



Massachusetts

Labor Market and Economic Review

2014



COMMONWEALTH OF MASSACHUSETTS

CHARLIE BAKER, Governor

RONALD L. WALKER, II, Secretary
Executive Office of Labor and Workforce Development

ROBERT T. CUNNINGHAM, Director
Department of Unemployment Assistance

EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
Department of Unemployment Assistance
Economic Research Office
September 2015

2014 Massachusetts Labor Market and Economic Review

Massachusetts Executive Office of Labor and Workforce Development
Department of Unemployment Assistance
Economic Research Office
Charles F. Hurley Building
19 Staniford Street
Boston, MA 02114

Rena Kottcamp, Director of Economic Research
Don Francis, MS, Labor Market Economist
Gregory Kilroy, MSIE, Labor Market Economist
Daniel G. Pierce, MBA, Employment Statistics Manager
Vonda Powell, PhD, Workforce Information Manger

This report is based on data available through December 2014, and where noted June 2015.

Report is available for download at: <http://www.mass.gov/lwd/economic-data/>

Image Credits:

Cover "Springfield, MA" <http://www.destination360.com/north-america/us/massachusetts/springfield>
Pg. 5 "Boston, MA" http://www.thcphotography.com/slideshow_cache/photos/boston_massachusetts_full.500x500.jpg
Pg. 5 "Blurred Professionals" <http://brandonhill.co.uk/sector/professional-services>
Pg. 9 "Boston Skyline" Jeff Overs, BBC <http://bbc.com/travel/feature/20120206>
Pg. 14 "Entrepreneurs" <http://news.uic.edu/files/2013/02/entrepreneurs.jpg>
Pg. 15 "Age Diversity" <http://harlandclarke.com/dv/09Q1/images/diversepeople.jpg>
Pg. 16 "Business People" <http://www.dividedequal.com/wp-content/uploads/2015/05/business-people.jpg>
Pg. 19 & 24 "Balance" <http://blog.huthwaite.co.uk/index.php/tag/power-balance>
Pg. 20 "Newspaper Reader" <http://www.nielsen.com/us/en.html>
Pg. 21 "Identifying Human Resources" <https://tctechcrunch2011.files.wordpress.com/2015/04/canstockphoto17514166.jpg?w=738>
Pg. 22 "Contributing Parts" http://www.neweconomyworkinggroup.org/sites/all/themes/zen_ninesixty/images/front/New_Economy.jpg
Pg. 24 "Mind the Gap" <http://www.1hq.co.uk>
Back Cover "MA Map Image" <http://ecx.images-amazon.com/images/I/31tU4ad4bzL.jpg>

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All of the uses require the prior authorization of the copyright owner.

Labor Market Fast Facts	4
Executive Summary	5
Overview of Massachusetts Economic Health:	6 - 12
Contributions to National Gross Domestic Product	
Industry Employment Growth Patterns	
Leading Employment Industries	
Industry Economic Output and Employment Contributions	
Industry and Occupational Wages	
Household and Personal Incomes	
Population and Labor Force Dynamics:	13 - 16
Population Characteristics and Projections	
Labor Resources and Alternative Measures of Unemployment	
Labor Force Status by Age Cohort	
Educational Attainment by Labor Force Age 25 and Older	
Overview of Massachusetts Labor Market Trends:	17 - 21
Labor Supply in Comparison to Labor Demand	
New England Labor Market Highlights	
Occupational Labor Demand Patterns	
Massachusetts Workforce Investment Areas Overview and Quick Facts:	22 - 23
Workforce Investment Area Aggregate Skill Gap Analysis Overview	24 - 25
Berkshire	26 - 27
Cape and the Islands	28 - 29
Franklin and Hampshire	30 - 31
Hampden	32 - 33
North Central	34 - 35
Central Massachusetts	36 - 37
Greater Lowell	38 - 39
Lower Merrimack Valley	40 - 41
North Shore	42 - 43
South Shore	44 - 45
Brockton	46 - 47
Bristol	48 - 49
Greater New Bedford	50 - 51
Metro North	52 - 53
Metro South/West	54 - 55
Boston	56 - 57



2014 MASSACHUSETTS
LABOR MARKET AND ECONOMIC
FAST FACTS

- *Led nation's GDP expansion in Professional Services*
- *Second highest annual gain in jobs this millennium*
- *Unemployment rate receded to near 2008 levels*
- *Improved Labor Force Participation Rate for the first time since the Great Recession*
- *Most educated population in the nation*
- *Sixth highest median household income in the nation*
- *Eleventh lowest percent of population living in poverty in the nation*
- *All New England states rank among the ten oldest populations in the nation*
- *Second consecutive year of population and labor force reductions among Middle Age 45 to 54*
- *Population with less than a high school education joined labor force in greatest numbers*
- *Expanded measures of the unemployment rate indicate growing numbers of those desiring full-time work are underemployed part-time workers*
- *Real-time online labor demand among the highest in the nation, yet, mirroring national trends, employer demand has softened over the first six months of 2015*
- *The Commonwealth's 16 local Workforce Areas are experiencing varying degrees of labor market tightness, with employer demand exceeding unemployed labor supply in greater Boston metropolitan areas.*

Executive Summary



Beginning with statewide performance and ending with local area dynamics, the following review highlights Massachusetts labor market and economic trends in an effort to support strategic policy, workforce, and economic development decision-making.

In 2014, the six state New England region contributed \$852.6 billion to the total value of goods and services produced by the nation, with Massachusetts supplying 49.8 percent of the region's share, making the Commonwealth the largest regional economy, 15th largest in the nation, and seventh highest per capita.

Notably in 2014, Massachusetts's *Professional, Scientific, and Technical Services* played a vital role in U.S. economic performance, second only to California in contribution to national economic output growth in this pivotal sector.

Along with *Professional, Scientific, and Business Services*, our leading job creating industries – *Education and Health Services*; and *Leisure and Hospitality* propelled 2014 job growth to a new peak of 3,445,900.

Strong job growth facilitated an uptick in employment, with 2014 lifting almost as many residents to the ranks of the employed as the combined employment growth of the last three years.

Improved job creation and employment underlie the Commonwealth's first post-Great Recession Labor Force Participation Rate (LFPR) gain, rising to 65.3.

Concurrently, at 5.8, the statewide unemployment rate declined to its lowest since 2008.

Along with these promising trends, the Bureau of Labor Statistics' expanded unemployment measures indicate that growing numbers of Commonwealth residents desiring full-time work are underemployed in part-time jobs.

Declines in population and labor force among middle age workers between 45 and 54 indicate that this cohort may be involuntarily working part-time, no longer seeking full-time employment, and/or opting to leave the state.

At the same time, with more teens age 16 to 19 gaining employment and actively seeking work in 2014, teens exhibited the largest LFPR increase and greatest unemployment rate decline among all age groups.

Statewide, and in varying degrees among local workforce areas, Commonwealth labor markets are exhibiting unprecedented tightness between employer demands for labor and the supplies of unemployed jobseekers and employed potential job changers.

Regional labor market performance assessments reveal that the tightest labor market, Boston, may lack sufficient skilled labor forces to meet employer demands. Deficient labor supply and increased employer competition for workers may also exist in the Lower Pioneer Valley workforce area of Hampden, and the Northeastern workforce area of Merrimack Valley.

In addition, the Southeastern labor markets of New Bedford, Brockton, and Bristol appear not to be as well-functioning as other locales for perhaps a variety of reasons.

Combined, these promising and cautionary trends, along with the following detailed content, highlight the wealth of the Commonwealth's economy, labor force, and capacity to cultivate healthy well-functioning labor markets.



The most comprehensive measure of the nation's economic health is reflected in the value of goods and services produced by our nation's labor and property—or Gross Domestic Product (GDP) as reported by the Bureau of Economic Analysis. At nearly \$16 trillion, the US economy grew by 2.2 percent in 2014.*

VALUE OF THE MASSACHUSETTS ECONOMY

Natural resource rich states like North Dakota, Texas, Wyoming, and West Virginia expanded their economies at the fastest rate in 2014.

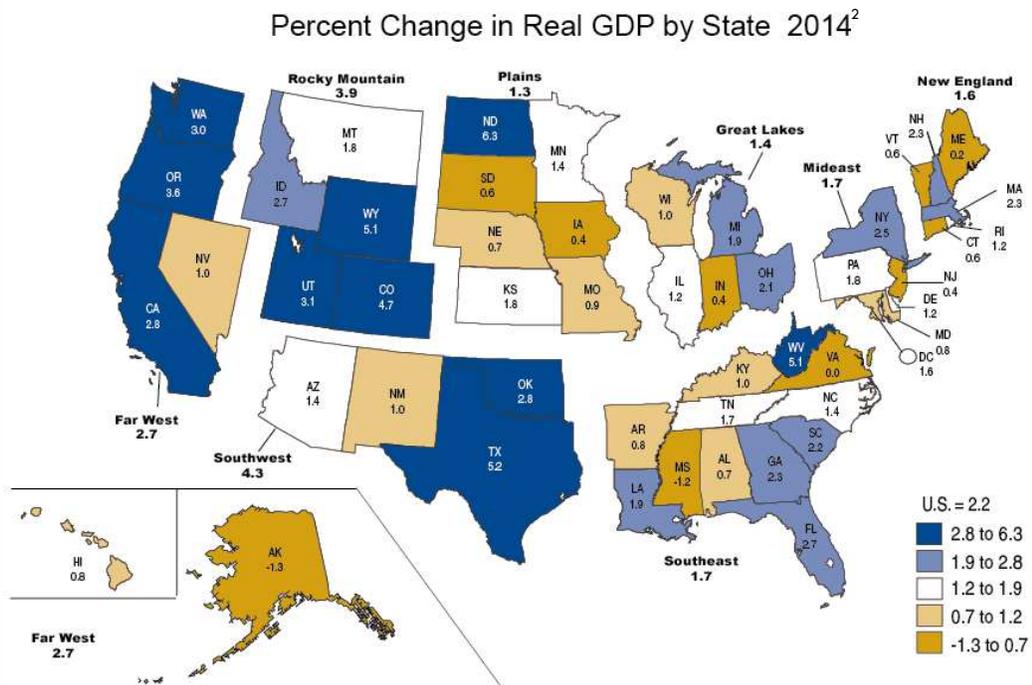
Nationwide, one sector contributed more to US economic performance than any other—Professional, Scientific, and Technical Services, with Massachusetts and Utah tying for the second highest growth rate in the sector, outperformed only by California.

Strong performance in Professional, Scientific, and Technical Services spurred the Commonwealth economy to grow faster than the nation as a whole.

Millions of Chained (2009) Dollars¹

Year	MA GDP	Regional GDP
2005	\$ 375,146	\$ 792,896
2006	\$ 381,127	\$ 809,171
2007	\$ 390,891	\$ 826,154
2008	\$ 391,788	\$ 816,312
2009	\$ 381,628	\$ 792,928
2010	\$ 394,778	\$ 813,639
2011	\$ 403,885	\$ 821,378
2012	\$ 410,686	\$ 830,163
2013	\$ 415,440	\$ 839,242
2014*	\$ 424,991	\$ 852,574

FIGURE 1. State and Regional Gross Domestic Product Annual Percentage Growth Rates



¹US Bureau of Economic Analysis, Real Gross Domestic Product [GDPC1], retrieved from FRED, Federal Reserve Bank of St. Louis.

²US Bureau of Economic Analysis image, retrieved from http://www.bea.gov/newsreleases/regional/gdp_state/gsp_newsrelease.htm, June 10, 2015.

MASSACHUSETTS OUTPACED REGIONAL & NATIONAL ECONOMIES IN 2014³

Massachusetts's economic impact on the nation is fueled by our knowledge-intensive industries. Our GDP leading performance in the *Professional, Scientific, and Technical Services* sector grew at double the rate of our next best performing sector: *Health Care and Social Assistance*.

Ranked 15th with 2.3% annual growth, the Massachusetts economy ranks in the top quartile of state GDP.

Our economy is one and a half times the size of the next largest New England economy – New Hampshire. By itself, Massachusetts accounts for 49.8% of the region's contribution to the nation's GDP.

Regionally, New England places sixth in annual growth and seventh in share of U.S. GDP of the eight regions by which the country's economic value is segmented.

The value of goods and services produced by Commonwealth labor and property, particularly in the Professional, Scientific, and Technical Services sector fueled the country's economic performance in 2014.

In spite of lower regional rankings, two factors make the Massachusetts and New England economies vital to our nation's economic health:

- 1) New England is one of just two regional economies *not* to have declined over the last four years. Whereas six of the eight regions have contracted and grown since 2011, **only New England and the Southeast have exhibited continued economic stability.**
- 2) If we consider economic value produced given the size of the population, New England comes in second, outranked only by the Mideast. Further, as a state, **Massachusetts has the seventh highest GDP per person in the country**, generating \$63,000 for every resident, a 1.5% gain over 2013.

Per Capita Real GDP Ranked by State

	2012	2013	2014*	2014 Rank	% Chg 2012-2013	% Chg 2013-2014
District of Columbia	\$ 164,248	\$ 159,962	\$ 159,386	1	-2.6	-0.4
Alaska	70,437	67,200	66,160	2	-4.6	-1.5
North Dakota	64,150	62,750	65,225	3	-2.2	3.9
New York	63,142	63,527	64,818	4	0.6	2.0
Connecticut	63,718	64,286	64,676	5	0.9	0.6
Wyoming	61,679	61,324	64,309	6	-0.6	4.9
Massachusetts	61,801	62,072	63,005	7	0.4	1.5
Delaware	60,621	60,496	60,551	8	-0.2	0.1
New Jersey	56,159	56,434	56,405	9	0.5	-0.1
Washington	53,714	54,367	55,298	10	1.2	1.7
California	52,851	53,616	54,462	11	1.4	1.6
Texas	50,774	52,759	54,433	12	3.9	3.2



States Ranked by Professional, Scientific, & Technical Services Contribution to National GDP Growth

	Real GDP 2014* (Millions)	Share of US GDP	% Chg Real GDP	% Chg Rank	Industry Contribution to GDP Growth (%)					
					Prof & Techn Servs	Health Care & Social Asst	Mgt of Info	Mngf: Drble Gds	Mngf: NDrbl Gds	
1 California	2,113,280	13.4%	2.8	9	0.54	0.22	0.36	0.21	0.37	0.24
2 Massachusetts	424,991	2.7%	2.3	15	0.52	0.26	0.22	0.18	0.17	0.14
3 Utah	128,178	0.8%	3.1	7	0.52	0.12	0.3	0.09	0.18	0.42
4 Georgia	435,511	2.8%	2.3	14	0.4	0.19	0.35	0.29	0.11	-0.03
5 Colorado	279,650	1.8%	4.7	5	0.4	0.3	0.17	0.24	0.2	0.22
6 Connecticut	232,620	1.5%	0.6	42	0.38	0.13	0.07	0.29	-0.33	-0.13
7 New Hampshire	66,276	0.4%	2.3	16	0.38	0.16	0.51	0.33	0.21	0.09
8 North Dakota	48,233	0.3%	6.3	1	0.36	0.27	0.07	0.17	0.1	0.17
9 Washington	390,489	2.5%	3	8	0.36	0.26	0.58	0.12	0.13	0.19
10 New York	1,279,921	8.1%	2.5	13	0.35	0.17	0.36	0.11	-0.03	-0.02

³US Bureau of Economic Analysis, Real Gross Domestic Product NAICS industry detail and Per Capita GDP by state, chained 2009 dollars.

*Advance Statistics subject to revision.

In addition to increasing economic output, the Massachusetts economy added over 60,000 jobs in 2014, representing the second highest annual gain this millennium.

Falling on the heels of a 62,000 gain in 2013, this year's job growth pushed the Bureau of Labor Statistics' Current Employment Statistics (CES) total Massachusetts employment estimate to a new peak of 3,445,900.

Almost 90% of Massachusetts jobs are in the Service Producing sector, which added 59,100 of the total 60,700 jobs gained.

The largest proportion of jobs were added in Health Care and Social Assistance industries, which picked up 16,500 jobs annually, representing a 2.9% growth rate.

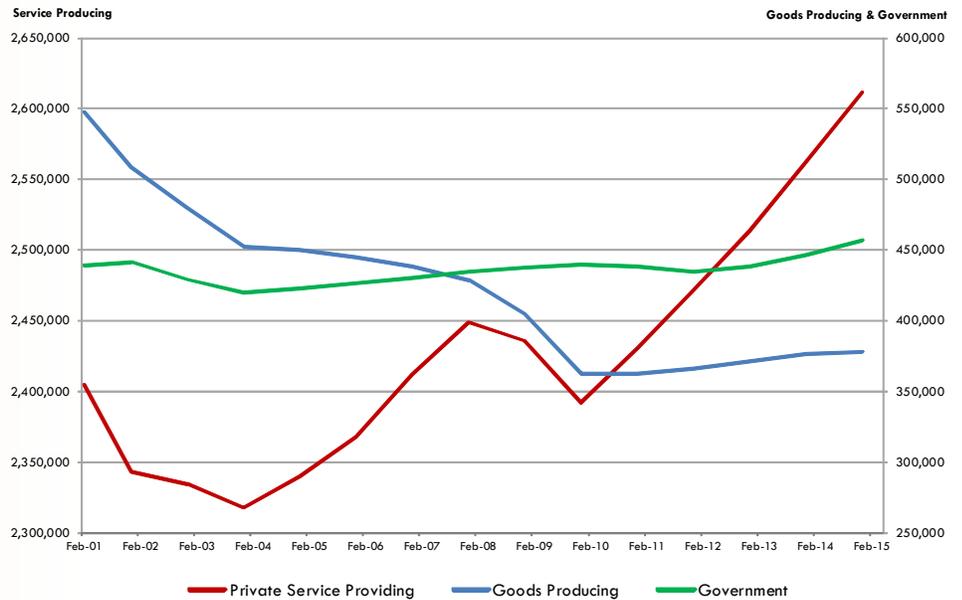
Increasing momentum in 2014 with 3.8% growth—nearly a full percentage point faster than 2013 and the highest annual growth rate among all industries, Professional, Scientific, and Technical Services added 10,500 jobs.

Also accelerating almost a full percentage point, Retail Trade exhibited its strongest annual expansion since 2010, adding 5,000 jobs, more than double the number added in 2013.

Accommodations and Food Services expanded but with slightly fewer jobs than those added last year, picking up 7,600 in 2014.

Similarly, Construction gained over the year, increasing 4,000 jobs, representing over 1,000 fewer than those added last year.

FIGURE 2. Current Employment Statistics Jobs by Sector February 2001 - February 2015 (Seasonally Adjusted)⁴



	Current Employment Statistics ⁴		2014 2013		2014 2013	
	Feb-01	Dec-14	Job Gain/Loss in (000)	Rate of Growth/Decline	Job Gain/Loss in (000)	Rate of Growth/Decline
Total Nonfarm	3,391,200	3,445,900	60.7	62.0	1.8%	1.9%
Total Private	2,951,900	2,989,300	50.8	53.5	1.7%	1.9%
Goods Producing	547,200	377,900	1.6	4.9	0.4%	1.3%
Service-Providing	2,844,000	3,068,000	59.1	57.1	2.0%	1.9%
Private Service Providing	2,404,700	2,611,400	49.2	48.6	1.9%	1.9%
Mining and Logging	1,500	1,000	0	0	0%	0%
Construction	137,700	128,300	4.0	5.2	3.2%	4.4%
Manufacturing	408,000	248,600	-2.4	-0.3	-1.0%	-0.1%
Trade, Transportation, and Utilities	598,700	566,100	7.8	4.8	1.4%	0.9%
Wholesale Trade	143,100	124,000	0.8	1.1	0.6%	0.9%
Retail Trade	361,400	352,900	5.0	1.8	1.4%	0.5%
Transportn, Warehousng, & Utilities	94,200	89,200	2.0	1.9	2.3%	2.2%
Information	116,900	87,500	1.4	0.7	1.6%	0.8%
Financial Activities	230,900	208,900	1.7	1.1	0.8%	0.5%
Professional, Scientific, & Bsns Services	505,400	523,300	11.5	14.6	2.2%	2.9%
Prof, Scientific, & Tech Services	251,500	288,000	10.5	7.8	3.8%	2.9%
Mngmnt of Companies & Enterprises	74,900	64,300	-0.1	0.6	-0.2%	0.9%
Admin, Support & Waste Mgt.	179,000	171,000	1.1	6.2	0.6%	3.8%
Education and Health Services	556,500	744,200	15.2	10.3	2.1%	1.4%
Educational Services	144,300	157,500	-1.3	-1.6	-0.8%	-1.0%
Health Care and Social Assistance	412,200	586,700	16.5	11.9	2.9%	2.1%
Leisure and Hospitality	281,100	346,600	7.6	11.0	2.2%	3.4%
Arts, Entertainment, and Recreation	41,200	53,400	0	3.0	0%	6.0%
Accommodation and Food Services	239,900	293,200	7.6	8.0	2.7%	2.9%
Other Services	115,200	134,800	4.0	6.1	3.1%	4.9%
Government	439,300	456,600	9.9	8.5	2.2%	1.9%

⁴US Bureau of Labor Statistics, Current Employment Statistics, seasonally adjusted.

Knowledge and innovation intensive industries are by far the state's chief employers.

Led by *Education and Health Services*, the largest Massachusetts sector at 744,200 jobs, accounts for 22 percent of all jobs. Since the prior 2001 peak, the sector's jobs have increased by 187,700.

Another employment cornerstone of the state's economy is *Professional, Scientific, and Business Services*, the third largest sector with 523,300 jobs.

The largest industry group in the sector is *Professional, Scientific and Technical Services* which added 36,500 jobs since 2001 and exhibited the fastest annual job growth in 2014.

Within *Professional, Scientific and Technical Services*, the Bureau of Labor Statistics Occupational Employment and Wage Statistics (OES) data reveal that **just six**

occupational groups account for more than half of all Professional, Scientific and Technical Services employment. Each of the six are Science, Technology, Engineering, or Math (STEM) occupations, and four of the six provide experienced-worker annual wages over \$100,000.⁶

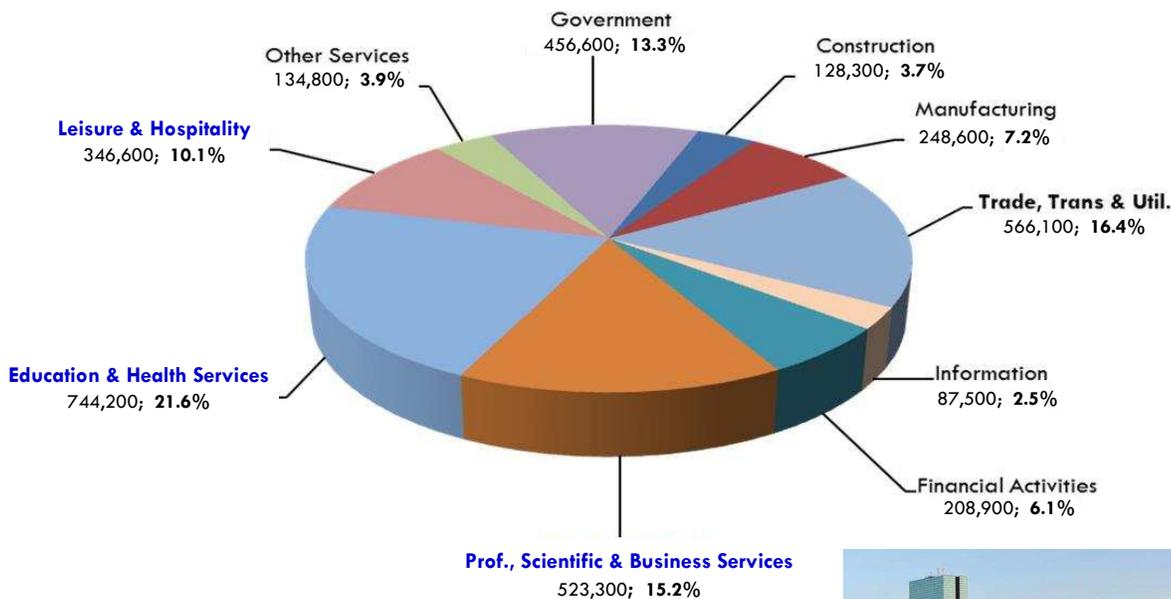
Following *Retail Trade, Leisure and Hospitality* is the next largest private employment sector, adding 65,500 jobs since 2001, with over 80% of the growth stemming from *Accommodations and Food Services* industries. Since 2010, this industry group has consistently added between 6,000 to 9,000 jobs annually.

At the same time, one industry has consecutively declined for most of the last half decade: *Manufacturing*.

Notably, within *Manufacturing, Non-durable Goods have stabilized*, adding nearly a 1,000 jobs over the last three years, whereas Durable Goods continues to decline as technological advances restructure the industry.

While *Manufacturing* may be less crucial to total Commonwealth employment, **nine of the sixteen local Workforce Investment Areas have larger proportions of manufacturing employment** than the state as a whole, and the sector is the **third largest contributor to economic output**, with greater GDP contribution than all sectors except *Professional, Scientific and Technical Services* and *Real Estate*.

FIGURE 3. Massachusetts Job Composition by Industry, December 2014 (Seasonally Adjusted)⁵



⁵US Bureau of Labor Statistics, Current Employment Statistics, December 2014, seasonally adjusted.

⁶US Bureau of Labor Statistics, Occupational Employment and Wage Statistics, 2014 annual averages.

INDUSTRY ECONOMIC OUTPUT & EMPLOYMENT CONTRIBUTIONS

Eight of seventeen Commonwealth industries factor more in state economic output than employment.

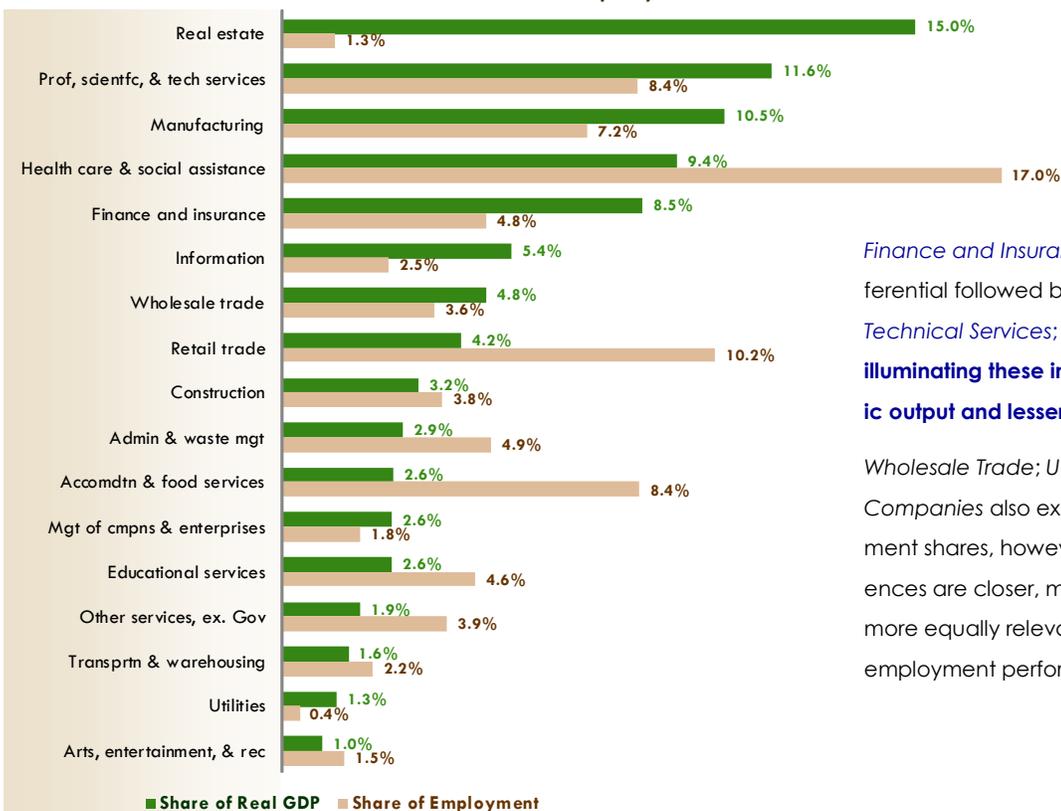
Industry	2014* Real GDP (Millions)	GDP RANK	Employment RANK
All industry total	\$ 424,991		
Private industries	378,701		
Real estate and rental and leasing	63,612	1	16
Professional, scientific, & technical services	49,209	2	4
Manufacturing	44,461	3	5
Health care and social assistance	39,759	4	1
Finance and insurance	36,232	5	7
Information	23,141	6	13
Wholesale trade	20,524	7	11
Retail trade	18,009	8	2
Construction	13,709	9	10
Administrative and waste management services	12,205	10	6
Accommodation and food services	11,159	11	3
Management of companies and enterprises	11,081	12	14
Educational services	10,987	13	8
Other services, except government	7,885	14	9
Transportation and warehousing	6,684	15	12
Utilities	5,439	16	17
Arts, entertainment, and recreation	4,039	17	15

As noted, more Massachusetts employment is in *Healthcare and Social Assistance* than any other industry group, however, in terms of economic output derived from the value of incomes earned via Commonwealth labor and capital and incurred production costs—that is the state's Gross Domestic Product and contribution to the national economy, Healthcare ranks fourth, below *Professional, Scientific, and Technical Services*; *Manufacturing*; and *Real Estate*.

Additionally, *Retail Trade* and *Accommodations and Foods Services* are leading Commonwealth employment industries, however, their contributions to the state's economic output are less pivotal.

If we consider all seventeen industry groups in terms of their respective proportions of Commonwealth GDP and employment, eight of the seventeen contribute more to state economic output.

FIGURE 4. Massachusetts Share of Gross Domestic Product Relative to Share of Total Employment⁷



Reflecting Commonwealth property values, *Real Estate* has the largest difference in magnitude of GDP share relative to employment share.

Finance and Insurance has the second largest differential followed by *Professional, Scientific, and Technical Services*; *Manufacturing*; and *Information*, illuminating these industry's leading role in economic output and lesser role in employment.

Wholesale Trade; *Utilities*; and *Management of Companies* also exhibit greater GDP than employment shares, however the magnitude of the differences are closer, making these three industry groups more equally relevant to economic output and employment performance.

⁷US Bureau of Economic Analysis, Real Gross Domestic Product 2014, Chained 2009 dollars; Current Employment Statistics, January 2015, seasonally adjusted.

*Advance Statistics subject to revision.

Industries critical to Commonwealth GDP tend to have greater concentrations of highly paid workers, as the value of employee compensation factors into GDP.

The Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) data indicate that *Finance and Insurance* paid the highest Massachusetts average weekly wages in 2014, followed by *Management of Companies*; and *Professional and Technical Services*.*

Across all three industries, Management Occupations and Lawyers earned the highest annual wages.

Within *Finance and Insurance*, the highest wage occupational groups were *Management*; *Legal*; and *Life, Physical, and Social Sciences*.

The top three Management Occupa-

TOP WAGE INDUSTRY/OCCUPATIONS

tions: Chief Executives, General and Operations Managers, and Sales Managers accounted for 6,600 jobs and offered higher wages than every other *Finance and Insurance* occupation, except Lawyers.

Combined, Lawyers and Life, Physical, and Social Sciences occupations, including Economics, accounted for another 1,330 jobs. These top wage occupations made up a total of 4.8 % of *Finance and Insurance* employment.

Representing 7% of *Management of Companies* employment, or 4,330 jobs, Chief Executives, Lawyers, and General and Operations Managers were again among the highest annual wage earners. Additionally, another 2,225 jobs were held by high wage

earning Architectural and Engineering Managers in the *Management of Companies* industry.

Highest wage occupations in *Professional and Technical Services* included Chief Executives, Natural Science Managers, and Lawyers, as well as Computer and Mathematical Occupations: Computer and Information Research Scientists, Computer Network Architects, and Systems Software/Software Developers. Combined, these high wage occupations accounted for 11.3% of industry employment or 31,410 jobs.

FIGURE 5. Massachusetts Industry Quarterly Census of Employment and Wages 2014 Average Weekly Wages



⁸US Bureau of Economic Analysis, Quarterly Census of Employment and Wages, 2014 average annual data.

*Massachusetts QCEW *Professional and Technical Services* is analogous to CES *Professional, Scientific, and Technical Services* industry group; Definitional variations among *Education Services*; *Finance and Insurance*; and *Real Estate* makes these industry groups non-comparable across QCEW and CES programs.

Concentrated high wage occupations partly underlie national and Massachusetts assessments of growing income inequality.

