

COMMONWEALTH OF MASSACHUSETTS

WORKFORCE INFORMATION GRANT

ECONOMIC ANALYSIS REPORT FOR PROGRAM YEAR 2009

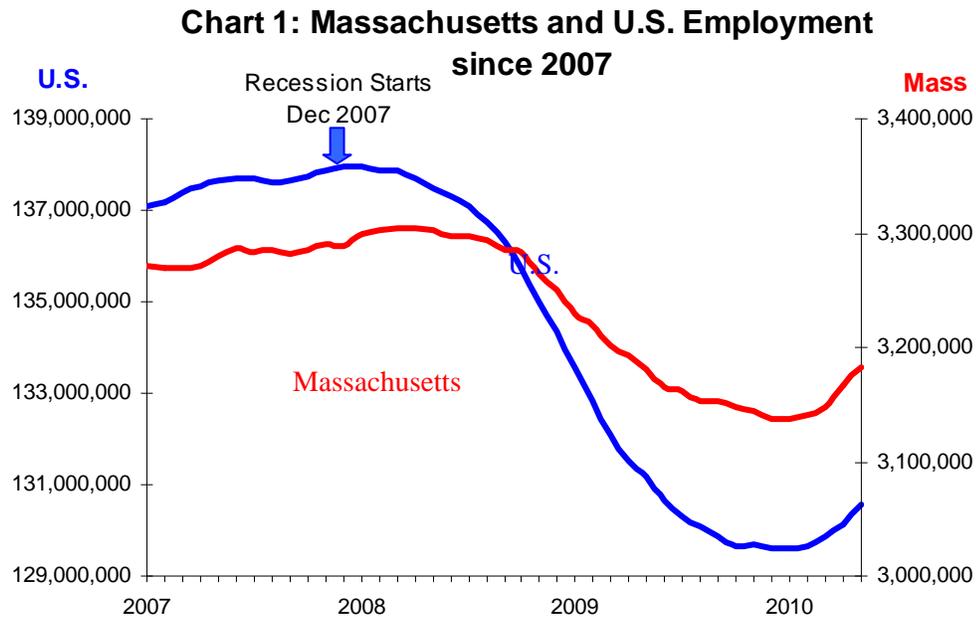
September 2010

**Executive Office of Labor and Workforce Development
Department of Workforce Development**

This report describes the employment and labor market situation in the Commonwealth during the period of May 2009 through May 2010. During this period, the Commonwealth experienced the peak of job loss (December 2009) and began a sustained period of monthly job gains. The period of job loss associated with the recession occurred between March 2008 and December 2009.

Section 1: Impact of the Recession on Employment

The most significant economic impact of the recession in Massachusetts is job loss. As of May 2010 statewide employment was at 3,182,400.¹ Jobs were up 2,200 (0.1 percent) over the previous twelve month period. However, 44,800 jobs were gains over the first six months of 2010. Job loss and unemployment has slowed business revenues, reduced tax revenues and state spending, reduced consumer spending and shaken consumer confidence. However, many of these indicators – particularly business confidence² – have begun to turn around in 2010.³



Source: Current Employment Statistics (CES)
 Massachusetts Department of Workforce Development, U.S. Bureau of Labor Statistics

The national recession began in December 2007.⁴ Chart 1 shows the course of the recession in terms of total jobs for the nation and Massachusetts. While the Commonwealth has experienced a serious economic downturn during this period, it is clear from the chart that the nation experienced sharper job loss in 2008 and 2009. In Massachusetts the most significant job loss began August of

¹ BLS CES 790

² AIM Business Confidence Index

³ *Ibid.*

⁴ National Bureau of Economic Research.

2008. During the first several months of the national recession, the Commonwealth saw some small job growth. After August 2008 the state began a long period of job loss. By April 2009, the state had experienced a loss of over 108,000 jobs.

The recession has had wide ranging impact across employment sectors, with significant job loss in several areas of the Massachusetts economy. Table 1

demonstrates job loss by industry sector. The Healthcare and Education, Federal and State Government sectors are the only areas with positive job growth or no change between August 2008 and April 2009, the period of the largest job loss. During the period between April 2009 and December 2009, job loss began to slow. Starting in January 2010, the nation and the Commonwealth began a period of job gains. Even so, employers within these sectors have implemented layoffs or slowed hiring as a result of the recession.

