachusetts and the United States, 2006**



As Figure 7 indicates, the wages in some supersectors are much higher than those in others. For example, in 2006, the average weekly wage in the shrinking manufacturing supersector was \$1,256, while in the growing education and health services supersector the average wage was \$885. On the bright side, the average wage in the growing professional and business services supersector was \$1,335. The decline in employment in higher wages sectors such as manufacturing is of concern, but wage data for an entire supersector does not tell the entire story. Looking at the wages for supersectors obscures the range of wages within the sectors that comprise each supersector. For example, the education and health services supersector includes both the relatively high wages for doctors and the relatively low-wages for other hospital staff.

Figure 7.<sup>9</sup>

Average Weekly Wage by Sector in Massachusetts, 2006



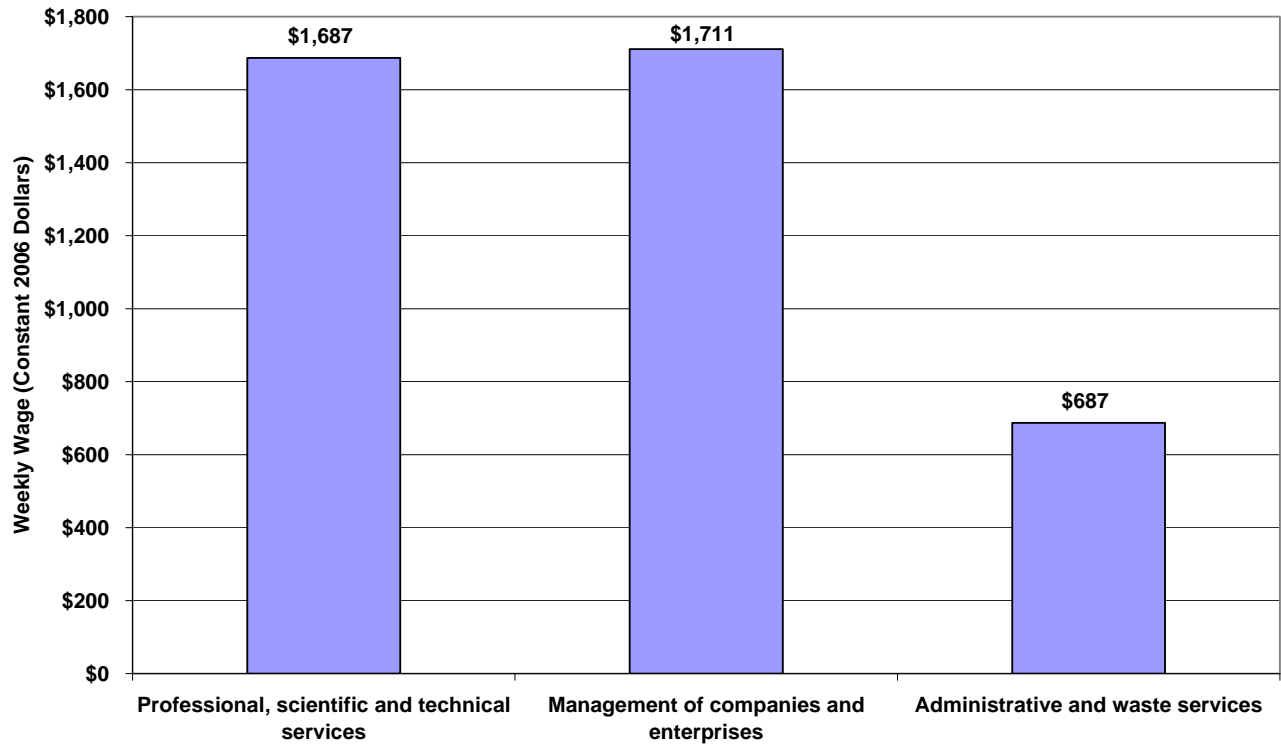
We can see the wage differences within a supersector more clearly by looking at a specific example. Within the professional and business services supersector there are three sectors: professional, scientific and technical services; management of companies and enterprises; administrative and support and waste management and remediation services. As Figure 8 shows, two of these sectors, as we would expect, have relatively high wages, while the third does not. Given the differences in the average wages in these sectors, it is also important to note which sectors are growing.

- The professional, scientific and technical services sector grew from 232,000 jobs in June 2005 to 248,800 in June 2007, an increase of 7.2 percent.
- The number of jobs in management fell from 64,900 to 61,300 over this period, a decrease of 5.5 percent.
- The number of jobs in administrative, waste management and remediation services grew from 163,500 to 172,600 over this period, an increase of 5.6 percent.

<sup>9</sup> For the construction, natural resources and mining supersector, Figure 7 shows the average wage for construction only - \$1,056 per week in 2006. The average wage for the remainder of the supersector - natural resources and mining - was \$868 per week that year.

**Figure 8.**

**Average Weekly Wage in the Three Sectors of the Professional & Business Services Supersector in Massachusetts, 2006**



In looking at wages by supersector, it is also important to recognize that the wages within each supersector can vary over time, and as the result of policy choices. Manufacturing wages were relatively high in America in the 20<sup>th</sup> century because of a particular set of policies and institutions that encouraged strong wage growth in that sector. Looking forward, it is important to consider not just which sectors are adding jobs but also how wages can be increased in each sector and across the economy.

## **LABOR FORCE**

### *Composition of the Massachusetts Labor Force*

Just as the composition of jobs across the supersectors differs in Massachusetts from the rest of the country, so does the demographic composition of the labor force. Figures 9-12 illustrate the differences through four measures: educational background, race and ethnicity, age and gender. Relative to the national workforce in 2006, the workforce in Massachusetts had a smaller share of workers of color, a larger share of older workers, and a larger share of women. The most notable factor distinguishing Massachusetts from the rest of the country is the share of the labor force that has a bachelor's degree. While 29.5 percent of the US labor force had a bachelor's degree in 2006, 42.3 percent of the Massachusetts labor force had a bachelor's degree in that year.

Figure 9.

