



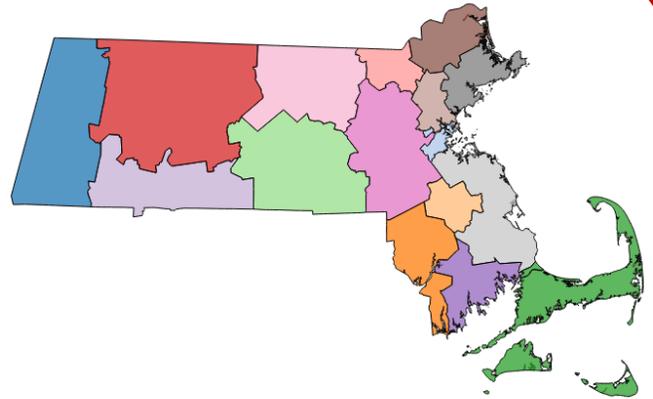
Massachusetts Workforce and Labor Area Review 2015



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EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT

Department of Unemployment Assistance

Economic Research Office

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Massachusetts 2015 Workforce and Labor Area Review

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Department of Unemployment Assistance

Economic Research Office

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Executive Summary

This report provides recent economic trends in the workforce and labor force for the Commonwealth and each of the sixteen Local Workforce Areas with emphasis on the leading drivers including: jobs by industry, occupational groups and jobs in demand along with labor force dynamics.

In 2015 the Massachusetts economy continued to show strength in job growth, declining unemployment and growth in the value of goods and services. Recent statewide trends indicate strength for the industries that drive job growth and productivity along with some slower growth for others.

The Real Estate, Rental and Leasing; Professional, Scientific and Technical Services; Manufacturing; Health Care and Social Assistance; and Finance and Insurance industries account for over half of the Commonwealth's Gross Domestic Product.

Health Care and Social Assistance; Construction; Accommodation and Food Services; and Administrative and Support Services are the key drivers of job growth from June 2015 to June 2016 with Construction posting the highest over the year rate of growth.

Statewide jobs are at another new high of 3.56 million. Seven industries – Construction; Professional, Scientific and Technical Services; Administrative and Support Services ; Educational Services; Health Care and Social Assistance; Accommodation and Food Services; and Other Services –reached new peak employment levels during the first six months of 2016.

Each industry has a unique distribution of jobs and skills by occupational groups reflecting the mix of industries and their products and services. There are notable differences in jobs by occupational group in Professional, Scientific and Technical Services and Manufacturing industries but each has large shares of jobs in Management; Architecture and Engineering; and Office and Administrative Support occupations.

Annual projected demand for jobs by occupational group shows openings due to growth in the occupations and the largest shares of openings due to replacement as workers retire or leave jobs for other reasons.

Statewide and in several workforce areas HWOL current job postings relative to the estimated numbers of unemployed residents indicate tightness in openings as fewer residents are unemployed.

The labor force is growing at a slower rate than jobs with fewer residents participating in the labor force. The June 2016 labor force participation rate is unchanged over the year as more residents are employed.

Educational attainment correlates positively to increased labor force participation rates, more employed residents and lower unemployment rates for those age 25 plus.

Massachusetts has a highly educated labor force with over half of the residents age 25 plus with a Bachelor's Degree or higher.

Population projections for 2020, 2025 and 2030 indicate the largest and fastest growing age cohort will be for those age 65 plus.

Statewide Workforce and Labor Force Trends

Leading monthly indicators of the Commonwealth's economic performance show continued strength in job growth with a moderate expansion of the labor force. The numbers of jobs added and the rate of job growth exceeds that of the labor force. The Health Care and Construction industries added the largest numbers of jobs. Real time job openings statewide indicate some slack in hiring demand compared to same time last year.

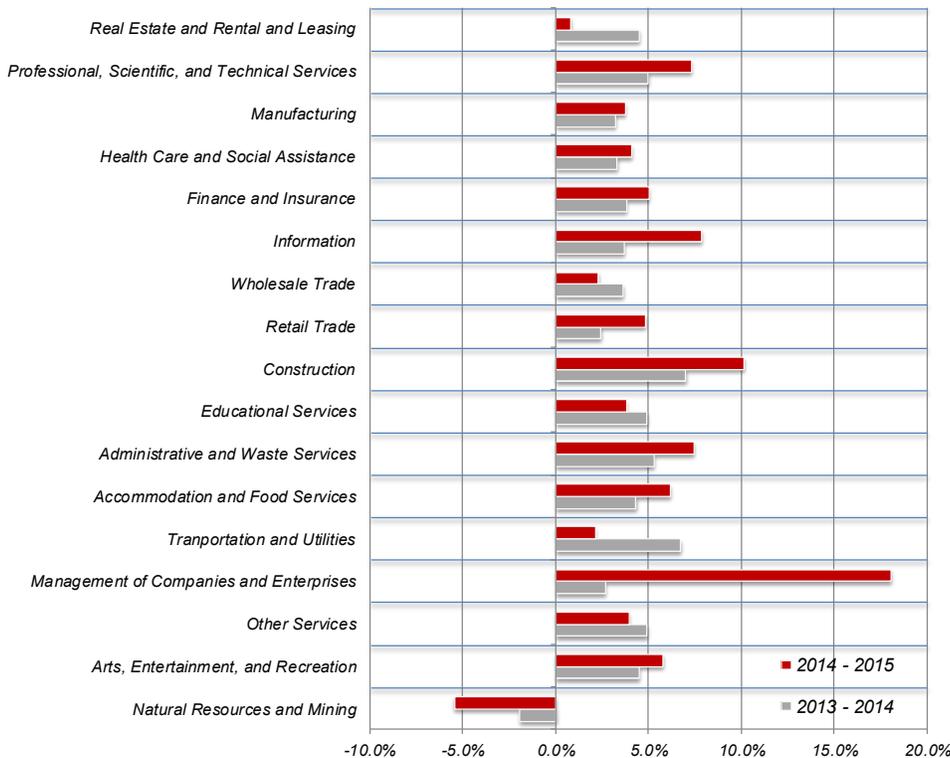
Gross Domestic Product

Gross Domestic Product (GDP) current dollar estimates measure the value of goods and services produced in the Commonwealth. In 2015 Massachusetts GDP is estimated at \$476.7 billion. Private sector industries account for \$425 billion or 89 percent of the State's GDP. The 2015 private industries' GDP over the year gain of \$19.6 billion is a growth of 4.8 percent compared to the 4.1 percent over the year gain the previous year.

Private service-producing industries represent the largest shares of GDP, jobs and wages in Massachusetts with a GDP total of \$358 billion, a growth of 5.2 percent over the year.

Ranked by share of GDP, Real Estate Rental and Leasing; Professional, Scientific and Technical Services; Manufacturing; Health Care and Social Assistance; and Finance and Insurance, account for over half of GDP. Real Estate Rental and Leasing contributed \$66.8 billion or 14 percent of GDP with smaller shares of jobs and private sector wages covered by the unemployment insurance (UI) program.

Annual Gross Domestic Product Growth by Industry



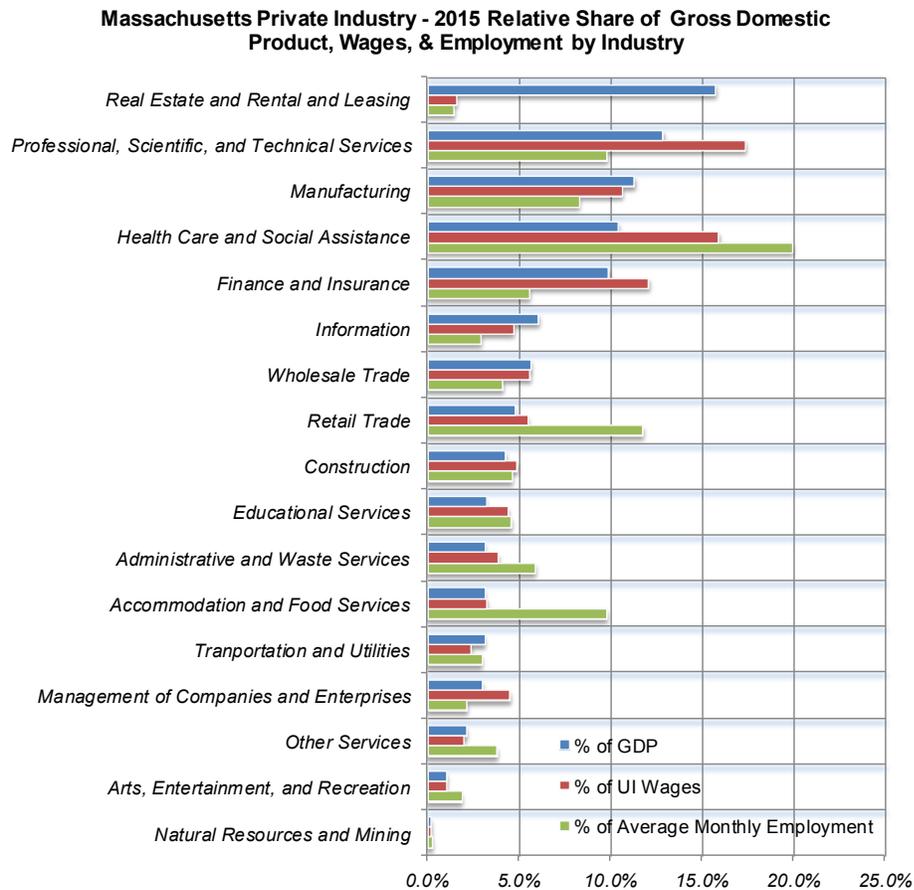
Source: US Department of Commerce, Bureau of Economic Analysis (BEA)

In 2015, Manufacturing and Construction, the two leading goods producing sectors, added \$66.2 billion to GDP. Manufacturing, which contributed the third highest share of GDP, the fourth highest shares of private wages and annual average monthly employment, has just over 249,000 employees and produces high value added products. Construction with an average of 139,000 jobs a month in 2015 recorded a ten percent year-over-year growth in GDP following a 7 percent yearly growth in 2014.

Private sector payrolls covered by the Unemployment Insurance program are 47.5 percent of GDP. Professional, Scientific and Technical Services; Health Care and Social Assistance; Finance and Insurance and Manufacturing had the largest annual total payrolls in 2015.

Health Care and Social Assistance; Professional, Scientific and Technical Services and Manufacturing were three of the five industries with the largest shares of jobs, representing over 41 percent of private sector jobs in 2015. With 2015 average monthly employment of 598,500, Health Care and Social Assistance generates one in every five job private sector jobs.