Personal income as reported by the Bureau of Economic Analysis captures the sum total of earned income from employment or owning a business, investments, and government transfer payments, including Social Security, Medicare, Medicaid, social assistance programs, and unemployment insurance.

Annual percentage changes in Massachusetts real personal income have generally trended with the nation as a whole. However, in 2013, the latest year for which data are available, Commonwealth real personal income dipped by a tenth of a percentage point, declining \$380,410,000, while the U.S. grew by an eighth of a point.⁹

In 2013, according to the Census Bureau's Current Population Survey (CPS), which estimates household income, Massachusetts had the 6th highest median household income in the nation—\$66,866.

The CPS measures income inequality via a summary ratio that allows comparisons across various sizes of populations and economies. The metric, called a Gini Index, reflects a perfectly equal economy where all households receive the same income with zero. Alternatively, a Gini Index of one reflects perfect inequality where one household receives all the income and all other households receive no income. The higher the Gini Index the more inequali-

FIGURE 6. Massachusetts and US Annual Percent Change in Real Personal Income⁹

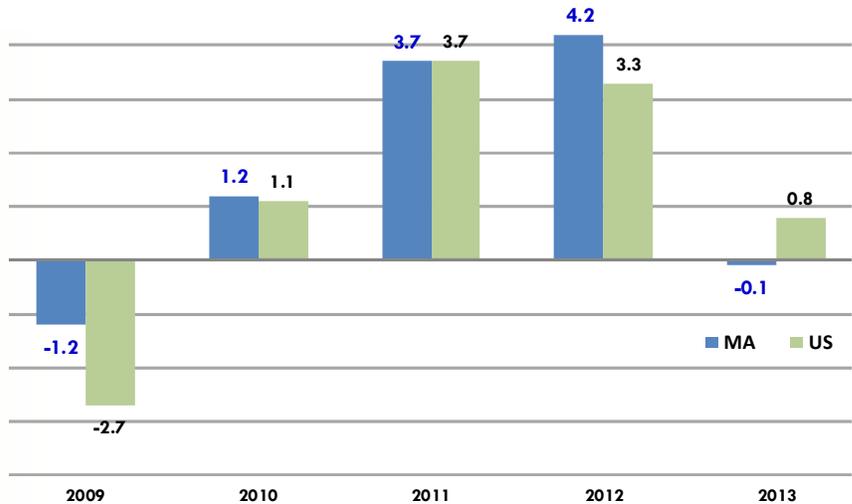
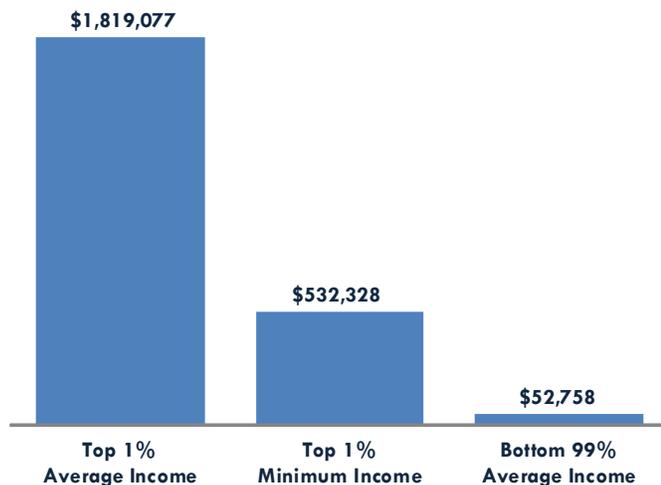


FIGURE 7. Massachusetts IRS Tax Flier Income Characteristics, 2012¹¹



ty.

According to 2013 Gini Indices, states with the highest household income inequality are: **1.** District of Columbia, **2.** Connecticut, **3.** Louisiana, and **4.** California, followed by Florida, Georgia, and **Massachusetts**, all tied for **5th** place.¹⁰

Whereas personal and household income provide overall measures of inequality, the Internal Revenue Service's Statistics of Income Division provides insight on the distribution of incomes within

a state's economy.¹¹

Broadscale tax filings analyses reveal all 50 states have grown in income inequality since the late 1970's.

Specifically, the Economic Policy Institute reports that between 2009 and 2012, Massachusetts ranked 8th in income growth among the top 1% of IRS tax filers, and in 2012, ranked: **6th in income gap between the top 1% and bottom 99%**, and 3rd highest in minimum income qualifying as top 1%: \$532,328.

⁹US Bureau of Economic Analysis, Real Personal Income, Chained 2009 dollars.

¹⁰Excludes Puerto Rico which is higher than all states and DC.

¹¹US Census Bureau, Current Population Survey, Median Household Income and Gini Index, 2013 Inflation adjusted dollars.

¹²Economic Analysis and Research Network Report, January 2015, Tables 1–3, pg. 6–12, Economic Policy Institute.

¹³IRS inequality measures do not include non-cash income such as government transfer payments, and excludes all non-IRS tax filers.

The populations of Massachusetts and the New England region share multiple top national rankings, including highest median household income, with three of the six New England states among the top ten: Connecticut, Massachusetts, and New Hampshire.

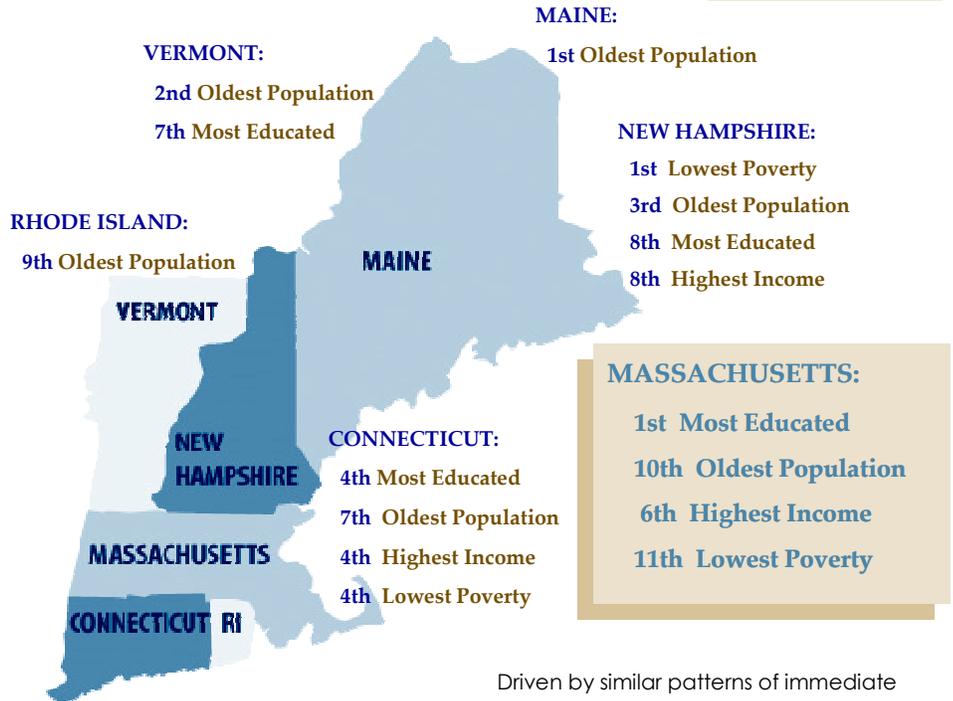
The same three states lead most of the nation in the **smallest percentages living in poverty**, as well as the **largest percentages of college-educated** residents. Also, one additional New England state shares a top ten ranking in most educated — Vermont.

In tandem, all six of the New England state populations rank among the nation's oldest, with median ages ranging from 39.2 to 43.2.

Massachusetts's aging population correlates with growing diversity. Suffolk, the lowest median age county is also the state's most diverse, with among the highest concentrations of Blacks, Hispanics, Asians, mixed race, and every other non-white census grouping. Likewise, the four Massachusetts counties with the greatest proportion of residents under five years of age — Hampden, Suffolk, and Essex, are also home to the state's largest concentrations of Hispanic residents.

With an estimated 6,745,408 inhabitants, the Commonwealth grew by an estimated .5% in 2014, slightly trailing the U.S. .7% over the year population growth.

Population projections for Massachusetts anticipate a continuation of the long-term slowing in the state's growth rate.¹³ As the nation grows older with the aging baby boom generation, Massachusetts and New England will be disproportionately affected, as the region's population is the



oldest in the nation. Given our robust Education Services sector, a second factor that may acutely influence Massachusetts is the projected diminishing pool of US college-aged populaces after 2015.¹⁴

Projected population growth is not uniform across the state. The Lower Pioneer Valley which encompasses Gateway Cities[^] of Chicopee, Holyoke, and Springfield are projected to **shrink in population** by the year 2030, declining to population levels comparable to those of the 2000 census.

Berkshire and Franklin counties, including the Gateway City of Pittsfield, are expected to grow at the **slowest rate** of .4% between 2010 and 2030. This overall trend masks near-term projected gains in Berkshire county as the area becomes increasingly popular with retirement-age populaces. Yet, the aged population is anticipated to eventually recede, returning the counties to population levels on par with the 2010 census.

Driven by similar patterns of immediate retirement-age population gains, followed by the **second slowest** state growth rate of 2.8% is the Cape and the Islands, including the Gateway Town of Barnstable.

With **mid-level growth** rates, the Northeast and Southeast, including Gateway Cities of: Haverhill, Lawrence, Lowell, Fall River, and New Bedford, are expected to grow between 3.5% and 3.6%. Growth in these regions is anticipated to stem from populations with young families relocating within the state.

The Central region, including Gateway Cities Fitchburg, Leominster, and Worcester, are anticipated to experience **healthy growth** through 2030, growing slightly less than the Metro South/West and Greater Boston population centers. The respective 2010 to 2030 growth rates for these areas are: 6.0%, 6.9%, and 7.5%; all anticipated to be fueled by non-native college students who remain after matriculation, international immigration, and in-state migration.

¹²US Census Bureau, 2010 Census; 2009 - 2013 5-Year American Community Survey estimates.

¹³Long-term Population Projections for Massachusetts Regions and Municipalities, Office of the Secretary of the Commonwealth of Massachusetts, prepared and interpreted by University of Massachusetts Amherst Donahue Institute, November 2013.

¹⁴Id., pg. 29.

[^]Massachusetts Gateway Cities defined as urban centers, excluding Boston metropolitan areas; Population, income, and education thresholds at: <http://www.mass.gov/hed/community/planning/gateway-cities-and-program-information.html>

Massachusetts 2014 Labor Force in a Snapshot

Both the Massachusetts Working Age Population and Labor Force expanded in 2014, reflecting nearly 50,000 more residents engaged in the labor market. The state's annual 65.3 percent Labor Force Participation Rate (LFPR) was composed of an estimated 3,352,700 employed and 204,800 unemployed, and depicts the first post-Great Recession LFPR gain. The state's unemployment rate was 5.8 percent, the lowest since 2008.

Population trends directly impact the labor resources available to Massachusetts industries, as the state's labor force is a function of the *working age population*, which is composed of Commonwealth residents age 16 and older not institutionalized or serving in the Armed Forces. The *labor force* is the subset of the working age population who are either employed or seeking employment.

In 2014, with .8 of a point growth, Commonwealth *Working Age Population* totaled 5,445,600. This pool of potential workforce participants has grown roughly a percentage point for the last 4 years. Over the most recent year, working age population growth stemmed from three of the six age cohorts: *Early Career* 25 to 34 year olds, *Older* residents age 55 to 64, and *Seniors* age 65 plus. As the state ages and retains non-native college graduates, more of the working age population growth will likely stem from these populations.

The number of residents participating in the labor force expanded by two times the previous year's amount, climbing to a *Labor Force* of 3,557,500. *Labor Force* growth was fueled by a strong uptick in *Employment* –80,700, **adding almost as much as the combined employment growth of the last three years.**

At the same time, *Unemployment* declined by a healthy 31,700, descending to the lowest number since prior to the Great Recession in 2008.

Combined, *Employment* and *Unemployment* levels fueled a .9 decline in the *Unemployment Rate*, which fell to 5.8, receding to just .3 of a point from 2008's rate.

Increasing Employment, declining Unemployment, and an improved Unemployment Rate all portend a vibrant labor market, with more of the state's working age population participating, and while the Unemployment Rate does encompass newly unemployed and those unemployed for longer than 15 weeks, it does not illuminate working age population members who have stopped fully participating in the labor market.

The Bureau of Labor Statistics publishes the **Official Unemployment Rate, or U-3**, plus five Alternative Unemployment Rates. Rates U-1 and U-2 are components of the Official U-3, and each successive rate encompasses the smaller rates up to rate U-6.

Annual Massachusetts trends reflect the **Newly Unemployed, or U-2** rate as coming the closest to prerecession levels; at 3.1 in 2014, the rate is just .7 of a percentage point shy of 2007's rate.

Both the **Long Term Unemployed, U-1** rate

and **Discouraged Unemployed, U-4** rate have receded to within 1.3 percentage points of the 2007 rates, currently at 2.9 for Long Term and 6.1 for Discouraged. Discouraged Unemployed are workers who would like to work but have not recently sought work because they believe their efforts would be futile.

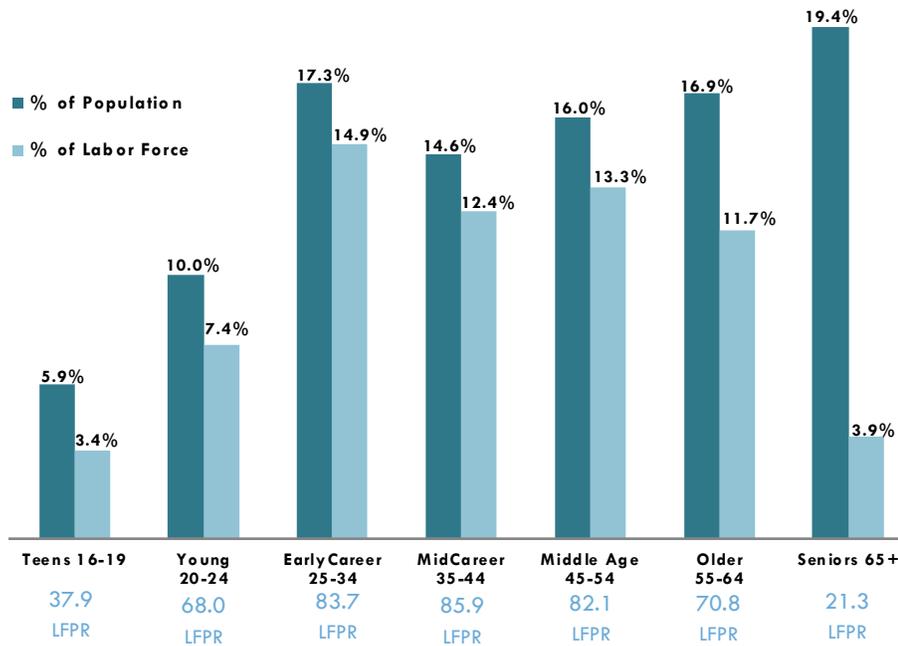
Another group of unemployed non-jobseekers, who believe they could obtain employment, if attempted, are reflected in the **Marginally Attached, U-5** rate. This rate is influenced by personal choices to remain out of the labor force, such as caregiving, education, and child rearing. While this rate has declined from its 2009 peak, it remains 1.7 percentage points above 2007's rate.

The final and most comprehensive Alternative Unemployment measure is the **Underemployed, U-6** rate which reflects workers who are employed part-time because they are unable to obtain full-time work. *Of all the unemployment rate measures, this metric remains the furthest from its prerecession level.* At 11.5 in 2014, the Massachusetts U-6 is 4.2 percentage points above 2007's rate.



¹⁵US Bureau of Labor Statistics, Current Population Survey, Twelve month annual averages, 2007–2014; Alternative Measures of Labor Utilization, annual averages, 2010–2014.

FIGURE 8. Massachusetts Percentages of Working Age Population versus Labor Force by Age Cohort, Twelve Month Average 2014**



LABOR FORCE AGE DYNAMICS**16

taken part-time work in place of desired full-time employment (—reflected in the U-6 Alternative Unemployment Rate), or is opting to leave the state altogether.

In 2014, the *Middle Age* unemployment rate was 4.5, composed of 733,416 employed and 34,633 unemployed.

MidCareer residents age 35 to 44 represent 14.6% of the population and 12.4% of the labor force, with an unemployment rate of 4.7, composed of 654,666 employed and 32,434 unemployed.

Lastly, at 10% of the working age population, *Young* residents age 20-24 represent 7.4% of the labor force, with 293,642 employed and 38,167 unemployed. This group exhibits trends similar to *Teens*, with the *second highest unemployment rate*, 11.5, and the *third lowest Labor Force Participation Rate*, surpassed only by *Teens* and *Seniors*. A factor underlying the low participation rate may be exposed by the U-5 Marginally Attached Alternative Unemployment Rate—with more of this age cohort perhaps electing not to seek work for personal choices, such as education, caregiving, or family demands.

When viewed by age cohorts, the working aged population and labor force exhibit distinct patterns.**

At 19.4%, the largest age group is *Seniors* 65 years and older. Of these 1,018,975 residents, 205,233 were employed, and 11,909 were unemployed in 2014.

Expectantly, *Seniors* are among the smallest labor force cohorts at just 3.9% of the labor force. Only *Teens* represent a smaller proportion at just 3.4%. However, *Seniors* are three times as likely to be employed than *Teens*, as *Teens* have the highest unemployment rate, at 17.7.

However, the Teen unemployment rate is down from 20.7 in 2013. The Labor Force Participation Rate of *Teens* improved as well, advancing to 37.9%, as employment increased to 119,158 and unemployment declined to 25,675 among *Teens*.

The next largest segment of the state's working age population, *EarlyCareer* residents age 25 to 34 years, are also the largest labor force cohort. Representing

nearly 15% of the labor force, this segment, along with the next largest working age group at 16.9%—*Older* 55 to 64 year olds, both advanced in working age population, labor force, and employment, while decreasing unemployment.

The 2014 unemployment rate for *Early-Career* workers was 4.7, composed of 738,734 employed and 36,784 unemployed. The *Older* unemployment rate was 4.0, composed of 604,317 employed and 25,234 unemployed.

The next largest potential labor pool, *Middle Age* workers between 45 to 54, at 16% of the working age population, has declined across the board in all labor market measures for the last two years, indicating that this population: is electing not to seek employment, is underemployed having



¹⁶US Bureau of Labor Statistics, Current Population Survey, Twelve month annual averages, 2007–2014; Alternative Measures of Labor Utilization, annual averages, 2010–2014.

**Subpopulation CPS trends are intended to illuminate general patterns; CPS data are derived from sample populations designed to produce reliable statewide estimates. As such, the likelihood of biased CPS estimates increases with subpopulation groups such as age, sex, race, and ethnicity. However, as a cross-check, the above noted Middle Age 45–54 trend is also evident in the larger sample based American Community Survey Massachusetts annual labor force estimates.

MASSACHUSETTS TWO-YEAR LABOR FORCE EDUCATIONAL ATTAINMENT¹⁶

With the nation's most educated population, Massachusetts's skilled labor supply is key to many of the state's industries.

Twelve month average labor force education attainment by residents age 25 plus over the last two years illustrates that both the majority of the working age population and the labor force possess a **Bachelor's Degree or Higher**. This education segment **grew by 45,800 residents since 2012, more than any other educational group**.

The dominant *Bachelor's or Higher* segment also exhibited the lowest unemployment rate, at 3.4 percent; partially driven by fewer members of this group joining the labor force, as the *Bachelor's or Higher* education segment added the least to the labor force —15,500 in total, and 16,800 to *Employed*.

Conversely, residents with **Less than a High School diploma added 41,100 to the labor force, more than any other group**, and while this group also added a healthy 39,500 to the ranks of the *Employed*, those with Less than high school educations experienced the highest unemployment rate, 9.4 in 2014.

High School Graduates are the second most prevalent education level among the Commonwealth's working age population, but, the segment's population growth has remained relatively flat. This group is the **only educational segment to decline in labor force over the two year period**. *High School Graduates* declined in labor force by 19,600 and added only 2,300 to *Employed*.

The final educational attainment segment, those with **Some College or an Associate's degree grew in population by 41,700, and 31,400 in added labor force, second only to those with a Bachelor's or Higher**. However, in spite of these positive trends, this segment exhibited the second highest unemployment rate, at 5.2.

Over the last two years residents with Less than a High School diploma and Some College or an Associate's attached to the Massachusetts labor force in greater numbers than those with a Bachelor's or Higher.

FIGURE 9. Massachusetts Labor Force and Educational Attainment, Annual Averages 2014 versus 2012

	Less than High School	High School Graduate	Some College or Associate's	Bachelor's or Higher
25 & Older Civilian Pop	407,600	1,244,000	958,000	1,959,800
Chg in Civ Pop	32,100	800	41,700	45,800
% Growth Rate Civ Pop	8.5%	0.1%	4.6%	2.4%
Labor Force	176,600	706,000	670,800	1,523,900
Chg in Labor Force	41,100	-19,600	31,400	15,500
% Growth Rate LF	30.3%	-2.7%	4.9%	1.0%
Employed Number	159,900	669,000	634,700	1,472,700
Chg in Employed	39,500	2,300	43,000	16,800
% Growth Rate Emp.	32.8%	0.3%	7.3%	1.2%
Unemp. Rate	9.4	5.2	5.4	3.4
Chg in Unemp. Rte	-1.7	-2.9	-2.1	-0.1



¹⁶US Bureau of Labor Statistics, Current Population Survey, annual twelve month averages 2012–2014.

UNEMPLOYED LABOR SUPPLY TRENDS

FIGURE 10. Massachusetts Online Labor Demand Compared to Unemployed Labor Supply (Seasonally Adjusted)

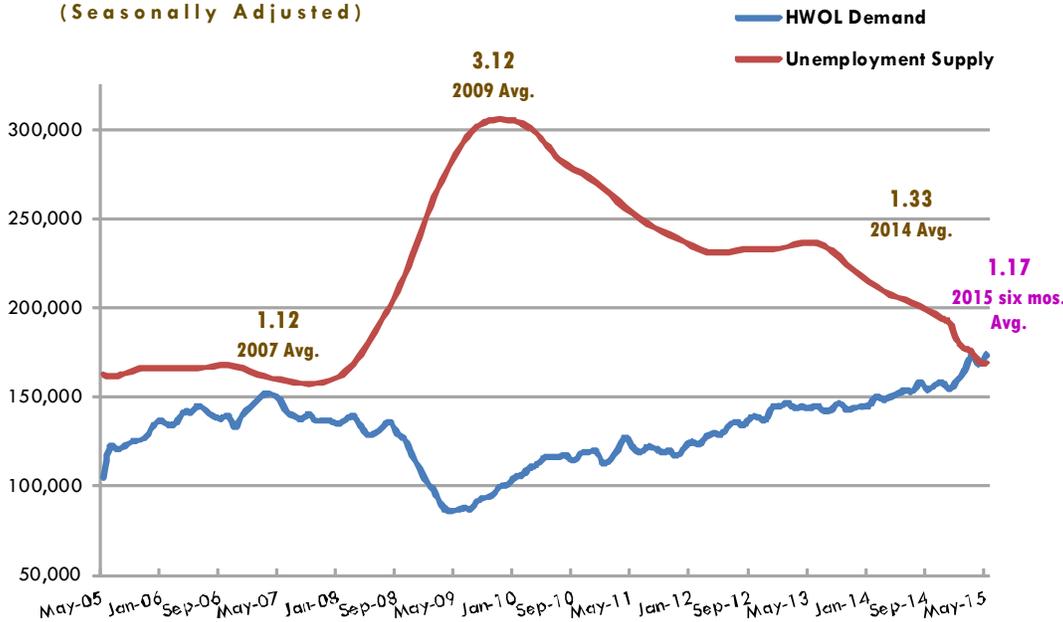


FIGURE 11. LABOR SUPPLY/DEMAND INDEX: Average Monthly Online Demand Relative to Unemployed Supply

Calendar Year	Demand Relative to Unemployed Labor Supply (Ratio)
2006	1.20
2007	1.12
2008	1.51
2009	3.12
2010	2.53
2011	2.10
2012	1.75
2013	1.60
2014	1.33
2015*	1.17

Demand for labor in the Commonwealth is among the strongest in the country.

In May 2015, of the twenty largest states ranked by The Conference Board’s Help Wanted Online (HWOL) Analytics, Massachusetts ranked third in over the year gain in online job demand and exhibited the third tightest labor market with just 1.01 advertised job openings per unemployed jobseekers.

The unemployed represent one source of labor supply, competing with new labor market entrants, as well as experienced workers desiring to change jobs, thus making the size of Commonwealth labor supply relative to the level of labor demand even tighter.

Indeed, in 2014, the average annual ratio of **unemployed labor supply relative to online advertised demand contracted to its tightest since 2007, with just 1.33 unemployed workers for every advertised job vacancy.** And, over the first six months of 2015, the Commonwealth labor market has become even tighter, with an unemployed labor supply/demand rate of 1.17.

Conversely, in 2009, in the midst of the Great-recession, the level of unemployed labor supply relative to employer online advertised demand peaked at 3.12 unemployed jobseekers for every job vacancy.

¹⁷US Bureau of Labor Statistics and The Conference Board HWOL, Calendar year monthly averages. *Six month average provided for 2015.

EMPLOYED LABOR SUPPLY TRENDS

FIGURE 12. Massachusetts Online Labor Demand Compared to Employed Labor Supply (Seasonally Adjusted)

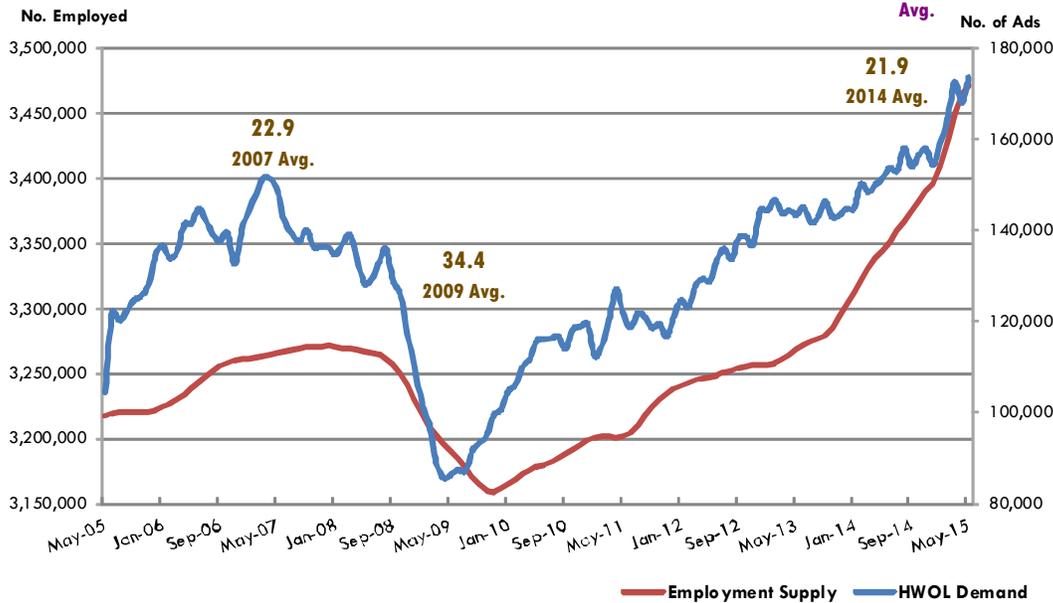


FIGURE 13. LABOR SUPPLY/DEMAND INDEX: Average Monthly Online Demand Relative to Employed Supply

Calendar Year	Demand Relative to Employed Labor Supply (Ratio)
2006	23.4
2007	22.9
2008	25.3
2009	34.4
2010	27.9
2011	26.9
2012	24.5
2013	22.7
2014	21.9
2015*	21.2

The same labor market tightness holds true for employed labor force members desiring to change jobs.

At its peak in 2009, the ratio of employed labor supply relative to online advertised labor demand was 34.4 employed workers for every job opening.

However, unlike the unemployed supply/demand rate, **the employed supply/demand rate has surpassed its prerecession lows, contracting to just 21.9 employed possible job changers for every online advertised job vacancy.**

The relatively more favorable labor market conditions for the employed versus the unemployed labor supply suggests possible imbalances between the skills of unemployed jobseekers and the labor demands of employers.

¹⁷US Bureau of Labor Statistics and The Conference Board HWOL, Calendar year monthly averages.

*Six month average provided for 2015.

UNEMPLOYED LABOR SUPPLY & EMPLOYED LABOR SUPPLY TRENDS

FIGURE 14. LABOR SUPPLY/DEMAND INDICES: Average Monthly Online Demand Relative to Employed & Unemployed Labor Supply

Calendar Year	Online Labor Demand HWOL Ads	Labor Supply		Labor Market Indicators	
		Number Employed	Number Unemployed	Demand Relative to Employed Labor Supply	Demand Relative to Unemployed Labor Supply
				Employed Residents/ HWOL Demand (Ratio)	Unemployed Residents/ HWOL Demand (Ratio)
2006	138,626	3,243,933	166,283	23.4	1.20
2007	142,529	3,267,275	159,392	22.9	1.12
2008	129,341	3,259,642	193,475	25.3	1.51
2009	92,842	3,182,900	288,425	34.4	3.12
2010	113,928	3,181,525	286,908	27.9	2.53
2011	119,389	3,213,658	249,817	26.9	2.10
2012	132,824	3,249,817	232,167	24.5	1.75
2013	144,052	3,273,750	230,633	22.7	1.60
2014	152,626	3,355,350	202,875	21.9	1.33
2015*	160,951	3,408,245	186,782	21.2	1.17

TOP 10 MOST IN DEMAND OCCUPATIONS

	Avg Mos. HWOL 2014	Chg Level vs 2013	% Chg vs 2013	Min. Education
Registered Nurses	5,891	-156	-2.6%	Associate's
Software Developers, Applications	4,347	-166	-3.7%	Bachelor's
Retail Salespersons	3,217	-395	-10.9%	Less than HS
First-Line Spvrs of Retail Sales Wrkrs	3,152	241	8.3%	HS dplm/eqv
Marketing Managers	3,024	-113	-3.6%	Bachelor's
Customer Service Representatives	2,778	329	13.4%	HS dplm/eqv
Exec Secretaries and Exec Admin Assts	2,644	99	3.9%	HS dplm/eqv
Heavy and Tractor-Trailer Truck Driver	2,630	505	23.8%	HS dplm/eqv
Web Developers	2,384	-279	-10.5%	Bachelor's
Accountants	2,302	-93	-3.9%	Bachelor's

While 2014 aggregate all-occupation average monthly advertised openings advanced to 152,626, demand for some of the largest Commonwealth occupations slightly decreased versus a year ago.

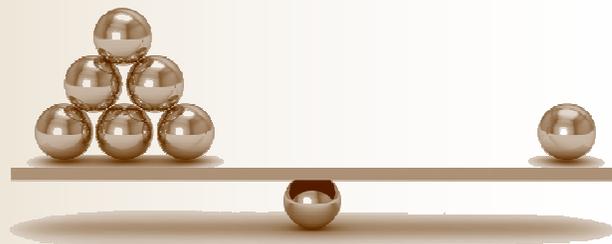
More recently, **consistent with national trends over the first six months of 2015, Massachusetts online labor demand has alternated between modest one month gains, followed by a monthly decline.**

Excluding typical high turn-over positions in *Retail* and *Customer Service*, the only **non-STEM** (Science, Technology, Engineering, and Math—noted in bold) top ten in demand Commonwealth occupations are *Executive Secretaries/Administrative Assistants*; and *Heavy/Tractor-Trailer Truck Drivers*.

Along with *Registered Nurses*; *Software Developers*;

Marketing Managers; *Web Developers*; and *Accountants*, these ten occupations led in online demand, accounting for roughly 21% of all advertised demand in 2014.

Just three of the top ten occupations posted annual gains in online demand: *Heavy/Tractor-Trailer Truck Drivers*; *Customer Service Representatives*; and *First-Line Supervisors of Retail Workers*.



¹⁷US Bureau of Labor Statistics and The Conference Board HWOL, Calendar year monthly averages.
*Six month average provided for 2015.