Education in the Labor Force, 2006

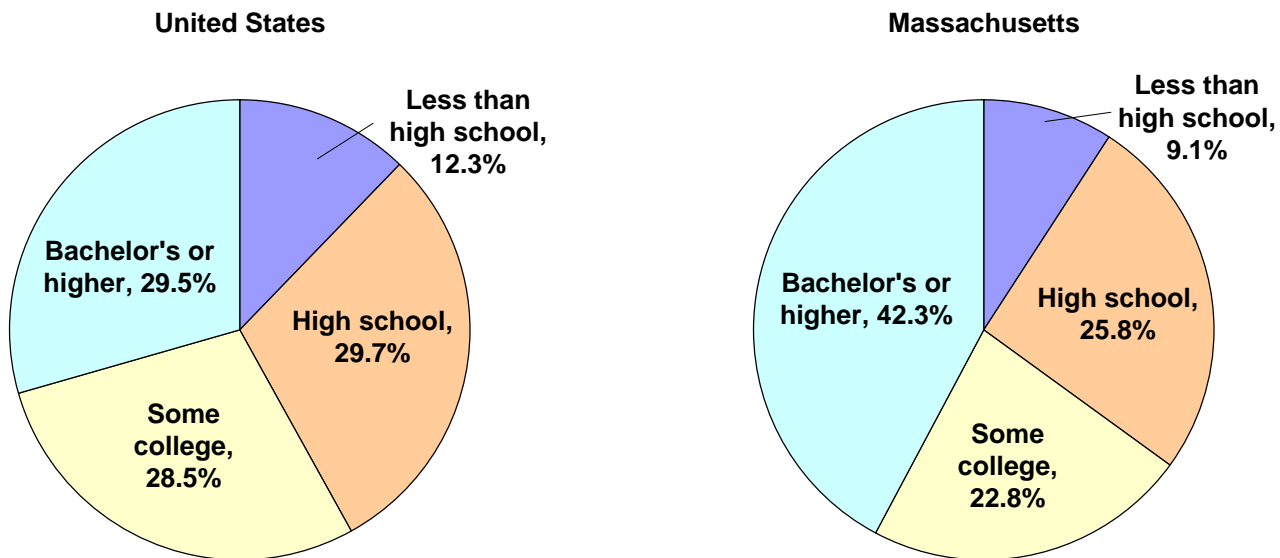
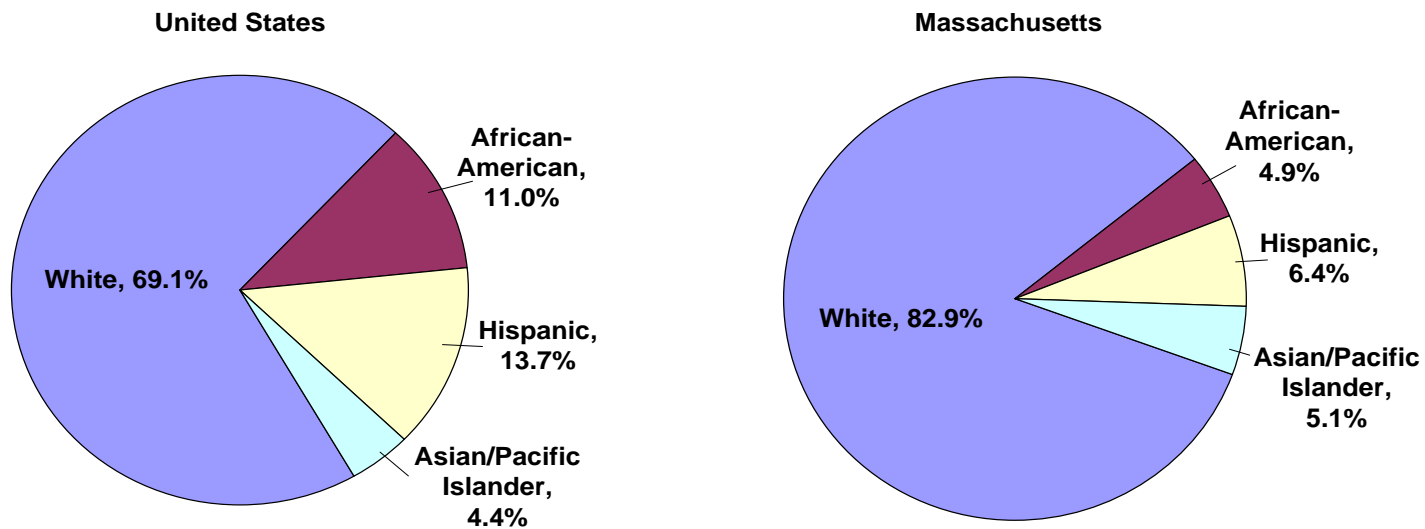


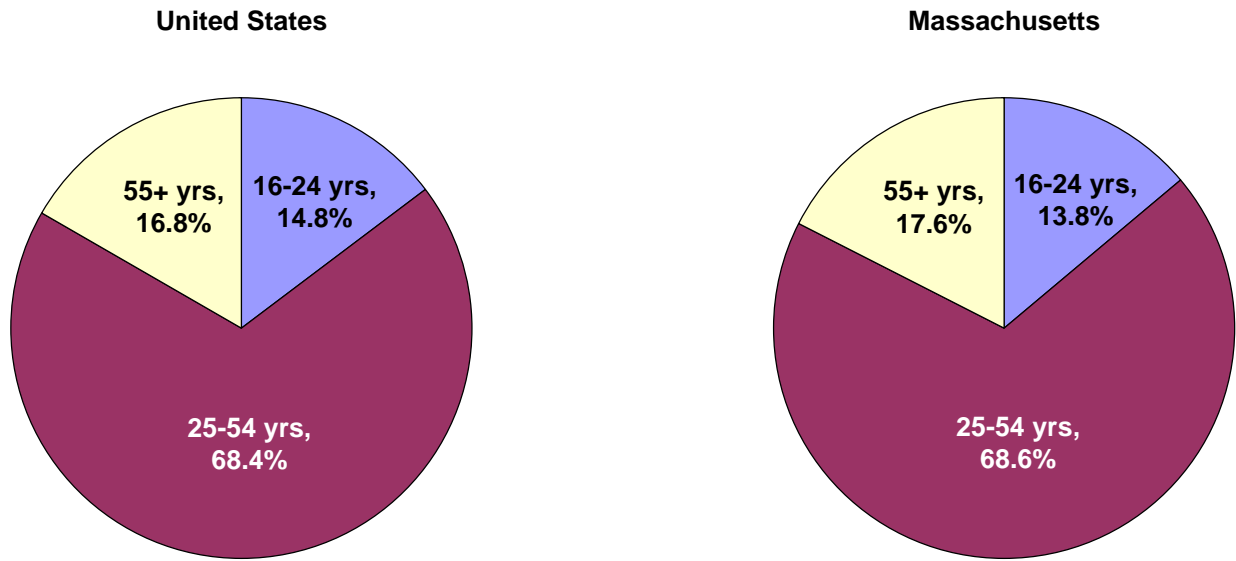
Figure 10.