The chart below compares 2015 shares of GDP, private sector UI total wages and average monthly employment by industry.



Source: US Department of Commerce, Bureau of Economic Analysis (BEA), MA Department of Unemployment Assistance (DUA), QCEW Program, 2015 Wages and Employment

Industry Trends

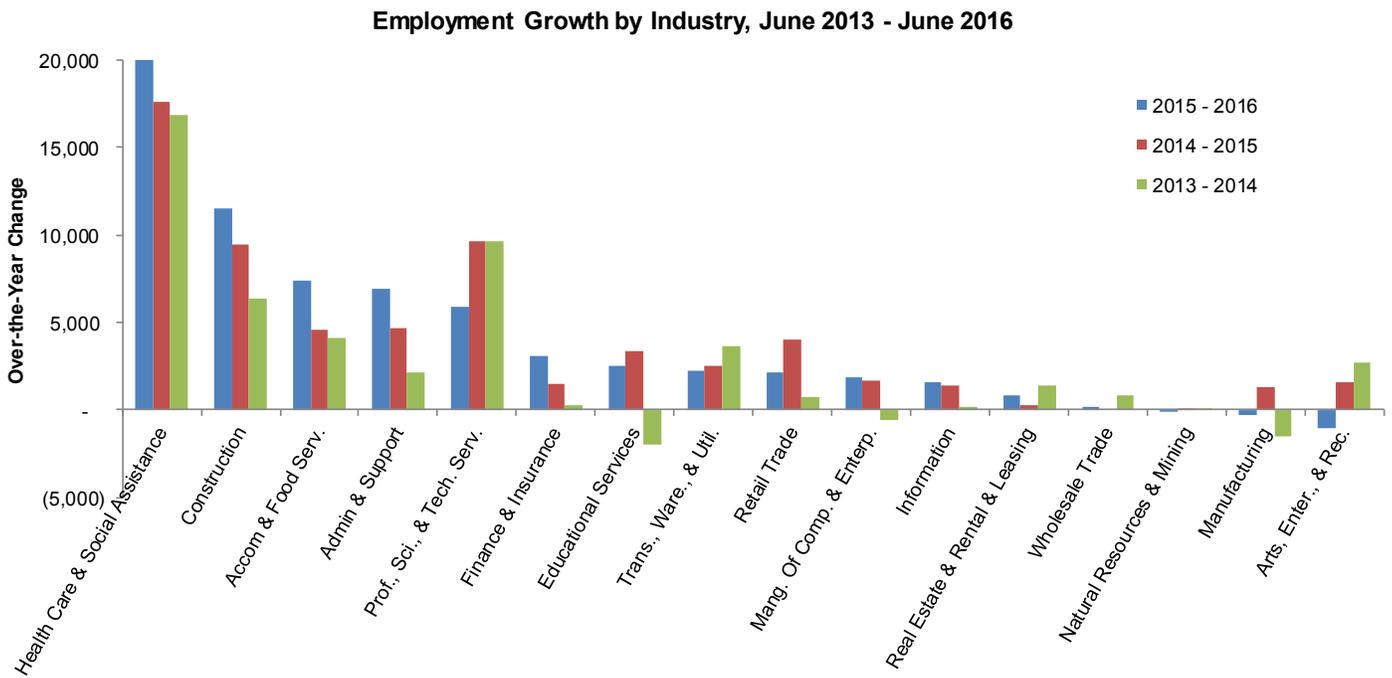
The BLS Current Employment Statistics jobs estimates provide more current measures of the jobs by industry in the Commonwealth than the universe numbers of jobs reported by employers for the unemployment insurance program. Job levels in Massachusetts, estimated at 3.56 million in June 2016, are at their highest levels.

The Commonwealth has a highly educated labor force, which is home to universities and colleges, research centers, corporation, and venture capital firms that invest and fund research and development. Changes in life styles and purchasing habits have changed the mix of products and services and a construction boom has also generated record numbers of jobs.

Health Care and Social Assistance; Construction; and Accommodation and Food Services generated the most jobs from June 2015 to June 2016. Jobs in Manufacturing had modest declines.

Job gains in parts of Retail Trade; Accommodation and Foods Services; Arts, Entertainment and Recreation; and Other Services reflect the demands of a growing labor force. These industries also offer part-time work with schedules that accommodate the variety of scheduled hours' job seekers may be available to work.

Jobs in Construction are at their highest level and have the largest year-to-year rate of growth. The construction boom reflects increasing demands for housing, industrial, commercial and entertainment space and is revitalizing core cities and towns. During the first six months of 2016 the Real Estate, Rental and Leasing; Professional, Scientific and Technical Services; Administration and Support; Educational Services; Accommodation and Food Services; and Other Services industries have all reached new peak employment levels.



Source: US Bureau of Labor Statistics (BLS), Current Employment Statistics (CES), June 2016, Seasonally Adjusted

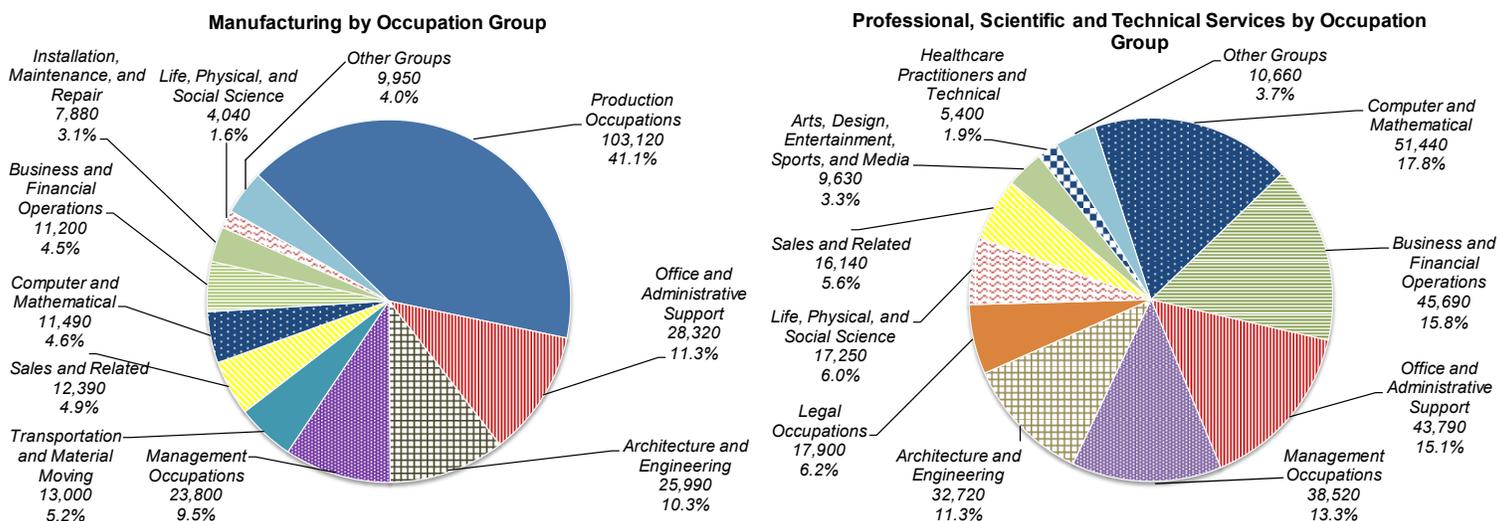
Occupations by Industry

Looking at jobs by occupation we can identify the specific job titles and educational attainment levels of the Massachusetts workforce. Jobs are classified and grouped by major areas of the type of work performed. At major group levels, comparisons can be made for broad categories of work that are found in each industry. Estimates of the numbers of jobs and the mean average annual wages by detailed occupation at the summary group levels are available from the Occupational Employment and Wage Statistics (OES). Estimates are further developed to array the information by major occupational group and industry. These estimates provide staffing patterns by industry and show the wide range and diversity of jobs for each of the major occupation groups. OES and staffing pattern estimates by industry include private and state and local government sectors.

Seven major occupational groups are prevalent in every industry. Statewide, the highest average annual wages are in Management Occupations which has 255,000 jobs, 7.5 percent of all jobs. By industry the shares of occupational groups vary due to the nature of the businesses. Jobs in Management range from a low of 3 percent in Retail Trade and Food and Accommodation Services; to 9.5 percent in Manufacturing and 23 percent in Management of Companies. Real Estate Rental and Leasing; Finance and Insurance; Professional, Scientific and Technical Services; and Information industries Management Occupations have shares of 12 to 15 percent for these jobs that generally require higher education and skills. In addition, Business and Financial Operations; Computer and Mathematical; Office and Administrative Support; Installation, Maintenance and Repair; and Transportation and Material Moving occupations are an integral part of every industry.

Within each industry the mix of occupational groups and job titles vary as do the levels of skills, previous experience and or education required.

The following two examples below show the distribution of jobs for the occupational groups with the largest shares of jobs for the industry.



Source: US Bureau of Labor Statistics (BLS), MA DUA, Occupational Employment and Wages (OES), May 2015

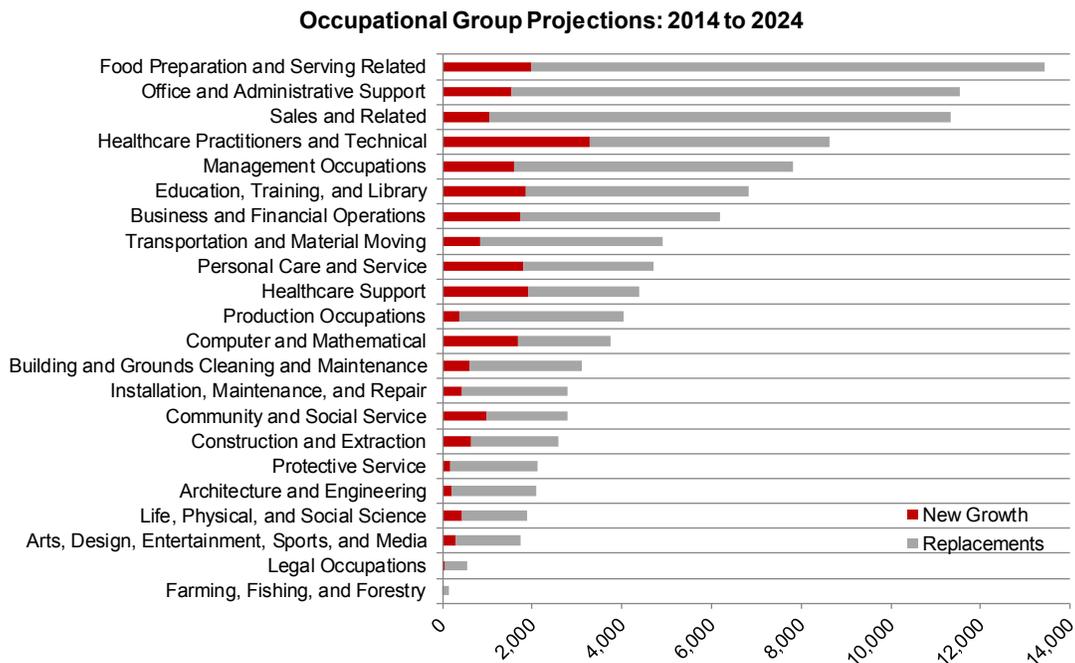
Occupational Demand

Industry and Occupation Projections estimate the likely annual demand for jobs due to replacement and growth. Replacement demand, which indicates openings for workers who retire or leave their jobs, generates the largest numbers of projected openings in almost all industries and occupations.