*Three of the six New England states exhibited
12-month average over the year labor force declines*

Twelve Month Averages Ending in June

	Labor Force 2014	Labor Force 2015	HWOL Ads June 2015	2014 2015		Number Unemp 2015	2014 2015		2014 2015		Chg in Unemp. Rate
				Ads per 100 Persons in Labor Force			Available Supply/ Demand Ratio		Unemployment Rate		
Connecticut	1,873,567	1,902,745	74,470	3.59	3.91	117,845	2.0	1.6	7.2	6.2	-1.0
Rhode Island	555,540	553,327	21,435	3.49	3.87	36,798	2.5	1.7	8.6	6.7	-1.9
Maine	704,757	693,116	29,043	3.34	4.19	35,895	1.8	1.2	6.1	5.2	-0.9
Vermont	349,749	348,619	13,883	3.37	3.98	13,559	1.2	1.0	4.2	3.9	-0.3
New Hampshire	741,731	743,646	28,452	3.67	3.83	29,538	1.3	1.0	4.7	4.0	-0.7
Massachusetts	3,524,618	3,598,830	162,245	4.25	4.51	184,870	1.5	1.1	6.3	5.1	-1.2

As the largest New England economy, the Massachusetts labor market potentially competes with nearby states in the region.

Expressing HWOL online advertised labor demand as a percentage of a state's labor force equalizes population differences by revealing the number of ads for every 100 labor force members.

Massachusetts on average had 4.51 online advertised jobs for every 100 labor force members for the twelve months ending in June 2015.

All states in the region saw over the year gains, with Massachusetts still attracting more online labor demand than the rest of the region.

Declining labor forces in Rhode Island, Maine, and Vermont partly fueled their improved online demand for labor competitiveness with Massachusetts.

Alternatively, gains in Ads per 100 Persons in the Labor Force in Connecticut and New Hampshire may be more indicative of their labor markets becoming more competitive with the Commonwealth's.

Additionally, **all New England states experienced a tightening of the labor market as the rate of the supply of unemployed labor relative to online advertised labor demand narrowed**, with most states exhibiting a near one to one ratio of supply and demand.

¹⁸US Bureau of Labor Statistics and The Conference Board HWOL, **Twelve month averages ending in June 2014 and June 2015.**



Statewide, occupations with the **largest annual increases** in online advertised demand required less than a college education.

Some of the largest annual gains may be a function of high turn-over fields such as food preparation and retail.

High annual growth college degree requiring occupations tended to be clustered in **Elementary, Secondary, and Middle School Teaching positions**, as well as Science, Technology, Engineering, and Mathematics (**STEM**) fields such as: Management- Operations Research- Financial-Market Research- and Information Security-Analysts, Computer and Information Systems Managers, Civil Engineers, and Informatics Nurse Specialists.

All but one of the top ten most in demand Bachelor's requiring occupations were in STEM fields.

Of the top 100 most in demand jobs, roughly a third were in STEM professions.

Local variations in occupation demand follow.

Top 10 Associates Degree Online Advertised Occupations

- Registered Nurses
- Computer User Support Specialists
- General/Operations Managers
- Preschool Teachers, Except Spec. Ed.
- Paralegals and Legal Assts
- Construction Managers
- Nurse Practitioners
- Industrial Engineering Technicians
- Physical Therapist Assts
- Environ Sci and Protection Technicians

Top 10 Bachelor's Degree Online Advertised Occupations

- Software Developers, Applications
- Marketing Managers
- Web Developers
- Computer Systems Analysts
- Network & Computer Systems Admins.
- Management Analysts
- Industrial Engineers
- Medical and Health Services Managers
- Market Research Anlyst & Mrktng Spclst
- Sales Managers

Top 10 Highest Annual Gain in Online Demand

Heavy and Tractor-Trailer Truck Drivers	HS dplm/eqv
Social and Human Service Assistants	HS dplm/eqv
Customer Service Representatives	HS dplm/eqv
Home Health Aides	Less than HS
Sales Agents, Financial Services	Bachelor's
First-Line Supervisors for Retail Sales	HS dplm/eqv
Combined Food Pres & Serving Workers	Less than HS
First-Line Sprvrs Office & Admin Support	HS dplm/eqv
Elementary Teachers, Except Spec. Ed.	Bachelor's
Lcnsd Practical & Lcnsd Voc Nurses	Pstsecndry non award

Top 10 Science, Technology, Engineering, & Math (STEM) Online Advertised Occupations & minimum required education

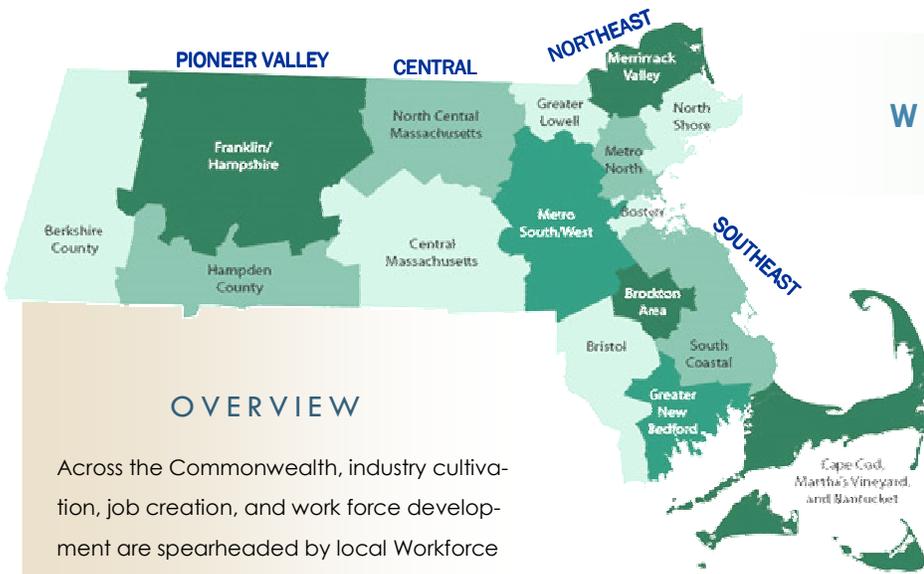
Registered Nurses	Associates
Software Developers, Applications	Bachelor's
Web Developers	Bachelor's
Computer Systems Analysts	Bachelor's
Network & Computer Systems Admins	Bachelor's
Medical Scientists, Except Epidemiologists	Doctoral/professional
Computer User Support Specialists	Associates
Industrial Engineers	Bachelor's
Medical and Health Services Managers	Bachelor's
Physical Therapists	Doctoral/professional

Top 15 High School Diploma Online Advertised Occupations

- First-Line Supervisors for Retail Sales
- Customer Service Representatives
- Exec. Secretaries & Exec. Admin. Assts.
- Heavy and Tractor-Trailer Truck Drivers
- First-Line Sprvrs Office & Admin Support
- Social and Human Service Assistants
- First-Line Sprvrs Food Prep & Serving
- Sales Reps, Whls & Manuf, Ex Tech & Sci Managers, All Other
- Bookkeeping/Accounting/Auditing Clerks
- Sales Representatives, Services, All Other
- Maintenance/Repair Workers, General
- Light Truck or Delivery Services Drivers
- Scrtrs & Admin Asst, Ex Legal/Med/Exec
- Medical Secretaries

¹⁹US Bureau of Labor Statistics and The Conference Board HWOL, Calendar year monthly averages.

MASSACHUSETTS WORKFORCE INVESTMENT AREAS *20



OVERVIEW

Across the Commonwealth, industry cultivation, job creation, and work force development are spearheaded by local Workforce Investment Areas (WIAs) and their boards.

Insight into the annual economic and labor market health of the state's sixteen local WIAs follows.

LABOR FORCE

Annually, an additional 49,000 working age residents attached to the Massachusetts labor force. Approximately 44% of the added labor force was concentrated in the three greater Boston metropolitan area WIAs. Concurrently, Berkshire and New Bedford had the fewest added labor force members in 2014.

UNEMPLOYMENT

Outside the three greater Boston metropolitan area WIAs and the North and South Shores, Franklin/Hampshire and Lowell recorded the lowest 2014 unemployment rates.

New Bedford and Hampden, the highest unemployment rate WIAs, also had the greatest annual declines in unemployment rates.

New Bedford's pace of employment increase was slightly faster than the state as a whole, at 2.6%. Yet, given New Bedford's sluggish labor force growth, their improved unemployment rate may suggest working age New Bedford residents are dropping out of the labor market and/or underemployed.

Statewide, and across the WIAs, employment advanced at roughly the same pace of 2.5%, annually.

With the lightest online labor demand and lowest labor force improvement, only Berkshire WIA posted slower employment gains.

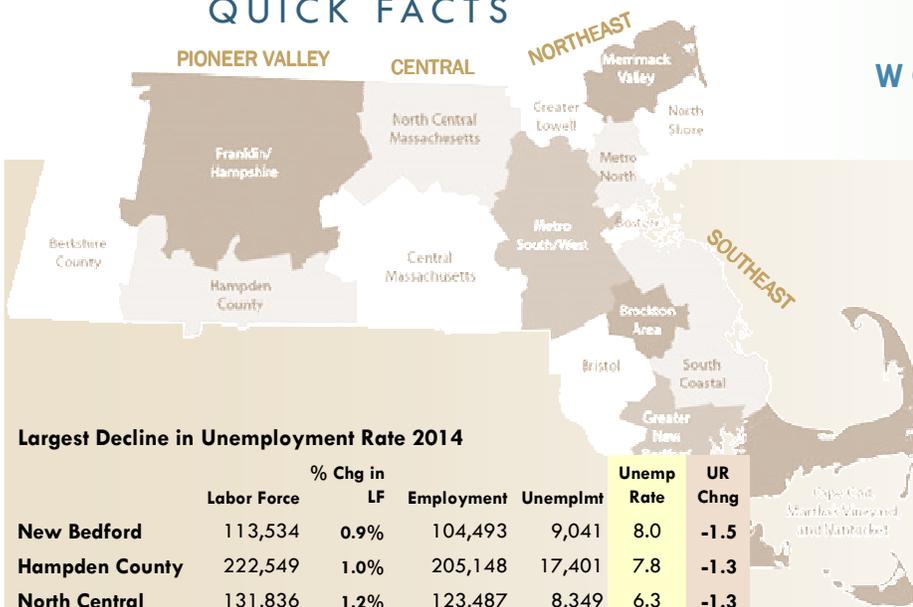
	Labor Force	% Chg in LF	Employment	Share of Emplmt	Unemplmt	Unemp Rate	UR Chng
Metro South/West	499,396	1.7%	477,665	14.2%	21,731	4.4	-0.7
Metro North	444,021	1.7%	423,836	12.6%	20,185	4.5	-0.8
Boston	354,299	1.6%	335,583	10.0%	18,716	5.3	-0.9
Central MA	307,040	1.5%	288,436	8.6%	18,604	6.1	-1.0
South Shore	285,978	1.6%	269,930	8.1%	16,048	5.6	-0.9
North Shore	225,483	1.4%	213,026	6.4%	12,456	5.5	-0.9
Hampden	222,549	1.0%	205,148	6.1%	17,401	7.8	-1.3
Bristol	189,292	1.0%	176,099	5.3%	13,194	7.0	-1.2
Merrimack	177,718	1.1%	166,110	5.0%	11,607	6.5	-1.2
Lowell	148,990	1.4%	140,073	4.2%	8,918	6.0	-1.1
North Central	131,836	1.2%	123,487	3.7%	8,349	6.3	-1.3
Brockton	129,380	1.3%	121,127	3.6%	8,252	6.4	-1.0
Cape & Islands	128,021	1.3%	119,027	3.6%	8,994	7.0	-1.1
New Bedford	113,534	0.9%	104,493	3.1%	9,041	8.0	-1.5
Franklin/Hampshire	133,821	1.2%	126,798	3.8%	7,022	5.2	-0.9
Berkshire County	66,115	0.2%	61,826	1.8%	4,290	6.5	-0.8
Massachusetts	3,557,500	1.4%	3,352,700	100%	204,800	5.8	-0.9



*20 WIA Level analyses based on: US Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Occupational Employment and Wage Statistics; Current Population Statistics; and The Conference Board HWOL, 2014 annual average data; Massachusetts Short-term Industry and Occupational Projections 2014–2016.

QUICK FACTS

MASSACHUSETTS WORKFORCE INVESTMENT AREAS *20



EMPLOYMENT

Healthcare; Education; and Professional and Technical Services are the leading statewide employment industries. Yet, when viewing labor market variations across the state, Manufacturing takes on more prominence with stronger concentrations of employment than the state as a whole in nine of the 16 WIAs.

Additionally apparent is Professional and Technical Services' greater Boston area hub of employment.

Also of note, outside the greater Boston area, Merrimack Valley's continued employment and labor force stability is unparalleled in the state.

LABOR MARKET

The tightest labor markets with the least unemployed or employed labor supply relative to online demand are the three greater Boston metropolitan area WIAs. While the slackest markets with the most surplus labor supply are located in the Southeast, Cape, and North Central areas, all with over 3 unemployed workers for every online advertised job.

Largest Decline in Unemployment Rate 2014

	Labor Force	% Chg in LF	Employment	Unemplmt	Unemp Rate	UR Chng
New Bedford	113,534	0.9%	104,493	9,041	8.0	-1.5
Hampden County	222,549	1.0%	205,148	17,401	7.8	-1.3
North Central	131,836	1.2%	123,487	8,349	6.3	-1.3
Merrimack Valley	177,718	1.1%	166,110	11,607	6.5	-1.2
Bristol County	189,292	1.0%	176,099	13,194	7.0	-1.2

Largest Increase in Employment 2014

	Labor Force	% Chg in LF	Employment	Unemplmt	Unemp Rate	UR Chng	Level Chg Emplmt	% Chg Emplmt
Metro South/West	499,396	1.7%	477,665	21,731	4.4	-0.7	11,809	2.5%
Metro North	444,021	1.7%	423,836	20,185	4.5	-0.8	10,522	2.5%
Boston	354,299	1.6%	335,583	18,716	5.3	-0.9	8,499	2.6%
Central MA	307,040	1.5%	288,436	18,604	6.1	-1.0	7,373	2.6%
South Shore	285,978	1.6%	269,930	16,048	5.6	-0.9	6,678	2.5%

Average Annual Unemployed Labor Supply Relative to Online Advertised Demand

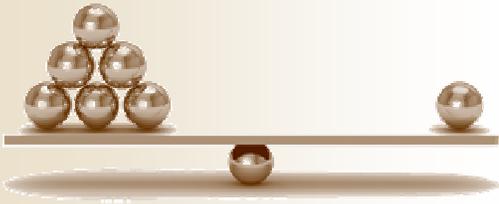
Average Annual Wage Rank & Growth Patterns

Rank		Avg Annual 2014 Wage	Chg Level vs 2013	% Chg vs 2013
1	Boston	\$ 88,500	\$ 5,164	6.2%
2	Metro North	\$ 74,124	\$ 2,617	3.7%
3	Metro South/West	\$ 73,623	\$ 1,645	2.3%
Massachusetts				
		\$ 64,157	\$ 2,357	3.8%
4	Greater Lowell	\$ 63,865	\$ 2,248	3.6%
5	Merrimack Valley	\$ 58,021	\$ 1,924	3.4%
6	South Shore	\$ 52,016	\$ 1,434	2.8%
7	Central MA	\$ 51,772	\$ 1,016	2.0%
8	North Shore	\$ 50,463	\$ 1,180	2.4%
9	Bristol County	\$ 46,782	\$ 1,414	3.1%
10	Hampden County	\$ 46,593	\$ 1,446	3.2%
11	Brockton	\$ 46,424	\$ 822	1.8%
12	Grtr New Bedford	\$ 46,228	\$ 3,094	7.2%
13	North Central	\$ 45,239	\$ 875	2.0%
14	Cape & Islands	\$ 43,393	\$ 1,150	2.7%
15	Berkshire County	\$ 42,106	\$ 1,347	3.3%
16	Franklin/Hampshire	\$ 41,417	\$ 1,422	3.6%

	*A HWOL Ads	Employed/ HWOL Demand (Ratio)	Unemployed/ HWOL Demand (Ratio)	Unemp Supply / Demand Chg vs 2013	Unemp Supply / Demand Chg vs 2012	Unemp Rate	UR Chg
Bristol	3,422	51.5	3.9	-0.7	-1.5	7.0	-1.2
Brockton	2,499	48.5	3.3	-0.5	-0.6	6.4	-1.0
Cape & Islands	2,846	41.8	3.2	-0.8	-1.2	7.0	-1.1
New Bedford	2,926	35.7	3.1	-1.4	-1.8	8.0	-1.5
North Central	2,791	44.2	3.0	-1.4	-1.9	6.3	-1.3
Franklin Hampshire	2,536	50.0	2.8	-0.6	-1.2	5.2	-0.9
Merrimack	4,471	37.2	2.6	-0.7	-0.7	6.5	-1.2
South Shore	6,263	43.1	2.6	-0.5	-0.9	5.6	-0.9
Hampden	6,958	29.5	2.5	-0.6	-0.7	7.8	-1.3
North Shore	5,149	41.4	2.4	-0.4	-0.7	5.5	-0.9
Berkshire	1,920	32.2	2.2	-0.3	-0.4	6.5	-0.8
Lowell	4,445	31.5	2.0	-0.7	-0.7	6.0	-1.1
Central	11,056	26.1	1.7	-0.5	-0.7	6.1	-1.0
Metro North	21,285	19.9	0.9	-0.3	-0.3	4.5	-0.8
Metro SouthWest	25,733	18.6	0.8	-0.2	-0.2	4.4	-0.7
Boston	37,290	9.0	0.5	-0.1	-0.1	5.3	-0.9
Massachusetts	152,626	21.9	1.3	-0.3	-0.4	5.8	-0.9

*20 Ibid.

** Note: The sum of WIAs do not equal MA, as statewide average is based on seasonally adjusted data, whereas WIA averages are derived from non-seasonally adjusted data.



ASSESSING LOCAL LABOR MARKET PERFORMANCE

Promoting healthy functioning local labor markets throughout the state is pivotal to a variety of stakeholders. To that end, aggregate assessments of labor market performance follows for each of the 16 workforce development areas.

HEALTHY PERFORMING LABOR MARKETS

A healthy labor market is characterized by well-performing industries that have access to sufficient resources for sustained growth, including appropriately skilled labor forces.

ILL-PERFORMING LABOR MARKETS

An ill-performing labor market is one in which industry growth is inhibited by a lack of requisite resources, in particular, adequate supplies of qualified job candidates and potential employees.

AGGREGATE SKILL GAP ASSESSMENT

Assessing the degree of equilibrium or imbalance between employer labor demands and potential labor supply is an imprecise undertaking that encompasses a variety of perspectives.

Utilizing The Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS) data, and The Conference Board's Help Wanted Online (HWOL) Analytics, an aggregate indication of the presence or absence of a marked gap between online advertised employer demand and the supply of unemployed jobseekers, as well as employed potential job changers can be inferred.

The aggregate labor market assessments offered on the following pages do not provide insight on the specific occupations or industries that may be affected by skill gaps, rather, they provide a barometer or gauge by which local labor markets can be categorized, signifying which labor markets are most in need of closer assessment via additional means of skill gap assessment, such as direct employer input and/or precise occupational matches with unemployment insurance claimants.

The Commonwealth's 16 local area labor markets range from the tightest in the greater Boston metropolitan area, where robust employer demand exceeds the number of unemployed workers, to the slackest markets located in the Southeastern region and the Cape, where the supply of unemployed workers exceeds employer demand for labor.

INTERPRETING AGGREGATE SKILL GAPS

Six metrics are viewed in tandem in an effort to gauge how well a local labor market is functioning:

- **Size of the labor force**
- **Monthly online job openings**
- **Level of employment**
- **Level of unemployment**
- **Degree of unemployment rate**
- **Pace of mean wage growth**



*20 WIA Level analyses based on: US Bureau of Labor Statistics, Quarterly Census of Employment and Wages; Occupational Employment and Wage Statistics; Current Population Statistics; and The Conference Board HWOL, 2014 annual average data; Massachusetts Short-term Industry and Occupational Projections 2014–2016.

24 WIA aggregate skill gap analysis offers one of many possible ways to infer the likelihood of local market skill imbalances. Outcomes are intended to offer a [first-step towards more refined exploration](#). Other probable data points include: commuting patterns; longer-term real wage growth by industry/occupation; and direct employer assessments.

OVERVIEW

The likelihood that a labor market may be ill-functioning due to pronounced imbalances between employer needs and the skills/qualifications of the labor supply may be inferred from the tightness of the supply of workers in relation to employer demand, in tandem with the level of unemployment, and pace of wage increases. Three broad classifications result from this schema:

TIGHT:

< 1 unemployed worker per vacancy

Tight markets characterized by strong employer demand, low unemployment, and stable wages, are generally well-functioning and not indicative of deficient labor supplies.

However, when accompanied by higher unemployment and/or upticks in wages, a tight labor market could encompass unmet employer demand due to lack of qualified potential employees.

Five Commonwealth labor markets can be classified as "tight." Four of the five are also the largest labor markets in the state.

Notably, even when aggregate trends point to a well-functioning market, specific industry/occupational fissures may require closer analysis to uncover.

SLACK:

2 to 3 unemployed workers per vacancy

Labor markets with adequate employer demand—that is comparable to the size of its labor force, that also exhibit surpluses of jobseekers in relation to the number of vacancies, may portend marked skill gaps, particularly when the unemployment rate is high and wages are rising.

Five Commonwealth labor markets can be classified as "slack" and may perhaps take priority for further exploration of possible skill gaps.

LOOSE:

3+ unemployed workers per vacancy

Loose labor markets are typified by smaller labor forces, weaker employer demand, relatively higher unemployment, and generally softer wage growth.

These markets may not be as well-functioning as other locales for a variety of reasons, which may include limited qualified job candidates, particularly when coupled with upward pressure on wages.

Six Commonwealth labor markets can be classified as "loose," with perhaps two of the six, New Bedford and Bristol, most likely to encompass broadscale skill gaps.

Individual WIA labor market performance reviews follow in geographical order.

Average Annual Data 2014 vs. Year Ago

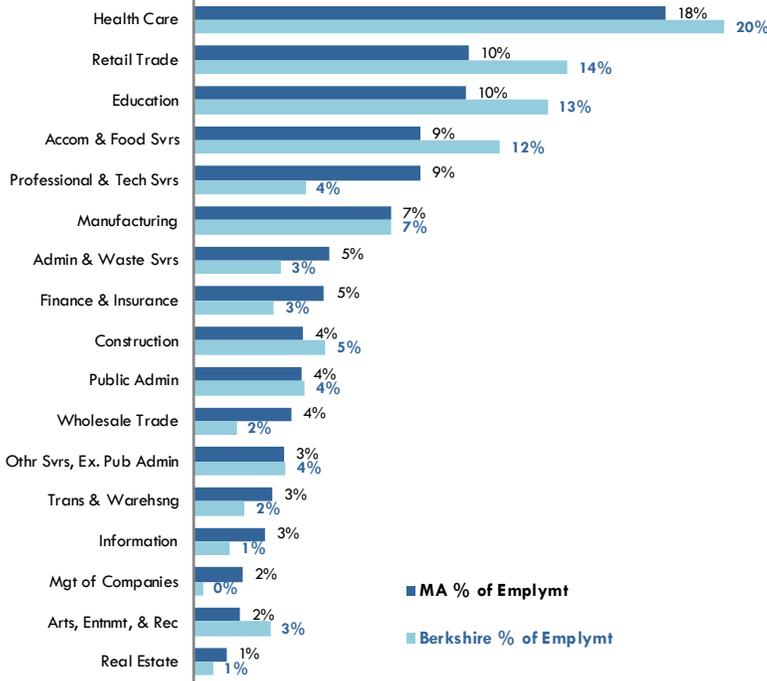
	*A Job Postings	Employment	Share of Employment	Unempymnt	Labor Market Performance Assessment	Employ / Postings	Unemploy / Postings	UR	UR Chg	Wage Growth Rate	
Lack of All Workers	37,290	335,583	10.0%	18,716	tightest	9.0	0.5	5.3	-0.9	6.2%	Boston
	25,733	477,665	14.2%	21,731	tightest	18.6	0.8	4.4	-0.7	2.3%	Metro SouthWest
	21,285	423,836	12.6%	20,185	tightest	19.9	0.9	4.5	-0.8	3.7%	Metro North
	11,056	288,436	8.6%	18,604	tight/mid UR	26.1	1.7	6.1	-1.0	2.0%	Central
	4,445	140,073	4.2%	8,918	tight/mid UR	31.5	2.0	6.0	-1.1	3.6%	Lowell
Could be Skill Gaps	1,920	61,826	1.8%	4,290	tight/mid UR	32.2	2.2	6.5	-0.8	3.3%	Berkshire
	5,149	213,027	6.4%	12,456	slack/low UR	41.4	2.4	5.5	-0.9	2.4%	North Shore
	6,958	205,148	6.1%	17,401	slack/Hgh UR	29.5	2.5	7.8	-1.3	3.2%	Hampden
	6,263	269,930	8.1%	16,048	slack/low UR	43.1	2.6	5.6	-0.9	2.8%	South Shore
	4,471	166,110	5.0%	11,607	slack/mid UR	37.2	2.6	6.5	-1.2	3.4%	Merrimack
Demand Driven Slackness	2,536	126,798	3.8%	7,022	slack/low UR	50.0	2.8	5.2	-0.9	3.6%	Franklin Hampshire
	2,791	123,487	3.7%	8,349	loose/mid UR	44.2	3.0	6.3	-1.3	2.0%	North Central
	2,926	104,493	3.1%	9,041	loose/Hgh UR	35.7	3.1	8.0	-1.5	7.2%	New Bedford
	2,846	119,027	3.6%	8,994	loose/Hgh UR	41.8	3.2	7.0	-1.1	2.7%	Cape & Islands
	2,499	121,127	3.6%	8,253	loose/mid UR	48.5	3.3	6.4	-1.0	1.8%	Brockton
Unique Case	3,422	176,099	5.3%	13,194	loosest/Hgh UR	51.5	3.9	7.0	-1.2	3.1%	Bristol
		3,352,700	100.0%			21.9	1.3	5.8	-0.9	3.8%	Statewide

*20 Ibid.

** Note: The sum of WIAs do not equal MA, as statewide average is based on seasonally adjusted data, whereas WIA averages are derived from non-seasonally adjusted data.

***WIA aggregate skill gap analysis offers one of many possible ways to infer the likelihood of local market skill imbalances. Outcomes are intended to offer a first-step towards more refined exploration. Other probable data points include: commuting patterns; longer-term real wage growth by industry/occupation; and direct employer assessments.

WIA vs. Statewide Industry Job Mix, 2014



2014 vs. 2013 Snapshot

Employment: 61,826	
Share of MA Employment: 1.8%	<u>Chg.</u>
Labor Force: 66,115	+2%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 6.5	-8
MA Statewide Unemployment Rate: 5.8	-9
Average Annual Wage: \$ 42,106	+3.3%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 2.2	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 32.2	
MA Unemployed S/D: 21.9	

Berkshire Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	1,270	\$ 76,337
2 Nursing Asst	880	\$ 28,172
3 Gen & Operations Mngrs	860	\$ 96,449
4 Teacher Asst	830	\$ 27,478
5 Scndry Sch Tchrs, Ex SpEd/Carr/Tech	700	\$ 63,003
6 Elem Sch Tchrs, Ex Spec Edu	640	\$ 66,175
7 Lndscpng & Groundskeeping Wrkrs	610	\$ 31,934
8 Personal Care Aides	540	\$ 24,556
9 Maintenance & Repair Wrkrs, Gen	540	\$ 37,218
10 Bus Drivers, Sch or Spec Client	500	\$ 31,665
11 Construction Laborers	470	\$ 36,372
12 Middle Sch Tchrs, Ex SpEd/Carr/Tech	440	\$ 64,967
13 Carpenters	430	\$ 46,767
14 Edu Admin, PostScndry	410	\$ 100,988
15 Home Health Aides	390	\$ 28,183
16 Lic Prctcl & Lic Voc Nurses	360	\$ 49,479
17 Heavy & Tractor-Trailer Truck Drivers	350	\$ 41,916
18 Self-Enrichment Edu Tchrs	350	\$ 40,184
19 Childcare Wrkrs	340	\$ 24,223
20 Accountants & Auditors	340	\$ 68,660
21 Software Developers, Syst Software	340	\$ 88,757
22 Labrs & Frght, Stck, Mtrl Movers	330	\$ 26,700
23 Social & Human Service Asst	320	\$ 35,345
24 Light Truck or Delivery Svcs Drivers	300	\$ 38,138
25 Recreation Workers	300	\$ 23,370

Berkshire Highest Wage Occupations

	Median Wage
1 Natural Sciences Mngrs	\$ 208,129
2 Surgeons	\$ 208,000
3 Dentists, Gen	\$ 192,743
4 Physicians & Surgeons, All Other	\$ 191,431
5 Chief Executives	\$ 177,844
6 Family & Gen Practitioners	\$ 173,773
7 Internists, Gen	\$ 172,936
8 Compensation & Benefits Mngrs	\$ 129,569
9 Pharmacists	\$ 125,508
10 Computer & Information Syst Mngrs	\$ 116,259

Berkshire County WIA, along with the Cape and the Islands, are home to the oldest Commonwealth populaces, with the median age in the Berkshires at 45.1. **Berkshire is also the state's smallest labor market, with the lightest demand for labor, and fewest labor force members.**

Reflecting the impact of the area's popularity with retirement age residents, as well of mirroring national patterns of older workers remaining attached to the labor force longer, the **Berkshire labor force remained relatively flat, with .2 of a point annual growth, representing the first non-decline in its labor force since 2009.**

At the same time, 719 workers were added to employment, while the pace of improvement in the unemployment rate was on par with the state's: slightly less than a full percentage point, at .8. However, **the degree of the Berkshire unemployment rate was 6.5.**

Indicating the **Berkshire's greater Leisure and Hospitality oriented economy**, employment in: *Healthcare; Retail; Education; Accommodations and Food Services; Construction; and Arts, Entertainment, and Recreation* are more concentrated than the Commonwealth as a whole.

Wages in Berkshire rose roughly on pace with the state, advancing 3.3%. **Mean wages ranked 15th lowest, out of 16.**

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Berkshire Monthly Online Demand		Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1	Retail Sales	82	-11	less than HS
2	First-Line Sprvrs of Retail Sales Wrkrs	80	10	HS dplm/eqv
3	Heavy and Tractor-Trailer Truck Drivers	74	15	HS dplm/eqv
4	Registered Nurses	51	-7	Associate's
5	Occupational Therapists	47	-53	Master's
6	Physical Therapists	45	-59	Doc or prof
7	Speech-Language Pathologists	40	15	Master's
8	Social and Human Service Assts	39	4	HS dplm/eqv
9	Computer Systems Engineers/Architects	32	17	Associate's
10	Customer Service Representatives	31	-4	HS dplm/eqv
11	First-Line Sprvrs Offc / Admin Spprt	25	0	HS dplm/eqv
12	Maids	23	4	less than HS
13	Cooks, Restaurant	23	1	less than HS
14	Nursing Assts	22	4	PstScdry non award
15	First-Line Sprvrs of Food Prep	22	3	HS dplm/eqv
16	Exec Secretaries and Exec Admin Assts	19	-5	HS dplm/eqv
17	Automotive SPECTY Technicians	19	2	HS dplm/eqv
18	Hotel, Motel, and Resort Desk Clerks	19	0	HS dplm/eqv
19	Computer User Support Spclts	19	7	Associate's
20	Occupational Therapy Assts	18	-7	Associate's
21	Maintenance and Repair Wrkrs, Gen	18	-7	HS dplm/eqv
22	Janitors and Cleaners, Except Maids	18	2	less than HS
23	Bookkeeping, Accounting,	18	4	HS dplm/eqv
24	Insurance Sales Agents	17	10	HS dplm/eqv
25	Software Developers, Applications	16	9	Bachelor's

Employer demand for labor in Berkshire averaged 1,920 job postings per month, —the **lightest in the Commonwealth**. Weak demand, combined with an **6.5 unemployment rate influence Berkshire's tight to somewhat slack labor market performance**, with roughly two unemployed jobseekers and 32 employed potential job changers for every advertised vacancy.