Table 1: Massachusetts Employment by Industries, August 2008 vs. April 2009

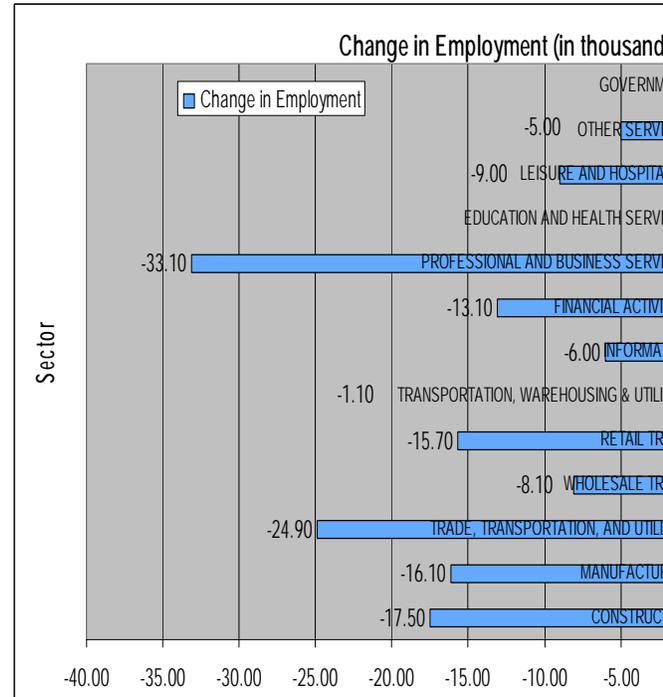
Industry Division	August 2008	April 2009	Net Change	Percent Change
TOTAL NONFARM	3,293.7	3,182.40	-111.3	-3.4%
TOTAL PRIVATE	2,855.5	2,734.10	-121.4	-4.3%
CONSTRUCTION	131.7	106.5	-25.2	-19.1%
MANUFACTURING	286.3	253	-33.3	-11.6%
TRADE, TRANSPORTATION, AND UTILITIES	569.6	535.5	-34.1	-6.0%
WHOLESALE TRADE	135.7	124.6	-11.1	-8.2%
RETAIL TRADE	349.4	332.8	-16.6	-4.8%
TRANSPORTATION, WAREHOUSING & UTILITIES	84.5	78.1	-6.4	-7.6%
INFORMATION	88.9	83.7	-5.2	-5.8%
FINANCIAL ACTIVITIES	221.0	207	-14	-6.3%
PROFESSIONAL AND BUSINESS SERVICES	487.5	464.8	-22.7	-4.7%
EDUCATION AND HEALTH SERVICES	642.5	667.7	25.2	3.9%
LEISURE AND HOSPITALITY	306.0	296.7	-9.3	-3.0%
OTHER SERVICES	120.6	117.7	-2.9	-2.4%
GOVERNMENT	438.2	448.3	10.1	2.3%

Source: BLS, CES 790 Series; Massachusetts Department of Workforce Development
 Note: Numbers are in thousands; Data is seasonally adjusted

Section 2: Employment Overview by Sector – May 2009 to May 2010

Chart 2 shows the change by industry over the period from May 2009 to May 2010 using the CES estimates. The job numbers are the result of a monthly survey that uses U.S. Department of Labor Bureau of Labor Statistics methodology as part of the CES-790 series. More than 8,000 Massachusetts employers are surveyed to determine the number of jobs by industry. These estimates are the economic indicator used to gauge the Commonwealth's employment growth patterns.

**Chart 2: Massachusetts Job Gains and Losses
April 2008 to April 2009**



The Education and Health Services sector continues to bolster the Massachusetts economy during this recession. Although this sector has seen occasional minor job loss during the recession, Education and Health Services remains the only private sector to add jobs over the year. Health Care and Social Assistance added 6,500 of the 18,300 jobs added by the super sector from one year ago.