The expected increases in the aging labor force will likely generate higher replacement rates for some industries and occupations over the next eight years than reflected in the projections. Looking at the more detailed staffing patterns at product levels and working with employers in those industries will provide more guidance on the specific occupations, skills and education required to meet replacement demands, the major source for new and reemployment opportunities.

Short-term projections, statewide and by LWDA, are produced and published yearly; long-term projections are done every two years providing workforce partners, policy makers, job seekers and the public with more recent staffing patterns and expected annual job openings.

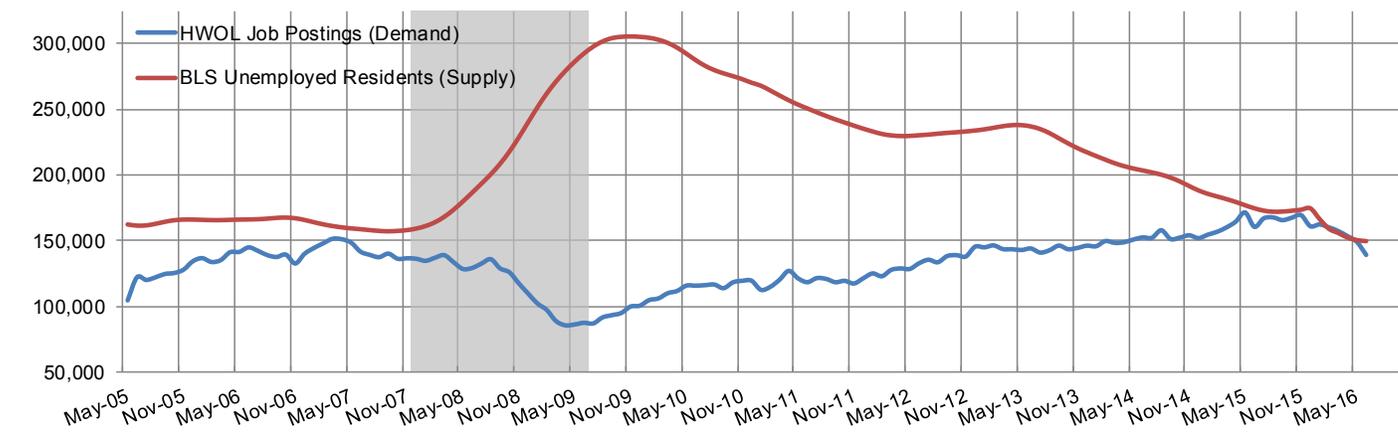
The 2014 to 2024 long term projections estimate total annual openings of 107,400 with 23,400 due to growth and 84,000 due to replacement. Openings statewide by major occupational group are displayed on the chart below.



Current Job Postings

The Conference Board's Help Wanted On-line (HWOL) analytics provide real time information on job postings. The seasonally adjusted data shows that total postings have edged down in recent months. Using HWOL job postings as a proxy for demand for jobs and the estimated number of unemployed residents as a proxy for labor supply the graph below shows the two series are within a narrow range of each other for most of the last year. The supply estimate does not include the share of employed workers who are seeking other job opportunities, making the job market tighter.

Labor Supply vs. Labor Demand
Massachusetts Seasonally Adjusted Data



Source: The Conference Board's Help Wanted On Line (HWOL), Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS) Program

There were 139,100 job postings in June 2016 with 32 percent of the openings for STEM occupations. Compared to one year ago, postings were down 9,100 or 6.5 percent.

Job postings by educational attainment that require a Doctor's Degree were up over the year. Thirty one percent of the openings require a Bachelor's Degree, a third of all postings were for jobs that require related work experience and openings that typically require an Associate's Degree represent an additional 11 percent of openings.

The Healthcare Practitioner and Technical Occupations group which added postings over the year, makes up 12 percent of total job postings, with postings for Registered Nurses postings having the largest increase. At the same time, Computer and Mathematical Occupation postings which also represent 12 percent of postings, experienced a decline in postings compared to same time last year. Other occupational groups that had fewer postings in June compared to same time the prior year, include Computer Occupations, Software Developers and Computer Systems Analysts; Sales and Related Occupations; Office and Administrative Support Occupations; and Construction and Extraction.

Job postings peaked in November 2015 at 169,500.

Labor Force

Massachusetts' labor force series as measured by the Bureau of Labor Statistics (BLS) provide estimates of the number of residents age sixteen plus who are employed or unemployed and actively seeking work. At just under 3.6 million in June 2016, the labor force continues to show slow growth with fewer residents participating in the labor force. The June 64.9 labor force participation rate, the proportion of the working age population in the labor force, and the 62.2 employment population ratio, the share of working age population employed, are each three percentage points below the levels prior to the 2008 recession. At 4.2 percent, the June 2016 unemployment rate is the lowest rate since the September 2001 rate of 4.1 percent.

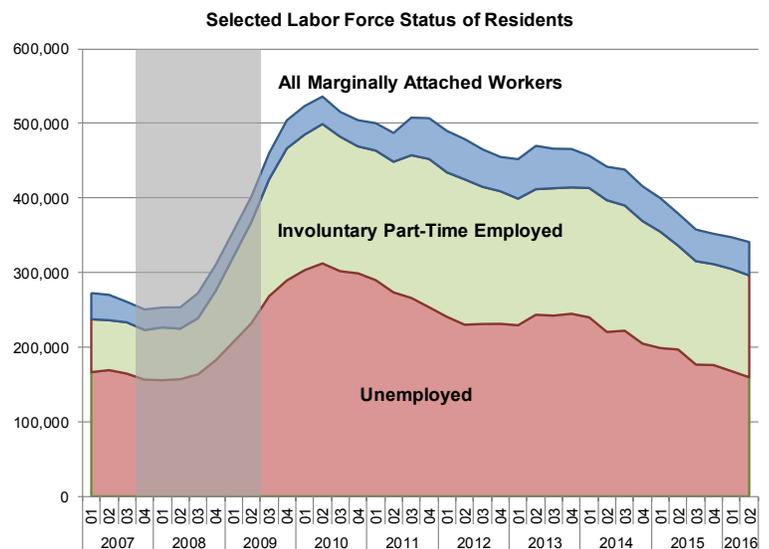
The modest over the year rise in the employment population ratio to 62.2 reflects the over the year increase in the number of employed residents. At 64.9 the labor force participation rate is unchanged. While the share of residents participating in the labor force remains constant over the year, the labor force has grown by 24,700, a growth of 0.7 percent, with 49,700 more residents employed and 24,900 fewer residents unemployed. The monthly labor force and unemployment rate estimates are two of three monthly indicators of the state's economy.

At the same time GDP is increasing and Massachusetts is adding jobs, some employers are voicing their concerns about labor shortages for available jobs. With both the employment population ratio and labor force participation rates remaining below the prerecession levels in the spring of 2008, the current participation rates are a concern of the workforce system and policy makers at both the state and national levels.

The 1.8 million residents who do not want a job now comprise the largest share of residents not in the labor force. Retirees, residents on certain disability programs, those attending school and others who do not want to work now are included in the not in labor force estimate.

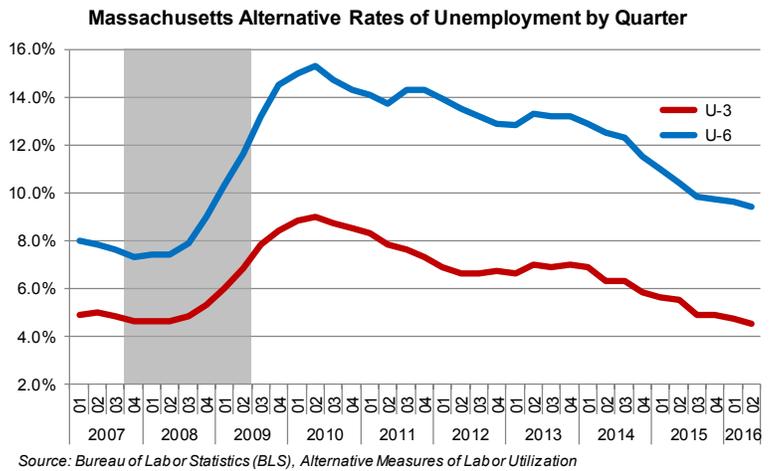
Due to the small monthly sample for Massachusetts used to develop labor force estimates, reliable information on the reasons why residents do not want a job now are not available. Based on June 2016 twelve month average there were 140,900 residents not in the labor force who do not want a job now but have not been seeking work.

Counted in the labor force are an average 136,600 or 4 percent of employed residents who are involuntarily working part-time and cannot find full-time work. During the recession this estimate peaked in 2011 at 6.1 percent of employed residents. At 4 percent, the current share of underemployed residents is twice as high as before the 2008 recession when 2 percent of the employed residents were involuntarily working part-time. Changes in the mix of job opportunities and hiring practices in some industries may account for the larger share of involuntary part-time residents.



Alternative Measures of Unemployment

To measure the impact of individuals not counted in the official monthly unemployment rates, U-3, BLS produces four quarter average estimates for a series of alternative unemployment rates. The broadest measure, known as U-6, includes estimates for marginally attached workers, these residents who want a job now but have not sought work in the most recent four weeks are not included in the monthly official unemployment rate, plus residents working 35 hours or less per week who are available for and want to work full-time, referred to as involuntary working part-time. These residents are included in the monthly rates as employed. The U-6 rate for the twelve months ending June 2016 is 9.4 percent. The rate was lowest for the comparable period in 2007 at 7.4 percent and peaked at 15.3 percent in 2010.