Race/Ethnicity in the Labor Force, 2006



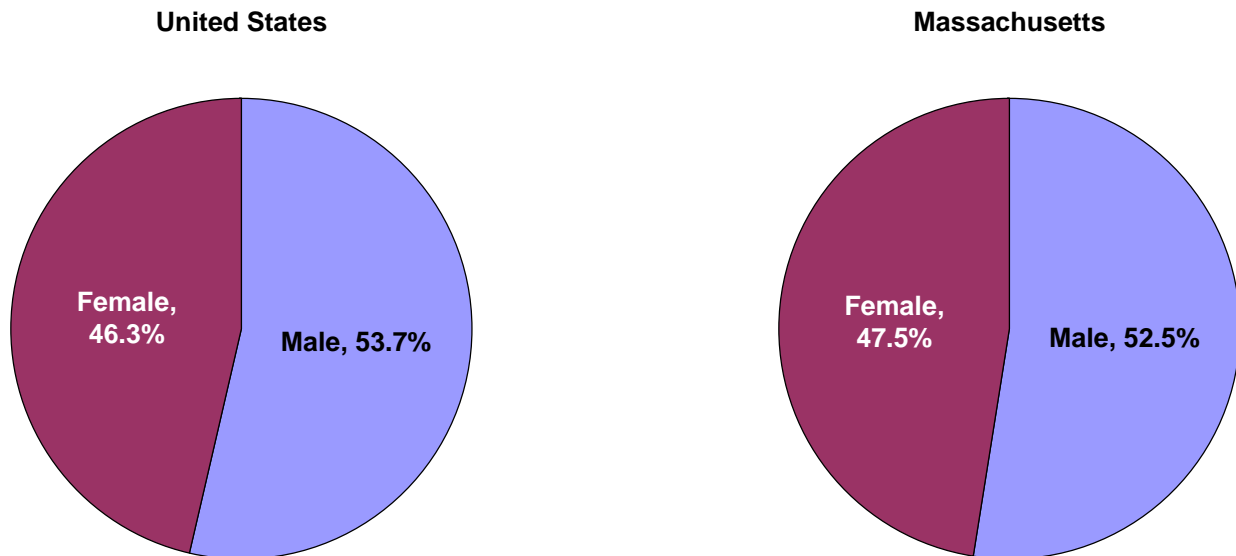
**Figure 11.**

**Age in the Labor Force, 2006**



**Figure 12.**

**Gender in the Labor Force, 2006**

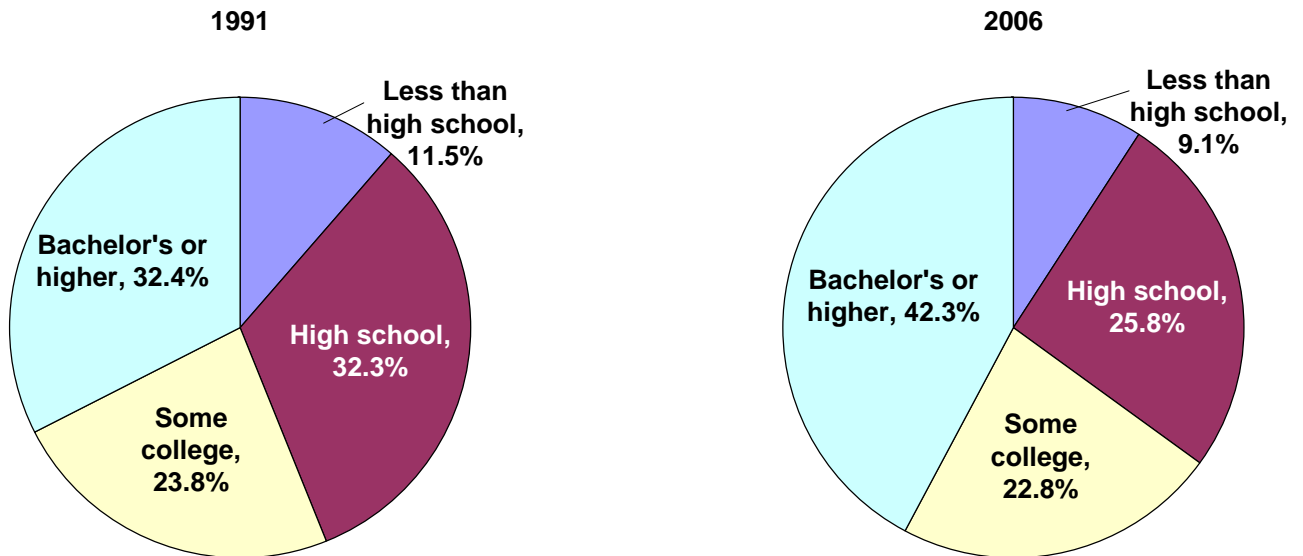


*Changes in the Massachusetts Labor Force Demographics: 1991 – 2006*

Figures 13 – 16 show changes in the Massachusetts labor force from 1991 - 2006. Since 1991 the share of the workforce that holds a bachelor's degree has increased considerably. In addition, workers of color constitute a slightly larger share of the workforce in 2006 than they did in 1991. The share of the workforce that is over the age of 55 has increased. Finally, the gender composition changed little.