Professional, Scientific, and Business Services a critical employment sector for Massachusetts has seen significant job loss during the recession (22,700 August 2008–May 2010). At 464,800, employment in May 2010 the overall sector is up 4,600 or 1.0 percent from one year ago. Since May 2009, Administrative and Waste Management Services has added 6,500 jobs, while the Management of Companies and Enterprises is down 1,300 and Professional, Scientific, and Technical Services component is down 600 jobs.

Employment in Financial Activities was 207,000 in May 2010. This industry sector was impacted early and severely in the recession. This sector was down -7,000 jobs (or -3.3 percent) from May 2009. The 600 job gain over the first five months of 2010 is an improvement from the 1,800 job loss over the final three months of 2009.

Manufacturing jobs continued to trend downward with over the month losses recorded -100. Durable Goods lost -400 jobs or 0.2% while Nondurable Goods posted a gain of 300 jobs for 0.3% increase over the month. At 253,000 in May 2010, manufacturing employment is down -6,900 or -2.7 percent from one year

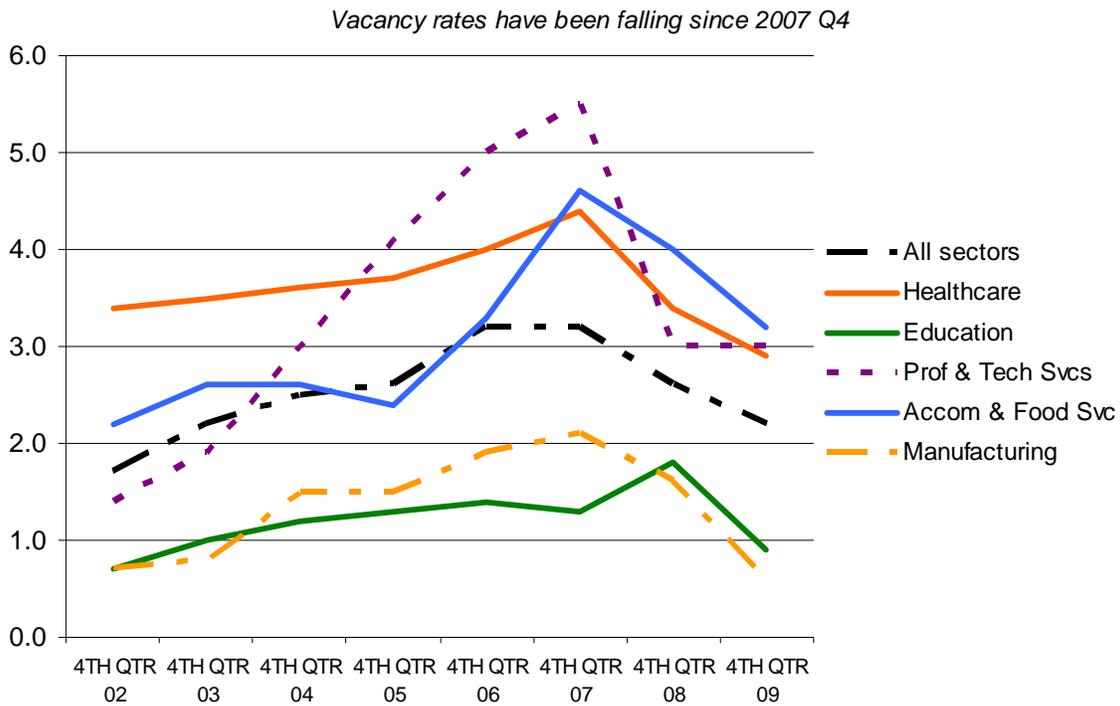
ago. Durable Good posted all the over the year job loss at -6,900 or -4.0 percent. Nondurable goods remained flat over the year at 164,100.

Construction jobs are down -5,500 or -4.9 percent from one year ago (May to May).

Section 3: Job Vacancies

The recession has reduced the number of available jobs in Massachusetts. Chart 3 below shows the trends in job vacancies (not seasonally adjusted) by sector between the 4th Quarter of 2002 and the 4th Quarter of 2009 as reported in the biannual Massachusetts Job Vacancy Survey (JVS).