Labor Force Participation and Unemployment Rate Trends

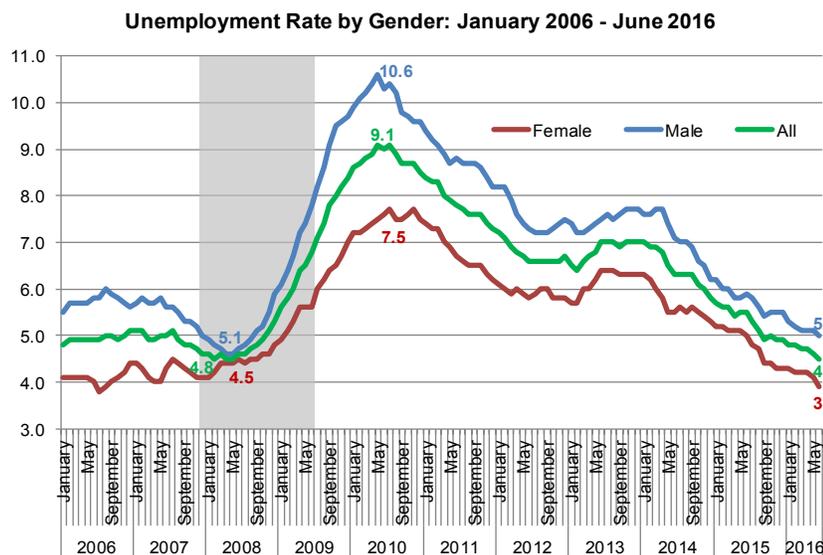
Using twelve month averages, we can compile labor force participation and unemployment rate estimates by gender, educational attainment and age cohorts.

The labor force participation rate for residents age 16 plus was 66 in September 2008. Rates gradually declined through 2014. By June 2016 the labor force participation rate was 64.7 or 1.3 percentage points below the prerecession rate.

BY gender, male labor force participation rates rose just prior to the recession to 72.7 in September 2008 and have fallen to 69.7 in June 2016.

The rates for females dropped prior to the recession to 61.8 in September 2008, peaked in 2009 and are at 60.2 in June 2016. The unemployment rates clustered in April 2008 with statewide rate of 4.5 percent, female rate of 4.4 percent and male rate of 4.5 percent.

Unemployment rate trends for all and by gender peaked in 2010 with the male rate 1.6 percent higher than the statewide 9.1 rate and the female rate 1.6 percent lower. By June 2016 the rates are all down with the male rate higher than all and the female rate lower.

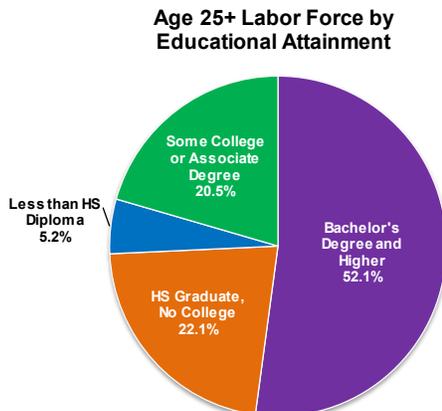


Source: Unpublished Bureau of Labor Statistics (BLS), Current Population Survey (CPS), 12 Month Moving Averages compiled by DUA

Educated Labor Force

Labor force statistics by educational attainment are available for residents age 25 plus. Statewide residents age 25 plus represent 85 percent of the working age population with labor force participation rate of 66.5, a 63.9 employment population ratio and a 4 percent unemployment rate.

Educational attainment correlates positively to increased labor force participation rates, employment population ratios, more employed residents and lower unemployment rates.



Source: Unpublished Bureau of Labor Statistics (BLS), Current Population Survey (CPS), 12 Month Moving Averages compiled by DUA

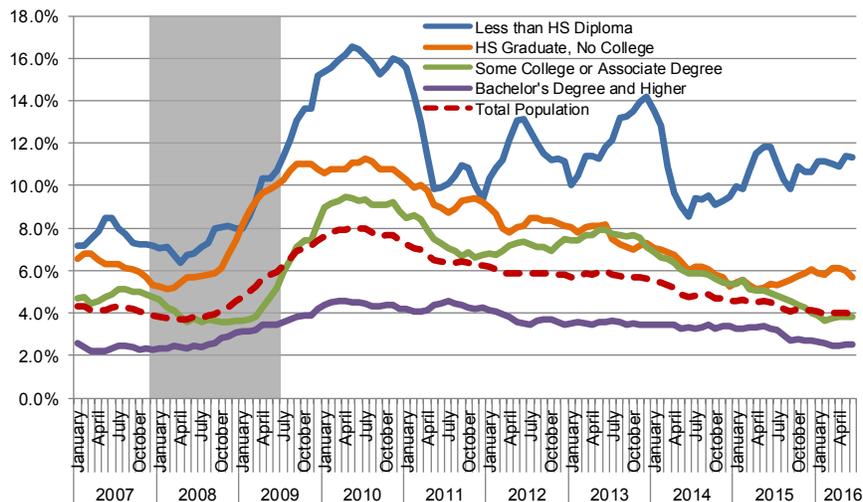
Residents with bachelor's degree or higher are 46 percent of the working age population, the largest share, and over half of the labor force and number of employed residents. This cohort has the highest labor force participation rate of 75.4, and the lowest unemployment rate of 2.5 percent.

Residents with some college or associates degree are the third largest group by population with a 3.9 percent unemployment rate and 67.2 labor force participation rate.

Unemployment rates for those with bachelor's degree or Higher and Some College or Associates Degrees declined over the year.

High school graduates with no college are the second largest share of the population with a labor force participation rate of 59 and 5.7 percent unemployment rate. Residents with less than a high school diploma are the next to smallest share of the population, 7.4 percent, with the lowest labor force participation rate, 39.6, and the highest unemployment rate of 11.4 percent. The unemployment rates remain twice that of those who graduate high school.

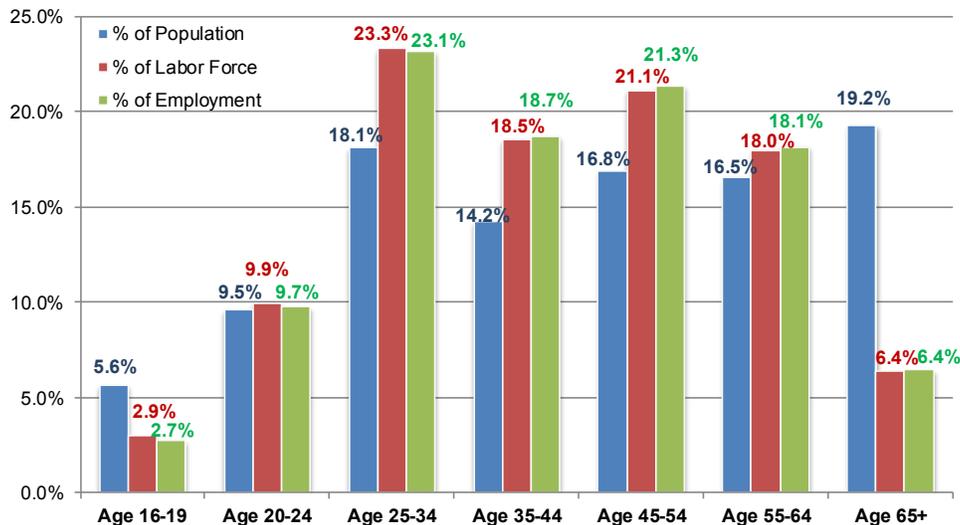
Unemployment Rates by Educational Attainment, Age 25+



Source: Unpublished Bureau of Labor Statistics (BLS), Current Population Survey (CPS), 12 Month Moving Averages compiled by DUA

Aging Labor Force

Percentages of Working Age Population, Labor Force, and Employed Residents by Age Groups, June 2016



Source: Unpublished Bureau of Labor Statistics (BLS), Current Population Survey (CPS), 12 Month Moving Averages compiled by DUA

As the chart above shows residents in the core working age cohorts of 25 to 34, 35 to 44 and 45 to 54, are just under half of the working age population, 62.9 percent of the labor force and 63.1 percent of the employed population. The 35 through 64 age cohorts have unemployment rates of 3.5 to 3.6 percent. The 20 to 24 and 55 to 64 age cohorts labor force participation rates of 67.3 and 70.3.

At 310,200 or 5.6 percent of the working-age population, teens, age 16 to 19, represent the smallest share of the population and have the highest unemployment rate, 12.4 percent.

With just over 1 million residents' in this cohort seniors, age 65 plus, represent 19.2 percent of the Commonwealth's 5.5 million working age population. This cohort has a labor force participation rate of 21.4 and represents the largest share of those not in the labor force. The numbers of baby boomers reaching retirement age is a contributing factor in the drop in labor force participation. Larger in-migration of younger workers may be needed to offset resident's retiring and no longer in the labor force.

Labor Force by Age Group, June 2016

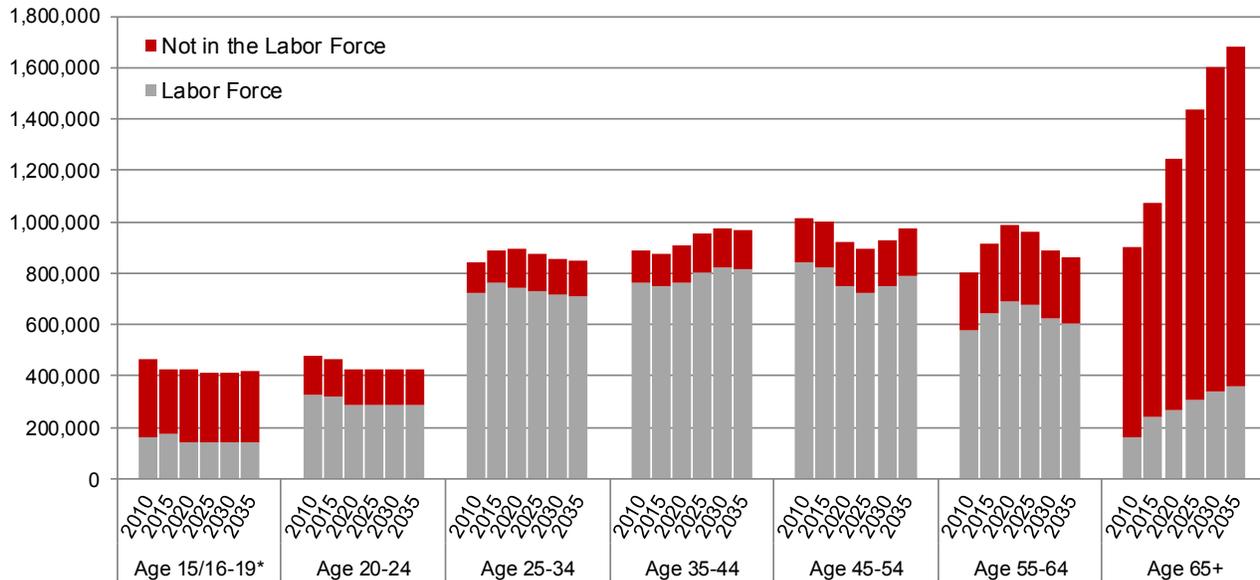
Age Groups	Working Age Population	Not in the Labor Force	Labor Force	Participation Rate	Employed	Employment/Population Ratio	Unemployed	Unemployment Rate
Age 16-19	310,200	205,100	105,100	33.9	92,100	29.7	13,000	12.4%
Age 20-24	527,000	172,500	354,500	67.3	331,300	62.9	23,300	6.6%
Age 25-34	996,800	165,700	831,100	83.4	788,700	79.1	42,400	5.1%
Age 35-44	783,000	123,000	660,000	84.3	636,900	81.3	23,100	3.5%
Age 45-54	927,800	174,200	753,600	81.2	726,500	78.3	27,000	3.6%
Age 55-64	912,200	270,800	641,400	70.3	618,700	67.8	22,700	3.5%
Age 65+	1,062,500	835,600	226,900	21.4	218,800	20.6	8,000	3.5%
Total	5,519,500	1,946,900	3,572,600	64.7	3,413,000	61.8	159,500	4.5%