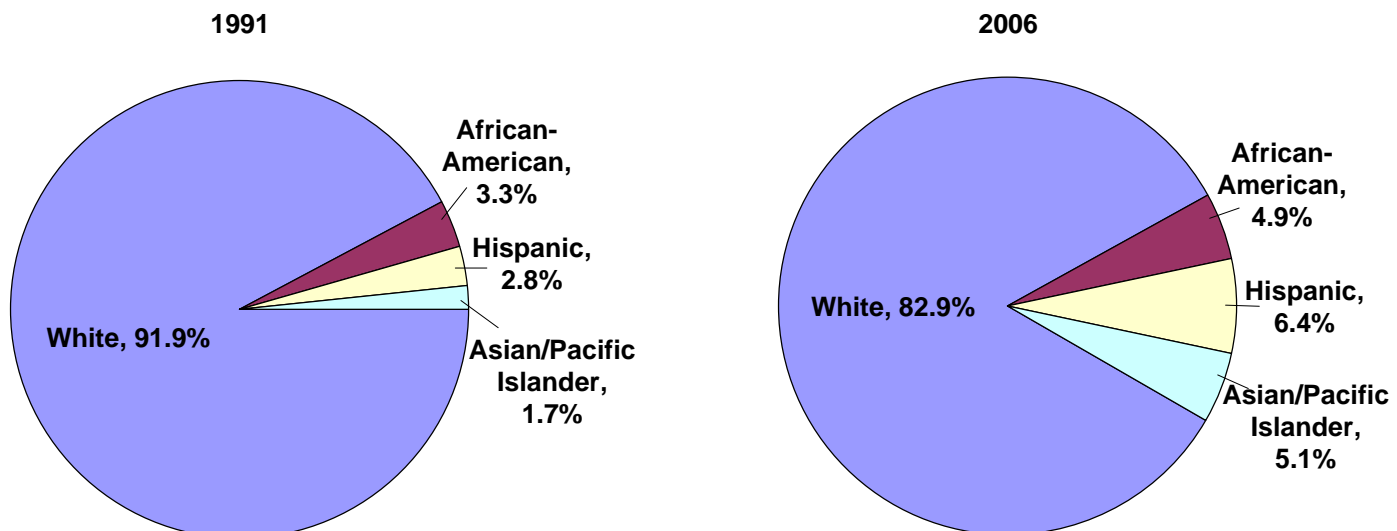
**Figure 13.**

**Education in the Massachusetts Labor Force, 1991-2006**



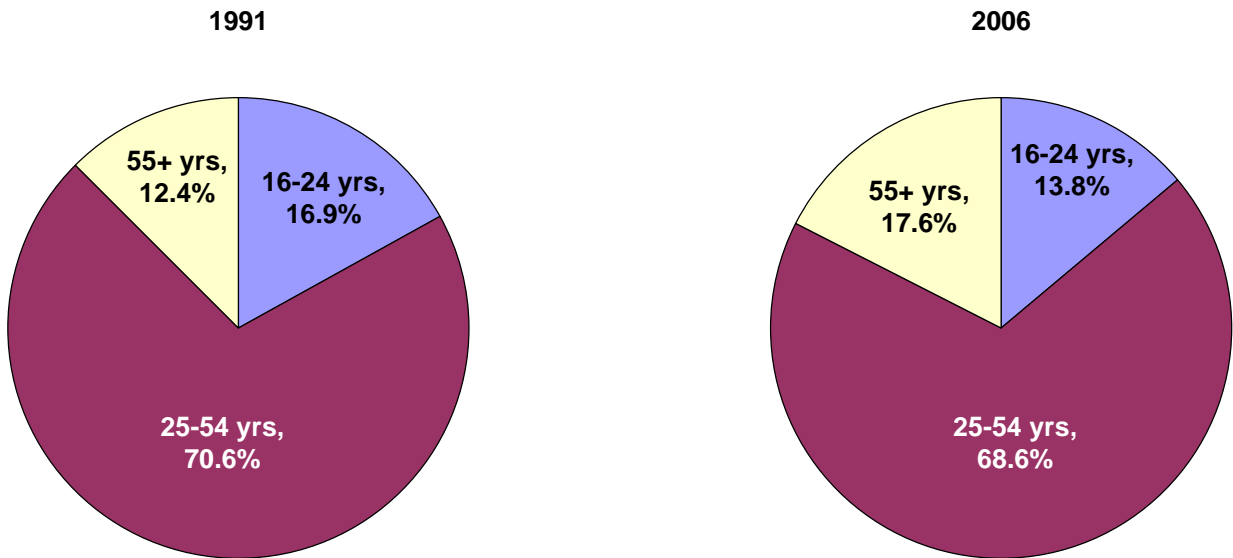
**Figure 14.**

**Race/Ethnicity in the Massachusetts Labor Force, 1991-2006**



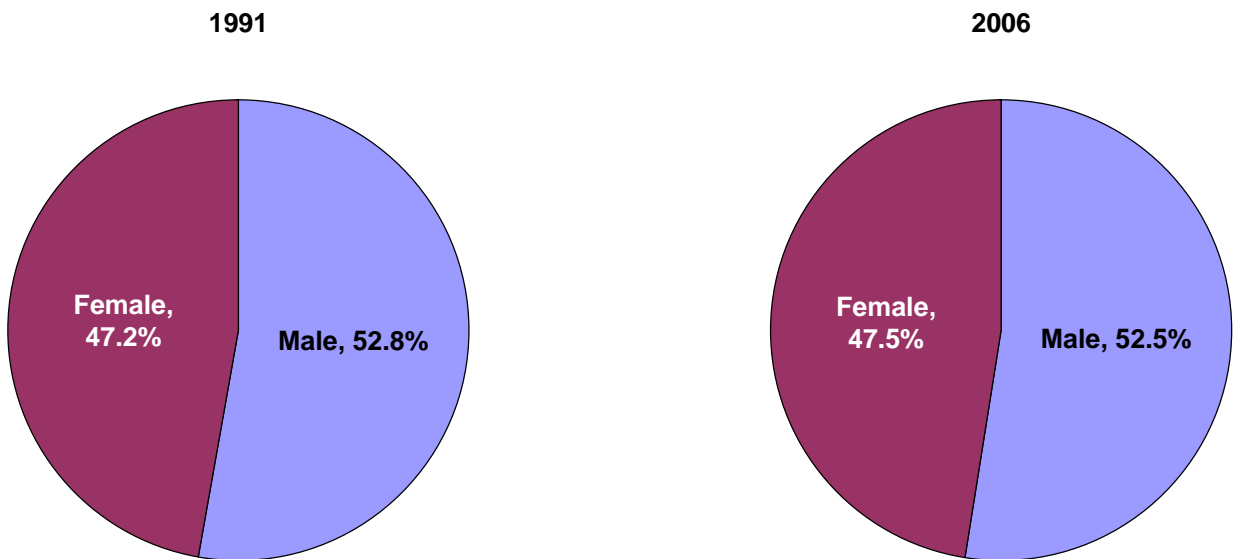
**Figure 15.**

**Age in the Massachusetts Labor Force, 1991-2006**



**Figure 16.**

**Gender in the Massachusetts Labor Force, 1991-2006**





## *Labor Force Statistics by Demographic Group*

The ability to find a job and stay employed varies considerably among workers. Figure 17 compares workers' labor force attachments in Massachusetts by demographic group in 2006. Seven measures of labor force attachment are presented: labor force participation rate, employment to population ratio, unemployment rate, long-term unemployment share, under-employment rate, part-time workers share and part-time for economic reasons share. Each of these measures are defined in the glossary below. For each of the seven measures of labor force attachment, Figure 17 indicates whether a given groups' experience is significantly different from the rest of the workforce in Massachusetts.<sup>10</sup> For example, the table indicates that the proportion of women who worked part-time was higher than the proportion of men who did so in 2006. Moreover, it shows that women were less likely to work part-time for "economic reasons," as defined by the BLS. The definition of this term includes an inability to find full-time employment due to unfavorable business conditions or seasonal declines in demand.

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<sup>10</sup> At various points in this analysis we refer to whether or not the difference between two numbers is statistically significant. Because the data are based on a survey of a random sample of individuals meant to represent the entire state or nation, one cannot be certain that the estimate produced by the sample is the actual rate for the entire population. For each number they publish, the Census Bureau includes a "margin of error." Statistically we can be 90 percent certain that the actual number for the entire population is within a range that is the estimate plus or minus the margin of error. This is called a 90 percent confidence interval. Therefore, when this report states that the difference between two numbers is not statistically significant, we are saying that the two ranges overlap.

### Labor Force Statistics – A Brief Glossary

The statistics presented in Figure 17 – and discussed throughout this section of the paper – are defined by the Bureau of Labor Statistics (BLS) as follows:

- *Labor force participation rate* – The labor force participation rate is the number of people aged 16 or older who are either employed or considered to be unemployed divided by the entire population aged 16 or older. Individuals in institutions (for instance, prisoners or nursing home residents) are excluded from this calculation, as are members of the military. Thus, a labor force participation rate of 74.8 percent for men means that approximately 75 out of every 100 men aged 16 or older either have a job or are looking for one, while 25 out of every 100 men are not in the labor force – that is, they are not actively seeking employment, either because they do not believe jobs are available or for any other reason.
- *Employment to population ratio* – The employment to population ratio is the number of employed people aged 16 or older divided by the entire population aged 16 or older. (Again, institutionalized individuals and members of the military are not counted in this measure.) It is similar to the labor force participation rate, except that it excludes unemployed workers from its numerator.
- *Unemployment rate* – The unemployment rate is found by dividing the number of unemployed people (aged 16 or older) by the entire labor force (aged 16 or older). It does not include individuals who may be out of work but who have become discouraged and stopped looking for a job. (To be considered “unemployed” by the BLS, an individual must have made specific efforts to secure employment within the past four weeks; otherwise, he or she is deemed to be out of the labor force.) Consequently, the unemployment rate tends to understate the true depth of unemployment.
- *Long-term unemployment share* – The long-term unemployment share is the percentage of people who are considered unemployed who have been out of work for more than 26 weeks.
- *Underemployment rate* – A more comprehensive measure than the basic unemployment rate, the underemployment rate takes into account individuals who are out of work but who have not looked for a job in the past four weeks (and who, therefore are not regarded as “unemployed” by the BLS) as well as individuals who work part-time but who are seeking full-time employment.
- *Part-time workers share* – The part-time workers share is the percentage of all employed persons who work fewer than 35 hours per week.
- *Part-time for economic reasons share* – This is the percentage of all part-time workers who want to work full-time (and are available to do so) but who are unable to do so, either because they can not find full-time employment or because such employment is simply unavailable (for instance, due to unfavorable business conditions).