Chart 3: Massachusetts Vacancy Rates by Major Sector



Massachusetts Department of Workforce Development, Job Vacancy Surveys 2002-2009

Professional, Technical Services, Hotel and Food, and Healthcare occupations consistently report vacancy rates than overall vacancy rate, even into the recession. Vacancy rates for professional and technical occupations are falling, but remain higher than overall vacancy rate. Vacancy rates for Food Preparation/Serving may be higher due to higher turnover and temporary, seasonal employment. Education and Manufacturing sectors have consistently lower vacancy rates, although as you identify specific employers or occupations within these sectors you find higher vacancy rates for “skill gap” occupations.

As part of a broader effort to understand and explain the "Skills Gap" in Massachusetts, the Executive Office of Labor and Workforce Development, through its quasi public workforce agency (Commonwealth Corporation), uses the JVS to help workforce development practitioners and policy makers gain a better understanding of the specific occupations that are in demand. Commonwealth Corporation identifies critical occupations that have a large number of vacancies, or a vacancy rate of at least 5% and have an annual median wage of at least \$25,000. In addition, persistent vacancies are those that are considered critical for three consecutive surveys.⁵

Table 2: Vacancies and Employment by Critical Occupation

Occupations	Critical Vacancies, 4th Quarter 2009 ¹	Employment in Critical Occupations, May 2008 ²
Office and Administrative Support	4,178	255,750
Healthcare Practitioner and Technical	3,696	105,190
Healthcare Support	2,990	79,130
Management	2,909	94,840
Computer and Mathematical	1,644	84,090
Sales and Related	1,431	45,000
Business and Financial Operations	1,357	54,220
Community and Social Services	1,226	35,400
Food Preparation and Serving Related	774	39,360
Life, Physical, and Social Science	757	18,940
Transportation and Material Moving	506	23,510
Installation, Maintenance, and Repair	426	14,950
Protective Service	390	21,320
Personal Care and Service	363	11,200
Construction and Extraction	290	15,380
Education, Training, and Library	280	13,940
Arts, Design, Entertainment, Sports, and Media	279	2,530
Building and Grounds Cleaning and Maintenance	241	53,930

Source: Massachusetts Department of Workforce Development

¹Jobs Vacancy Survey, 4th Quarter 2009, Massachusetts Department of Workforce Development

²BLS, ES-202; Massachusetts Department of Workforce Development

The number of critical occupations has seen similar declines. In the 4th quarter of 2009, there were 53 critical occupations, up from 45 critical occupations in the 2nd quarter of 2009 but still much lower than the 92 in the 4th quarter of.

Table 2 shows a complete list of those occupations in which critical vacancies are identified. A hyper link to specific occupations within each job family is available below. In addition, the chart can be found at:

<http://www.commcorp.org/researchandevaluation/vacancy-critical.html>.

⁵ The Massachusetts Skills Gap Project is an analysis of job vacancies in Massachusetts focusing on persistent vacancies in critical occupations. For additional background please see:

<http://www.commcorp.org/researchandevaluation/skillsgap.html>.

There are fifty-four (54) occupations that contain critical vacancies. These account for 38% of all vacancies in Massachusetts in the fourth quarter of 2009. Nearly a sixth of these vacancies (4,178 of 23,737) are in Office and Administrative Support. This represents almost a doubling of vacancies in this occupational category from the previous year. Healthcare Practitioner and Technical occupations have 3,696 critical vacancies, slightly lower than the 3,688 one year earlier. Registered Nurses (2,769) and Nurses Aides and Assistants (1,705) continue to be the critical occupations with the highest number of vacancies. New additions to the top ten critical vacancies are medical and health services managers, application software engineers, tax preparers (which is seasonal), first-line supervisors of retail sales staff, and executive secretaries and administrative assistants. Seven of the top ten critical vacancies typically require training or educational credentials below a bachelor's degree. Three of occupational categories had no critical vacancies – Architecture and engineering, legal and Production occupations.

Seven (7) of the 54 critical occupations with 2,401 (10%) of the 23,737 critical vacancies are in the three occupational categories that make up STEM occupations (computer and mathematical, life, physical, and social science, and architecture and engineering). STEM occupations constitute one of the top 10 occupations with the highest vacancies (Computer software engineer, Applications).