Source: Unpublished Bureau of Labor Statistics (BLS), Current Population Survey (CPS), 12 Month Moving Averages compiled by DUA

Population Projections

The University of Massachusetts' Donahue Institute's population projections for 2020, 2025 and 2030 indicate that from 2015 to 2030 the largest and fastest growing age cohort will be those age 65 plus. At 1.5 million they will be just over 26 percent of the population age 15 plus. The 20 to 24 and 25 to 34 age cohorts are expected to decline. Age 15 to 19 year olds are also expected to decline. Population aged 55 to 64 is projected to peak in 2020 and then decline.

Population & Labor Force Projections by Age Groups, 2010-2035



Source: UMass Donahue Institute Vintage 2015 Population Projections, March 2015, DUA Labor Market Estimates

The population estimates, based on Census data, indicate that the current tight labor market may not be able to provide the employees needed to support continued annual rates of job growth at current levels or meet the demand to replace existing workers as they leave the labor force. For demonstration purposes, DUA has applied the current labor force participation rates to the Donahue Institute's projections to show what the impact could be. Donahue does not project labor force projections rates.

At current labor force participation rates by age cohort, the population estimates suggest tighter labor markets and on-going challenges for the workforce system.

Workforce Development Areas

In Massachusetts there are sixteen Workforce Development Areas and accompanying boards that support economic development, help to build workforce pipelines as well as spearhead regional planning initiatives and workforce strategies. The following contains key labor market data and insight for each of these areas.

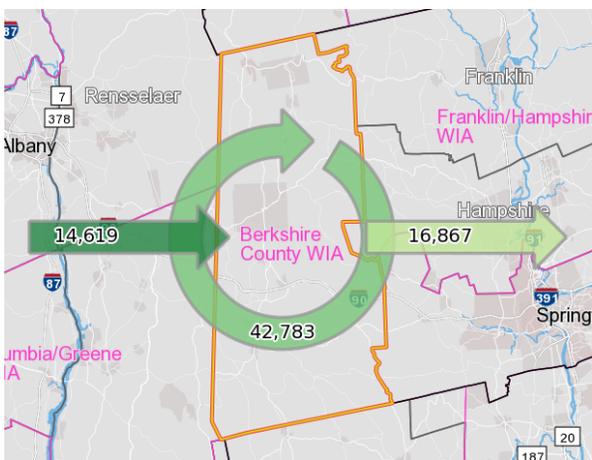
Berkshire County WDA

2015 vs. 2014 Snapshot

Employed Residents	61,950	
Share of MA Employment	1.8%	<u>Change</u>
Labor Force	65,608	-0.5%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	5.6%	-0.9%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$42,120	3.2%
MA Average Wage	\$64,116	4.1%
Number of Establishments	4785	2.2%
MA Establishments	234,994	3.4%

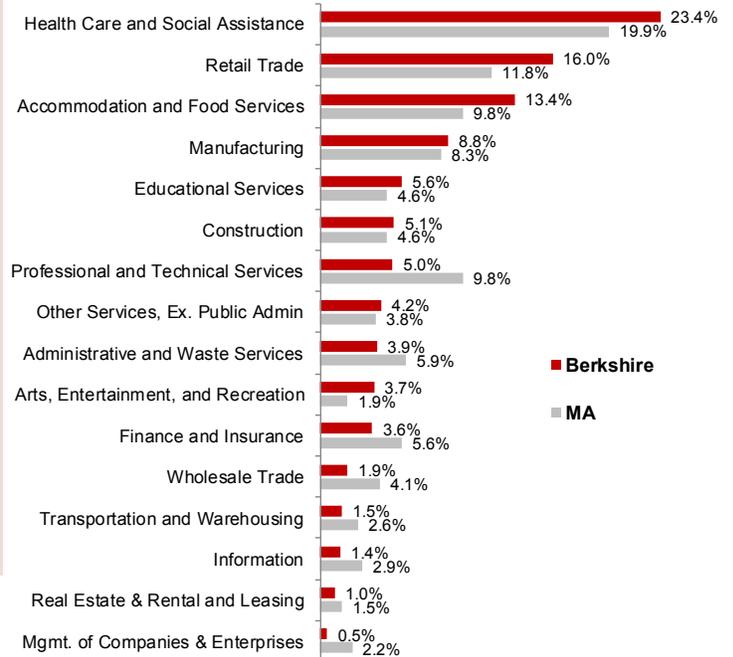
Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

Berkshire County WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

The Berkshire County Workforce Development area has the smallest labor force in the Commonwealth. Losing roughly 500 individuals from the labor force from 2014 to 2015, it also showed the largest percentage decline relative to the other Workforce Areas in Massachusetts.

The individuals who make up the work force in Berkshire County tend to reside there, with 72 percent of workers in this area calling it their home as well. This is far higher than other workforce areas and somewhat surprising given the area's rural makeup, but it's possible that fewer public transportation options necessitate that workers live closer to their place of employment.

Industry wise, Healthcare Care and Social Assistance as well as Retail Trade figure heavily in the composition of jobs for this area, much like the other workforce areas. Manufacturing is also important to the Berkshire County economy as it's the fourth largest industry in terms of employment share. Paper Production, Non-Metallic Mineral Products, Plastic and Rubber Products as well as Fabricated Metal Products define the Manufacturing industry in Berkshire County.

Berkshire County WDA Top 10 OES Occupations		Employment	Median Wage
1	Office and Administrative Support	8,840	\$33,940
2	Food Preparation and Serving Related	6,280	\$20,655
3	Sales and Related	5,970	\$23,705
4	Education, Training, & Library	5,220	\$50,082
5	Healthcare Practitioners and Technical	3,930	\$67,631
6	Management Occupations	3,820	\$79,467
7	Production Occupations	2,890	\$35,936
8	Building, Grounds Cleaning, & Maintenance	2,850	\$28,629
9	Retail Salespersons	2,660	\$22,378
10	Construction and Extraction	2,590	\$44,899

Berkshire County WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg Mly. Postings	Education
1	Heavy and Tractor-Trailer Truck Drivers	74	HS dplm/eqv
2	Retail Salespersons	72	less than HS
3	Speech-Language Pathologists	65	Master's
4	Computer Occupations, All Other	62	Bachelor's
5	First-Line Supervisors of Retail Sales Workers	58	HS dplm/eqv
6	Physical Therapists	53	Doc or prof
7	Registered Nurses	50	Associate's
8	Social and Human Service Assistants	43	HS dplm/eqv
9	Customer Service Representatives	32	HS dplm/eqv
10	Occupational Therapists	27	Master's
11	Network and Computer Systems Administrators	22	Bachelor's
11	Supervisors of Office and Admin. Support Workers	22	HS dplm/eqv
13	Janitors & Cleaners, Except Maids	21	less than HS
13	Supervisors of Food Prep.& Serving Workers	21	HS dplm/eqv
15	Cooks, Restaurant	20	less than HS
15	Computer User Support Specialists	20	Associate's
15	Maintenance and Repair Workers, General	20	HS dplm/eqv
18	Nursing Assistants	19	PstScdry non award
18	Licensed Practical & Licensed Vocational Nurses	19	PstScdry non award
18	Food Prep. & Serving Workers, Incl. Fast Food	19	less than HS
18	Executive Secretaries & Executive Admin Assistants	19	HS dplm/eqv
18	Automotive Service Technicians and Mechanics	19	HS dplm/eqv
23	Industrial Engineers	18	Bachelor's
24	Software Developers, Systems Software	17	Bachelor's
24	Merchandise Displayers and Window Trimmers	17	HS dplm/eqv

Occupations with lower than average paying wages made up the majority in this area for 2015, the two with the highest volume being Office and Administration and Food Preparation and Serving Related Occupations paying annual salaries of \$33,940 and \$20,655 respectively.

Average wages in Berkshire County were the second lowest in the Commonwealth, just ahead of Franklin/Hampshire, and grew 3.2 percent from 2014, slightly below the State Average.

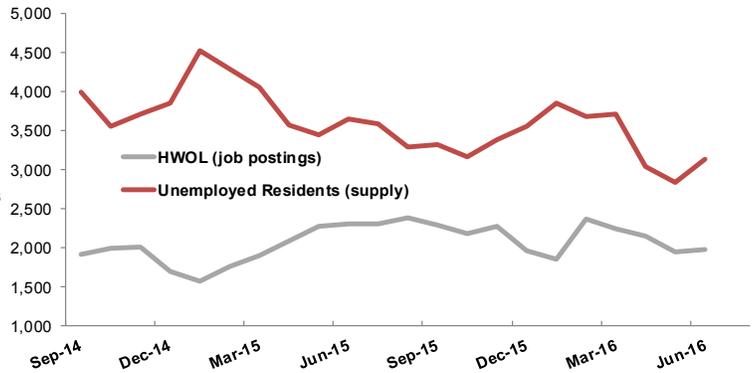
Overall demand for labor showed moderate volume but increased during the summer months likely due to the seasonal nature of the Berkshire County area. Demand for occupations in this area was comprised largely of Transportation, Health and Food Service related occupations. There was also a moderate demand for IT related occupations, primarily in support of the Educational Services industry.