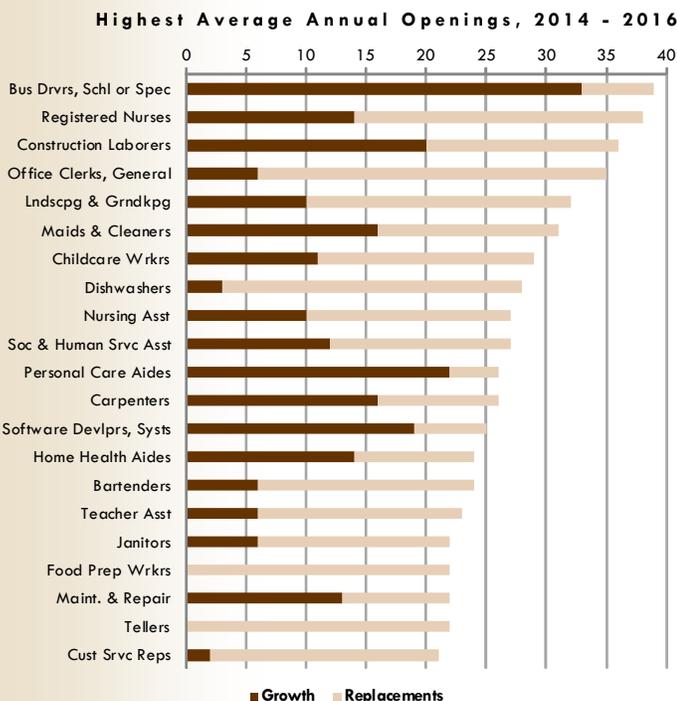
The area's muted employer demand, relatively high unemployment, and slight upward pressure on wages, may encompass pockets of industry / occupational skill imbalances. At the same time, **Berkshire's unique demography and industry employment mix sets it apart from other markets with similar degrees of labor market tightness**.

The occupations that employ the most Berkshire residents are less STEM related, with **just four of the top 25 employment occupations STEM related —STEM positions noted in bold**.* Current demand indicates greater employer need for STEM occupations, with more than a quarter of the 25 most advertised job openings in STEM fields.

The majority of highly demanded Berkshire occupations require a high school diploma or less.

Anticipated labor demand through 2016 suggests **greater job growth** in transportation needs for elderly/ special clients and/or school students; **software developers**; and **home health/personal care aides**. **Registered Nurses**; **construction laborers**; and **maintenance and repair workers** are anticipated to both create new jobs and have high replacement worker needs, as current job holders retire and/or leave these occupations.

Projected Labor Demand 2016

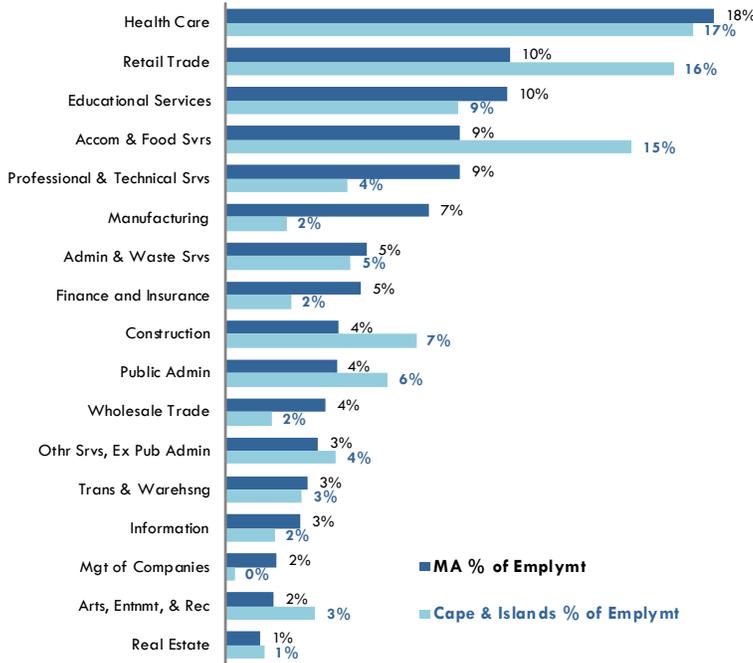


Berkshire County WIA 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Bus Drvrs, Schl or Spec	472	7.8%	39	5.5	1
Amusement and Rec Attdnts	176	3.9%	16	0.6	34
Software Devlprs, Svsts	608	3.3%	25	3.2	13
Hotel, Motel, & Resot Dsk Crks	220	2.8%	16	0.6	33
Construction Laborers	777	2.7%	36	1.3	3
Personal Care Aides	906	2.6%	26	5.5	11
Home Health Aides	587	2.6%	24	1.4	14
Recreation Wrkrs	330	2.5%	12	2.0	44
Maint. & Repair	577	2.3%	22	1.4	19
PreSchl Teachers, Ex Spec Edu	314	2.3%	15	0.9	36

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014



CAPE & ISLANDS WIA *20

2014 vs. 2013 Snapshot

Employment: 119,027	
Share of MA Employment: 3.6%	Chg.
Labor Force: 128,021	+1.3%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 7.0	-1.1
MA Statewide Unemployment Rate: 5.8	-0.9
Average Annual Wage: \$ 43,393	+ 2.7%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 3.2	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 41.8	
MA Unemployed S/D: 21.9	

Cape & Islands Top 25 Occupations

	Emplmt	Avg Wage
1 Landscping & Groundskeeping Wrkrs	2,750	\$ 37,921
2 Registered Nurses	2,250	\$ 80,883
3 Gen & Operations Mngrs	1,810	\$ 102,211
4 Nursing Asst	1,340	\$ 29,366
5 Teacher Asst	1,260	\$ 30,369
6 Carpenters	1,170	\$ 52,930
7 Elem Sch Tchrs, Ex Spec Edu	1,000	\$ 71,476
8 Scndry Sch Tchrs, Ex SpEd/Carr/Tech	940	\$ 70,735
9 Maintenance & Repair Wrkrs, Gen	930	\$ 41,475
10 Personal Care Aides	850	\$ 29,142
11 Home Health Aides	800	\$ 30,049
12 Light Truck or Delivery Svcs Drivers	780	\$ 34,818
13 Labrs & Frght, Stck, Mtrl Movers	760	\$ 32,062
14 Heavy & Tractor-Trailer Truck Drivers	730	\$ 47,000
15 Construction Laborers	700	\$ 38,422
16 Recreation Wrkrs	600	\$ 24,952
17 Police & Sheriff's Patrol Officers	560	\$ 58,667
18 Middle Sch Tchrs, Ex SpEd/Carr/Tech	550	\$ 70,727
19 Firefighters	520	\$ 52,230
20 Accountants & Auditors	510	\$ 73,161
21 Substitute Tchrs	500	\$ 23,678
22 Residential Advisors	490	\$ 27,305
23 First-Line Supervisors of Construction Trad	480	\$ 68,856
24 Lic Prctcl & Lic Voc Nurses	480	\$ 54,394
25 Financial Mngrs	470	\$ 96,826

Cape & Islands Highest Wage Occpnts

	Median Wage
1 Internists, Gen	\$ 198,320
2 Surgeons	\$ 196,568
3 Physicians & Surgeons, All Other	\$ 194,905
4 Commercial Pilots	\$ 191,840
5 Psychiatrists	\$ 188,246
6 Chief Executives	\$ 153,516
7 Real Estate Brokers	\$ 151,698
8 Dentists, Gen	\$ 143,261
9 Natural Sciences Mngrs	\$ 138,916
10 Podiatrists	\$ 129,735

The **oldest Commonwealth populace** resides in the Cape

and the Islands WIA, where the median age is 50.4.

Working age Cape residents attached to the labor force at a rate almost on par with the state, 1.3%, while adding 2,825 to employment.

At the same time, employment improved more slowly and unemployment decreased less rapidly than the majority of other WIAs, making the Cape's **unemployment rate, at 7.0, tied with nearby Bristol for the 3rd highest** across the state.

Yet, versus a year earlier, the **Cape unemployment rate has improved** by 1.1 points.

Also, like the Berkshires, the Cape's economy is more **Leisure and Hospitality oriented**, with greater employment concentrations than the state in: *Retail; Accommodations and Food Services; Construction; and Arts, Entertainment, and Recreation.*

Mean wages in the Cape are slightly higher than Berkshire's, and rose at a slower pace of 2.7%.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Cape & Islands Monthly Online Demand		Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1	Registered Nurses	137	-1	Associate's
2	Cooks, Restaurant	80	14	less than HS
3	Heavy and Tractor-Trailer Truck Drivers	78	-3	HS dplm/eqv
4	Landscaping and Groundskeeping Wrkrs	78	15	less than HS
5	First-Line Sprvrs of Food Prep	70	6	HS dplm/eqv
6	Retail Sales	70	3	less than HS
7	Physical Therapists	55	4	Doc or prof
8	Construction Carpenters	55	11	HS dplm/eqv
9	Home Health Aides	54	3	less than HS
10	First-Line Sprvrs of Retail Sales Wrkrs	53	4	HS dplm/eqv
11	Waiters and Waitresses	50	4	less than HS
12	Customer Service Representatives	48	21	HS dplm/eqv
13	Maids	45	1	less than HS
14	Janitors and Cleaners, Except Maids	39	12	less than HS
15	First-Line Sprvrs Offc / Admin Sprrt	38	12	HS dplm/eqv
16	Lic Prctcl and Lic Voc Nurses	38	9	PstScdry non award
17	Combined Food Prep , Including Fast Food	36	11	less than HS
18	Social and Human Service Assts	35	13	HS dplm/eqv
19	Maintenance and Repair Wrkrs, Gen	33	6	HS dplm/eqv
20	Light Truck or Delivery Services Drivers	33	10	HS dplm/eqv
21	Nursing Assts	32	6	PstScdry non award
22	Construction Laborers	31	5	less than HS
23	Occupational Therapists	31	6	Master's
24	Dishwashers	31	0	less than HS
25	First-Line Sprvrs, Construction Trades/ Extctn	30	9	HS dplm/eqv

Employer demand for labor in the Cape and Islands averaged 2,846 job postings per month. Labor market performance in the Cape is among the loosest in the state, with over three unemployed jobseekers and 41 employed potential job changers for every online advertised vacancy.

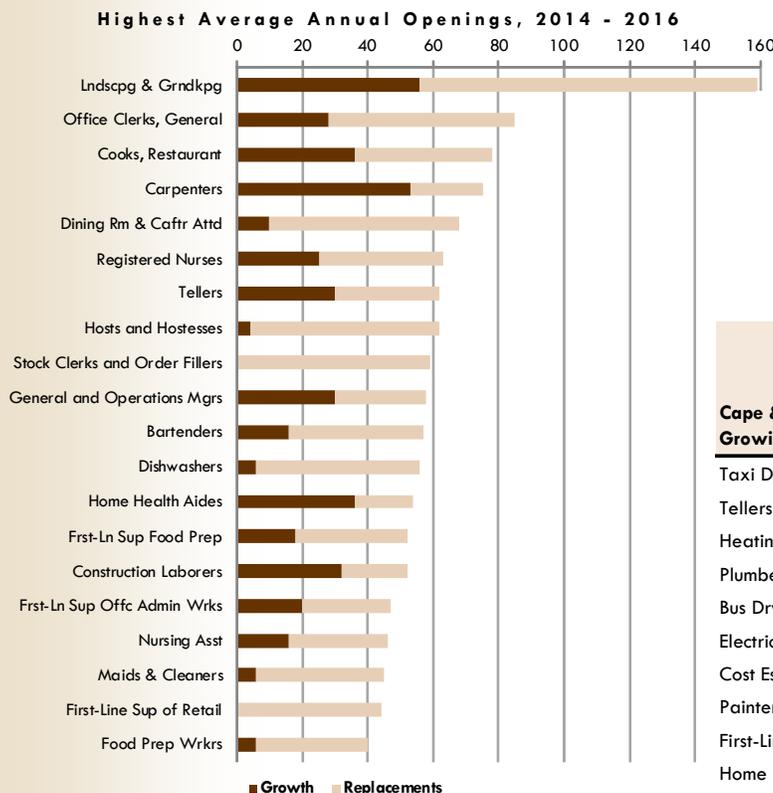
Only Bristol and New Bedford had greater surpluses of unemployed labor supply relative to online advertised jobs. Given the Cape's relatively healthy employer labor demand in proportion to its labor force size, and higher unemployment rate, the market's surplus of unemployed jobseekers is notable. However, so far, the rate of wage growth does not appear to indicate greater employer competition for skilled workers.

Both the occupations that employ the most Cape residents and the occupations with the most online demand are less STEM related than many of the other WIAs, with neither of the top 25 including more than four STEM occupations —STEM positions noted in bold.*

The majority of highly demanded Cape occupations require a high school diploma or less.

Anticipated labor demand through 2016 suggests greater job growth in Carpentry; Construction; and Home Health occupations. Landscaping & grounds keeping; tellers; and general and operations managers are anticipated to both create new jobs and have high replacement worker needs, as current job holders retire and/or leave these fields.

Projected Labor Demand 2016

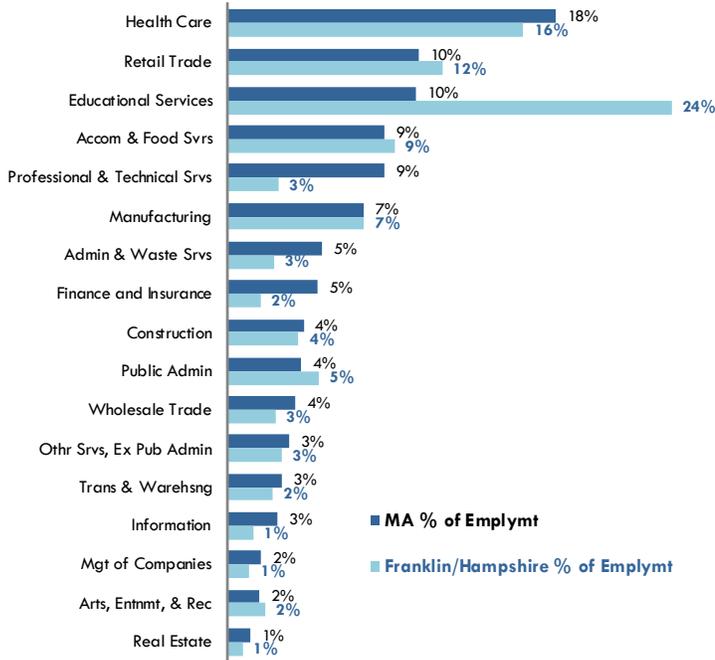


Cape & Islands 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Taxi Drvrs and Chauffeurs	421	5.5%	26	5.5	41
Tellers	668	4.7%	62	0.9	7
Heating, Air Cond, Ref Mech	558	4.5%	36	2.0	30
Plumbers, Pipefitters	390	4.4%	20	4.0	57
Bus Drvrs, Schl or Spec	554	4.1%	30	2.8	35
Electricians	385	4.0%	20	2.3	58
Cost Estimators	457	3.8%	29	1.2	38
Painters, Constrn & Mntc	477	3.6%	22	2.7	53
First-Line Sup of Constrn Trd	592	3.6%	26	3.3	40
Home Health Aides	1,115	3.4%	54	2.0	13

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014



FRANKLIN/HAMPSHIRE WIA *20

2014 vs. 2013 Snapshot

Employment: 126,798	
Share of MA Employment: 3.8%	<u>Chg.</u>
Labor Force: 133,821	+1.2%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 5.2	-.9
MA Statewide Unemployment Rate: 5.8	-.9
Average Annual Wage: \$ 41,417	+ 3.6%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 2.8	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 50.0	
MA Unemployed S/D: 21.9	

Franklin/Hampshire Top 25 Occupation: Emplmt Avg Wage

Rank	Occupation	Emplmt	Avg Wage
1	Registered Nurses	1,950	\$ 76,966
2	Nursing Asst	1,700	\$ 30,111
3	Elem Sch Tchrs, Ex Spec Edu	1,370	\$ 61,266
4	Gen & Operations Mngrs	1,310	\$ 97,345
5	Scndry Sch Tchrs, Ex SpEd/Carr/Tech	1,270	\$ 63,658
6	Teacher Asst	1,230	\$ 28,261
7	Healthcare Social Wrkrs	930	\$ 57,732
8	Undisclosed Healthcare Occupation	#	#
9	Security Guards	840	\$ 30,079
10	Maintenance & Repair Wrkrs, Gen	820	\$ 38,277
11	Lndscpng & Groundskeeping Wrkrs	810	\$ 33,148
12	Personal Care Aides	780	\$ 24,036
13	Lic Prctcl & Lic Voc Nurses	770	\$ 49,157
14	Accountants & Auditors	720	\$ 71,786
15	Police & Sheriff's Patrol Officers	710	\$ 51,850
16	Firefighters	700	\$ 41,491
17	Bus Drivers, Sch or Spec Client	690	\$ 27,694
18	Light Truck or Delivery Svcs Drivers	690	\$ 29,964
19	Social & Human Service Asst	670	\$ 39,490
20	Labrs & Frght, Stck, Mtrl Movers	630	\$ 27,549
21	Undisclosed Education Occupation	#	#
22	Middle Sch Tchrs, Ex SpEd/Carr/Tech	530	\$ 62,541
23	Team Assemblers	520	\$ 34,285
24	Financial Mngrs	520	\$ 84,684
25	Carpenters	500	\$ 45,941

Rank	Franklin/Hampshire Highest Wage	Median Wage
1	Family & Gen Practitioners	\$ 192,901
2	Internists, Gen	\$ 192,743
3	Surgeons	\$ 192,743
4	Veterinarians	\$ 166,953
5	Psychiatrists	\$ 163,523
6	Dentists, Gen	\$ 154,660
7	Chief Executives	\$ 146,458
8	Physicians & Surgeons, All Other	\$ 143,307
9	Economics Tchrs, PostScndry	\$ 127,334
10	Political Science Tchrs, PostScndry	\$ 122,052

With an economy driven by nearly a quarter of all employ-

ment in *Educational Services*, the Franklin/Hampshire WIA exhibited among the lowest unemployment rates outside of the greater Boston metropolitan area WIAs, improving by .9 of a point versus 2013, to 5.2. The WIA's labor force grew by 1.2%, adding 2,626 workers to the ranks of the employed.

In addition to the principal *Education Services*, slightly more concentrated employment than statewide exists in: *Retail; Accommodations and Food Services; Public Administration; and Arts, Entertainment, and Recreation* industries.

Also of note, Franklin/Hampshire has the lowest mean wage among all Commonwealth WIAs.

Concurrently, employer demand for labor is lighter in Franklin/Hampshire than all WIAs but Berkshire and Brockton.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Franklin/Hampshire Monthly Online Demand	Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1 Registered Nurses	145	36	Associate's
2 Social and Human Service Assts	78	15	HS dplm/eqv
3 Heavy and Tractor-Trailer Truck Drivers	71	5	HS dplm/eqv
4 First-Line Sprvrs of Retail Sales Wrkrs	59	17	HS dplm/eqv
5 Retail Sales	56	-8	less than HS
6 Exec Secretaries and Exec Admin Assts	44	3	HS dplm/eqv
7 Customer Service Representatives	42	-4	HS dplm/eqv
8 First-Line Sprvrs of Food Prep	41	13	HS dplm/eqv
9 First-Line Sprvrs Offc / Admin Spprt	35	1	HS dplm/eqv
10 Medical and Health Services Managers	33	-3	Bachelor's
11 Home Health Aides	31	1	less than HS
12 Physical Therapists	27	3	Doc or prof
13 Cooks, Restaurant	26	4	less than HS
14 Nursing Assts	26	6	PstScdry non award
15 Combined Food Prep , Including Fast Food	26	8	less than HS
16 Education Admins, Postsecondary	25	4	Master's
17 Teacher Assts	24	2	HS dplm/eqv
18 Personal Care Aides	24	-2	less than HS
19 Janitors and Cleaners, Except Maids	24	1	less than HS
20 Medical Secretaries	22	4	HS dplm/eqv
21 Insurance Sales Agents	22	14	HS dplm/eqv
22 Computer User Support Spclts	22	-5	Associate's
23 Light Truck or Delivery Services Drivers	21	0	HS dplm/eqv
24 Medical Assts	21	6	HS dplm/eqv
25 Social and Community Service Managers	21	4	Bachelor's

Employer demand for labor in Franklin/Hampshire averaged 2,536 job postings per month. Labor market performance in Franklin/Hampshire is slack to somewhat loose, with slightly less than three unemployed jobseekers and 50 employed potential job changers for every online job vacancy.

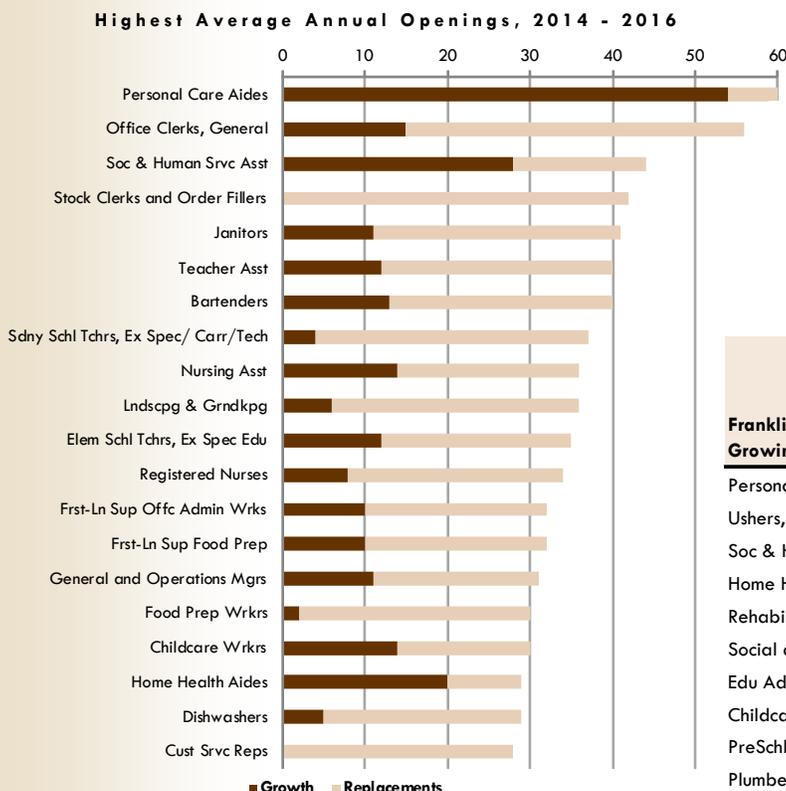
Labor market looseness in Franklin/Hampshire is likely influenced by comparatively lower employer demand in the WIA. However, Franklin/Hampshire boasts a low 5.2 unemployment rate and typical wage increases, suggesting that Franklin/Hampshire's labor market may less likely encompass broadscale mismatches between labor supply and employer demands.

The 25 occupations that employ the most Franklin/Hampshire residents include five STEM related occupations. Current demand for labor in the WIA indicates roughly the same degree of employer demand for STEM fields among the 25 most online advertised positions —STEM positions noted in bold.*

The majority of highly demanded Franklin/Hampshire occupations require a high school diploma or less.

Anticipated labor demand through 2016 suggests greater job growth in occupations catering to the elderly, with the most growth in home health/personal care aides; and social and human service assistants. At the same time, high replacement needs are anticipated for elementary and secondary school teachers, as current teachers are anticipated to retire and/or leave the field.

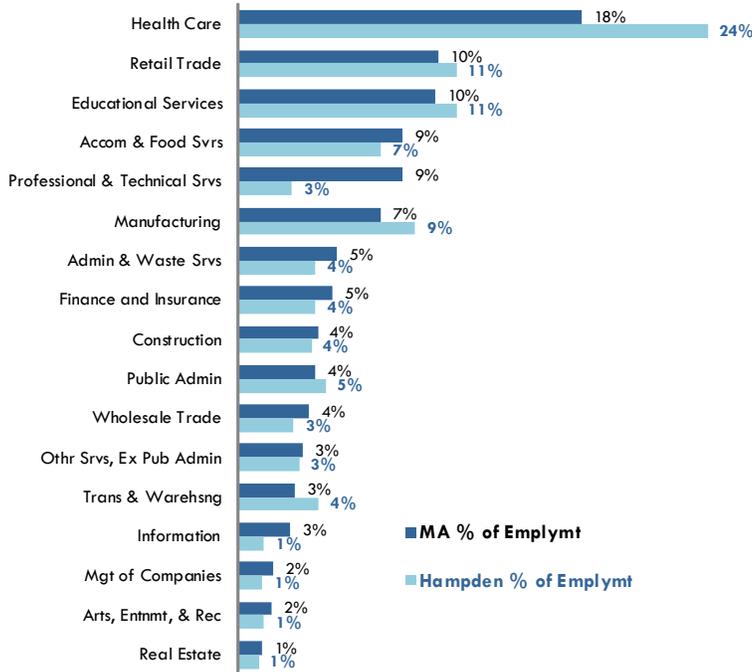
Projected Labor Demand 2016



Franklin/Hampshire 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Personal Care Aides	1,180	4.9%	60	9.0	1
Ushers, Lobby Attendants, and Ti	155	4.5%	16	0.6	45
Soc & Human Srvc Asst	748	4.0%	44	1.8	3
Home Health Aides	544	3.9%	29	2.2	18
Rehabilitation Counselors	274	3.7%	15	2.0	49
Social and Community Srvc Manc	292	3.2%	14	1.8	54
Edu Administrators, All Other	263	3.2%	14	1.3	55
Childcare Wrkrs	485	3.1%	30	0.9	17
PreSchl Teachers, Ex Spec Edu	486	2.9%	26	1.2	22
Plumbers, Pipefitters	416	2.9%	17	2.4	41

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.



2014 vs. 2013 Snapshot

Employment: 205,148	
Share of MA Employment: 6.1%	<u>Chg.</u>
Labor Force: 222,549	+1.0%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 7.8	-1.3
MA Statewide Unemployment Rate: 5.8	-0.9
Average Annual Wage: \$ 46,593	+ 3.2%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 2.5	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 29.5	
MA Unemployed S/D: 21.9	

Hampden County Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	5,320	\$ 72,342
2 Gen & Operations Mngrs	3,040	\$ 104,120
3 Heavy & Tractor-Trailer Truck Drivers	2,650	\$ 44,676
4 Teacher Asst	2,620	\$ 30,162
5 Nursing Asst	2,400	\$ 29,175
6 Labrs & Frght, Stck, Mtrl Movers	2,200	\$ 27,254
7 Elem Sch Tchrs, Ex Spec Edu	2,160	\$ 63,939
8 Personal Care Aides	2,050	\$ 23,732
9 Light Truck or Delivery Svcs Drivers	1,920	\$ 34,842
10 Maintenance & Repair Wrkrs, Gen	1,890	\$ 39,425
11 Team Assemblers	1,880	\$ 28,815
12 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	1,610	\$ 65,619
13 Medical Asst	1,560	\$ 35,565
14 Social & Human Service Asst	1,390	\$ 29,898
15 Bus Drivers, Sch or Spec Client	1,300	\$ 35,625
16 Accountants & Auditors	1,280	\$ 74,796
17 Home Health Aides	1,190	\$ 25,749
18 Lndscpng & Groundskeeping Wrkrs	1,180	\$ 29,703
19 First-Line Supervisors of Production & Op	1,160	\$ 58,389
20 Police & Sheriff's Patrol Officers	1,160	\$ 51,470
21 Construction Laborers	1,070	\$ 48,048
22 Middle Sch Tchrs, Ex SpEd/Carr/Tech	1,050	\$ 65,666
23 Firefighters	1,050	\$ 48,495
24 Amusement & Recreation Attendants	1,000	\$ 18,457
25 Machinists	980	\$ 44,594

Hampden County WIA, accounts for roughly **6% of all Commonwealth employment**. The economy is fueled by nearly a quarter of employment in *Healthcare*, as well as *employment concentrations stronger than the state in: Manufacturing; and Transportation and Warehousing*. Retail and Education employment are also slightly more prevalent in Hampden.

Over the year, the Hampden labor force remained nearly **unchanged**, with a modest 1% growth rate. Employment in the WIA advanced almost on par with the state, adding 4,772.

In spite of one of the healthiest unemployment rate decreases across the state, improving 1.3 points, the Hampden **unemployment rate, at 7.8, is the second highest statewide**.

Hampden mean wages rose a typical pace of 3.2%.

Hampden Highest Wage Occpnts Median Wage

1 Surgeons	\$ 196,568
2 Internists, Gen	\$ 193,349
3 Obstetricians & Gynecologists	\$ 190,928
4 Psychiatrists	\$ 183,310
5 Dentists, Gen	\$ 174,667
6 Chief Executives	\$ 166,713
7 Pediatricians, Gen	\$ 165,532
8 Family & Gen Practitioners	\$ 165,327
9 Law Tchrs, PostSandry	\$ 160,784
10 Architectural & Engineering Mngrs	\$ 140,675

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Hampden County Monthly Online Demand	Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1 Registered Nurses	476	70	Associate's
2 Heavy and Tractor-Trailer Truck Drivers	276	52	HS dplm/eqv
3 Retail Sales	181	-18	less than HS
4 First-Line Sprvrs of Retail Sales Wrkrs	168	14	HS dplm/eqv
5 Social and Human Service Assts	151	20	HS dplm/eqv
6 Medical and Health Services Managers	116	6	Bachelor's
7 Customer Service Representatives	114	22	HS dplm/eqv
8 Elementary School Tchrs, Exc Spec	103	12	Bachelor's
9 First-Line Sprvrs Offc / Admin Spprt	98	1	HS dplm/eqv
10 Physical Therapists	87	-23	Doc or prof
11 Computer User Support Spclts	86	6	Associate's
12 First-Line Sprvrs of Production and Op	82	15	PstScdry non award
13 Home Health Aides	81	11	less than HS
14 Sales Reps, Whlsl & Manuf, Ex Tech/Sci	77	-14	HS dplm/eqv
15 Scndry School Tchrs, Exc Spec & Crr/Tech	74	20	Bachelor's
16 Light Truck or Delivery Services Drivers	68	4	HS dplm/eqv
17 Lic Prctcl and Lic Voc Nurses	67	10	PstScdry non award
18 Exec Secretaries and Exec Admin Assts	66	-2	HS dplm/eqv
19 First-Line Sprvrs of Food Prep	65	8	HS dplm/eqv
20 Insurance Sales Agents	64	8	HS dplm/eqv
21 Maintenance and Repair Wrkrs, Gen	63	0	HS dplm/eqv
22 Bookkeeping, Accounting	63	-10	HS dplm/eqv
23 Accountants	63	1	Bachelor's
24 Nursing Assts	59	3	PstScdry non award
25 Mental Health & Sbstnc Abs Scl Wrkrs	55	8	Bachelor's

Employer demand for labor in Hampden averaged a healthy 6,958 job postings per month. In spite of healthy labor demand, Hampden's second highest statewide unemployment rate fueled its slack labor market performance, of roughly 2.5 unemployed jobseekers and 29.5 employed potential job changers for every advertised online job vacancy.

Hampden is one of four WIAs with mid-range employer labor demand and surpluses of labor supply. Combined with the area's pace of wage growth, the patterns in aggregate, suggest Hampden's labor market may encompass skill gaps.

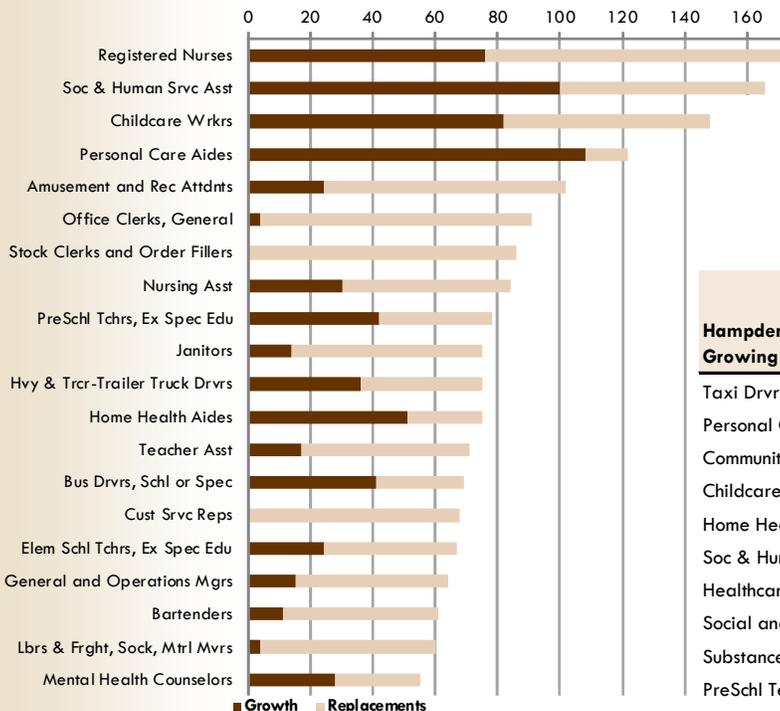
Just two of the 25 occupations that employ the most Hampden residents are in STEM fields; however current demand for labor indicates greater demand for STEM occupations in the WIA, with seven of the 25 most online advertised positions in STEM fields —STEM positions noted in bold.*

Minimum educational requirements for the 25 most highly demanded Hampden occupations skews toward high school or less, but also varies.