Nineteen of 54 (35%) of critical occupation titles require at least a Bachelor's degree, but 19 of 54 (35%) require only on the job training of up to a year, but not necessarily a post-secondary credential.

Persistent vacancies are those that have been categorized as critical occupation vacancies for three job vacancy surveys. This indicates they are not seasonal in nature, but rather represent structural shortages. In the fourth quarter of 2009 there were twenty-eight (28) occupations that met the definition of persistent vacancies. These occupations represent 17,008 vacancies, 72% of the total number of critical vacancies. The largest number of persistent occupations is, like critical occupations, in the Office and Administrative Support and Healthcare Practitioner and Technical occupational categories. There are three STEM occupations also included among these: two computer related occupations, and one from Life, Physical and Social Sciences.

Section 4: Demographics of the UI Claimant population

There were 216,225 claimants in May 2010 collecting benefits in all unemployment insurance programs. Just under half (48.3%) were on the regular state program, while the remainder (51.7%) were either on one tier of EUC or on the Federal-State Extended Benefits program.

There were six occupations with over 10,000 UI claimants. This accounted for 65.5% of all claimants:

- *Office & Administrative Support occupations (SOC-43)*. There were 53,148 claimants from this occupational category, accounting for 16% of all claimants. Nearly 55% of these claimants were on one of the extension programs.
- *Construction & extraction (SOC-11)*. There were 28,867 claimants from this occupational category. They represented 13.3% of total claimants.
- *Management occupations (SOC-47)*. 26,943 total claimants or 12.4% of all programs.
- *Production occupations (SOC-51)*. 20,902 total claimants or 9.7% of all programs.
- *Sales & Related occupations (SOC-41)*. 17,175 total claimants or 7.9% of all programs
- *Transportation & Material Moving occupations (SOC-53)*. 12,496 total claimants or 5.8% of all programs.

Only one civilian occupational group, *Farming, Fishing & Forestry (SOC-45)*, posted total UI claimants below 1,000. Table 3 below displays data from the Massachusetts Unemployment Insurance System for May 2010 for all programs.

Table 3: Massachusetts UI Claimants by Occupation, May 2010

SOC	Occupational Title	Claimants						
		Number			By Program		Percent of Total	
		All Programs	Regular UI	EUC and EB	Regular UI	EUC and EB	Regular UI	EUC and EB
	TOTAL	216,586	104,631	111,955	48.3%	51.7%	100.0%	100.0%
11	Construction & Extraction	28,867	15,037	13,830	52.1%	47.9%	14.4%	12.4%
13	Business & Fiscal Operations	9,602	4,331	5,271	45.1%	54.9%	4.1%	4.7%
15	Installation, Maintenance, & Repair	8,447	3,923	4,524	46.4%	53.6%	3.7%	4.0%
17	Architecture & Engineering	5,617	2,432	3,185	43.3%	56.7%	2.3%	2.8%
19	Life, Physical & Social Science	1,763	910	853	51.6%	48.4%	0.9%	0.8%
21	Community & Social Serv	2,575	1,302	1,273	50.6%	49.4%	1.2%	1.1%
23	Legal Occupations	1,406	663	743	47.2%	52.8%	0.6%	0.7%
25	Healthcare Support	4,753	2,718	2,035	57.2%	42.8%	2.6%	1.8%
27	Building & Grounds Cleaning & Maintenance	4,779	2,550	2,229	53.4%	46.6%	2.4%	2.0%
29	Education Training & Library	3,921	1,621	2,300	41.3%	58.7%	1.5%	2.1%
31	Arts, Design, Entertainment, Sports, & Media	4,357	2,049	2,308	47.0%	53.0%	2.0%	2.1%
33	Protective Service	2,128	1,097	1,031	51.6%	48.4%	1.0%	0.9%
35	Computer & Mathematical	6,613	2,880	3,733	43.6%	56.4%	2.8%	3.3%
37	Personal Care & Service	4,455	2,470	1,985	55.4%	44.6%	2.4%	1.8%
39	Healthcare Practitioners & Technical	4,098	2,384	1,714	58.2%	41.8%	2.3%	1.5%
41	Sales & Related	17,175	8,584	8,591	50.0%	50.0%	8.2%	7.7%
43	Office & Administrative Support	53,148	15,852	19,296	45.1%	54.9%	15.2%	17.2%
45	Farming, Fishing, & Forestry	916	618	298	67.5%	32.5%	0.6%	0.3%
47	Management	26,943	11,764	15,179	43.7%	56.3%	11.2%	13.6%
49	Food Preparation & Serving	9,264	5,952	3,312	64.2%	35.8%	5.7%	3.0%
51	Production	20,902	8,859	12,043	42.4%	57.6%	8.5%	10.8%
53	Transportation & Material Moving	12,496	6,583	5,913	52.7%	47.3%	6.3%	5.3%
55	Military Specific Occupations	208		208	0.0%	100.0%	0.0%	0.2%
99	Unknown	153	52	101	34.0%	66.0%	0.0%	0.1%