Annually, projected openings in Berkshire County are dominated by occupations requiring less than a high school diploma with high turnover rate, with the top three being Retail Salespersons, Cashiers and Waiters/Waitresses.

**Berkshire County WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Berkshire County WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

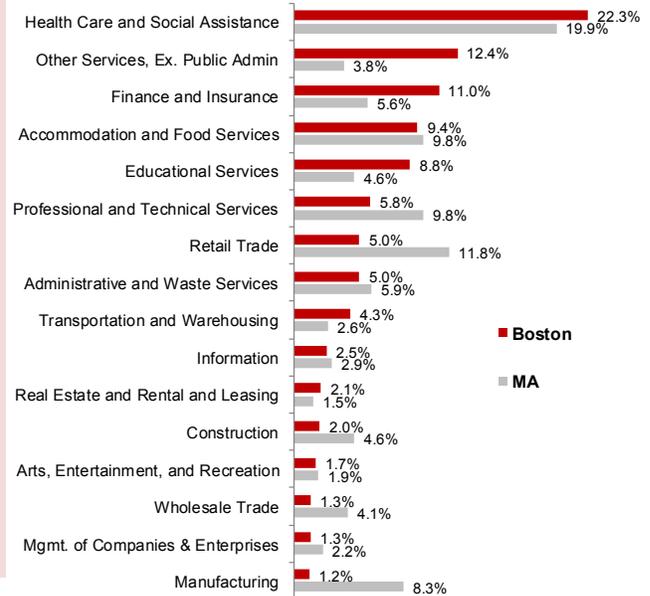
Boston WDA

2015 vs. 2014 Snapshot

Employed Residents	342,272	
Share of MA Employment	10.1%	<u>Change</u>
Labor Force	358,647	0.7%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	4.6%	-0.7%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$92,040	3.9%
MA Average Wage	\$64,116	4.1%
Number of Establishments	24,850	5.6%
MA Establishments	234,994	3.4%

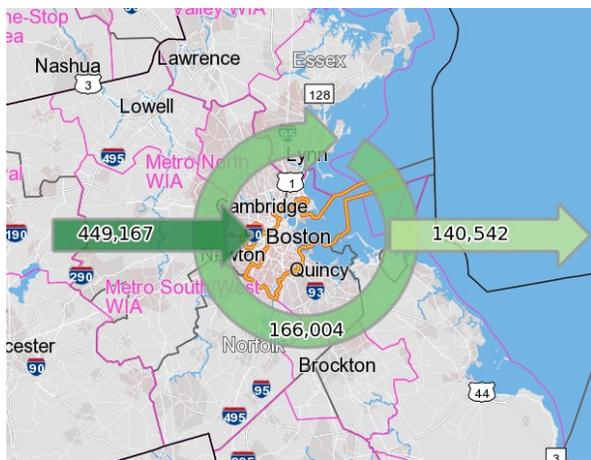
Source: DUA LAUS/QCEW Annual Averages

Boston WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- Live in WDA, employed outside
- Employed and live in the WDA
- Employed in the WDA, live outside

The Boston Workforce Development Area has one of the largest labor forces in Massachusetts which grew at the fastest rate from 2014 to 2015. Annual average unemployment has decreased in this area by 0.7 percent, the same rate as Massachusetts as a whole.

Boston has the largest share of individuals commuting into the area to work with 73 percent of workers coming to Boston from other workforce areas. This stands to reason, given the high cost of living, abundance of job openings, and public transportation infrastructure. More than half of the areas residents work here as well with 54 percent of Boston residents working in Boston.

More so than other workforce areas, Boston's industry composition is predominantly service based. Manufacturing comprises only 1.8 percent of the jobs in this area. Health Care, Finance, Accommodation and Food Services, Education, and Professional, Scientific and, Technical Services account for more than half of all jobs.

Registered Nurses and Management Occupations account for some of the highest employment levels in Boston and pay far above the sala-

Boston WDA Top 10 OES Occupations		
	Employment	Median Wage
1 Registered Nurses	22,950	\$101,559
2 Waiters and Waitresses	13,100	\$27,870
3 Retail Salespersons	11,860	\$23,605
4 Accountants and Auditors	11,130	\$78,251
5 General and Operations Managers	10,380	\$141,952
6 Janitors and Cleaners, Except Maids and Housekeeping Cleaners	9,480	\$32,314
7 Customer Service Representatives	9,150	\$41,445
8 Security Guards	8,840	\$28,745
9 Office Clerks, General	8,770	\$37,705
10 Lawyers	8,680	\$163,297

Boston WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg Mly. Postings	Education
1	Registered Nurses	1324	Associate's
2	Software Developers, Applications	1277	Bachelor's
3	Accountants and Auditors	1212	Bachelor's
4	Computer Occupations, All Other	1137	Bachelor's
5	Management Analysts	1092	Bachelor's
6	Marketing Managers	942	Bachelor's
7	Executive Secretaries and Executive Administrative Assistants	939	HS dplm/eqv
8	Financial Managers	887	Bachelor's
9	Web Developers	862	Bachelor's
10	Computer Systems Analysts	832	Bachelor's
11	Network and Computer Systems Administrators	571	Bachelor's
12	Computer User Support Specialists	536	Associate's
13	Managers, All Other	530	HS dplm/eqv
14	Market Research Analysts and Marketing Specialists	499	Bachelor's
15	Sales Managers	484	Bachelor's
16	First-Line Supervisors of Office and Administrative Support Workers	473	HS dplm/eqv
17	Financial Analysts	454	Bachelor's
18	Medical Scientists, Except Epidemiologists	407	Doc or prof
19	First-Line Supervisors of Food Preparation and Serving Workers	406	HS dplm/eqv
20	Customer Service Representatives	397	HS dplm/eqv
21	Public Relations Specialists	376	Bachelor's
22	Computer and Information Systems Managers	374	Bachelor's
23	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	366	Bachelor's
24	Human Resources Specialists	353	Bachelor's
25	Sales Representatives, Services, All Other	345	HS dplm/eqv

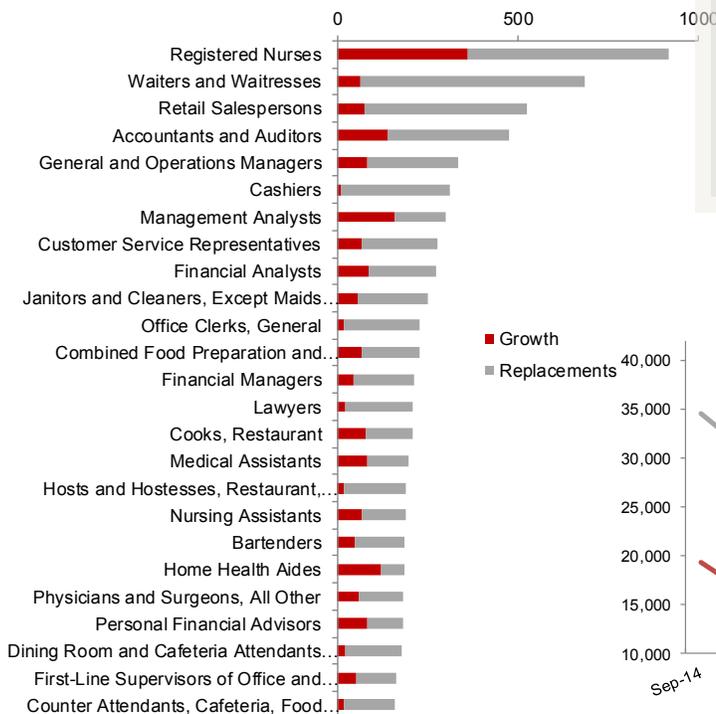
Security Guards and Lawyers both have high levels of employment relative to other areas. While the largest majority of Security Guards are employed in Admin, Services, the Accommodation and Food Service industry employs over 1,000 individuals and makes up more than one third of its overall staffing composition in Boston.

Boston has an extremely tight labor market. Using the number of unemployed residents in Boston as a proxy for labor supply, overall demand for jobs far exceeds the supply. In order to satisfy the area's labor demand, Boston is a "hub" for jobs and employers attracts workers from other workforce areas. Only 27 percent of all workers in Boston actually live there.

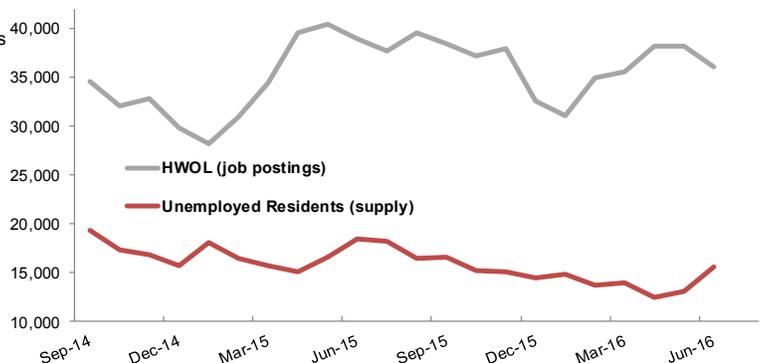
This current labor market gap is likely to be driven by the significant demand from Boston businesses for IT related occupations. In 2015 there were a combined average of 5,589 jobs posted online each month for IT occupations that included Software Developers, Web Developers, Computer Systems Analysts, Network Administrators, Computer User Support Specialists, and Computer Occupations.