Anticipated labor demand through 2016 suggests greater job growth in occupations catering to the elderly, with the most growth in home health/personal care aides; and transportation for special clients and/or school students. Registered Nurses; social and human service assistants; childcare workers; and preschool teachers are anticipated to both create new jobs and have high replacement needs as current job holders retire and/or leave the fields.

Projected Labor Demand 2016

Highest Average Annual Openings, 2014 - 2016

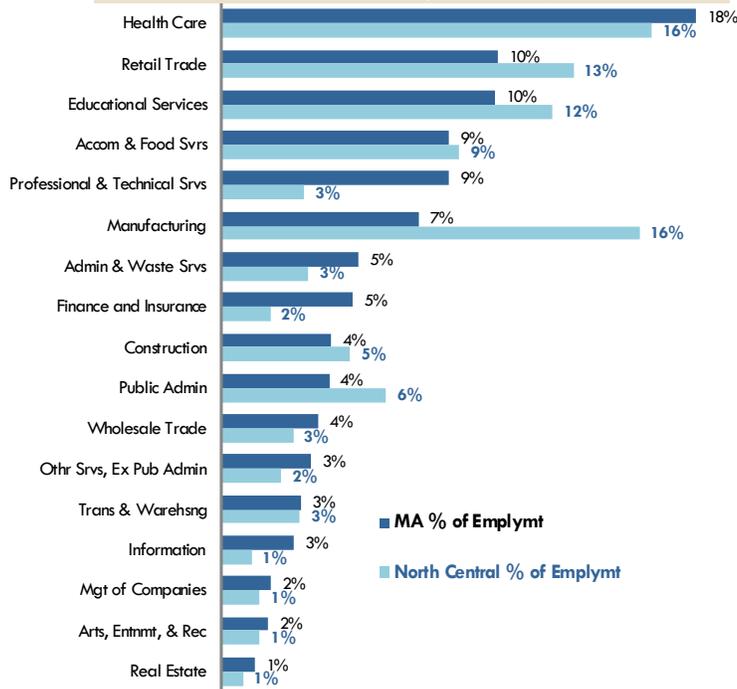


Hampden County 10 Fastest Growing	Projectd Emplmt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Taxi Drvrs and Chauffeurs	437	4.3%	22	4.5	73
Personal Care Aides	2,787	4.1%	122	7.7	4
Community and Social Srvc Spec	337	4.1%	21	1.6	75
Childcare Wrkrs	2,334	3.7%	148	1.2	3
Home Health Aides	1,460	3.7%	75	2.1	12
Soc & Human Srvc Asst	2,944	3.6%	166	1.5	2
Healthcare Social Wrkrs	702	3.5%	38	1.7	36
Social and Community Srvc Mngr	683	3.4%	34	1.8	44
Substance Abuse & Bhvrl Counslr	470	3.4%	24	1.7	66
PreSchl Teachers, Ex Spec Edu	1,371	3.3%	78	1.2	9

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014



NORTH CENTRAL WIA *20

2014 vs. 2013 Snapshot

Employment: 123,487	
Share of MA Employment: 3.7%	Chg.
Labor Force: 131,836	+1.2%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 6.3	-1.3
MA Statewide Unemployment Rate: 5.8	-0.9
Average Annual Wage: \$ 45,239	+ 2.0%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 3.0	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 44.2	
MA Unemployed S/D: 21.9	

North Central Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	1,470	\$ 82,095
2 Teacher Asst	1,390	\$ 27,029
3 Gen & Operations Mngrs	1,190	\$ 117,534
4 Scndry Sch Tchrs, Ex SpEd/Carr/Tech	1,040	\$ 67,503
5 Elem Sch Tchrs, Ex Spec Edu	1,000	\$ 67,461
6 Nursing Asst	860	\$ 28,583
7 Heavy & Tractor-Trailer Truck Drivers	770	\$ 43,269
8 Team Assemblers	690	\$ 32,890
9 Labrs & Frght, Stck, Mtrl Movers	690	\$ 29,619
10 First-Line Supervisors of Production & Op.	630	\$ 58,873
11 Molding, Coremaking & Casting Mach. O	620	\$ 34,670
12 Light Truck or Delivery Svcs Drivers	610	\$ 37,647
13 Lndscpng & Groundskeeping Wrkrs	600	\$ 31,958
14 Helpers--Production Wrkrs	600	\$ 24,899
15 Middle Sch Tchrs, Ex SpEd/Carr/Tech	590	\$ 67,375
16 Personal Care Aides	570	\$ 26,775
17 Firefighters	550	\$ 44,429
18 Correctional Officers & Jailers	500	\$ 63,867
19 Police & Sheriff's Patrol Officers	500	\$ 57,088
20 Social & Human Service Asst	490	\$ 33,136
21 Packers & Pckngs / Hndlrs	480	\$ 24,244
22 Packaging & Filling Mach. Oprs	480	\$ 27,031
23 Machinists	470	\$ 43,804
24 Maintenance & Repair Wrkrs, Gen	470	\$ 46,080
25 Healthcare Social Wrkrs	440	\$ 50,359

North Central Highest Wage

	Median Wage
1 Physicians & Surgeons, All Other	\$ 192,736
2 Family & Gen Practitioners	\$ 191,786
3 Dentists, All Other Specists	\$ 190,646
4 Chief Executives	\$ 177,635
5 Natural Sciences Mngrs	\$ 134,295
6 Marketing Mngrs	\$ 130,294
7 Dentists, Gen	\$ 128,587
8 Sales Mngrs	\$ 128,196
9 Pharmacists	\$ 116,505
10 Architectural & Engineering Mngrs	\$ 115,610

North Central County WIA is **one of the state's manufacturing centers**, with nearly a third of the WIA's employment split between *Manufacturing and Healthcare*. In addition to Manufacturing, the North Central WIA also has employment concentrations larger than the state in *Retail and Education*.

Annually, the North Central labor force expanded 1.2%, adding workers to the ranks of employed at the same pace as the state, picking up 3,022 workers, and **lowering the unemployment rate by a healthy 1.3 points**.

Yet, with an unemployment rate of 6.3, unemployment is more pronounced in North Central than most of the state.

Average wages in North Central are close to neighboring Franklin/Hampshire, the lowest mean wage WIA, and rose more slowly than most of the state.

With slightly higher volume than neighboring Franklin/Hampshire, online advertised **labor demand in North Central is lighter than most of the state**.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

North Central Monthly Online Demand	Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1 Registered Nurses	107	17	Associate's
2 Social and Human Service Assts	101	45	HS dplm/eqv
3 Retail Sales	82	5	less than HS
4 First-Line Sprvrs of Retail Sales Wrkrs	77	10	HS dplm/eqv
5 Heavy and Tractor-Trailer Truck Drivers	75	-3	HS dplm/eqv
6 First-Line Sprvrs of Production and Op	74	29	PstScdry non award
7 Maintenance and Repair Wrkrs, Gen	57	23	HS dplm/eqv
8 Customer Service Representatives	55	10	HS dplm/eqv
9 First-Line Sprvrs of Food Prep	46	12	HS dplm/eqv
10 Industrial Engineers	45	-6	Bachelor's
11 Helpers--Production Wrkrs	36	18	less than HS
12 Packaging & Flng Mach. Oprs	34	14	HS dplm/eqv
13 First-Line Sprvrs Offc / Admin Sprrt	32	4	HS dplm/eqv
14 Home Health Aides	29	5	less than HS
15 Teacher Assts	29	14	HS dplm/eqv
16 Physical Therapists	26	7	Doc or prof
17 Nursing Assts	26	-9	PstScdry non award
18 Medical and Health Services Managers	26	4	Bachelor's
19 Preschool Tchrs, Except Spec Education	25	11	Associate's
20 Janitors and Cleaners, Except Maids	24	7	less than HS
21 Mental Health & Sbstnc Abs Scl Wrkrs	24	3	Bachelor's
22 Bookkeeping, Accounting,	23	6	HS dplm/eqv
23 Combined Food Prep , Including Fast Food	23	4	less than HS
24 Exec Secretaries and Exec Admin Assts	23	2	HS dplm/eqv
25 Light Truck or Delivery Services Drivers	22	-1	HS dplm/eqv

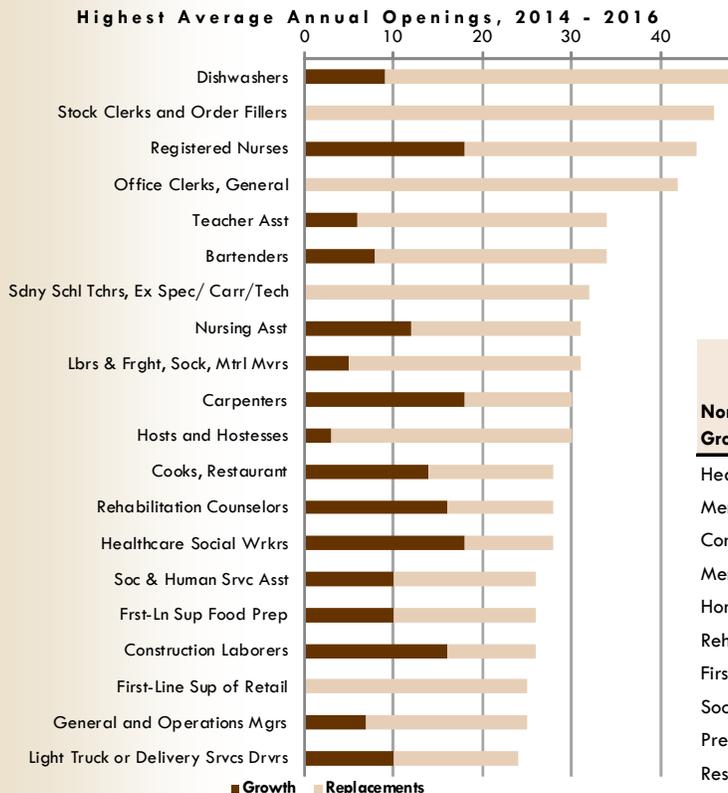
Employer demand for labor in North Central averaged 2,791 job postings per month. Labor market performance in North Central is among the loosest, with three unemployed jobseekers and 44 employed potential job changers for every advertised online job vacancy.

The area's lighter demand, high unemployment rate, and slower paced wage growth suggests that North Central's labor market looseness may be influenced more by light employer demand, than pronounced skill mismatches between labor supply and employer demands.

Only one of the 25 occupations that employ the most North Central residents are in STEM fields, while current labor demand indicates more employer demand in STEM fields, with five of the 25 most online advertised positions STEM occupations —STEM positions noted in bold.*

Minimum educational requirements for the 25 most highly demanded North Central occupations skews toward high school or less.

Projected Labor Demand 2016

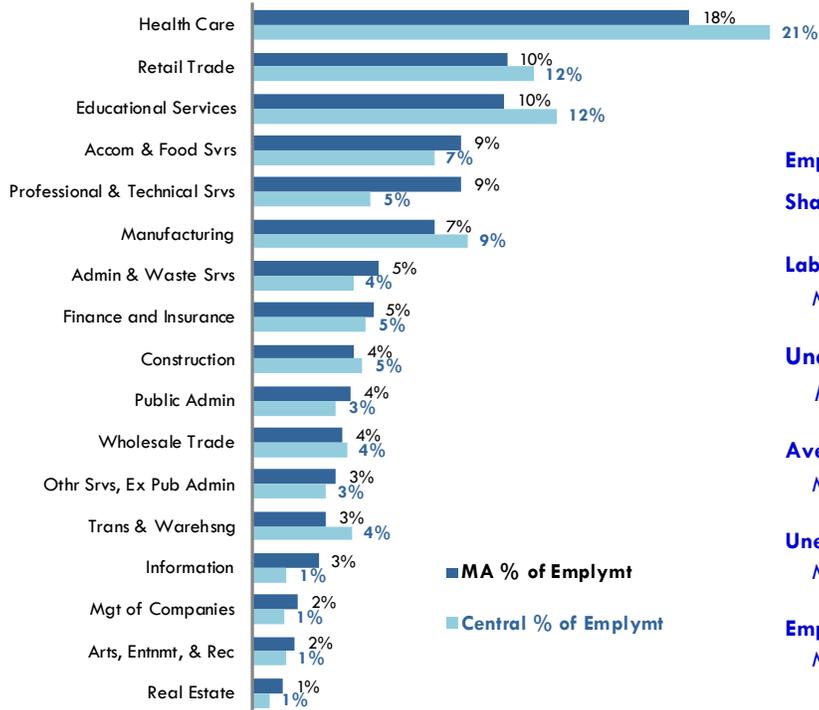


Anticipated labor demand through 2016 suggests greater job growth in construction labor; carpentry; healthcare social workers; and rehabilitation counselors. At the same time, Registered Nurses are anticipated to have high replacement needs as current job holders retire and/or leave nursing.

North Central 10 Fastest Growing	Project Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Healthcare Social Wrkrs	541	3.6%	28	1.8	14
Mental Health Counselors	222	3.6%	12	2.0	58
Construction Laborers	511	3.2%	26	1.6	17
Mental Hlth & Sub Soc Wrkrs	174	3.0%	9	1.3	76
Home Health Aides	226	2.8%	10	1.5	69
Rehabilitation Counselors	607	2.7%	28	1.3	13
First-Line Sup of Constrn Trd	359	2.5%	12	2.0	56
Social and Community Srvc Mngr	239	2.4%	10	1.5	68
PreSchl Teachers, Ex Spec Edu	328	2.4%	16	1.0	44
Residential Advisors	197	2.4%	12	0.5	59

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.



2014 vs. 2013 Snapshot

Employment: 288,436	
Share of MA Employment: 8.6%	<u>Chg.</u>
Labor Force: 307,040	+1.5%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 6.1	-1.0
MA Statewide Unemployment Rate: 5.8	-.9
Average Annual Wage: \$ 51,772	+ 2.0%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 1.7	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 26.1	
MA Unemployed S/D: 21.9	

Central MA Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	7,090	\$ 89,817
2 Nursing Asst	4,860	\$ 30,452
3 Gen & Operations Mngrs	4,620	\$ 117,829
4 Labrs & Frght, Stck, Mtrl Movers	3,550	\$ 31,299
5 Teacher Asst	3,240	\$ 28,570
6 Elem Sch Tchrs, Ex Spec Edu	2,650	\$ 66,235
7 Heavy & Tractor-Trailer Truck Drivers	2,400	\$ 50,306
8 Personal Care Aides	2,350	\$ 26,030
9 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	2,200	\$ 68,912
10 Light Truck or Delivery Svcs Drivers	2,170	\$ 37,794
11 Accountants & Auditors	2,080	\$ 75,308
12 Police & Sheriff's Patrol Officers	1,940	\$ 59,577
13 Social & Human Service Asst	1,850	\$ 33,560
14 Lndscpng & Groundskeeping Wrkrs	1,830	\$ 33,262
15 Lic Prctcl & Lic Voc Nurses	1,770	\$ 54,435
16 Maintenance & Repair Wrkrs, Gen	1,760	\$ 42,904
17 Financial Analysts	1,670	\$ 86,815
18 Team Assemblers	1,650	\$ 30,103
19 Automotive Service Technicians & Mechar	1,600	\$ 41,917
20 Claims Adjstrs, Examnrs, & Invstgrs	1,600	\$ 67,909
21 Middle Sch Tchrs, Ex SpEd/Carr/Tech	1,450	\$ 67,000
22 Construction Laborers	1,310	\$ 46,046
23 Packers & Pckngs / Hndlrs	1,270	\$ 21,144
24 Financial Mngrs	1,270	\$ 111,992
25 Healthcare Social Wrkrs	1,260	\$ 54,302

Central MA WIA accounts for more than 8.5% of all Commonwealth employment.

Healthcare and Education dominate Central MA, along with employment concentrations greater than the state in: Manufacturing; and Transportation and Warehousing.

The Central MA labor force expanded by 1.5% annually, adding to employment faster than the state, gaining 7,373 workers, and improving the area's unemployment rate by a full point, to 6.1.

Mean wages in Central are the fourth highest outside of the three greater Boston metropolitan area WIAs. Over the year, wages rose at a slower pace than most of the state.

With the most robust employer demand for labor outside of the three greater Boston metropolitan area WIAs, labor market performance in Central MA is also tighter than every WIA but the greater Boston area WIAs.

Central MA Highest Wage Occptns Median Wage

1 Anesthesiologists	\$ 208,000
2 Surgeons	\$ 194,388
3 Chief Executives	\$ 192,063
4 Family & Gen Practitioners	\$ 191,465
5 Pediatricians, Gen	\$ 185,347
6 Dentists, Gen	\$ 170,061
7 Podiatrists	\$ 169,948
8 Physicians & Surgeons, All Other	\$ 163,688
9 Nurse Anesthetists	\$ 163,059
10 Obstetricians & Gynecologists	\$ 154,717

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Central MA Monthly Online Demand	Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1 Registered Nurses	552	19	Associate's
2 Heavy and Tractor-Trailer Truck Drivers	379	92	HS dplm/eqv
3 Customer Service Representatives	302	50	HS dplm/eqv
4 Social and Human Service Assts	296	103	HS dplm/eqv
5 Retail Sales	267	-2	less than HS
6 First-Line Sprvrs of Retail Sales Wrkrs	262	55	HS dplm/eqv
7 First-Line Sprvrs Offc / Admin Spprt	167	32	HS dplm/eqv
8 Sales Reps, Whlsl & Manuf, Ex Tech/Sci	138	-10	HS dplm/eqv
9 Exec Secretaries and Exec Admin Assts	137	27	HS dplm/eqv
10 Medical and Health Services Managers	130	18	Bachelor's
11 First-Line Sprvrs of Production and Op	128	31	PstScdry non award
12 Light Truck or Delivery Services Drivers	127	23	HS dplm/eqv
13 Maintenance and Repair Wrkrs, Gen	120	26	HS dplm/eqv
14 Computer User Support Spclts	117	-4	Associate's
15 First-Line Sprvrs of Food Prep	117	19	HS dplm/eqv
16 Industrial Engineers	116	16	Bachelor's
17 Insurance Sales Agents	104	16	HS dplm/eqv
18 Bookkeeping, Accounting	101	11	HS dplm/eqv
19 Home Health Aides	100	-2	less than HS
20 Office Clerks, Gen	88	37	HS dplm/eqv
21 Marketing Managers	87	13	Bachelor's
22 Accountants	85	-9	Bachelor's
23 Physical Therapists	85	-4	Doc or prof
24 Software Developers, Applications	85	-2	Bachelor's
25 Sales Representatives, Services, All Other	84	12	HS dplm/eqv

Employer demand for labor in Central MA averaged 11,056 job postings per month. Central's labor market performance is tighter than most of the state, with just 1.7 unemployed jobseekers and 26.1 employed potential job changers for every advertised online job vacancy.

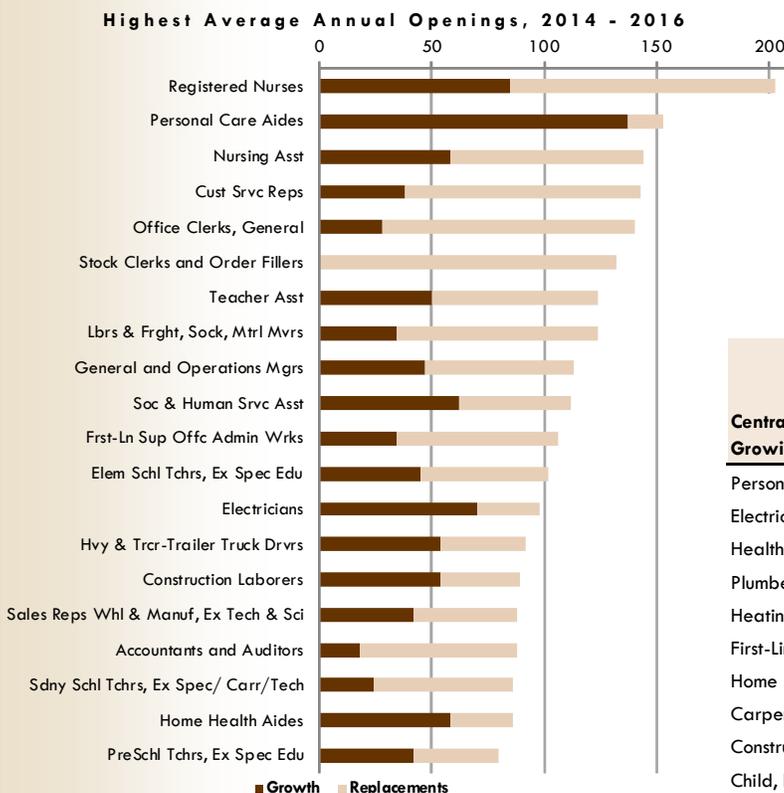
Healthy employer demand, along with somewhat higher unemployment, and slower paced wage increases, in aggregate portend sufficient skilled labor supply to meet employer demands, however, the trends do not preclude pockets of industry/occupational specific skill imbalances.

STEM related occupations are prevalent among the 25 occupations that employ the most Central MA residents, as well as among current employer demand, with nine of the 25 most online advertised positions in STEM fields —STEM positions noted in bold.*

Minimum educational requirements for the 25 most highly demanded Central MA occupations skews toward high school, but also varies.

Anticipated labor demand through 2016 suggests greater job growth in occupations catering to the elderly, with the most growth in home health/personal care aides; and social and human services assistants; as well as Electricians. Registered Nurses; and elementary and preschool teachers are anticipated to both create new jobs and have high replacement needs as current job holders retire and/or leave the fields.

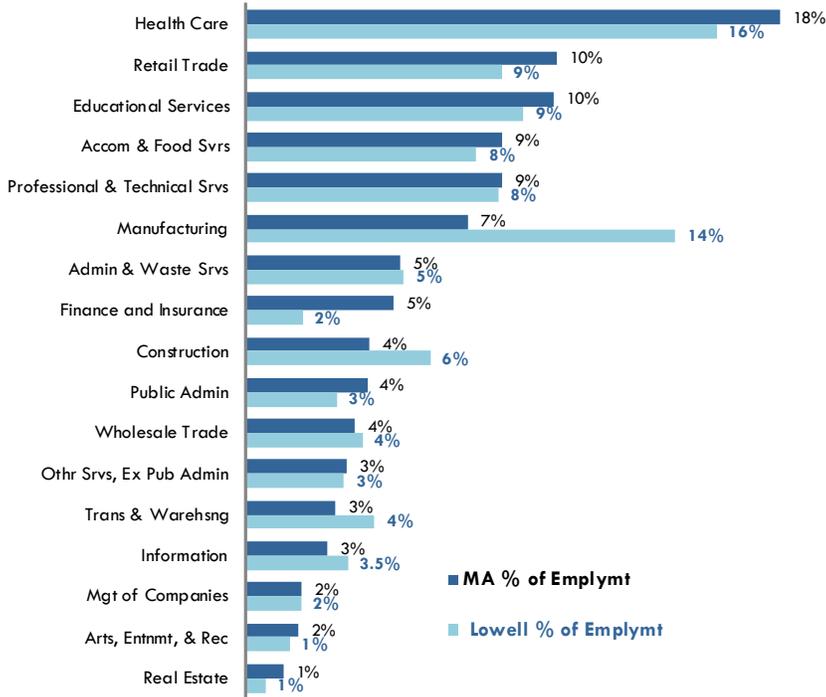
Projected Labor Demand 2016



Central MA 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Personal Care Aides	3,164	4.6%	153	8.6	2
Electricians	1,699	4.4%	98	2.5	13
Health SpecTchers, Pstsecond	685	3.9%	34	2.8	57
Plumbers, Pipefitters	692	3.8%	33	3.1	58
Heating, Air Cond, Ref Mech	673	3.8%	40	1.5	49
First-Line Sup of Constrn Trd	830	3.6%	37	3.1	53
Home Health Aides	1,743	3.5%	86	2.1	19
Carpenters	1,407	3.2%	60	2.8	30
Construction Laborers	1,775	3.2%	89	1.5	15
Child, Family, & Schl Soc Wrkrs	1,022	3.1%	50	1.5	40

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.



2014 vs. 2013 Snapshot

Employment: 140,073	
Share of MA Employment: 4.2%	<i>Chg.</i>
Labor Force: 148,990	+1.4%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 6.0	-1.1
MA Statewide Unemployment Rate: 5.8	-0.9
Average Annual Wage: \$ 63,865	+3.6%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 2.0	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 31.5	
MA Unemployed S/D: 21.9	

Lowell Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	2,150	\$ 78,201
2 Gen & Operations Mngrs	2,000	\$ 133,262
3 Labrs & Frght, Stck, Mtrl Movers	1,840	\$ 28,706
4 Nursing Asst	1,570	\$ 28,608
5 Software Developers, Syst Software	1,380	\$ 117,984
6 Heavy & Tractor-Trailer Truck Drivers	1,360	\$ 49,245
7 Teacher Asst	1,290	\$ 26,553
8 Electricians	1,230	\$ 55,375
9 Personal Care Aides	1,210	\$ 26,970
10 Security Guards	1,190	\$ 26,761
11 Elem Sch Tchrs, Ex Spec Ed	1,080	\$ 65,803
12 Accountants & Auditors	1,080	\$ 76,061
13 Software Developers, Applications	1,020	\$ 109,658
14 Team Assemblers	930	\$ 31,485
15 Light Truck or Delivery Svcs Drivers	900	\$ 45,831
16 Construction Laborers	890	\$ 51,844
17 Maintenance & Repair Wrkrs, Gen	870	\$ 45,630
18 Sndry Sch Tchrs, Ex SpEd/Carr/Tech	860	\$ 67,318
19 Lic Prctcl & Lic Voc Nurses	840	\$ 57,428
20 Computer User Support Specists	760	\$ 61,893
21 Substitute Tchrs	720	\$ 23,730
22 Computer Syst Analysts	710	\$ 91,395
23 Middle Sch Tchrs, Ex SpEd/Carr/Tech	680	\$ 65,133
24 Financial Mngrs	670	\$ 135,893
25 Machinists	630	\$ 50,859

The Greater Lowell WIA is the state's **second leading manufacturing center**, claiming 14% of local employment, making Lowell manufacturing employment twice the size of the industry's statewide proportion.

The statewide leading employment industries, *Healthcare* and *Education*, at 16% and 9% respectively, are also principal Lowell employers. Concurrently, employment concentrations greater than the state exist in: *Construction*; and *Transportation and Warehousing*.

Annually, the Lowell WIA labor force expanded at the same pace as the state, 1.4%, while adding 3,522 to employment, and lowering the unemployment rate 1.1 points to 6.0.

Also of note, **Lowell has the highest mean wage outside of the three greater Boston area WIAs**. Wages rose a typical pace of 3.6%

Lowell Highest Wage Occptns

	Median Wage
1 Internists, Gen	\$ 208,165
2 Oral & Maxillofacial Surgeons	\$ 196,568
3 Chief Executives	\$ 195,038
4 Psychiatrists	\$ 193,274
5 Physicians & Surgeons, All Other	\$ 191,996
6 Pediatricians, Gen	\$ 191,596
7 Sales Mngrs	\$ 156,965
8 Dentists, Gen	\$ 151,123
9 Architectural & Engineering Mngrs	\$ 147,560
10 Computer & Information Syst Mngrs	\$ 141,555

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Lowell Monthly Online Demand	Avg mos. HWOL Ads	Chg	
		Lvl vs 2013	Education
1 Software Developers, Applications	220	19	Bachelor's
2 Registered Nurses	115	25	Associate's
3 Marketing Managers	111	21	Bachelor's
4 Industrial Engineers	108	-3	Bachelor's
5 Heavy and Tractor-Trailer Truck Drivers	95	-14	HS dplm/eqv
6 Network and Computer Systems Admins	94	-19	Bachelor's
7 Customer Service Representatives	80	9	HS dplm/eqv
8 Computer User Support Spclts	79	15	Associate's
9 Software Developers, Systems Software	76	7	Bachelor's
10 Computer Systems Analysts	73	25	Bachelor's
11 First-Line Sprvrs Offc / Admin Spprt	67	12	HS dplm/eqv
12 Accountants	66	9	Bachelor's
13 Social and Human Service Assts	62	27	HS dplm/eqv
14 First-Line Sprvrs of Retail Sales Wrkrs	59	13	HS dplm/eqv
15 Sftwr Quality Assrnc Engineers & Tstrs	55	0	Associate's
16 Information Technology Project Managers	51	23	Associate's
17 Exec Secretaries and Exec Admin Assts	49	12	HS dplm/eqv
18 Retail Sales	49	8	less than HS
19 Electrical Engineers	48	4	Bachelor's
20 Sales Reps, Whlsl & Manuf, Ex Tech/Sci	46	6	HS dplm/eqv
21 Medical Scientists, Except Epidemiologists	45	-26	Doc or prof
22 Light Truck or Delivery Services Drivers	44	17	HS dplm/eqv
23 Computer Systems Engineers/Architects	44	17	Associate's
24 Maintenance and Repair Wrkrs, Gen	43	10	HS dplm/eqv
25 Sales Managers	42	10	Bachelor's

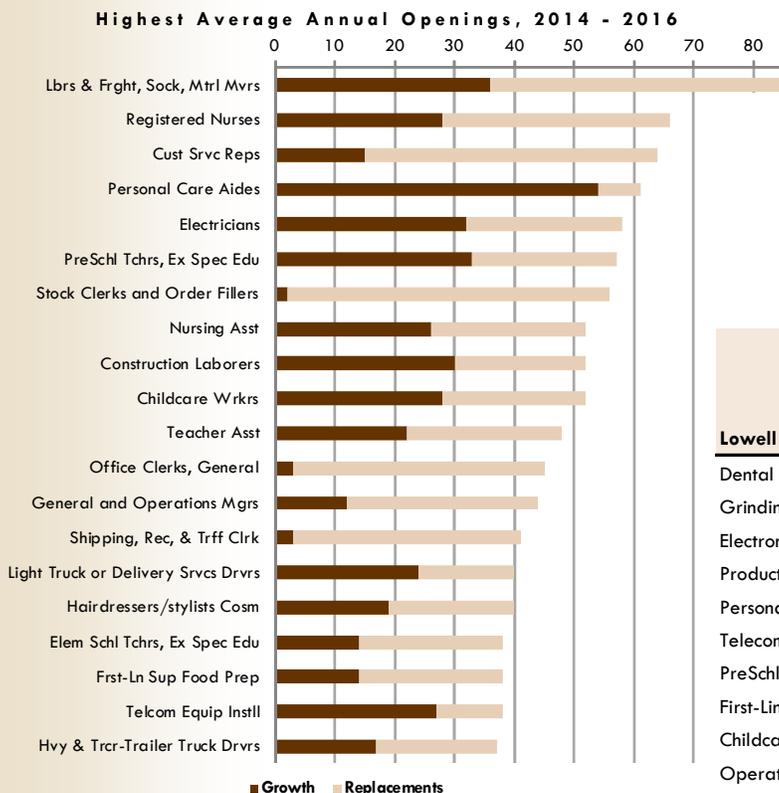
Employer demand for labor in Lowell averaged a healthy 4,445 job postings per month. Lowell's labor market performance is tighter than most of the state, with two unemployed jobseekers and 31.5 employed potential job changers for every advertised online job vacancy.

Combined, the area's relatively higher unemployment rate and typically paced wage growth thus far portend sufficient skilled labor supply to meet employer demands. However, the aggregate trends do not preclude pockets of industry/occupational specific skill imbalances.

STEM occupations are prevalent among the 25 occupations that employ the most Lowell residents, while current labor demand indicates even greater employer demand in STEM fields, with twice as many STEM occupations among the 25 most online advertised positions —STEM positions noted in bold.*

Minimum educational requirements for the 25 most highly demanded Lowell occupations tend to require college degrees, ranging from an Associate's to Doctorate.