Source: Massachusetts Division of Unemployment Assistance

The claimant pool is mostly male (60%), which is likely the result of the large job loss in two male-dominated industries, Construction and Manufacturing. The

share of male claimants only slightly decreased (from 62.8%) between May 2009 and May 2010. The duration of long-term unemployed increased from 41.4% in May 2009 to 43.3% in May 2010. Racial patterns roughly reflect the racial characteristics of the broader Massachusetts population, according to the 2009 population estimates from the U.S. Census. The white population is slightly less represented in the claimant population, while black and Hispanic are slightly higher. Asians have a significantly lower representation in the claimant population than in the general population.

Almost 70% of claimants were over the age of 34. Just over 45% (of all claimants) were over the age of 44. Nearly 75% of claimants had less than a 4-year college diploma. This appears to tell us is that unemployment hit older and less educated workers harder during this period than younger workers and those with college educations. This is consistent with national data from the BLS during this time period.

Table 4: Selected Characteristics Unemployment Insurance Continued Claimants for Massachusetts, May 09 vs May 10

Characteristic	May-09		May-10	
	Number	Percent share	Number	Percent share
Race/Ethnicity				
Hispanic/Latino	14,194	9.5%	10,268	10.3%
Asian	5,445	3.7%	2,865	2.9%
Black	11,165	7.5%	8,662	8.7%
Native American	363	0.2%	245	0.2%
Pacific Islander	136	0.1%	64	0.1%
White	121,122	81.3%	80,367	81.0%
Ethnic Unknown	10,786	7.2%	7,056	7.1%
Gender				
Male	93,511	62.8%	62,811	60.0%
Female	55,499	37.2%	41,917	40.0%
Age				
Under 22	4,589	3.1%	3,245	3.1%
22-24	8,785	5.9%	5,973	5.7%
25-34	32,768	22.0%	22,827	21.8%
35-44	35,449	23.8%	23,943	22.9%
45-54	37,891	25.4%	26,544	25.3%
55-64	23,597	15.8%	17,225	16.4%
65 and Over	5,931	4.0%	4,971	4.7%
Weeks Unemployed				
1 to 2	17,133	11.5%	13,620	13.0%
3 to 4	12,040	8.1%	8,896	8.5%
5 to 14	58,114	39.0%	3,632	35.2%
15 weeks or more	61,723	41.4%	45,383	43.3%
Educational Attainment				
Through Grade 8	3,504	2.9%	2,335	2.7%
9 to 11 Grades	8,627	7.1%	6,287	7.2%
High School Grad	49,226	40.3%	36,493	42.0%
1 to 3 Years of College	26,768	21.9%	19,888	22.9%
4 or More Years of College	34,114	27.9%	21,923	25.2%
Average Weekly Wage				
Under \$300	13,459	9.0%	12,697	12.8%
\$300 - \$499	23,822	16.0%	18,143	18.3%
\$500 - \$799	39,053	26.2%	25,490	25.7%
\$800 - \$999	19,587	13.1%	12,019	12.1%
\$1,000 - \$1,499	28,438	19.1%	16,918	17.0%
\$1,500 and Over	24,652	16.5%	13,990	14.1%

Source: Massachusetts Division of Unemployment Assistance