Registered Nurses showed the highest demand in the Boston area. They are also projected to have the largest numbers of openings each year from turnovers and replacements as well as from continued growth of the Health Care industry. General and Operations Manager; Lawyers; and Accountants are also projected to generate higher numbers of openings each year,

**Boston WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Boston WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

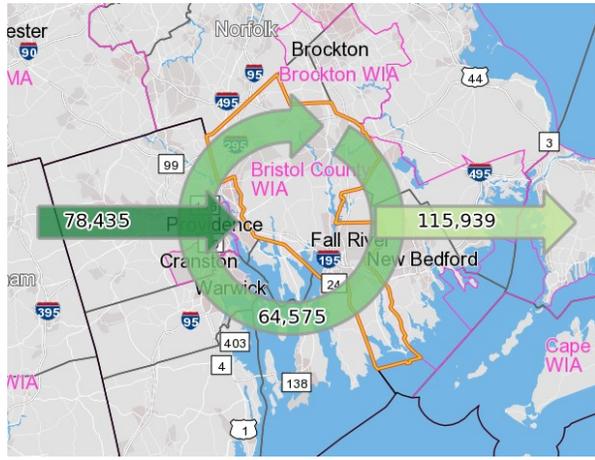
Bristol County WDA

2015 vs. 2014 Snapshot

Employed Residents	177,214	
Share of MA Employment	5.2%	<u>Change</u>
Labor Force	188,472	-0.1%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	6.0%	-0.9%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$49,452	5.9%
MA Average Wage	\$64,116	4.1%
Number of Establishments	10,393	1.7%
MA Establishments	234,994	3.4%

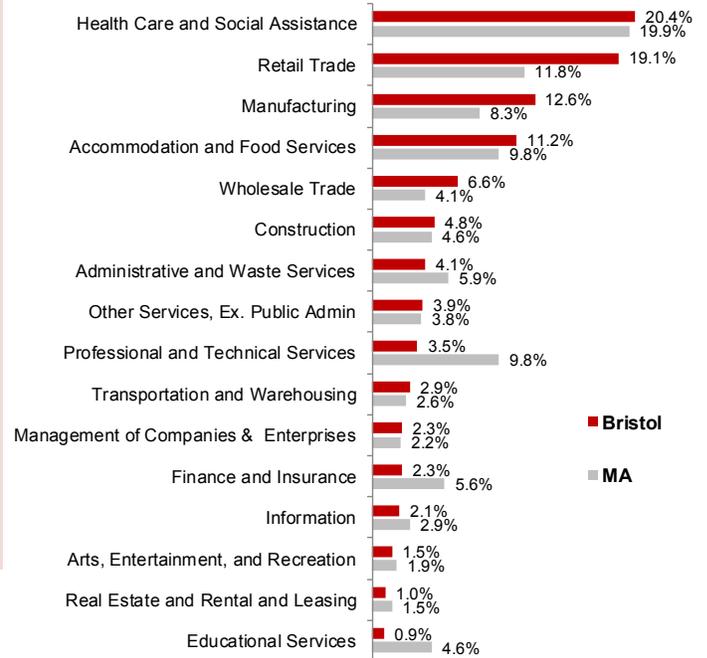
Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- Live in WDA, employed outside
- Employed and live in the WDA
- Employed in the WDA, live outside

Bristol County WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

Bristol County's moderate labor force remained relatively flat from 2014 to 2015, dipping slightly by 0.1 percent. The area does have one of the higher unemployment rates in the Commonwealth at 6 percent, but this rate did decline from 2014 by one of the largest margins.

Individuals who work in the Bristol County WDA are a fairly even mix of commuters and residents. In 2014, 45 percent of workers live in the area while 55 percent flow in from surrounding areas.

Health Care, Retail Trade and Manufacturing are the top three industries with the highest number of jobs. Bristol has the highest share of jobs of any WDA in Retail Trade at 19 percent and one of the higher shares in Manufacturing. Food, Beverage and Grocery Store are some the largest retail subsectors in the area. Automobile related sales also factors heavily into the retail landscape with over 5,000 jobs in the Automobile Dealers, Motor Vehicle and Parts Dealers sub sectors.

Manufacturing is fairly diverse in Bristol County, with numerous sub sectors, the largest in terms of jobs being Medical Equipment Manufacturing, Electrical Components Manufacturing, Bakeries and Tortilla Manufacturing, and Misc. Manufacturing.

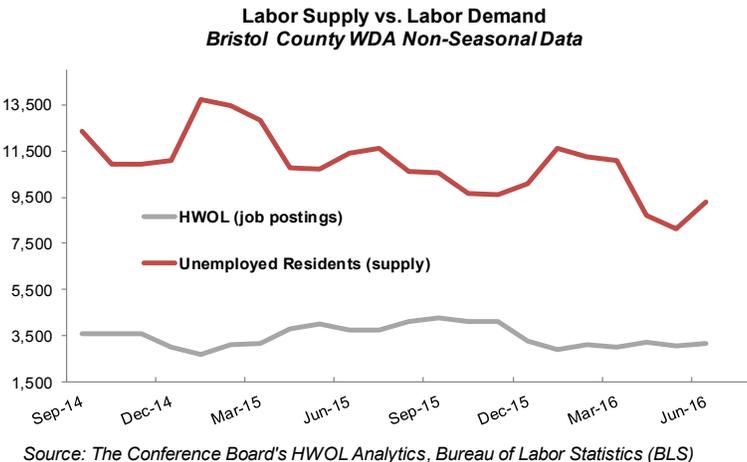
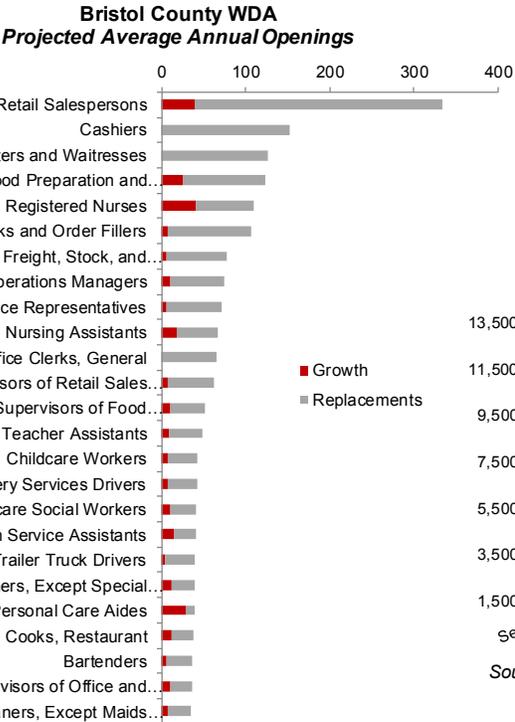
Bristol County WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	8,590	\$20,846
2	Cashiers	3,790	\$20,081
3	Stock Clerks and Order Fillers	3,560	\$22,405
4	Combined Food Preparation and Serving Workers, Including Fast Food	3,330	\$19,352
5	Registered Nurses	2,910	\$75,627
6	Waiters and Waitresses	2,890	\$19,690
7	Office Clerks, General	2,880	\$33,151
8	General and Operations Managers	2,720	\$93,054
9	Customer Service Representatives	2,430	\$33,708
10	Laborers and Freight, Stock, and Material Movers, Hand	2,430	\$26,789

Bristol County WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	188	Associate's
2	Customer Service Representatives	115	HS dplm/eqv
3	Retail Salespersons	113	less than HS
4	Heavy and Tractor-Trailer Truck Drivers	108	HS dplm/eqv
5	First-Line Supervisors of Retail Sales Workers	91	HS dplm/eqv
6	Industrial Engineers	79	Bachelor's
7	Stock Clerks and Order Fillers	55	less than HS
8	Social and Human Service Assistants	53	HS dplm/eqv
9	Light Truck or Delivery Services Drivers	52	HS dplm/eqv
9	Laborers and Freight, Stock, and Material Movers, Hand	52	less than HS
11	Speech-Language Pathologists	47	Master's
12	First-Line Supervisors of Food Preparation and Serving Workers	43	HS dplm/eqv
13	Teacher Assistants	42	HS dplm/eqv
14	Physical Therapists	40	Doc or prof
15	First-Line Supervisors of Production and Operating Workers	37	PstScdry non award
16	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	36	HS dplm/eqv
16	First-Line Supervisors of Office and Administrative Support Workers	36	HS dplm/eqv
18	Automotive Service Technicians and Mechanics	35	HS dplm/eqv
18	Maintenance and Repair Workers, General	35	HS dplm/eqv
20	Medical and Health Services Managers	34	Bachelor's
21	Combined Food Preparation and Serving Workers, Including Fast Food	32	less than HS
21	Marketing Managers	32	Bachelor's
21	Elementary School Teachers, Except Special Education	32	Bachelor's
24	Licensed Practical and Licensed Vocational Nurses	31	PstScdry non award
25	Accountants and Auditors	29	Bachelor's

Average wages in Bristol County are lower than the Massachusetts average, and out of the ten occupations with the highest employment counts, only Registered Nurses and General and Operational Managers paid annual wages over \$35,000. However, wages in the area rose from 2014 to 2015 and account for the largest earnings gain out of all the other workforce delivery areas.

Indications are that the labor market is fairly slack but the trend line from 2014 to 2015 does indicate some faint tightening. Similar to the majority of other workforce areas, Registered Nurses are the most in-demand occupation in term of jobs posted. With the Retail Trade and Manufacturing industries playing an important role in the economy; occupations that support them are in high demand as well. Heavy and Tractor Trailer Drivers; Heavy and Tractor-Trailer Truck Drivers; Stock Clerks and Order Fillers; Light Truck or Delivery Services Drivers and Laborers; and Freight, Stock, and Material Movers are all in the top ten in-demand occupations for the area.

Projections signal that annual openings will continue to be high for occupations that make up the Health Care, Retail Trade and Manufacturing Industries. However, a vast majority of these openings will be due to replacements as opposed to growth in these industries.



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

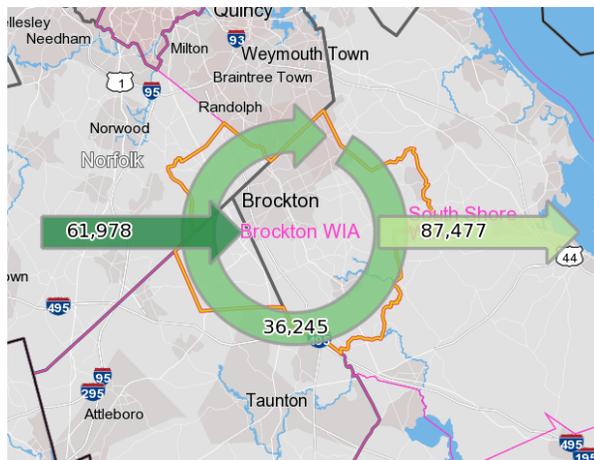
Brockton WDA

2015 vs. 2014 Snapshot

Employed Residents	122,466	
Share of MA Employment	3.6%	<u>Change</u>
Labor Force	129,623	0.4%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	5.5%	-0.9%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$48,152	3.8%
MA Average Wage	\$64,116	4.1%
Number of Establishments	6,931	4.3%
MA Establishments	234,994	3.4%

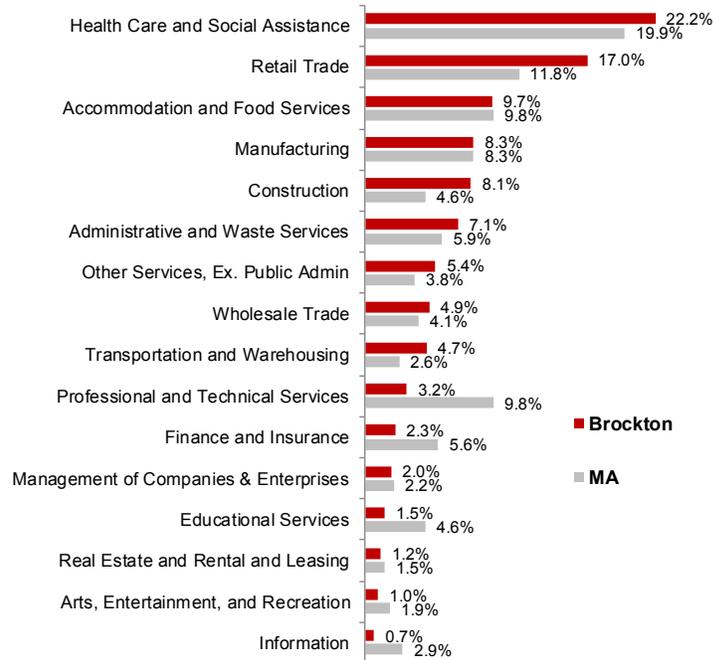
Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

Brockton WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

Brockton's labor force is smaller than the average, with those working only making up 3.6 percent of the total share of Massachusetts employment. Growing by 243 individuals from 2014 to 2015, it has shown a slight increase of 0.4 percent. The annual average unemployment rate was slightly higher than the Massachusetts average at 5.5 percent, decreasing by 0.9 percent from 2014.