**Figure 17.**

Massachusetts Labor Force Statistics by Demographic Group, 2006							
	<u>Labor force participation rate</u>	<u>Employment to population ratio</u>	<u>Unemployment rate</u>	<u>Long-term unemployment share</u>	<u>Under-employment rate</u>	<u>Part-time workers share</u>	<u>Part-time for economic reasons share</u>
<b>All United States</b>	66.2%	63.1%	4.6%	17.6%	8.2%	22.4%	12.8%
<b>All Massachusetts</b>	67.0%	63.6%	5.1%	16.2%	8.2%	27.1%	8.7%
<b>Gender</b>							
Male	73.5% *	69.3% *	5.6%	14.2%	8.7%	18.9% *	12.6% *
Female	61.0% *	58.3% *	4.4% *	18.9%	7.5%	36.1% *	6.6% *
<b>Age</b>							
16-24 yrs	59.8% *	53.8% *	10.1% *	(a)	17.1% *	50.7% *	11.1%
25-54 yrs	83.2% *	79.5% *	4.4% *	15.3%	6.9% *	20.8% *	9.1%
55 yrs and older	40.2% *	38.7% *	3.6% *	(a)	6.0% *	34.3% *	(a)
<b>Race / ethnicity</b>							
White	67.3%	64.4%	4.4% *	12.4%	6.9% *	27.1%	7.2% *
African-American	63.0% *	58.2% *	(a)	(a)	13.8% *	26.1%	(a)
Hispanic	66.4%	59.2% *	10.9% *	(a)	17.5% *	30.9% *	(a)
Asian/Pacific Islander	65.1%	61.3%	(a)	(a)	11.9% *	23.2% *	(a)
<b>Education</b>							
Less than high school	42.8% *	39.2% *	8.4% *	(a)	14.3% *	49.1% *	(a)
High school	63.2% *	58.5% *	7.5% *	(a)	11.2% *	25.7%	11.5% *
Some college	69.1% *	65.5% *	5.2%	(a)	9.0%	31.6% *	9.9%
Bachelor's or higher	78.0% *	75.8% *	2.8% *	(a)	4.6% *	21.0% *	6.2% *

\* Indicates difference from "All Massachusetts" is statistically significant; (a) indicates insufficient sample size.

Figure 17 shows that workers between the ages of 16 and 24 were more than twice as likely to be unemployed or underemployed as workers in the other age groups. Between 2001 and 2006, young workers experienced significant declines in their labor force participation rate (which dropped from 62.4 percent to 59.8 percent) and their employment to population ratio (which sank from 57.8 percent to 53.8 percent). It appears that a fraction of these changes could be due to growing enrollments in colleges and universities in the state, rather than higher unemployment. Nonetheless, this group experienced significant increases in their unemployment rate (which increased from 7.4 percent to 10.1 percent) and their underemployment rate (from 12.5 percent to 17.1 percent).

Workers of color faced higher underemployment rates than the workforce in its entirety in 2006. African-Americans workers' underemployment rate was twice that of white workers; Hispanic workers' underemployment rate was more than two and half times that of white workers. Between 2001 and 2006, Hispanic workers experienced significant increases in their unemployment rate (which increased from 7.7 percent to 10.9 percent) and their underemployment rate (which increased from 13.3 percent to 17.5 percent).

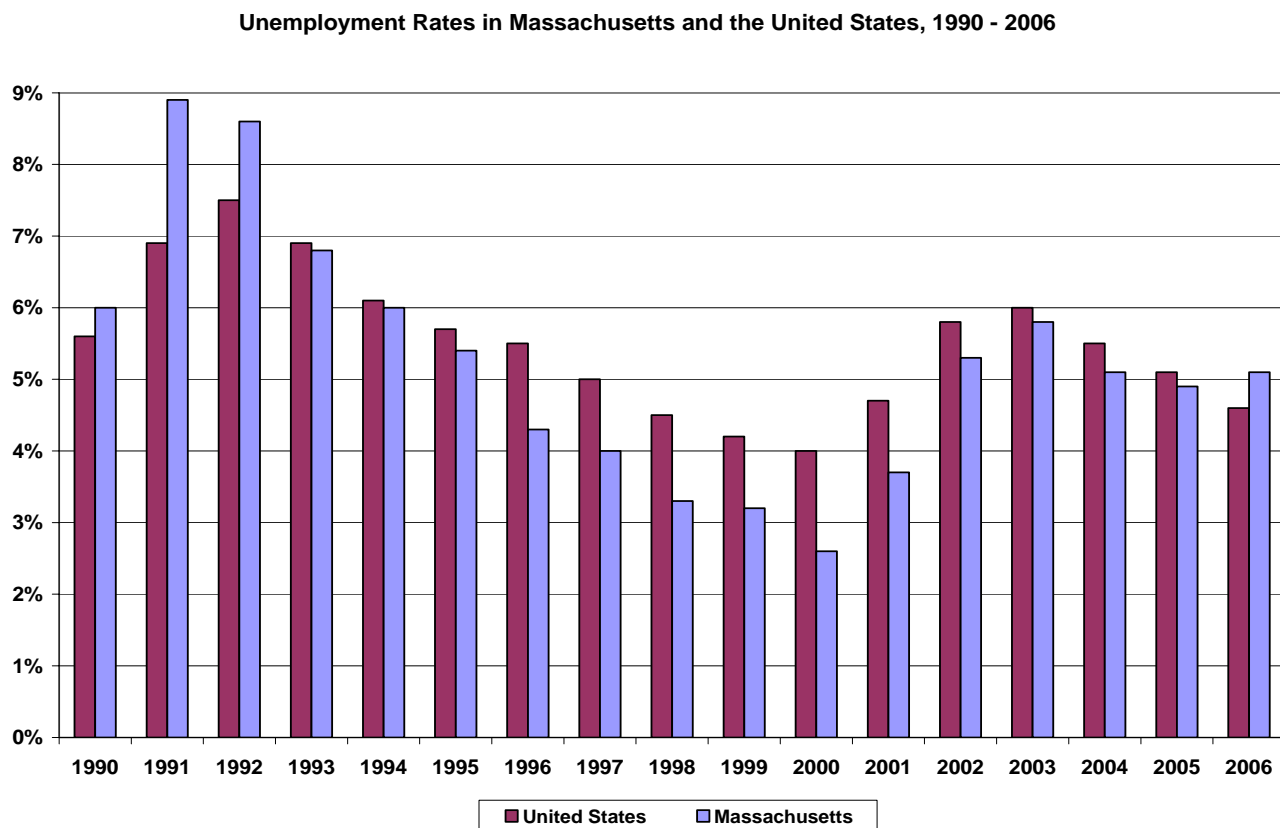
Not surprisingly, workers with a high school degree or less experienced significantly higher unemployment and underemployment rates than the workforce as a whole. In contrast, those workers who have some college training or have earned at least a bachelor's degree had higher labor force participation rates and employment to population ratios; they also enjoyed lower unemployment and underemployment rates. From 2001 to 2006, however, the labor force participation rate for workers with a bachelor's degree dropped from 82.2 percent to 78 percent. Similarly, their employment to

population ratio dropped from 79.9 percent to 75.8 percent during this period. Both changes were statistically significant. The unemployment rate of this group (2.8 percent) did not change over time.