Projected Labor Demand 2016

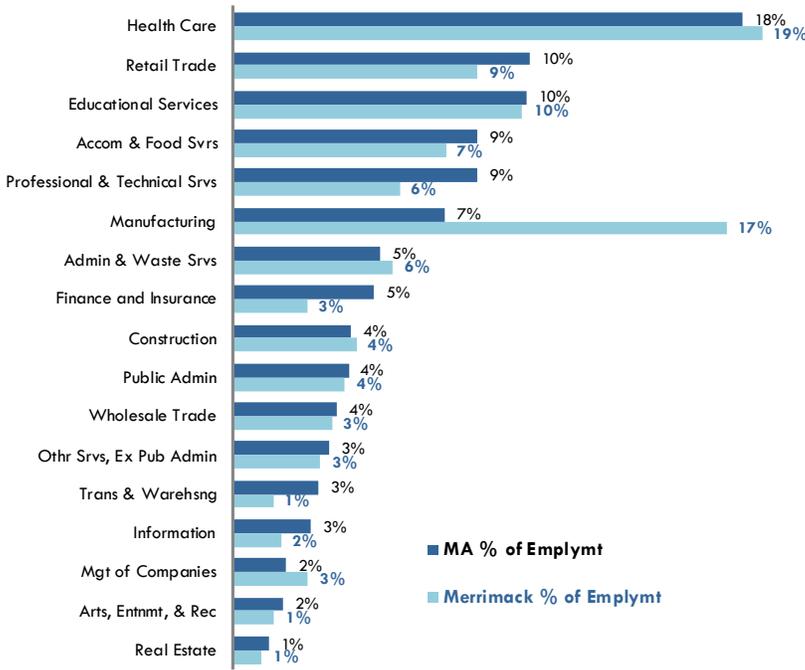


Anticipated labor demand through 2016 suggests greater job growth in personal care aides; preschool teachers; construction laborers; and telecommunications equipment installers. Laborers and freight stock materials movers; Registered Nurses; Electricians; and hairdressers, stylists, and Cosmetologists are anticipated to both create new jobs and have high replacement needs as current job holders retire and/or leave the fields.

Lowell 10 Fastest Growing	Project Emplmt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Dental Laboratory Technicians	180	21.5%	33	7.3	28
Grinding, Lapping, Polishing, anc	136	11.7%	16	7.0	68
Electromechanical Equipment Ass	465	6.2%	32	4.3	31
Production Wrkrs, All Other	234	5.1%	17	1.8	63
Personal Care Aides	1,421	4.1%	61	7.7	4
Telecommunications Equipment In	727	3.9%	38	2.5	19
PreSchl Teachers, Ex Spec Edu	958	3.6%	57	1.4	6
First-Line Sup of Helpers, Labore	242	3.5%	14	1.3	75
Childcare Wrkrs	873	3.4%	52	1.2	10
Operating Engineers and Other	571	3.2%	30	1.5	35

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.



2014 vs. 2013 Snapshot

Employment: 166,110	
Share of MA Employment: 5.0%	Chg.
Labor Force: 177,718	+1.1%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 6.5	-1.2
MA Statewide Unemployment Rate: 5.8	-0.9
Average Annual Wage: \$ 58,021	+ 3.4%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 2.6	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 37.2	
MA Unemployed S/D: 21.9	

Merrimack Valley Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	3,250	\$ 78,459
2 Gen & Operations Mngrs	2,690	\$ 137,820
3 Nursing Asst	2,130	\$ 28,567
4 Teacher Asst	1,860	\$ 31,447
5 Scndry Sch Tchrs, Ex SpEd/Carr/Tech	1,600	\$ 68,173
6 Packaging & Filling Mach. Oprs	1,510	\$ 33,070
7 Packers & Pckngs / Hndlrs	1,360	\$ 22,255
8 Elem Sch Tchrs, Ex Spec Edu	1,310	\$ 68,832
9 Software Developers, Syst Software	1,260	\$ 113,476
10 Inspectors, Tstrs, Srtrs, Smplr & Wghrs	1,220	\$ 47,254
11 Computer User Support Specists	1,220	\$ 67,268
12 Labrs & Frght, Stck, Mtrl Movers	1,180	\$ 31,756
13 Lic Prctcl & Lic Voc Nurses	1,130	\$ 55,216
14 Accountants & Auditors	1,130	\$ 80,579
15 Electrical & Electronic Eqpmnt Assmblrs	1,100	\$ 43,267
16 Industrial Engineers	1,080	\$ 104,813
17 Middle Sch Tchrs, Ex SpEd/Carr/Tech	1,010	\$ 67,969
18 Maintenance & Repair Wrkrs, Gen	940	\$ 42,806
19 Team Assemblrs	920	\$ 31,584
20 First-Line Supervisors of Production & Op	890	\$ 62,308
21 Personal Care Aides	860	\$ 24,887
22 Home Health Aides	840	\$ 27,639
23 Financial Mngrs	820	\$ 122,604
24 Lndscpng & Groundskeeping Wrkrs	800	\$ 29,790
25 Software Developers, Applications	770	\$ 110,447

Merrimack Valley Highest Wage

	Median Wage
1 Physicians & Surgeons, All Other	\$ 201,737
2 Surgeons	\$ 196,568
3 Natural Sciences Mngrs	\$ 192,905
4 Chief Executives	\$ 192,497
5 Pediatricians, Gen	\$ 191,311
6 Sales Mngrs	\$ 152,731
7 Architectural & Engineering Mngrs	\$ 141,732
8 Electronics Engineers, Ex Computer	#
9 Computer & Information Syst Mngrs	\$ 136,305
10 Marketing Mngrs	\$ 133,863

The Lower Merrimack Valley WIA (—along with neighboring Greater Lowell) is the state's **chief manufacturing hub**, with slightly more than a third of employment roughly split between *Manufacturing* and *Healthcare*.

Over the year, the Merrimack labor force expanded more slowly than the state, growing 1.1%, while adding 3,890 to employment.

The area's **unemployment rate improved** a healthy 1.2 points versus a year ago. Yet, at 6.5, the **Merrimack unemployment rate** is tied with the Berkshire WIA for the **fourth highest in the state**. However, the Merrimack labor market is more than twice the size of the Berkshire's.

Moreover, **Merrimack is the only WIA other than Boston and Metro North to have continually expanded its labor force since 2007, and added to employment since 2010.**

Mean wages in Merrimack are among the highest in the state and rose a typical pace of 3.4% over the year.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Merrimack Valley Monthly Online Demand		Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1	Registered Nurses	251	16	Associate's
2	Network and Computer Systems Admins	86	37	Bachelor's
3	Social and Human Service Assts	81	23	HS dplm/eqv
4	Customer Service Representatives	74	7	HS dplm/eqv
5	Software Developers, Applications	73	7	Bachelor's
6	Industrial Engineers	73	-11	Bachelor's
7	Heavy and Tractor-Trailer Truck Drivers	68	-16	HS dplm/eqv
8	Marketing Managers	68	3	Bachelor's
9	Medical and Health Services Managers	61	12	Bachelor's
10	Computer User Support Spclts	60	4	Associate's
11	First-Line Sprvrs of Retail Sales Wrkrs	60	1	HS dplm/eqv
12	Accountants	60	-1	Bachelor's
13	First-Line Sprvrs Offc / Admin Spprt	56	2	HS dplm/eqv
14	First-Line Sprvrs of Food Prep	53	12	HS dplm/eqv
15	Physical Therapists	52	-33	Doc or prof
16	Management Analysts	52	35	Bachelor's
17	Computer Systems Analysts	49	9	Bachelor's
18	Nursing Assts	48	16	PstScdry non award
19	Exec Secretaries and Exec Admin Assts	47	4	HS dplm/eqv
20	Retail Sales	46	-1	less than HS
21	Bookkeeping, Accounting	45	7	HS dplm/eqv
22	Elementary School Tchrs, Exc Spec	44	9	Bachelor's
23	Scondry School Tchrs, Exc Spec & Crr/Tech	44	13	Bachelor's
24	Maintenance and Repair Wrkrs, Gen	42	-4	HS dplm/eqv
25	First-Line Sprvrs of Production and Op	41	-10	PstScdry non award

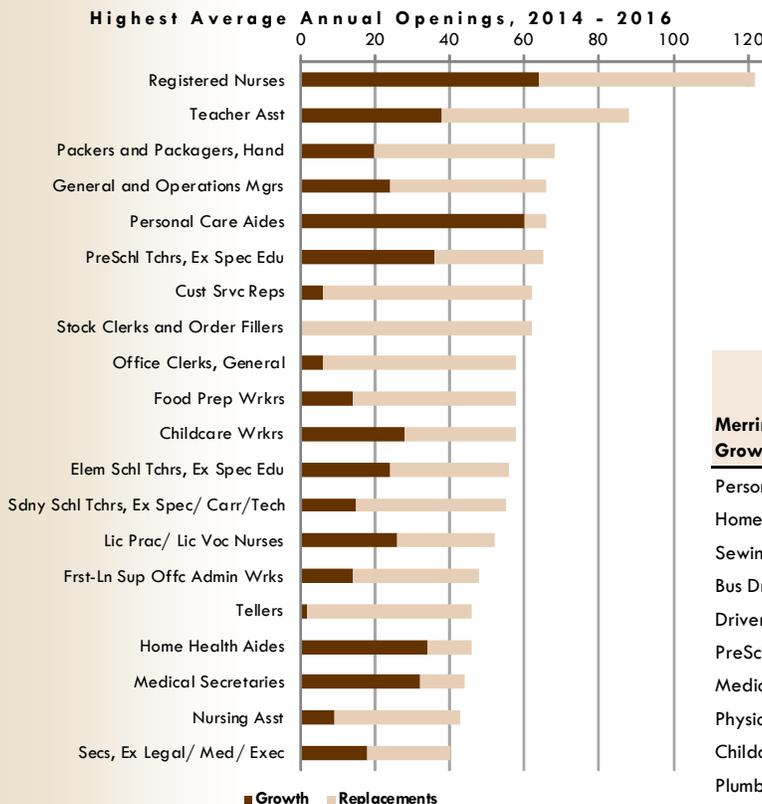
Employer labor demand in Merrimack is comparable to neighboring Lowell, averaging 4,471 job postings per month. In relation to Lowell, Merrimack's .5 of a point higher unemployment rate and larger labor force fueled its slack labor market performance, with 2.6 unemployed jobseekers and 37.2 employed potential job changers for every advertised online job vacancy.

Merrimack is one of four WIAs with mid-range employer labor demand and surpluses of labor supply. Combined with the area's pace of wage growth, the trends in aggregate, suggest Merrimack's labor market may encompass skill gaps.

STEM related occupations are prevalent among the 25 occupations that employ the most Merrimack residents, as well as among current employer demand, with 12 of the 25 most online advertised positions in STEM fields —STEM positions noted in bold.*

Minimum educational requirements for the 25 most highly demanded Merrimack occupations tend to require college degrees, ranging from an Associate's to Doctorate.

Projected Labor Demand 2016



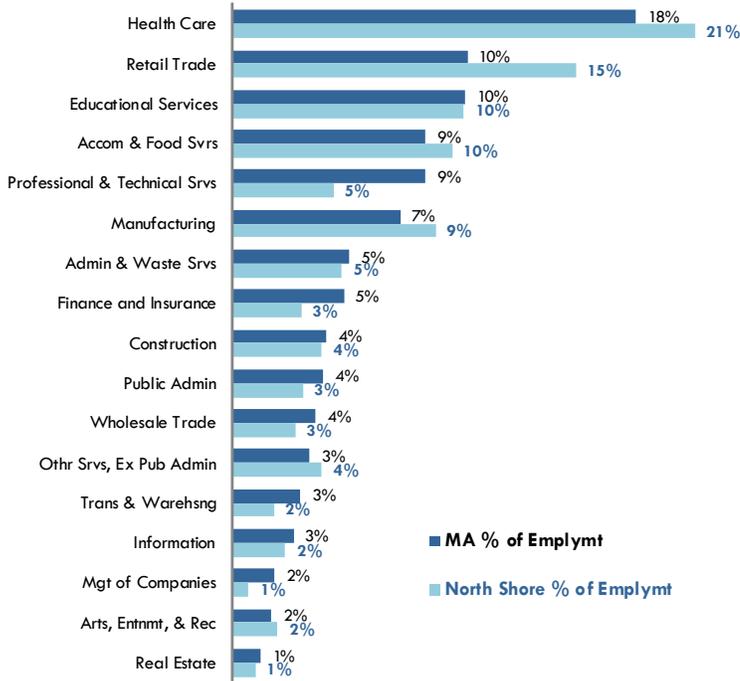
Anticipated labor demand through 2016 suggests greater job growth in home health/personal care aides; preschool teachers; and medical secretaries. Registered Nurses; and Licensed Practical and Licensed Vocational Nurses are anticipated to both create new jobs and have high replacement needs as current job holders retire and/or leave nursing.

Merrimack Valley 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Personal Care Aides	1,208	5.4%	66	10.0	5
Home Health Aides	713	5.1%	46	2.8	17
Sewing Machine Operators	563	4.8%	28	8.3	40
Bus Drvrs, Schl or Spec	767	3.5%	38	2.2	22
Driver/Sales Wrkrs	493	3.4%	23	2.3	53
PreSchl Teachers, Ex Spec Edu	1,121	3.4%	65	1.2	6
Medical Secretaries	1,037	3.2%	44	2.7	18
Physical Therapists	395	3.0%	21	1.3	60
Childcare Wrkrs	974	3.0%	58	0.9	11
Plumbers, Pipefitters	632	2.9%	26	2.3	46

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014



NORTH SHORE WIA *20

2014 vs. 2013 Snapshot

Employment: 213,026

Share of MA Employment: 6.4%

Chg.

Labor Force: 225,483

+1.4%

MA Labor Force: 3,557,500

+1.4%

Unemployment Rate: 5.5

-.9

MA Statewide Unemployment Rate: 5.8

-.9

Average Annual Wage: \$ 50,463

+ 2.4%

MA Average Wage: \$ 64,157

+3.8%

Unemployed Labor Supply/Online Demand:[^] 2.4

MA Unemployed S/D: 1.3

Employed Labor Supply/Online Demand:[^] 41.4

MA Unemployed S/D: 21.9

North Shore Top 25 Occupations

	Emplymt	Avg Wage
1 Registered Nurses	4,090	\$ 76,679
2 Gen & Operations Mngrs	3,340	\$ 124,389
3 Home Health Aides	2,900	\$ 25,338
4 Teacher Asst	2,700	\$ 29,439
5 Nursing Asst	2,630	\$ 30,581
6 Personal Care Aides	2,230	\$ 26,318
7 Social & Human Service Asst	2,150	\$ 31,649
8 Team Assemblers	1,800	\$ 29,601
9 Elem Sch Tchrs, Ex Spec Edu	1,700	\$ 67,344
10 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	1,600	\$ 69,118
11 Labrs & Frght, Stck, Mtrl Movers	1,450	\$ 33,761
12 Middle Sch Tchrs, Ex SpEd/Carr/Tech	1,370	\$ 67,682
13 Lndscpng & Groundskeeping Wrkrs	1,310	\$ 33,117
14 Automotive Service Technicians & Mechar	1,220	\$ 46,387
15 Maintenance & Repair Wrkrs, Gen	1,160	\$ 43,744
16 Packers & Pckngs / Hndlr	1,100	\$ 23,158
17 Accountants & Auditors	1,090	\$ 73,180
18 Lic Pretcl & Lic Voc Nurses	1,070	\$ 58,954
19 Heavy & Tractor-Trailer Truck Drivers	1,060	\$ 54,298
20 Medical Asst	1,010	\$ 36,350
21 Hairdressers, Hairstylists, & Cosmetologis	970	\$ 35,067
22 Police & Sheriff's Patrol Officers	920	\$ 59,474
23 Construction Laborers	900	\$ 43,191
24 Light Truck or Delivery Svcs Drivers	890	\$ 43,631
25 Fitness Trainers & Aerobics Instructors	880	\$ 42,116

North Shore Highest Wage Occpntns

	Median Wage
1 Surgeons	\$ 208,000
2 Dentists, All Other Specists	\$ 194,388
3 Internists, Gen	\$ 193,860
4 Pediatricians, Gen	\$ 193,261
5 Family & Gen Practitioners	\$ 192,055
6 Obstetricians & Gynecologists	\$ 191,967
7 Physicians & Surgeons, All Other	\$ 191,176
8 Chief Executives	\$ 185,781
9 Psychiatrists	\$ 172,657
10 Natural Sciences Mngrs	\$ 144,115

Led by *Healthcare*; and *Retail*, two-thirds of North Shore employment is concentration in those two industries, along with: *Education*; *Accommodations and Food Services*; and *Manufacturing*.

Over the year, the North Shore labor force expanded at the same pace as the state, adding 4,775 to employment. The pace of improvement in the unemployment rate was also on par with the state's, dropping .9 of a point to 5.5, the **second lowest unemployment rate outside of the three greater Boston area WIAs**.

At the same time, wages in the North Shore advanced more slowly than all but Metro South/West, the two Central region, and Brockton WIAs.

The **North Shore is the only WIA other than Boston and Metro North to have added to employment every year since 2008**.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

[^] Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

North Shore Monthly Online Demand		Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1	Retail Sales	252	-22	less than HS
2	Registered Nurses	249	-13	Associate's
3	First-Line Sprvrs of Retail Sales Wrkrs	225	14	HS dplm/eqv
4	Social and Human Service Assts	108	24	HS dplm/eqv
5	Customer Service Representatives	102	12	HS dplm/eqv
6	First-Line Sprvrs of Food Prep	91	5	HS dplm/eqv
7	Industrial Engineers	87	-4	Bachelor's
8	Home Health Aides	79	16	less than HS
9	Heavy and Tractor-Trailer Truck Drivers	78	9	HS dplm/eqv
10	First-Line Sprvrs Offc / Admin Spprt	75	8	HS dplm/eqv
11	Physical Therapists	62	-11	Doc or prof
12	Accountants	61	-10	Bachelor's
13	Sales Agents, Financial Services	57	27	Bachelor's
14	Medical and Health Services Managers	55	-3	Bachelor's
15	Bookkeeping, Accounting	54	6	HS dplm/eqv
16	Combined Food Prep , Including Fast Food	52	13	less than HS
17	Exec Secretaries and Exec Admin Assts	52	-1	HS dplm/eqv
18	Computer User Support Spclts	51	5	Associate's
19	Light Truck or Delivery Services Drivers	49	17	HS dplm/eqv
20	Maintenance and Repair Wrkrs, Gen	48	9	HS dplm/eqv
21	Software Developers, Applications	46	-18	Bachelor's
22	Marketing Managers	46	0	Bachelor's
23	First-Line Sprvrs of Production and Op	44	1	PstScdry non award
24	Cooks, Restaurant	43	2	less than HS
25	Waiters and Waitresses	43	4	less than HS

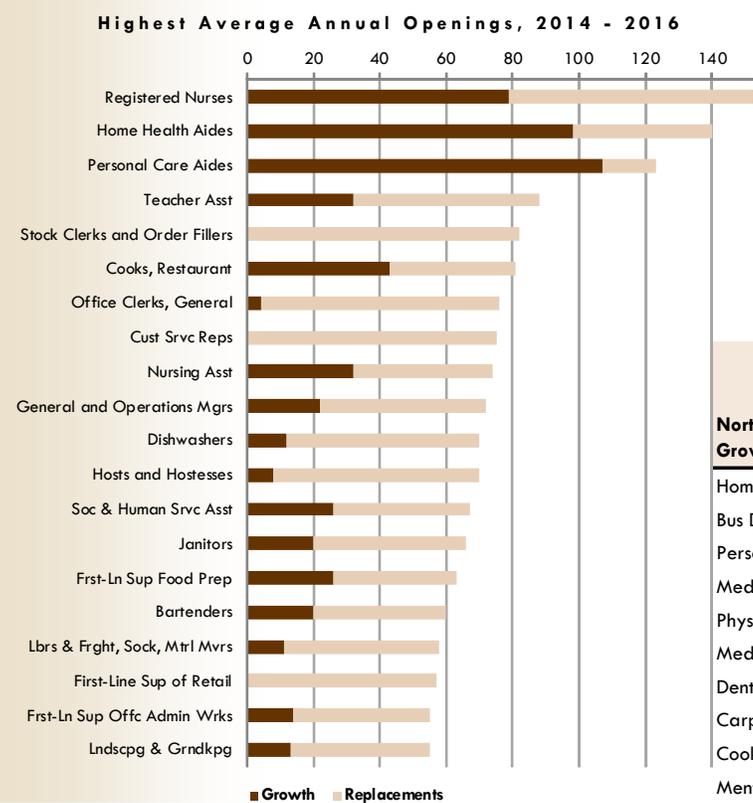
Employer demand for labor is greater in the North Shore than either neighboring Merrimack or Lowell, averaging 5,149 job postings per month. Even with the North Shore's low unemployment rate, its labor market performance is fairly slack, with 2.4 unemployed jobseekers and 41.4 employed potential job changers for every advertised online job vacancy.

The North Shore is one of four WIAs with mid-range employer labor demand and surpluses of labor supply. However, unlike Hampden and Merrimack, North Shore's low unemployment and slower rising wages, imply that in aggregate, labor supplies are sufficient and heightened employer competition for skilled workers has not taken root.

Just three of the 25 occupations that employ the most North Shore residents are in STEM fields, while current labor demand indicates more employer demand in STEM fields, with nine of the 25 most online advertised positions STEM occupations —STEM positions noted in bold.*

Minimum educational requirements for the 25 most highly demanded North Shore occupations skews toward high school or less, but also varies.

Projected Labor Demand 2016



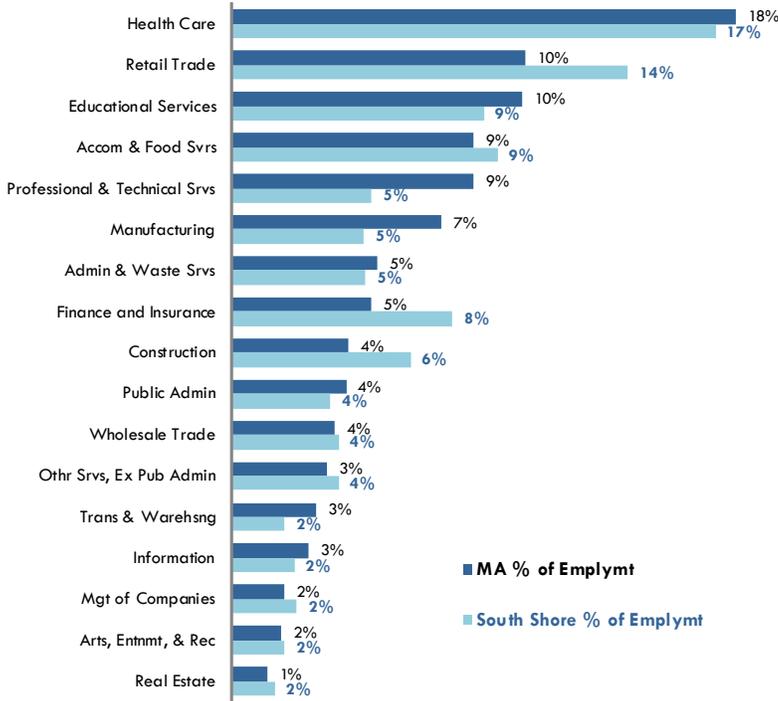
Relative to other WIAs, anticipated labor demand through 2016 suggests fewer occupations will generate new job growth in the North Shore, with just: home health/personal care aides adding significant job growth. Registered Nurses; and cooks are anticipated to both create new jobs and have high re- placement needs as current job holders retire and/or leave the fields.

North Shore 10 Fastest Growing	Projectd Emplmt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmt Ratio^^	Demand Rank within WIA
Home Health Aides	2,585	4.0%	140	2.3	2
Bus Drvrs, Schl or Spec	501	3.8%	26	2.3	55
Personal Care Aides	3,091	3.7%	123	6.7	3
Medical Secretaries	1,297	2.6%	46	2.3	24
Physical Therapists	546	2.4%	24	1.0	57
Medical and Health Srvcs Mngr	699	2.4%	30	1.1	47
Dental Hygienists	487	2.3%	21	1.1	62
Carpenters	1,113	2.3%	38	1.7	34
Cooks, Restaurant	2,026	2.2%	81	1.1	6
Mental Health Counselors	818	2.1%	33	1.1	43

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014



SOUTH SHORE WIA *20

2014 vs. 2013 Snapshot

Employment: 269,930

Share of MA Employment: 8.1%

Chg.

Labor Force: 285,978

+1.6%

MA Labor Force: 3,557,500

+1.4%

Unemployment Rate: 5.6

-.9

MA Statewide Unemployment Rate: 5.8

-.9

Average Annual Wage: \$ 52,016

+ 2.8%

MA Average Wage: \$ 64,157

+3.8%

Unemployed Labor Supply/Online Demand: ^ 2.6

MA Unemployed S/D: 1.3

Employed Labor Supply/Online Demand: ^ 43.1

MA Unemployed S/D: 21.9

South Shore Top 25 Occupations

	Emplmt	Avg Wage
1 Gen & Operations Mngrs	4,330	\$ 125,138
2 Registered Nurses	3,830	\$ 81,935
3 Nursing Asst	2,940	\$ 28,813
4 Home Health Aides	2,840	\$ 26,251
5 Personal Care Aides	2,610	\$ 25,039
6 Teacher Asst	2,590	\$ 27,716
7 Accountants & Auditors	2,180	\$ 77,414
8 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	1,990	\$ 71,580
9 Security Guards	1,950	\$ 29,839
10 Construction Laborers	1,870	\$ 45,773
11 Elem Sch Tchrs, Ex Spec Edu	1,770	\$ 70,927
12 Lndscpng & Groundskeeping Wrkrs	1,710	\$ 34,449
13 Electricians	1,680	\$ 67,178
14 Middle Sch Tchrs, Ex SpEd/Carr/Tech	1,650	\$ 69,885
15 Labrs & Frght, Stck, Mtrl Movers	1,570	\$ 29,738
16 Maintenance & Repair Wrkrs, Gen	1,430	\$ 43,305
17 Management Analysts	1,430	\$ 92,521
18 Financial Mngrs	1,410	\$ 111,010
19 Automotive Service Technicians & Mechar	1,250	\$ 48,832
20 Light Truck or Delivery Svcs Drivers	1,210	\$ 30,652
21 Claims Adjstrs, Examnrs, & Invstgtrs	1,200	\$ 68,355
22 Team Assemblers	1,180	\$ 29,133
23 Fitness Trainers & Aerobics Instructors	1,090	\$ 44,890
24 Financial Analysts	1,080	\$ 120,588
25 Heavy & Tractor-Trailer Truck Drivers	1,060	\$ 51,656

South Shore Highest Wage Occptns

	Median Wage
1 Pediatricians, Gen	\$ 195,102
2 Dentists, Gen	\$ 194,388
3 Family & Gen Practitioners	\$ 192,743
4 Chief Executives	\$ 191,114
5 Physicians & Surgeons, All Other	\$ 190,826
6 Internists, Gen	\$ 190,755
7 Training & Development Mngrs	\$ 150,792
8 Compensation & Benefits Mngrs	\$ 140,701
9 Psychiatrists	\$ 137,993
10 Architectural & Engineering Mngrs	\$ 134,282

The South Shore accounts for roughly 8% of Commonwealth employment. South shore employment is fueled by *Healthcare*, with employment concentrations greater than the state in: *Retail*; *Accommodations and Food Services*; *Finance and Insurance*; and *Construction*.

Over the year, the South Shore labor force expanded faster than the state as a whole, adding 6,678 to employment. The unemployment rate improved on par with the state, declining .9 of a point to 5.6, the **third lowest unemployment rate outside of the three greater Boston area WIAs.**

South Shore wages advanced more slowly than most of the state, however mean wages in the South Shore rank the **third highest outside of the greater metropolitan area WIAs.**

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

South Shore Monthly Online Demand		Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1	Registered Nurses	335	-32	Associate's
2	Retail Sales	261	-49	less than HS
3	First-Line Sprvrs of Retail Sales Wrkrs	246	19	HS dplm/eqv
4	Customer Service Representatives	161	23	HS dplm/eqv
5	First-Line Sprvrs Offc / Admin Spprt	129	21	HS dplm/eqv
6	Sales Agents, Financial Services	101	35	Bachelor's
7	First-Line Sprvrs of Food Prep	98	8	HS dplm/eqv
8	Computer User Support Spclts	94	27	Associate's
9	Social and Human Service Assts	93	30	HS dplm/eqv
10	Accountants	88	10	Bachelor's
11	Medical and Health Services Managers	83	-7	Bachelor's
12	Web Developers	82	-3	Bachelor's
13	Marketing Managers	80	5	Bachelor's
14	Network and Computer Systems Admins	80	16	Bachelor's
15	Heavy and Tractor-Trailer Truck Drivers	73	-3	HS dplm/eqv
16	Physical Therapists	70	-23	Doc or prof
17	Computer Systems Analysts	70	-29	Bachelor's
18	Exec Secretaries and Exec Admin Assts	66	5	HS dplm/eqv
19	Bookkeeping, Accounting	62	8	HS dplm/eqv
20	Sales Reps, Whlsl & Manuf, Ex Tech/Sci	61	9	HS dplm/eqv
21	Home Health Aides	58	10	less than HS
22	Software Developers, Applications	58	-17	Bachelor's
23	Light Truck or Delivery Services Drivers	58	13	HS dplm/eqv
24	Combined Food Prep , Including Fast Food	56	12	less than HS
25	Financial Managers, Branch or Department	53	18	Bachelor's

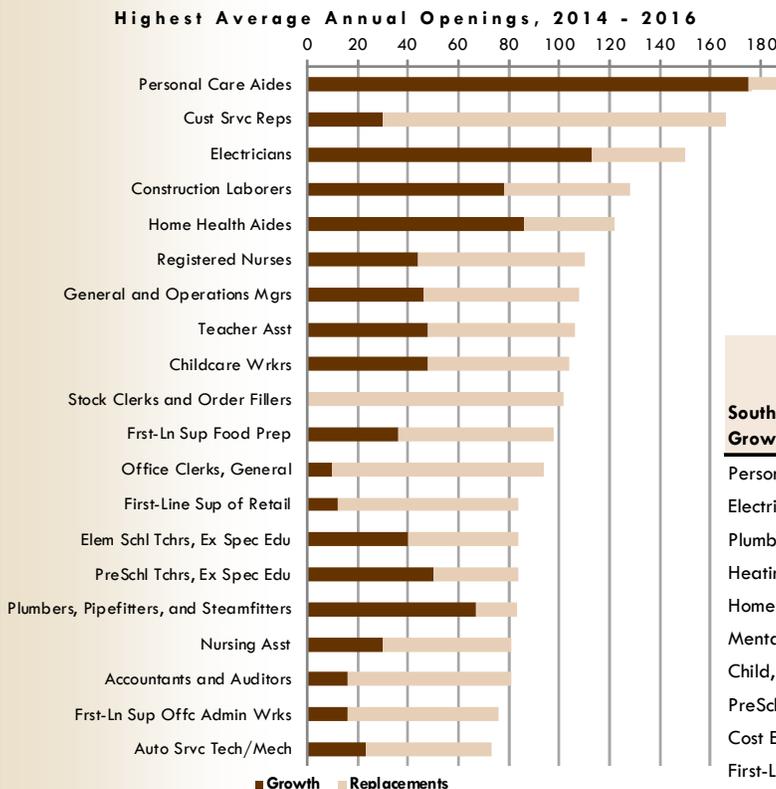
Employer demand for labor in the South Shore is **healthy**, averaging 6,263 job postings per month. **Even with low unemployment and strong labor demand, the South Shore labor market performance is slack**, with 2.6 unemployed jobseekers and 43.1 employed potential job changers for every advertised online job vacancy.

The South Shore is one of four WIAs with mid-range employer labor demand and surpluses of labor supply. However, unlike Hampden and Merrimack, **South Shore's low unemployment and slower rising wages, imply that in aggregate, so far, labor supplies are sufficient and heightened employer competition for skilled workers has not taken root.**

Only five of the 25 occupations that employ the most South Shore residents are in STEM fields, while current labor demand indicates **more employer demand in STEM fields**, with 12 of the 25 most online advertised positions STEM occupations —**STEM positions noted in bold.**

Minimum educational requirements for the 25 most highly demanded South Shore occupations is **nearly split** between high school or less and college educated.

Projected Labor Demand 2016



Anticipated labor demand through 2016 suggests **greater job growth** in home health/personal care aides; Electricians; construction; and Plumbers, Pipefitters, and Steamfitters. Registered Nurses; general and operations managers; and elementary and preschool teachers are anticipated to **both create new jobs and have high replacement needs** as current job holders retire and/or leave the fields.