### *Unemployment Rates*

As Figure 18 suggests, the unemployment rate in Massachusetts increased from the 2001 national recession through 2003. From 2003 through 2005, unemployment rates fell in Massachusetts and the US. In 2006, the national unemployment rate continued to drop to 4.6 percent, while unemployment in Massachusetts increased to 5.1 percent; the unemployment rate in Massachusetts was higher than the national average for the first time since 1992.

**Figure 18.**

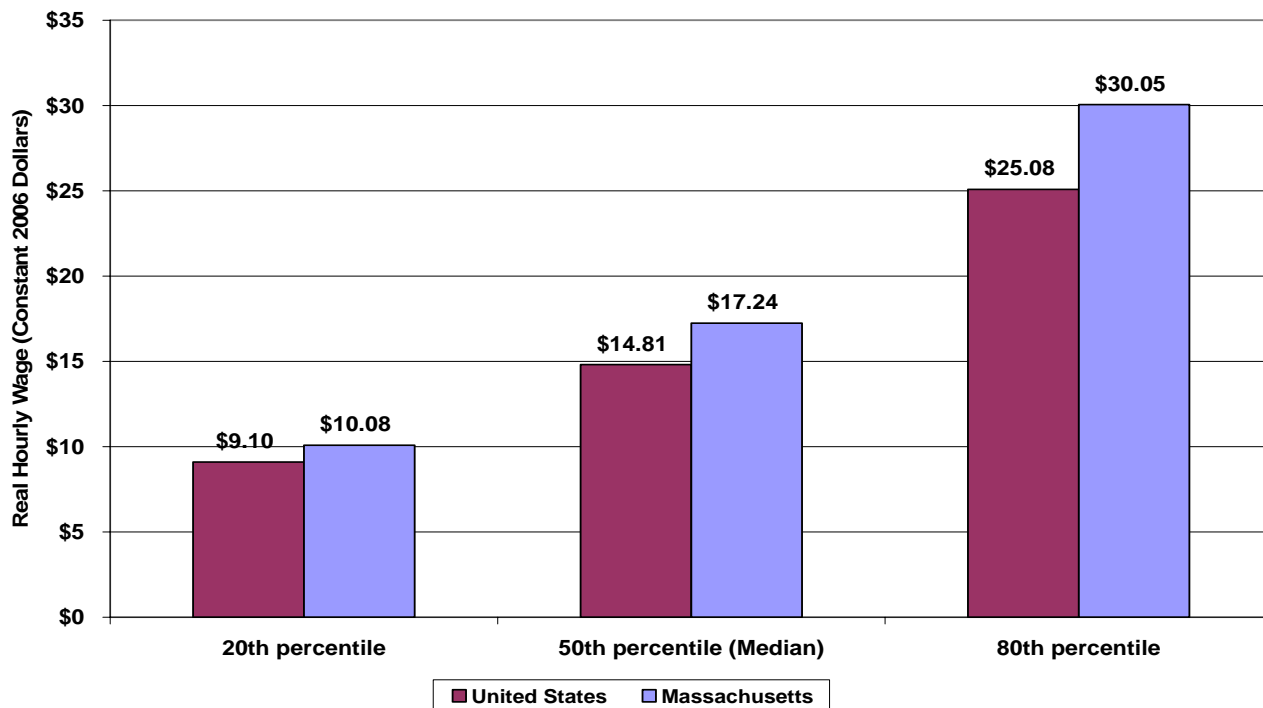


### **WAGES**

As Figure 19 shows, relative to the country as a whole, Massachusetts is a high-wage state. This is particularly true at the high end of the income spectrum, where wages in Massachusetts are 20 percent above the national average (at the 80<sup>th</sup> percentile).

**Figure 19.**

**Hourly Wages, Massachusetts and the United States, 2006**



When looking at trends in wages in Massachusetts (in Figures 20 - 21), we see that progress has begun for middle and high income workers but not for those with lower incomes.

- Workers at the 20<sup>th</sup> percentile:

From 2003 to 2006, wages for workers at the 20<sup>th</sup> percentile experienced a 7 percent decline, from \$10.84 to \$10.08.

Looking at the most recent year, from 2005 to 2006, wages for workers at the 20<sup>th</sup> percentile experienced a 3.3 percent decline, from \$10.42 to \$10.08. Only 3 other states – Indiana, Iowa and Colorado – experienced larger drops during this period.

- Workers at the 50<sup>th</sup> percentile (median):

From 2003 to 2006, wages for workers at the 50<sup>th</sup> percentile experienced a 2.9 percent decline, from \$17.76 to \$17.24.

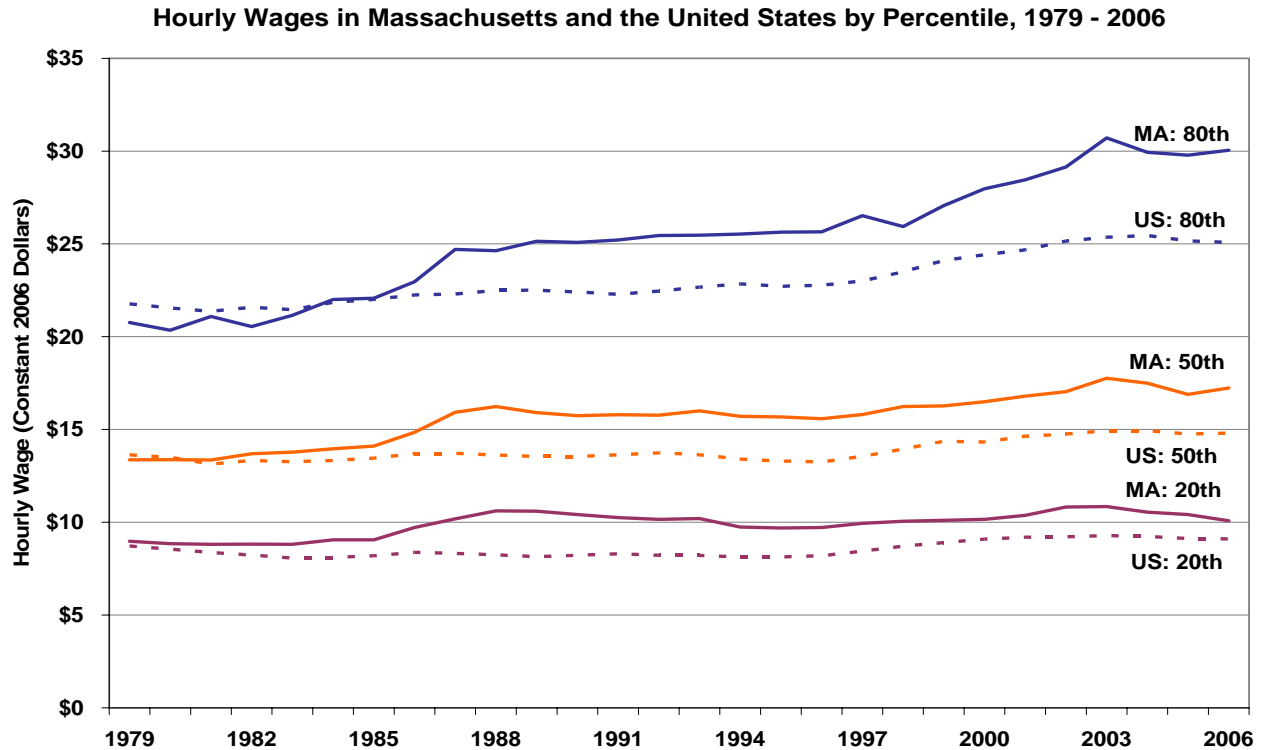
Looking at the most recent year, from 2005 to 2006, wages for workers at the 50<sup>th</sup> percentile experienced a 2.1 percent increase, from \$16.89 to \$17.24. Only 9 other states – Arkansas, Louisiana, Wyoming, West Virginia, Oklahoma, South Carolina, Florida, Maine and Vermont – experienced faster median wage growth during this period.

- Workers at the 80<sup>th</sup> percentile:

From 2003 to 2006, wages for workers at the 80<sup>th</sup> percentile experienced a 2.1 percent decline, from \$30.71 to \$30.05.

From 2005 to 2006, wages for workers at the 80<sup>th</sup> percentile experienced a 0.9 percent increase, from \$29.78 to \$30.05. The Commonwealth experienced the 24<sup>th</sup> fastest rate of growth among the fifty states during this period.

**Figure 20.**



**Figure 21.**

**Wages by Percentile in Massachusetts and the United States, 2001 - 2006**  
(Constant 2006 Dollars)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
MA: 20th percentile	\$10.37	\$10.82	\$10.84	\$10.54	\$10.42	\$10.08
US: 20th percentile	\$9.19	\$9.22	\$9.28	\$9.23	\$9.12	\$9.10
MA: 50th percentile (Median)	\$16.79	\$17.04	\$17.76	\$17.49	\$16.89	\$17.24
US: 50th percentile (Median)	\$14.63	\$14.75	\$14.93	\$14.93	\$14.75	\$14.81
MA: 80th percentile	\$28.45	\$29.14	\$30.71	\$29.93	\$29.78	\$30.05
US: 80th percentile	\$24.68	\$25.15	\$25.36	\$25.45	\$25.17	\$25.08

## CONCLUSION

Although it is now more than five years since the end of the 2001 recession, Massachusetts continues to struggle economically. Despite gains since the end of 2003, total non-farm employment in 2006 was 2.9 percent below the 2001 level. Only two other states experienced deeper job losses during this period: Michigan and Louisiana experienced 4.8 percent and 3.1 percent declines respectively.

In reviewing the conditions of working people in Massachusetts in 2006, we see both good news and bad news. Wages in the bottom 20<sup>th</sup> percentile have fallen 3.3 percent while the state's median wage has increased 2.1 percent. Wages at the middle and at the top in Massachusetts are growing faster than national averages and job growth in the high-wage professional and business services supersector is high relative to other supersectors in Massachusetts. Yet, unemployment is high in Massachusetts, relative to the United States.

State government did take steps, however, that took effect after 2006, to raise wages for low-wage workers. Specifically, legislation was enacted to raise the minimum wage in the Commonwealth in two stages: from \$6.75 per hour to \$7.50 per hour on January 1, 2007 and then from \$7.50 per hour to \$8.00 per hour on January 1, 2008. Though the minimum wage was increased, it was not indexed to inflation. Consequently, in the absence of further action, workers who earn the minimum wage will lose real purchasing power each year after 2008, as they did between 2001 and 2006.

There has also been some progress in funding for education, which could increase the long-term earning power of future Massachusetts workers. In FY 2008, Massachusetts will invest \$3.726 billion in K-12 education aid to cities and towns. Nominally, this is an increase of \$220 million or 6.3 percent over the FY 2007 final funding level. However, adjusting for inflation and using the measure identified in the state's education reform law, the FY 2008 funding level is \$353 million or 8.6 percent below the FY 2002 level of support. In the case of higher education, the FY 2008 budget increases state funding for higher education by \$22 million or 2.1 percent over the FY 2007 level of support. After adjusting for inflation, however, the increase disappears. Even with the nominal increase in FY 2008, the state's support of higher education, after adjusting for inflation, remains \$246 million or 18.9 percent below the FY 2001 level of funding.

In the months and years to come, Massachusetts faces dual challenges: encouraging economic growth and expanding economic opportunity so that everyone in the Commonwealth can benefit from – and contribute to – a vibrant state economy.