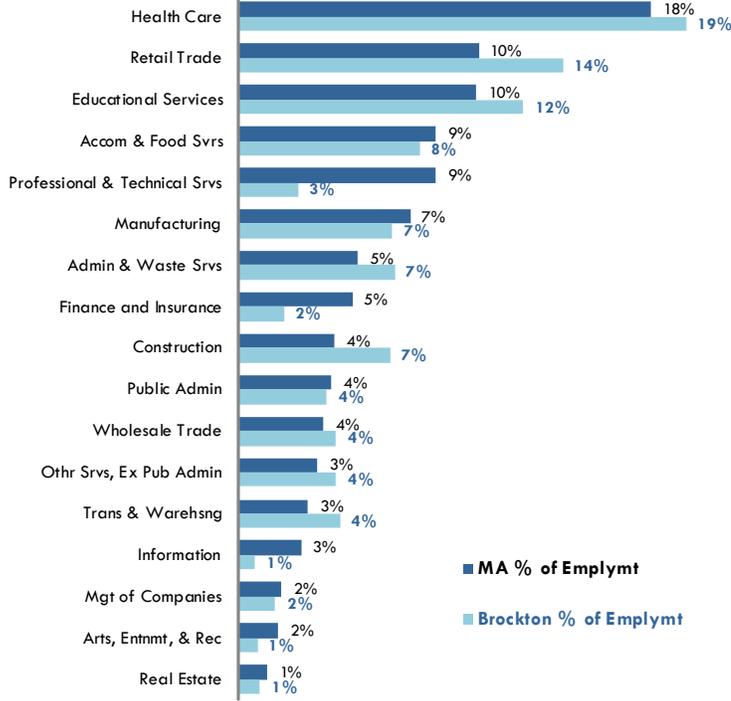
South Shore 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmt Ratio^^	Demand Rank within WIA
Personal Care Aides	2,940	6.5%	189	12.5	1
Electricians	2,256	5.4%	150	3.1	3
Plumbers, Pipefitters	1,339	5.4%	83	4.2	16
Heating, Air Cond, Ref Mech	782	4.7%	52	1.9	35
Home Health Aides	2,202	4.1%	122	2.4	5
Mental Health Counselors	514	3.9%	29	1.9	67
Child, Family, & Schl Soc Wrkrs	748	3.9%	42	2.0	43
PreSchl Teachers, Ex Spec Edu	1,364	3.8%	84	1.5	15
Cost Estimators	501	3.5%	30	1.1	65
First-Line Sup of Constrn Trd	696	3.3%	30	2.8	63

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014

2014 vs. 2013 Snapshot



Employment: 121,127

Share of MA Employment: 3.6%

Chg.

Labor Force: 129,380

+1.3%

MA Labor Force: 3,557,500

+1.4%

Unemployment Rate: 6.4

-1.0

MA Statewide Unemployment Rate: 5.8

-.9

Average Annual Wage: \$ 46,424

+ 1.8%

MA Average Wage: \$ 64,157

+3.8%

Unemployed Labor Supply/Online Demand:[^] 3.3

MA Unemployed S/D: 1.3

Employed Labor Supply/Online Demand:[^] 48.5

MA Unemployed S/D: 21.9

Brockton Top 25 Occupations

	Emplmt	Avg Wage
1 Labrs & Frght, Stck, Mtrl Movers	2,480	\$ 25,526
2 Registered Nurses	2,480	\$ 86,796
3 Gen & Operations Mngrs	1,720	\$ 115,010
4 Heavy & Tractor-Trailer Truck Drivers	1,520	\$ 48,666
5 Teacher Asst	1,220	\$ 27,215
6 Nursing Asst	1,180	\$ 31,471
7 Light Truck or Delivery Svcs Drivers	1,100	\$ 37,443
8 Elem Sch Tchrs, Ex Spec Edu	980	\$ 67,878
9 Home Health Aides	950	\$ 27,575
10 Construction Laborers	880	\$ 56,807
11 Bus Drivers, Sch or Spec Client	840	\$ 35,544
12 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	750	\$ 68,659
13 Dental Asst	710	\$ 37,722
14 Lndscpng & Groundskeeping Wrks	690	\$ 33,963
15 Police & Sheriff's Patrol Officers	620	\$ 72,362
16 Healthcare Social Wrks	610	\$ 48,652
17 Carpenters	600	\$ 54,462
18 Middle Sch Tchrs, Ex SpEd/Carr/Tech	600	\$ 67,834
19 Automotive Service Technicians & Mechar	600	\$ 43,173
20 Personal Care Aides	580	\$ 27,484
21 Accountants & Auditors	520	\$ 73,919
22 Team Assemblers	510	\$ 24,467
23 Packers & Pckngs / Hndlr	490	\$ 22,915
24 Heating, Air Cndtng & Refrig Mechan	490	\$ 66,998
25 Maintenance and Repair Workers, Genei	470	\$ 45,505

Brockton Highest Wage Occptns

	Median Wage
1 Family & Gen Practitioners	\$ 190,820
2 Internists, Gen	\$ 190,646
3 Physicians & Surgeons, All Other	\$ 187,310
4 Psychiatrists	\$ 176,393
5 Dentists, Gen	\$ 169,019
6 Chief Executives	\$ 168,813
7 Pediatricians, Gen	\$ 145,204
8 Marketing Mngrs	\$ 126,527
9 Architectural & Engineering Mngrs	\$ 120,296
10 Pharmacists	\$ 115,442

The Brockton economy is driven by employment concentrations greater than the state in: *Healthcare; Retail; Education; Administrative and Waste Services; and Construction.*

Over the year, the Brockton labor force expanded by slightly more than the state, adding 2,921 to employment. At the same time, the WIA's unemployment rate improved by a full point, to 6.4.

Brockton wages advanced more slowly than any other WIA, rising just 1.8% annually.

Concurrently, **employer demand for labor in Brockton was the lightest of all WIAs but Berkshire.**

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

[^] Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Brockton Monthly Online Demand		Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1	Registered Nurses	125	-58	Associate's
2	Retail Sales	105	-20	less than HS
3	Heavy and Tractor-Trailer Truck Drivers	91	-5	HS dplm/eqv
4	First-Line Sprvrs of Retail Sales Wrkrs	91	20	HS dplm/eqv
5	Customer Service Representatives	55	7	HS dplm/eqv
6	Light Truck or Delivery Services Drivers	49	10	HS dplm/eqv
7	Social and Human Service Assts	39	-3	HS dplm/eqv
8	Physical Therapists	38	-15	Doc or prof
9	First-Line Sprvrs Offc / Admin Sprrt	37	-4	HS dplm/eqv
10	Medical and Health Services Managers	36	1	Bachelor's
11	Sales Reps, Whlsl & Manuf, Ex Tech/Sci	35	6	HS dplm/eqv
12	Bookkeeping, Accounting	27	7	HS dplm/eqv
13	Sales Agents, Financial Services	27	7	Bachelor's
14	Maintenance and Repair Wrkrs, Gen	27	8	HS dplm/eqv
15	Occupational Therapists	26	-7	Master's
16	Lic Prctcl and Lic Voc Nurses	25	6	PstScdry non award
17	First-Line Sprvrs of Food Prep	25	2	HS dplm/eqv
18	Lbrs & Frght, Stck & Mtrl Mvrs	23	5	less than HS
19	First-Line Sprvrs, Transp & Mtrl-Mvng & Vhcl	23	11	HS dplm/eqv
20	Medical Assts	22	0	HS dplm/eqv
21	First-Line Sprvrs of Production and Op	22	-1	PstScdry non award
22	Mental Health & Sbstnc Abs Scl Wrkrs	22	-4	Bachelor's
23	Demonstrators and Product Promoters	21	8	HS dplm/eqv
24	Insurance Sales Agents	21	7	HS dplm/eqv
25	Cashiers	20	-8	less than HS

Employer demand for labor in Brockton averaged

2,499 job postings per month. **Low demand, combined with an 6.5 unemployment rate influence**

Brockton's loose labor market performance of 3.3 unemployed jobseekers and 48.5 employed potential job changers for every advertised online job vacancy. **Only Bristol's labor market performance was looser than Brockton.**

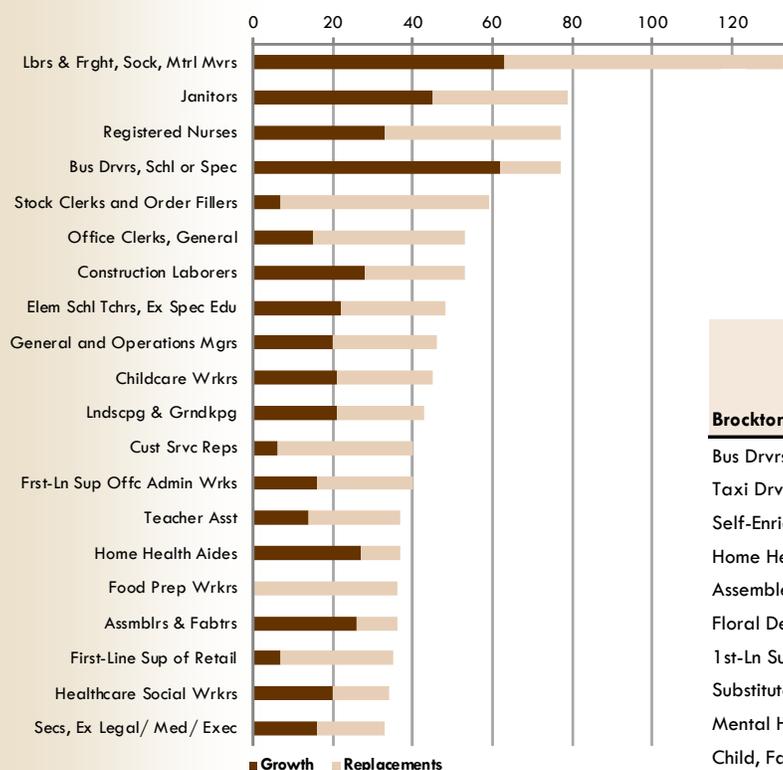
The area's low demand, soft wage growth, and higher unemployment rate, in aggregate, suggest labor market performance factors other than and/or in addition to employer competition for skilled workers.

Only two of the 25 occupations that employ the most Brockton residents are in STEM fields, while current labor demand indicates **more employer demand in STEM fields**, with six of the 25 most online advertised positions STEM occupations —**STEM positions noted in bold.**

Minimum educational requirements for the 25 most highly demanded Brockton occupations skew toward high school or less.

Projected Labor Demand 2016

Highest Average Annual Openings, 2014 - 2016



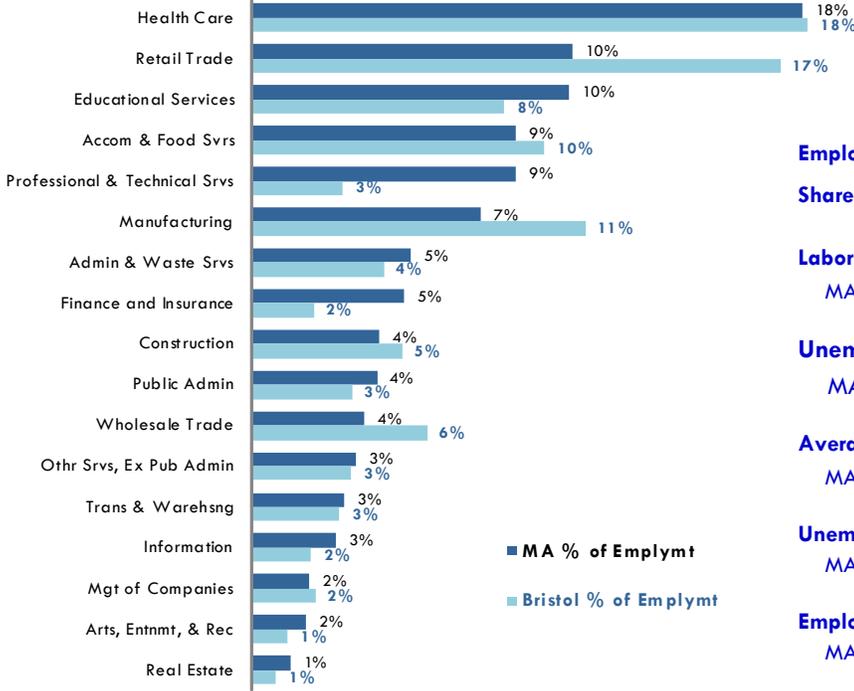
Anticipated labor demand through 2016 suggests

greater job growth in transportation needs for elderly/special clients and/or school students; and **home health/personal care aides**. Laborers and freight stock materials movers; and **Registered Nurses** are anticipated to **both create new jobs and have high replacement needs** as current job holders retire and/or leave the fields.

Brockton 10 Fastest Growing	Projectd Emplmt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Bus Drvrs, Schl or Spec	1,064	6.4%	77	4.1	4
Taxi Drvrs and Chauffeurs	371	5.6%	22	6.3	41
Self-Enrichment Edu Teachers	345	5.3%	22	3.4	42
Home Health Aides	610	4.7%	37	2.7	15
Assemblers & Fabricators	659	4.1%	36	2.6	17
Floral Designers	403	3.9%	25	1.5	30
1st-Ln Sup Helpers, Laborers, & /	239	3.3%	14	1.3	62
Substitute Teachers	504	3.1%	23	1.9	37
Mental Health Counselors	308	3.1%	15	1.5	57
Child, Family, & Schl Soc Wrkrs	514	3.1%	25	1.5	29

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.



2014 vs. 2013 Snapshot

Employment: 176,099	
Share of MA Employment: 5.3%	<u>Chg.</u>
Labor Force: 189,292	+1.0%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 7.0	-1.2
MA Statewide Unemployment Rate: 5.8	-0.9
Average Annual Wage: \$ 46,782	+ 3.1%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 3.9	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 51.5	
MA Unemployed S/D: 21.9	

Bristol County Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	2,810	\$ 77,739
2 Gen & Operations Mngrs	2,430	\$ 113,746
3 Labrs & Frght, Stck, Mtrl Movers	2,260	\$ 30,765
4 Nursing Asst	2,000	\$ 28,368
5 Heavy & Tractor-Trailer Truck Drivers	1,900	\$ 45,891
6 Light Truck or Delivery Svcs Drivers	1,860	\$ 35,513
7 Teacher Asst	1,710	\$ 26,924
8 Elem Sch Tchrs, Ex Spec Edu	1,200	\$ 70,944
9 Social & Human Service Asst	1,030	\$ 32,297
10 Personal Care Aides	1,020	\$ 26,431
11 Middle Sch Tchrs, Ex SpEd/Carr/Tech	980	\$ 66,827
12 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	960	\$ 73,274
13 Packers & Pckngs / Hndlr	950	\$ 25,417
14 Construction Laborers	930	\$ 47,857
15 Automotive Service Technicians & Mechar	890	\$ 40,762
16 Carpenters	880	\$ 55,298
17 Accountants & Auditors	880	\$ 76,270
18 Bus Drivers, Sch or Spec Client	860	\$ 37,365
19 Lic Prctcl & Lic Voc Nurses	830	\$ 49,596
20 Lndscpng & Groundskeeping Wrkrs	810	\$ 27,894
21 Maintenance & Repair Wrkrs, Gen	780	\$ 39,921
22 First-Line Supervisors of Production & Op	740	\$ 58,731
23 Childcare Wrkrs	720	\$ 24,323
24 PreSch Tchrs, Ex Spec Edu	700	\$ 29,365
25 Police & Sheriff's Patrol Officers	680	\$ 60,279

Bristol County Highest Wage Occpnts

	Median Wage	#
1 Psychiatrists		
2 Family & Gen Practitioner	\$ 192,755	
3 Chief Executives	\$ 192,197	
4 Physicians & Surgeons, All Other	\$ 191,561	
5 Internists, Gen	\$ 183,987	
6 Pediatricians, Gen	\$ 154,027	
7 Dentists, Gen	\$ 147,411	
8 Architectural & Engineering Mngrs	\$ 138,851	
9 Computer & Information Syst Mngrs	\$ 128,418	
10 Pharmacists	\$ 117,948	

The Bristol economy is powered by the largest concentration of Retail and Wholesale Trade employment in the state, with a fifth of the WIA's employment in trade. Healthcare is also a leading employment industry, and the proportion of Manufacturing employment is larger than the state's.

Annually, the Bristol labor force grew a modest 1%, adding 4,015 workers to the ranks of employed, while lowering the unemployment rate by a healthy 1.2 points.

Yet, with an unemployment rate at 7.0, Bristol tied with the Cape and Islands for the third highest rate of unemployment.

Mean wages in Bristol are lower than nearby South Shore, but slightly higher than neighboring Brockton or New Bedford. Wages rose over the year a fairly typical pace of 3.1%.

Employer demand for labor in Bristol is heavier than six other WIAs. However, when taking into account the size of Bristol's labor force, Bristol employer demand is about 25% lighter than Merrimack whose labor force is nearly the same size.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Bristol Monthly Online Demand	Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1 Registered Nurses	191	4	Associate's
2 Retail Sales	142	-32	less than HS
3 Customer Service Representatives	115	15	HS dplm/eqv
4 First-Line Sprvrs of Retail Sales Wrkrs	103	1	HS dplm/eqv
5 Heavy and Tractor-Trailer Truck Drivers	101	31	HS dplm/eqv
6 Industrial Engineers	63	-5	Bachelor's
7 Social and Human Service Assts	49	-1	HS dplm/eqv
8 Light Truck or Delivery Services Drivers	45	7	HS dplm/eqv
9 First-Line Sprvrs Offc / Admin Sprrt	44	6	HS dplm/eqv
10 Elementary School Tchrs, Exc Spec	42	12	Bachelor's
11 Physical Therapists	42	-12	Doc or prof
12 Teacher Assts	40	14	HS dplm/eqv
13 Sales Reps, Whlsl & Manuf, Ex Tech/Sci	40	-1	HS dplm/eqv
14 First-Line Sprvrs of Food Prep	40	2	HS dplm/eqv
15 Lbrs & Frght, Stck & Mtrl Mvrs	39	5	less than HS
16 First-Line Sprvrs of Production and Op	38	-6	PstScdry non award
17 Medical and Health Services Managers	33	0	Bachelor's
18 Lic Prctcl and Lic Voc Nurses	30	17	PstScdry non award
19 Combined Food Prep , Including Fast Food	30	14	less than HS
20 Home Health Aides	30	4	less than HS
21 Maintenance and Repair Wrkrs, Gen	29	-3	HS dplm/eqv
22 Spec Ed Tchrs, Kindergarten & Elem	29	2	Bachelor's
23 Exec Secretaries and Exec Admin Assts	28	-2	HS dplm/eqv
24 Automotive Specty Technicians	28	9	HS dplm/eqv
25 Scndry School Tchrs, Exc Spec & Crr/Tech	27	5	Bachelor's

Employer demand for labor in Bristol averaged 3,422 job postings per month. **Weaker employer demand relative to its labor force size influenced Bristol's loose labor market performance —the loosest in the Commonwealth**, with nearly four unemployed jobseekers and 51.5 employed potential job changers for every advertised online job vacancy.

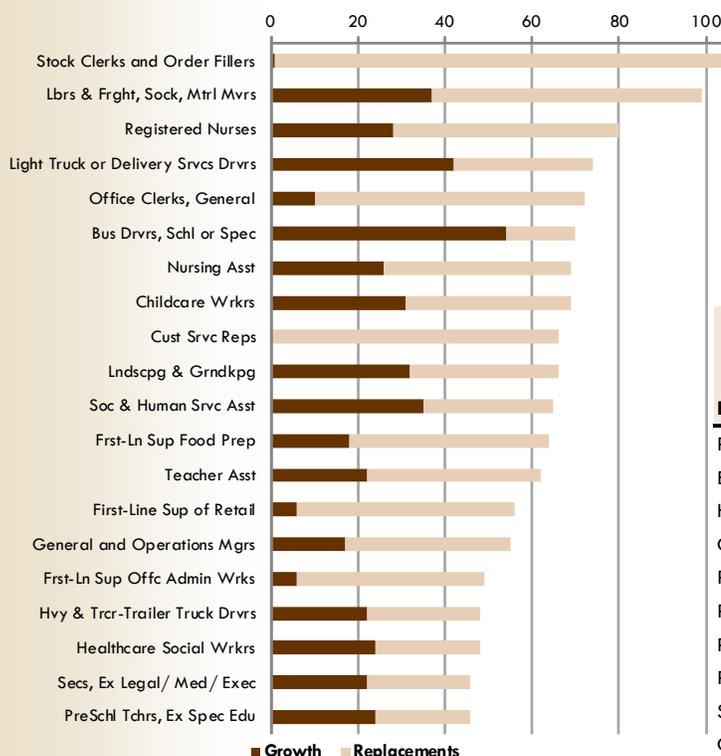
Bristol's underdeveloped employer demand relative to the size of its labor force sets it apart from other WIAs, making its aggregate labor market patterns less categorical, and perhaps warranting more focused exploration of Bristol's labor market trends.

Just three of the 25 occupations that employ the most Bristol residents are in STEM fields, while current labor demand indicates **more employer demand in STEM fields**, with five of the 25 most online advertised positions STEM occupations —**STEM positions noted in bold.**

Minimum educational requirements for the 25 most highly demanded Bristol occupations is roughly evenly split between high school or less and college educated.

Projected Labor Demand 2016

Highest Average Annual Openings, 2014 - 2016



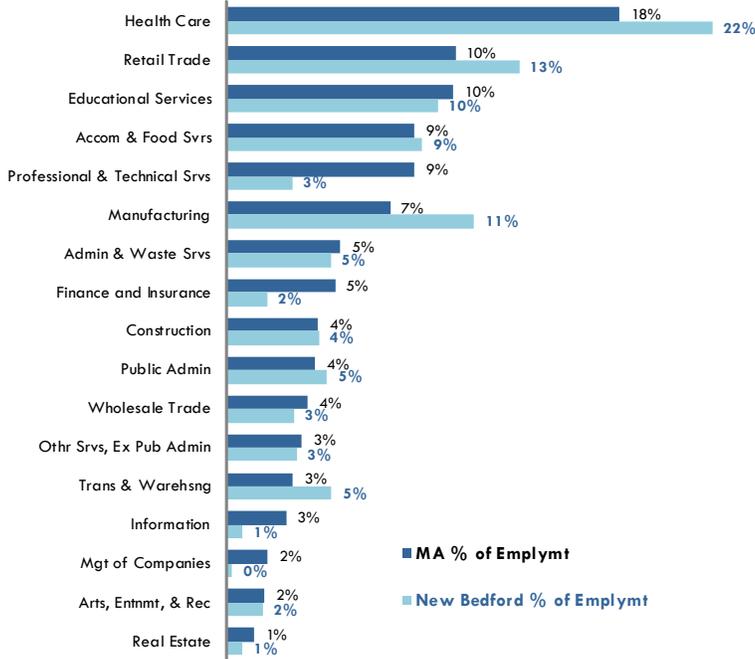
Anticipated labor demand through 2016 suggests **greater job growth** in transportation needs for elderly/special clients and/or school students and **Laborers and freight stock materials movers.**

Registered Nurses are anticipated to **both create new jobs and have high replacement needs** as current job holders retire and/or leave nursing.

	Project Emplmt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Bristol 10 Fastest Growing					
Refuse & Recyclable Mtrl Clctrs	399	5.6%	26	3.3	45
Bus Drvrs, Schl or Spec	1,136	5.1%	70	3.4	6
Home Health Aides	616	4.7%	37	2.7	33
Computer Systems Analysts	376	3.8%	19	2.8	55
Personal Care Aides	962	3.6%	37	6.4	32
PreSchl Teachers, Ex Spec Edu	869	2.9%	46	1.1	20
Rehabilitation Counselors	613	2.8%	28	1.3	43
Packaging and Filling Machine C	353	2.8%	18	1.3	59
Soc & Human Srvc Asst	1,321	2.8%	65	1.2	11
Childcare Wrkrs	1,265	2.6%	69	0.8	8

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.



2014 vs. 2013 Snapshot

Employment: 104,493	
Share of MA Employment: 3.1%	<i>Chg.</i>
Labor Force: 113,534	+9%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 8.0	-1.5
MA Statewide Unemployment Rate: 5.8	-0.9
Average Annual Wage: \$ 46,228	+7.2%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ 3.1	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 35.7	
MA Unemployed S/D: 21.9	

New Bedford Top 25 Occupations

	Emplymt	Avg Wage
1 Registered Nurses	2,290	\$ 74,405
2 Nursing Asst	1,870	\$ 26,560
3 Gen & Operations Mngrs	1,120	\$ 104,610
4 Packers & Pckngs / Hndlr	1,010	\$ 22,660
5 Personal Care Aides	1,010	\$ 25,904
6 Teacher Asst	990	\$ 32,200
7 Labrs & Frght, Stck, Mtrl Movers	950	\$ 27,275
8 Heavy & Tractor-Trailer Truck Drivers	930	\$ 45,545
9 Elem Sch Tchrs, Ex Spec Edu	880	\$ 76,342
10 Lic Prctcl & Lic Voc Nurses	760	\$ 54,630
11 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	740	\$ 72,381
12 Packaging & Filling Mach. Oprs	730	\$ 22,312
13 Carpenters	650	\$ 45,157
14 Middle Sch Tchrs, Ex SpEd/Carr/Tech	620	\$ 72,213
15 Social & Human Service Asst	620	\$ 37,633
16 Helpers--Production Wrkrs	610	\$ 23,179
17 Maintenance & Repair Wrkrs, Gen	600	\$ 38,025
18 Light Truck or Delivery Svcs Drivers	490	\$ 30,372
19 Lndscpng & Groundskeeping Wrkrs	490	\$ 30,778
20 Construction Laborers	480	\$ 47,386
21 Healthcare Social Wrkrs	470	\$ 60,229
22 Police & Sheriff's Patrol Officers	470	\$ 58,765
23 Accountants & Auditors	460	\$ 69,475
24 First-Line Supervisors of Production & Op	450	\$ 63,351
25 Team Assemblers	440	\$ 28,877

The New Bedford economy is driven by employment concentrations greater than the state in: *Healthcare; Retail; Manufacturing; and Transportation and Warehousing.*

New Bedford's labor force expanded more slowly than the state, adding 2,692 to employment, while **lowering the unemployment rate more than any other WIA, shedding 1.5 points.**

Yet, with an unemployment rate at 8.0, the New Bedford WIA has the highest unemployment rate in the state.

New Bedford mean wages rank 12th out of the 16 WIAs. However, **wages in New Bedford rose faster than any other WIA, increasing 7.2% versus a year earlier.**

New Bedford Highest Wage Occptns

	Median Wage
1 Physicians & Surgeons, All Other	\$ 191,840
2 Family & Gen Practitioners	\$ 191,717
3 Internists, Gen	\$ 190,646
4 Psychiatrists	\$ 185,927
5 Pediatricians, Gen	\$ 177,573
6 Chief Executives	\$ 166,444
7 Pharmacists	\$ 129,999
8 Computer & Information Syst Mngrs	\$ 127,028
9 Securities, Commodities, & Financial Svcs	\$ 119,129
10 Optometrists	\$ 118,568

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

New Bedford Monthly Online Demand		Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1	Registered Nurses	156	16	Associate's
2	Heavy and Tractor-Trailer Truck Drivers	145	38	HS dplm/eqv
3	Retail Sales	76	-9	less than HS
4	Customer Service Representatives	72	13	HS dplm/eqv
5	First-Line Sprvrs of Retail Sales Wrkrs	57	5	HS dplm/eqv
6	Social and Human Service Assts	53	19	HS dplm/eqv
7	Physical Therapists	42	-1	Doc or prof
8	First-Line Sprvrs Offc / Admin Spprt	41	15	HS dplm/eqv
9	Construction Carpenters	40	16	HS dplm/eqv
10	Lic Prctcl and Lic Voc Nurses	38	18	PstScdry non award
11	First-Line Sprvrs of Food Prep	38	12	HS dplm/eqv
12	Maintenance and Repair Wrkrs, Gen	37	18	HS dplm/eqv
13	Home Health Aides	37	11	less than HS
14	Medical and Health Services Managers	35	5	Bachelor's
15	Insurance Sales Agents	35	11	HS dplm/eqv
16	Light Truck or Delivery Services Drivers	35	8	HS dplm/eqv
17	Sales Reps, Whlsl & Manuf, Ex Tech/Sci	35	6	HS dplm/eqv
18	Exec Secretaries and Exec Admin Assts	33	13	HS dplm/eqv
19	Medical Secretaries	30	11	HS dplm/eqv
20	First-Line Sprvrs, Construction Trades/ Extctn	30	15	HS dplm/eqv
21	Bookkeeping, Accounting	28	6	HS dplm/eqv
22	First-Line Sprvrs of Production and Op	28	9	PstScdry non award
23	Cooks, Restaurant	27	9	less than HS
24	Construction Laborers	27	10	less than HS
25	Nursing Assts	26	2	PstScdry non award

Employer demand for labor in New Bedford averaged 2,926 job postings per month. Lighter demand, combined with an 8.0 unemployment rate influence New Bedford's loose labor market performance of 3.1 unemployed jobseekers and 35.7 employed potential job changers for every advertised online job vacancy.

The area's muted employer demand, when combined with high unemployment, and significant upward pressure on wages, in aggregate, portend deficient supplies of skilled labor and heightened employer competition for skilled workers.

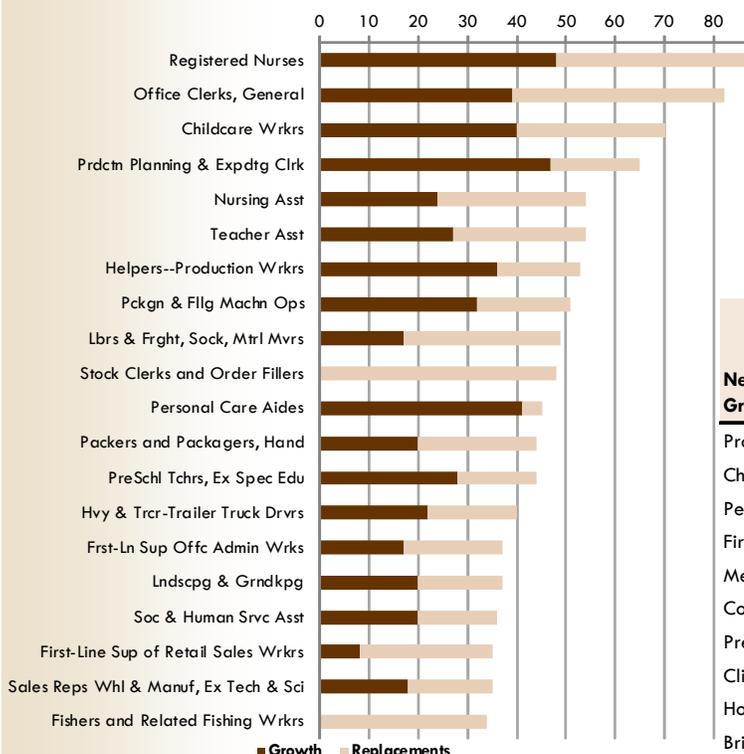
STEM occupations are less significant in New Bedford, with just three of the 25 largest employment occupations in STEM fields, and only one additional STEM occupation among the 25 most online advertised positions —**STEM positions noted in bold.***

Minimum educational requirements for the 25 most highly demanded New Bedford occupations skews toward high school or less.

Anticipated labor demand through 2016 suggests greater job growth in a variety of manufacturing related positions, including: office clerks; production planning and expediting clerks; production workers; packaging filling machine operators; as well as personal care aides; and preschool teachers. Registered Nurses and social and human service assistants are anticipated to both create new jobs and have high replacement needs as current job holders retire and/or leave the fields.

Projected Labor Demand 2016

Highest Average Annual Openings, 2014 - 2016

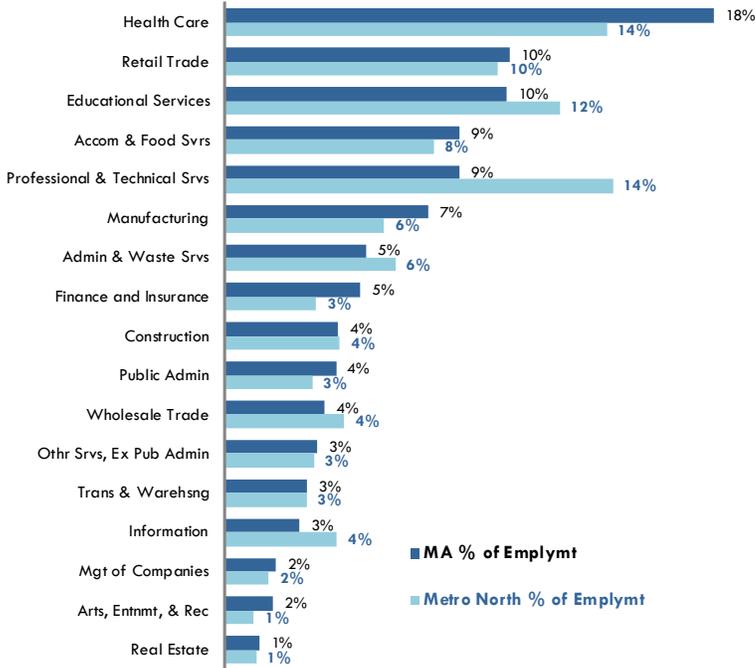


New Bedford 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmt Ratio^^	Demand Rank within WIA
Prod, Planning, & Expdtdg Clrks	830	6.2%	65	2.6	4
Child, Family, & Schl Soc Wrkrs	461	5.1%	30	2.8	29
Personal Care Aides	874	5.0%	45	10.3	11
First-Line Sup of Housekeeping a	240	4.9%	15	2.8	56
Mental Health Counselors	316	4.7%	20	2.3	46
Counter and Rental Clerks	409	4.7%	29	1.6	32
PreSchl Teachers, Ex Spec Edu	662	4.6%	44	1.8	13
Clinical, Cnslng, & Schl Psych	280	4.4%	19	1.7	47
Home Health Aides	438	4.1%	24	2.4	37
Brickmasons and Blockmasons	250	4.0%	12	5.0	70

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014



METRO NORTH WIA *20

2014 vs. 2013 Snapshot

Employment: 423,836	
Share of MA Employment: 12.6%	<u>Chg.</u>
Labor Force: 444,021	+1.7%
MA Labor Force: 3,557,500	+1.4%
Unemployment Rate: 4.5	-.8
MA Statewide Unemployment Rate: 5.8	-.9
Average Annual Wage: \$ 74,124	+ 3.7%
MA Average Wage: \$ 64,157	+3.8%
Unemployed Labor Supply/Online Demand: ^ .9	
MA Unemployed S/D: 1.3	
Employed Labor Supply/Online Demand: ^ 19.9	
MA Unemployed S/D: 21.9	

Metro North Top 25 Occupations

	Emplmt	Avg Wage
1 Gen & Operations Mngrs	9,970	\$ 141,397
2 Registered Nurses	8,500	\$ 85,906
3 Software Developers, Applications	6,260	\$ 110,046
4 Software Developers, Syst Software	5,430	\$ 115,237
5 Accountants & Auditors	5,230	\$ 81,461
6 Labrs & Frght, Stck, Mtrl Movers	4,820	\$ 31,281
7 Nursing Asst	4,140	\$ 31,228
8 Computer Syst Analysts	4,010	\$ 89,132
9 Personal Care Aides	4,000	\$ 25,336
10 Medical Scientists, Ex Epidemiologists	3,660	#
11 Financial Mngrs	3,350	\$ 136,598
12 Light Truck or Delivery Svcs Drivers	3,330	\$ 36,843
13 Computer & Information Syst Mngrs	3,230	\$ 138,417
14 Teacher Asst	3,150	\$ 28,382
15 Police & Sheriff's Patrol Officers	3,150	\$ 61,654
16 Management Analysts	2,980	\$ 92,524
17 Elem Sch Tchrs, Ex Spec Edu	2,880	\$ 70,664
18 Maintenance & Repair Wrkrs, Gen	2,790	\$ 45,868
19 Admin Svcs Mngrs	2,780	\$ 97,954
20 Market Research Analysts & Marketing	2,690	\$ 77,119
21 Lndscpng & Groundskeeping Wrkrs	2,680	\$ 34,279
22 Social & Human Service Asst	2,620	\$ 47,126
23 Heavy & Tractor-Trailer Truck Drivers	2,560	\$ 46,829
24 Child, Family, & Sch Social Wrkrs	2,270	\$ 70,494
25 Electricians	2,240	\$ 63,707

Metro North Highest Wage Occpnts

	Median Wage
1 Obstetricians & Gynecologists	\$ 194,388
2 Family & Gen Practitioners	\$ 193,530
3 Surgeons	\$ 192,743
4 Chief Executives	\$ 192,438
5 Physicians & Surgeons, All Other	\$ 190,997
6 Internists, Gen	\$ 190,804
7 Natural Sciences Mngrs	\$ 188,381
8 Business Tchrs, PostScndry	\$ 184,318
9 Dentists, Gen	\$ 177,963
10 Pediatricians, Gen	\$ 176,714

As one of the three greater Boston metropolitan area WIAs,

Metro North's economy is powered by the highest concentration of Professional and Technical Services employment in the state. Forty percent of Metro North's employment is nearly split among *Professional and Technical Services*; *Healthcare*; and *Education*.

Metro North, like the Boston and Merrimack WIAs has **continually expanded its labor force since 2007**. Over the year, Metro North **tied with Boston for the fastest labor force growth**, adding 7,405 to employment, while lowering its **unemployment rate** to 4.5, the **second lowest** in the Commonwealth.

Mean wages in Metro North are higher than all WIAs except Boston. Wages rose at a typical pace of 3.7%.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Metro North Monthly Online Demand	Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1 Software Developers, Applications	994	57	Bachelor's
2 Medical Scientists, Except Epidemiologists	858	115	Doc or prof
3 Registered Nurses	589	150	Associate's
4 Exec Secretaries and Exec Admin Assts	488	34	HS dplm/eqv
5 Marketing Managers	456	30	Bachelor's
6 First-Line Sprvrs of Retail Sales Wrkrs	423	82	HS dplm/eqv
7 Web Developers	421	-48	Bachelor's
8 Retail Sales	389	-39	less than HS
9 Network and Computer Systems Admins	372	-16	Bachelor's
10 Heavy and Tractor-Trailer Truck Drivers	361	136	HS dplm/eqv
11 Computer Systems Analysts	360	-19	Bachelor's
12 Customer Service Representatives	337	73	HS dplm/eqv
13 First-Line Sprvrs Offc / Admin Spprt	310	55	HS dplm/eqv
14 Accountants	303	-4	Bachelor's
15 Computer User Support Spclts	300	46	Associate's
16 Information Technology Project Managers	295	36	Associate's
17 Managers, All Other	261	54	HS dplm/eqv
18 First-Line Sprvrs of Food Prep	257	56	HS dplm/eqv
19 Medical and Health Services Managers	232	-1	Bachelor's
20 Industrial Engineers	228	16	Bachelor's
21 Social and Human Service Assts	208	17	HS dplm/eqv
22 Market Research Analysts & Mrking Spclts	208	20	Bachelor's
23 Sftwr Quality Assrnc Engineers & Tstrs	206	3	Associate's
24 Management Analysts	197	39	Bachelor's
25 Sales Agents, Financial Services	172	56	Bachelor's

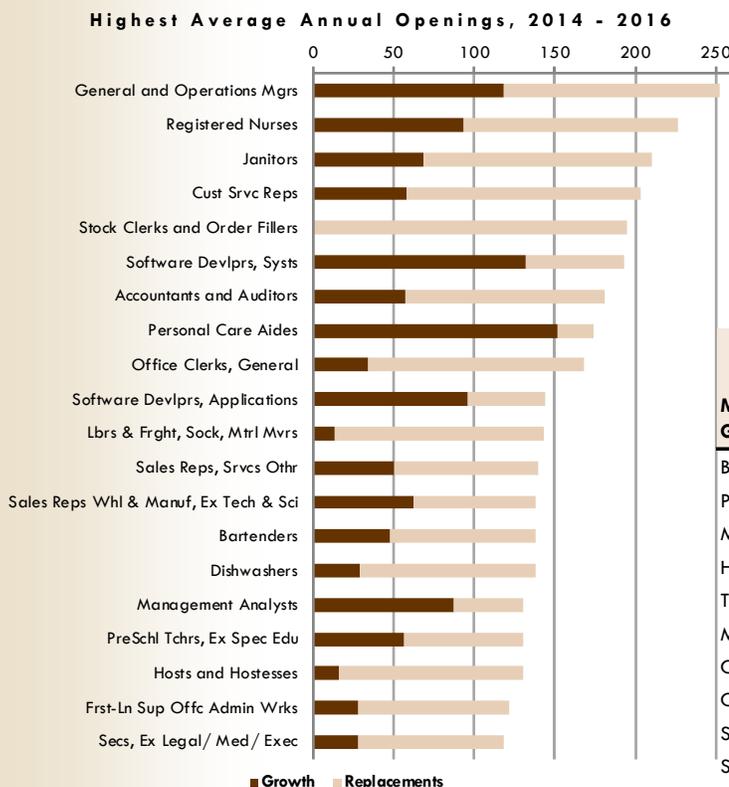
Metro North employer demand for labor is robust, averaging 21,285 job postings per month. **High demand** combined with the WIA's **low unemployment rate tightened its labor market performance** to just .9 unemployed jobseekers and 19.9 employed potential job changers for every advertised online job.

In aggregate, Metro North's **strong labor demand, low unemployment, and slight upward pressure on wages** do not portend broadscale unmet labor demands due to deficient labor supply. However, the trends also do not preclude **pockets of industry/occupational specific skill imbalances**.

STEM related occupations are prevalent among the 25 occupations that employ the most Metro North residents, and becoming even more so among current employer demand, with 15 of the 25 most online advertised positions in STEM fields —**STEM positions noted in bold.***

Minimum educational requirements for the 25 most highly demanded Metro North occupations tend to **require college degrees**, ranging from an Associate's to Doctorate.

Projected Labor Demand 2016



Anticipated labor demand through 2016 suggests **greater job growth** in systems and applications software developers; management analysts; and personal care aides. General and Operations Managers; Registered Nurses; and preschool teachers are anticipated to **both create new jobs and have high replacement needs** as current job holders retire and/or leave the fields.

Metro North 10 Fastest Growing	Project Emplmt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Bus Dvrns, Schl or Spec	1,223	4.0%	64	2.6	52
Personal Care Aides	4,211	3.8%	174	6.9	8
Market Research Analysts & Spc	2,665	3.5%	118	2.9	21
Home Health Aides	1,958	3.4%	96	2.0	29
Taxi Dvrns and Chauffeurs	2,625	3.1%	100	3.5	28
Management Analysts	3,400	2.7%	130	2.0	16
Computer Systems Analysts	2,748	2.6%	104	1.9	27
Cooks, Restaurant	2,737	2.4%	116	1.2	22
Software Devlprs, Svsts	5,959	2.3%	193	2.2	6
Sales Reps, Whsl Manuf, Tech, S	2,738	2.2%	110	1.2	24

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

WIA vs. Statewide Industry Job Mix, 2014

METRO SOUTH/WEST WIA *20

2014 vs. 2013 Snapshot

Employment: 477,665

Share of MA Employment: 14.2%

Chg.

Labor Force: 499,396

+1.7%

MA Labor Force: 3,557,500

+1.4%

Unemployment Rate: 4.4

-.7

MA Statewide Unemployment Rate: 5.8

-.9

Average Annual Wage: \$ 73,623

+ 2.3%

MA Average Wage: \$ 64,157

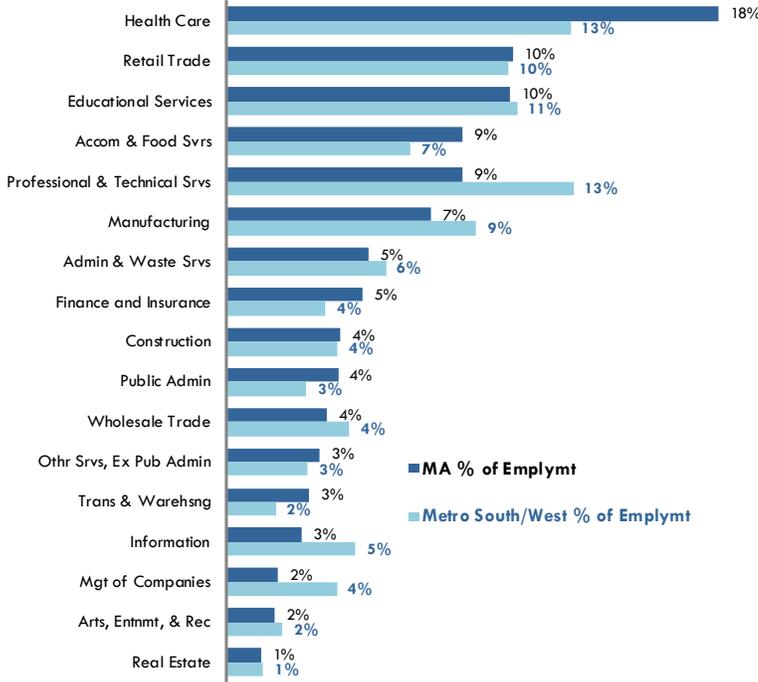
+3.8%

Unemployed Labor Supply/Online Demand: ^ .8

MA Unemployed S/D: 1.3

Employed Labor Supply/Online Demand: ^ 18.6

MA Unemployed S/D: 21.9



Metro South/West Top 25 Occupations

	Emplymt	Avg Wage
1 Software Developers, Syst Software	12,480	\$ 116,269
2 Gen & Operations Mngrs	11,020	\$ 149,568
3 Software Developers, Applications	10,750	\$ 113,165
4 Registered Nurses	8,740	\$ 84,141
5 Accountants & Auditors	6,990	\$ 82,545
6 Teacher Asst	6,750	\$ 31,972
7 Nursing Asst	5,830	\$ 30,110
8 Management Analysts	5,230	\$ 106,495
9 Market Research Analysts & Marketing	5,080	\$ 77,221
10 Computer User Support Specists	4,840	\$ 66,321
11 Sandry Sch Tchrs, Ex SpEd/Carr/Tech	4,490	\$ 75,383
12 Computer & Information Syst Mngrs	4,460	\$ 157,051
13 Lndscpng & Groundskeeping Wrkrs	4,350	\$ 35,409
14 Financial Mngrs	4,340	\$ 136,644
15 Elem Sch Tchrs, Ex Spec Edu	4,250	\$ 75,006
16 Labrs & Frght, Stck, Mtrl Movers	4,010	\$ 30,636
17 PreSch Tchrs, Ex Spec Edu	4,010	\$ 39,404
18 Computer Syst Analysts	3,930	\$ 91,972
19 Sales Mngrs	3,490	\$ 154,654
20 Personal Care Aides	3,400	\$ 29,181
21 Maintenance & Repair Wrkrs, Gen	3,330	\$ 45,003
22 Home Health Aides	3,280	\$ 28,444
23 Electrical Engineers	3,170	\$ 108,198
24 Carpenters	3,020	\$ 58,814
25 Computer Programmers	3,020	\$ 94,234

Metro South/West Highest Wage Occpnt

	Median Wage
1 Surgeons	\$ 208,000
2 Physicists	\$ 197,052
3 Obstetricians & Gynecologists	\$ 196,568
4 Chief Executives	\$ 194,896
5 Internists, Gen	\$ 190,803
6 Family & Gen Practitioners	\$ 190,769
7 Psychiatrists	\$ 187,473
8 Physicians & Surgeons, All Other	\$ 166,744
9 Natural Sciences Mngrs	\$ 156,430
10 Pediatricians, Gen	\$ 154,677

Metro South/West is the largest labor market in the state.

The economy is powered by the Commonwealth's second highest concentration of Professional and Technical Services employment.

Almost half of Metro Southwest's employment is distributed among *Professional and Technical Services; Healthcare; Education; and Retail*. In addition, employment concentrations greater than the state exists in: *Manufacturing; Information; and Management of Companies*.

Accounting for 14.2% of Commonwealth employment, **Metro South/West tied with neighboring Metro North for the fastest labor force expansion** over the year, adding 8,472 to **employment, more than any other WIA.**

Annually, at 4.4, **Metro South/West boasts the lowest unemployment rate in the state.**

Metro South/West has the **third highest mean wages.** Annually, **the pace of wage advancement was among the slowest**, with just three areas advancing more slowly: Brockton and the two Central region WIAs.

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Current Labor Demand 2014

Metro South/West Monthly Online Demand	Avg mos. HWOL Ads	Chg	
		Lvl vs 2013	Education
1 Software Developers, Applications	1,271	42	Bachelor's
2 Registered Nurses	762	152	Associate's
3 Marketing Managers	756	-18	Bachelor's
4 Customer Service Representatives	594	93	HS dplm/eqv
5 Network and Computer Systems Admins	570	-47	Bachelor's
6 First-Line Sprvrs of Retail Sales Wrkrs	568	87	HS dplm/eqv
7 Retail Sales	540	-15	less than HS
8 Computer Systems Analysts	538	1	Bachelor's
9 Web Developers	485	-10	Bachelor's
10 Computer User Support Spclts	472	15	Associate's
11 Exec Secretaries and Exec Admin Assts	423	33	HS dplm/eqv
12 Information Technology Project Managers	413	64	Associate's
13 First-Line Sprvrs Offc / Admin Spprt	412	44	HS dplm/eqv
14 Accountants	410	8	Bachelor's
15 Industrial Engineers	391	-19	Bachelor's
16 Sftwr Quality Assrnc Engineers & Tstrs	349	-5	Associate's
17 Management Analysts	335	37	Bachelor's
18 Market Research Analysts & Mrking Spclts	322	49	Bachelor's
19 Computer Systems Engineers/Architects	299	90	Associate's
20 Social and Human Service Assts	282	58	HS dplm/eqv
21 First-Line Sprvrs of Food Prep	279	26	HS dplm/eqv
22 Medical Scientists, Except Epidemiologists	248	39	Doc or prof
23 Sales Agents, Financial Services	240	84	Bachelor's
24 Software Developers, Systems Software	216	31	Bachelor's
25 Bookkeeping, Accounting	208	4	HS dplm/eqv

Employer demand for labor in Metro South/West is second only to Boston, averaging 25,733 job postings per month. High demand combined with low unemployment tightened Metro South/West's labor market performance to just .8 unemployed jobseekers and 18.6 employed potential job changers for every advertised online job vacancy.

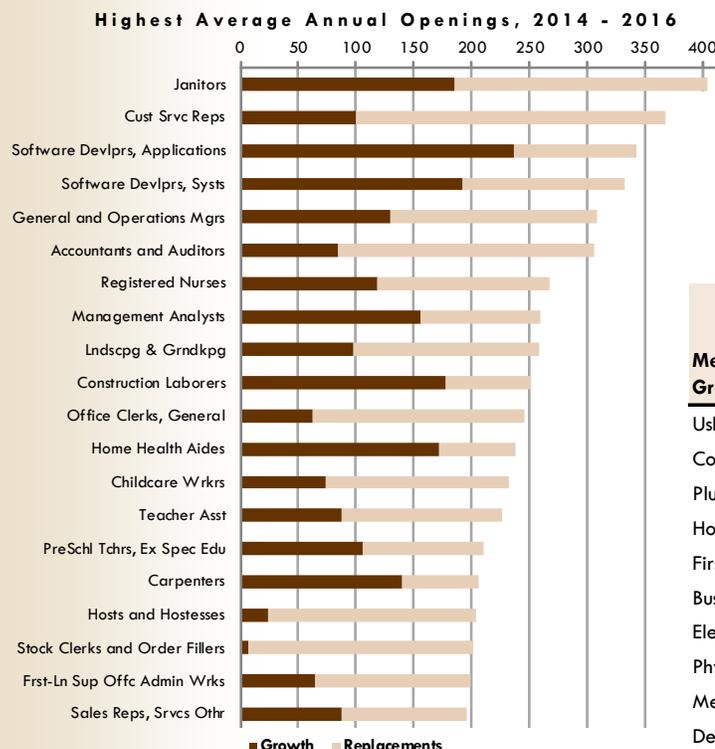
In aggregate, Metro South/West's healthy labor demand, low unemployment, and slight upward pressure on wages do not portend broadscale unmet labor demands due to deficient labor supply. However, the trends do not preclude pockets of industry/occupational specific skill imbalances.

STEM related occupations are prevalent among the 25 occupations that employ the most Metro South/West residents, and becoming even more so among current employer demand, with 17 of the 25 most online advertised positions in STEM fields —STEM positions noted in bold.*

Minimum educational requirements for the 25 most highly demanded Metro South/West occupations tend to require college degrees, ranging from an Associate's to Doctorate.

Anticipated labor demand through 2016 suggests greater job growth in systems and applications software developers; management analysts; and home health aides; construction; and Carpenters. General and Operations Managers; Registered Nurses; and preschool teachers are anticipated to both create new jobs and have high replacement needs as current job holders retire and/or leave the fields.

Projected Labor Demand 2016

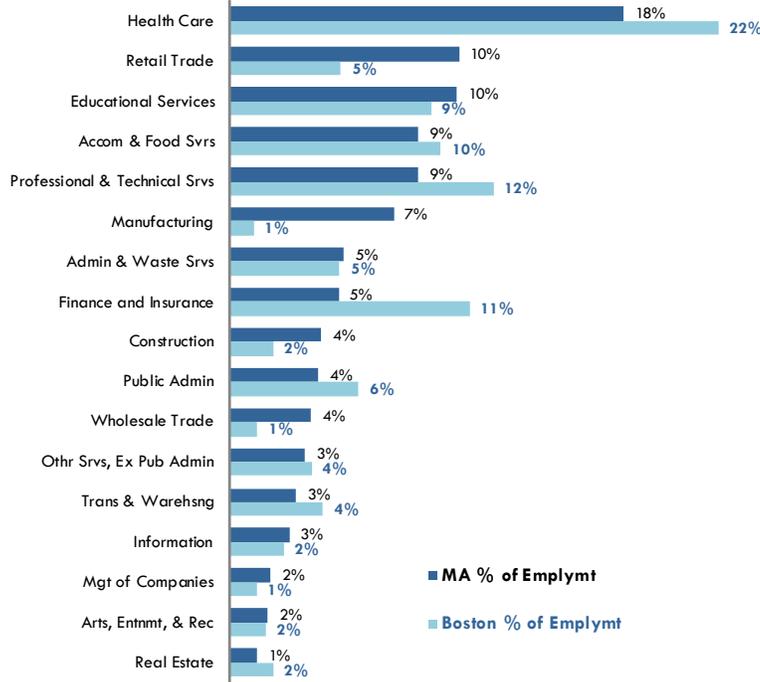


Metro South/West 10 Fastest Growing	Projectd Emplt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Ushers, Lobby Attendants	779	5.0%	88	0.7	58
Construction Laborers	3,913	4.9%	251	2.4	10
Plumbers, Pipefitters	1,618	4.6%	88	3.6	57
Home Health Aides	4,128	4.4%	238	2.6	12
First-Line Sup of Constrn Trd	1,869	3.6%	84	3.2	61
Bus Drvrs, Schl or Spec	2,363	3.5%	114	2.2	42
Electricians	2,214	3.1%	104	1.7	48
Physical Therapists	1,350	3.1%	70	1.3	71
Medical Secretaries	3,231	3.0%	130	2.6	38
Dental Hygienists	1,403	3.0%	69	1.4	72

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.

2014 vs. 2013 Snapshot



Employment: 335,583

Share of MA Employment: 10.0%

Chg.

Labor Force: 354,299

+1.6%

MA Labor Force: 3,557,500

+1.4%

Unemployment Rate: 5.3

-.9

MA Statewide Unemployment Rate: 5.8

-.9

Average Annual Wage: \$ 88,500

+ 6.2%

MA Average Wage: \$ 64,157

+3.8%

Unemployed Labor Supply/Online Demand: ^ .5

MA Unemployed S/D: 1.3

Employed Labor Supply/Online Demand: ^ 9.0

MA Unemployed S/D: 21.9

Boston Top 25 Occupations

	Emplmt	Avg Wage
1 Registered Nurses	22,390	\$ 96,485
2 Accountants & Auditors	11,330	\$ 83,230
3 Gen & Operations Mngrs	9,710	\$ 153,958
4 Lawyers	9,590	\$ 161,736
5 Financial Analysts	8,910	\$ 107,095
6 Security Guards	8,210	\$ 32,558
7 Management Analysts	7,690	\$ 106,376
8 Financial Mngrs	6,720	\$ 145,060
9 Medical Asst	5,270	\$ 40,627
10 Software Developers, Applications	4,660	\$ 110,643
11 Market Research Analysts & Marketing	4,430	\$ 72,841
12 Nursing Asst	4,390	\$ 34,414
13 Business Operations Specists, All Other	4,240	\$ 79,110
14 Physicians & Surgeons, All Other	4,100	\$ 121,697
15 Computer Syst Analysts	3,970	\$ 88,471
16 Edu Admin, PostScndry	3,710	\$ 105,554
17 Labrs & Frght, Stck, Mtrl Movers	3,610	\$ 37,456
18 Maintenance & Repair Wrkrs, Gen	3,560	\$ 47,312
19 Human Resources Specists	3,560	\$ 78,160
20 Software Developers, Syst Software	3,370	\$ 113,204
21 Personal Financial Advisors	3,240	\$ 134,818
22 Medical Scientists, Ex Epidemiologists	3,120	#
23 Computer & Information Syst Mngrs	3,090	\$ 148,607
24 Computer User Support Specists	3,060	\$ 63,719
25 Healthcare Social Wrkrs	2,970	\$ 62,701

Boston Highest Wage Occpnts

	Median Wage
1 Surgeons	\$ 197,012
2 Chief Executives	\$ 194,891
3 Anesthesiologists	\$ 190,808
4 Family & Gen Practitioners	\$ 182,440
5 Internists, Gen	\$ 169,969
6 Makeup Artists, Theatrical & Performance	\$ 166,599
7 Pediatricians, Gen	\$ 165,153
8 Nurse Anesthetists	\$ 157,837
9 Psychiatrists	\$ 155,795
10 Lawyers	\$ 148,957

Boston is the second largest labor market in the state. Led

by *Healthcare*, **over forty percent of Boston's employment is concentration in just three industries:** *Healthcare; Professional and Technical Services; and Finance and Insurance.*

Over the year, the Boston labor force expanded faster than the state as a whole, adding 5,716 to employment. The unemployment rate improved to 5.3, the **third lowest unemployment rate in the state.** However, **Boston's unemployment rate is the highest among the three greater Boston area WIAs.**

Mean **wages** in Boston are the **highest in the Commonwealth.** **Boston wages advanced faster than every WIA in the state with the exception of New Bedford.**

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^ Labor Supply and Online Labor Demand methodology on pg. 16 - 20.

Undisclosed.

Current Labor Demand 2014

Boston Monthly Online Demand	Avg mos. HWOL Ads	Chg Lvl vs 2013	Education
1 Software Developers, Applications	1,430	-139	Bachelor's
2 Marketing Managers	1,141	-53	Bachelor's
3 Registered Nurses	1,108	-187	Associate's
4 Web Developers	1,074	-152	Bachelor's
5 Management Analysts	980	15	Bachelor's
6 Exec Secretaries and Exec Admin Assts	956	-9	HS dplm/eqv
7 Accountants	934	-7	Bachelor's
8 Computer Systems Analysts	863	-149	Bachelor's
9 Financial Managers, Branch or Department	829	60	Bachelor's
10 Network and Computer Systems Admins	640	-97	Bachelor's
11 Sales Managers	637	-64	Bachelor's
12 Market Research Analysts & Mrking Spclts	570	4	Bachelor's
13 Information Technology Project Managers	556	-80	Associate's
14 First-Line Sprvrs Offc / Admin Spprt	552	40	HS dplm/eqv
15 Computer User Support Spclts	535	-34	Associate's
16 Medical Scientists, Except Epidemiologists	479	35	Doc or prof
17 Financial Analysts	465	37	Bachelor's
18 First-Line Sprvrs of Food Prep	460	12	HS dplm/eqv
19 Managers, All Other	440	17	HS dplm/eqv
20 Sales Reps, Whlsl & Manuf, Techl & Sci	413	-46	Bachelor's
21 Sales Representatives, Services, All Other	412	-41	HS dplm/eqv
22 Computer & Information Systems Mngrs	410	6	Bachelor's
23 Public Relations Spclts	403	-28	Bachelor's
24 Medical and Health Services Managers	397	-53	Bachelor's
25 Sales Reps, Whlsl & Manuf, Ex Tech/Sci	387	-81	HS dplm/eqv

Employer demand for labor in Boston is the highest in the state, averaging 37,290 job postings per month.

High demand combined with low unemployment narrowed Boston's labor market performance to the tightest in the state, with just .5 unemployed jobseekers and 9 employed potential job changers for every advertised online job vacancy.

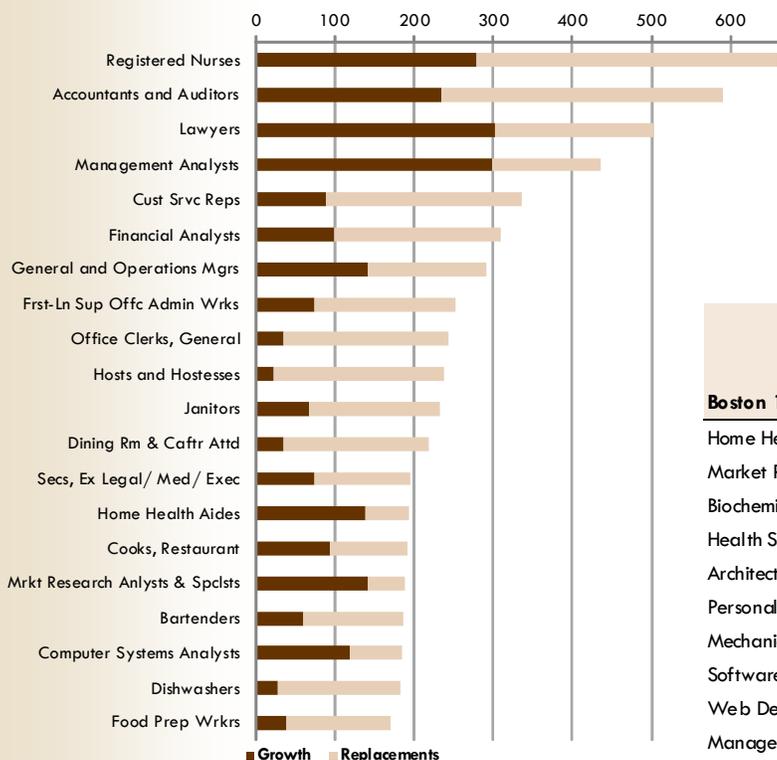
Boston's robust employer demand, higher unemployment—relative to the two other greater Boston metropolitan area WIAs, and significant upward pressure on wages, in aggregate, portend deficient supplies of skilled labor and heightened employer competition for skilled workers.

STEM related occupations are prevalent among the 25 occupations that employ the most Boston residents, and becoming even more so among current employer demand, with 17 of the 25 most online advertised positions in STEM fields—**STEM positions noted in bold.***

Minimum educational requirements for the 25 most highly demanded Boston occupations—more than any other WIA—require college degrees, ranging from an Associate's to Doctorate.

Projected Labor Demand 2016

Highest Average Annual Openings, 2014 - 2016



Anticipated labor demand through 2016 suggests greater job growth in lawyers; management analysts; home health aides; market research analysts and specialists; and computer systems analysts. Registered Nurses; accountants and auditors; and general and operations managers are anticipated to both create new jobs and have high replacement needs as current job holders retire and/or leave the fields.

Boston 10 Fastest Growing	Projectd Emplmt June 2016	Annual Growth Rate	Annual Avg Openings	Growth / Rplcmnt Ratio^^	Demand Rank within WIA
Home Health Aides	3,404	4.3%	193	2.5	14
Market Research Analysts & Spcl	4,065	3.7%	188	3.1	16
Biochemists and Biophysicists	1,288	3.6%	78	1.3	66
Health Species Teachers, Postsec	1,933	3.3%	86	2.4	60
Architects, Ex Lndscp / Naval	3,278	3.1%	168	1.4	21
Personal Care Aides	3,596	3.1%	126	6.0	41
Mechanical Engineers	1,019	3.1%	62	0.9	90
Software Devlprs, Sys	4,102	3.1%	163	3.0	22
Web Devlprs	1,647	3.0%	69	2.1	79
Management Analysts	10,976	2.8%	436	2.2	4

*20 Ibid., and *STEM (Science, Technology, Engineering, and Math) related occupations noted in bold.

^^Ratios less than one indicate more job openings due to Replacements; Greater than one indicates more openings due to Growth.



Massachusetts

Labor Market and Economic Review

2014



COMMONWEALTH OF MASSACHUSETTS
Department of Unemployment Assistance
Economic Research Office

©2015 Commonwealth of Massachusetts
An equal opportunity employer