Fewer residents in the Brockton WDA actually work there. In 2014, 71 percent of residents of this area commute elsewhere for employment, the highest outflow rate for residents in the state.

Construction accounted for 6,400 jobs on a monthly basis in 2015. While not as high as some other industries in the area like Healthcare, Retail Trade, and Accommodation and Food Services; Construction had a higher share of all jobs here at 8.1 percent, higher than any other workforce area in Massachusetts. The majority of these jobs were in the Specialty Trade Contractors sub sector.

Brockton WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	3,020	\$22,447
2	Cashiers	2,980	\$20,826
3	Registered Nurses	2,490	\$88,559
4	Stock Clerks and Order Fillers	2,350	\$23,091
5	Office Clerks, General	2,110	\$34,471
6	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,850	\$25,305
7	Laborers and Freight, Stock, and Material Movers, Hand	1,800	\$23,445
8	General and Operations Managers	1,760	\$106,836
9	Bookkeeping, Accounting, and Auditing Clerks	1,530	\$43,038
10	Nursing Assistants	1,520	\$30,055

Brockton WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	141	Associate's
2	Retail Salespersons	95	less than HS
3	Heavy and Tractor-Trailer Truck Drivers	90	HS dplm/eqv
4	First-Line Supervisors of Retail Sales Workers	85	HS dplm/eqv
5	Customer Service Representatives	60	HS dplm/eqv
6	Speech-Language Pathologists	47	Master's
7	Light Truck or Delivery Services Drivers	46	HS dplm/eqv
8	First-Line Supervisors of Office and Administrative Support Workers	38	HS dplm/eqv
8	Medical and Health Services Managers	38	Bachelor's
10	First-Line Supervisors of Food Preparation and Serving Workers	36	HS dplm/eqv
11	Physical Therapists	35	Doc or prof
11	Social and Human Service Assistants	35	HS dplm/eqv
13	Stock Clerks and Order Fillers	32	less than HS
14	Bookkeeping, Accounting, and Auditing Clerks	31	HS dplm/eqv
15	Laborers and Freight, Stock, and Material Movers, Hand	30	less than HS
16	Maintenance and Repair Workers, General	27	HS dplm/eqv
16	Licensed Practical and Licensed Vocational Nurses	27	PstScdry non award
18	First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	26	HS dplm/eqv
19	Occupational Therapists	25	Master's
20	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	24	HS dplm/eqv
20	Accountants and Auditors	24	Bachelor's
22	Cashiers	23	less than HS
22	Automotive Service Technicians and Mechanics	23	HS dplm/eqv
24	First-Line Supervisors of Production and Operating Workers	22	PstScdry non award
25	Medical Secretaries	21	HS dplm/eqv

Average annual wages in this area were in the lowest quadrant, but the rate of wage gain from 2014 was on pace with the Massachusetts average.

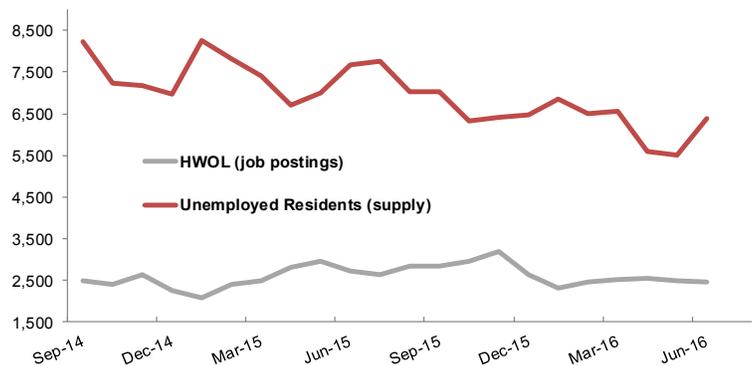
Demand for jobs remained relatively flat. A contributing factor to a slack labor market is that employers only posted roughly 2,500 jobs each month, one of the lowest volume levels in the State. The supply of unemployed individuals looking for work has trended downward somewhat slightly reducing the slack throughout the course of 2015.

In-demand occupations were comprised mainly of Healthcare, Retail and Transportation clusters, reflecting the areas mix of industries. Supervisory occupations showed high demand with three of the top ten including First-Line Supervisors for Retail; Office and Administration; and Food Preparation workers. There were virtually the same number of jobs posted for Retail Sales Persons as there were for First Line Supervisors of Retail Sales.

Projected annual openings indicate that Retail and Cashier occupations will have the highest volumes overall, and while large numbers of these openings relative to other occupations will be generated from growth, they will stem primarily from the need for replacement workers. Teachers Assistants, Elementary School Teachers and Janitors all project higher than average numbers of openings due to growth, indicating continued expansion of the Education Services industry.



**Labor Supply vs. Labor Demand
Brockton WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

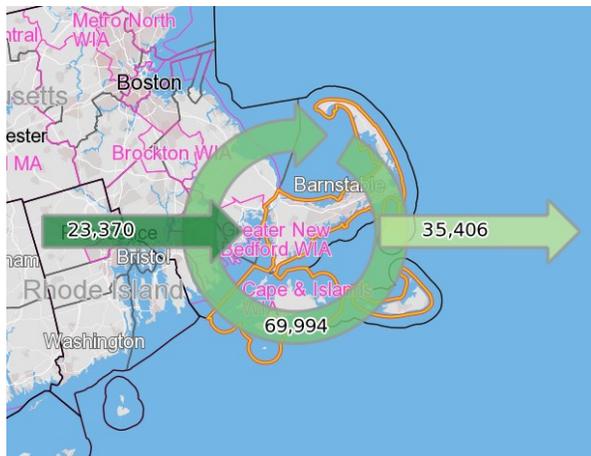
Cape & Islands WDA

2015 vs. 2014 Snapshot

Employed Residents	119,574	
Share of MA Employment	3.5%	<u>Change</u>
Labor Force	127,607	-0.2%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	6.3%	-0.8%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$45,084	4.0%
MA Average Wage	\$64,116	4.1%
Number of Establishments	11,086	0.8%
MA Establishments	234,994	3.4%

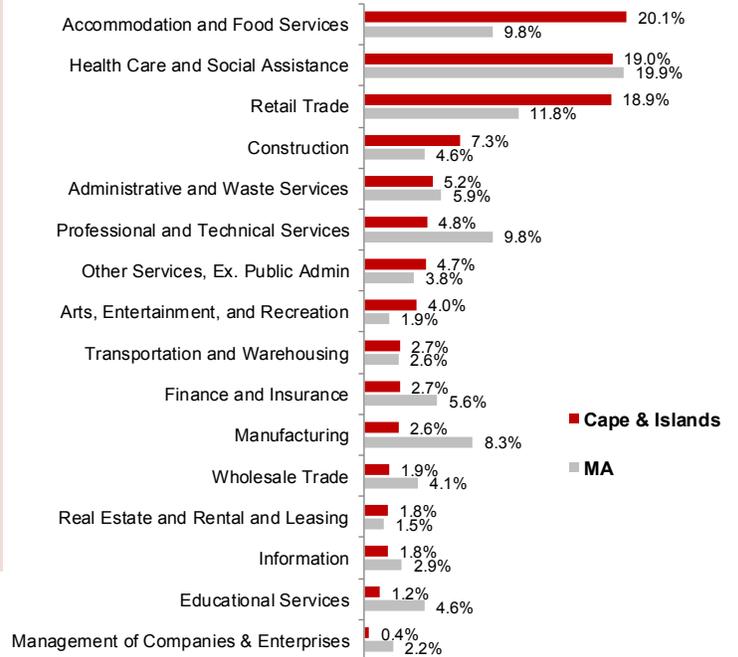
Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

Cape & Islands WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

This area has one of the smaller labor forces, second only to the Berkshire area, and remained relatively unchanged, losing roughly 400 individuals from 2014 to 2015.

Average annual unemployment was slightly higher than the Commonwealth as a whole but is subject to fluctuation more so than any other workforce area due to the seasonal nature of some of the Cape and Islands' largest industries. Unemployment was at a low of 4.6 percent in July but rose during the winter months to a high of 6.9 percent in December.

Accommodation and Food Services is the largest industry in the area, surpassing even Healthcare and Social Assistance in terms of jobs. Healthcare and Social Assistance follows closely behind and is in line with the statewide percentage. Retail Trade and Construction also have high employment shares for the area, well above the Massachusetts average.

Cape & Islands WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	5,390	\$26,837
2	Cashiers	3,760	\$22,551
3	Waiters and Waitresses	3,520	\$19,634
4	Registered Nurses	2,660	\$81,098
5	Landscaping and Groundskeeping Workers	2,520	\$37,561
6	Office Clerks, General	2,500	\$33,328
7	General and Operations Managers	2,300	\$81,045
8	Bookkeeping, Accounting, and Auditing Clerks	2,150	\$40,224
9	Combined Food Preparation and Serving Workers, Including Fast Food	1,840	\$19,850
10	Cooks, Restaurant	1,670	\$27,629

Cape & Islands WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	123	Associate's
2	Landscaping and Groundskeeping Workers	84	less than HS
3	Heavy and Tractor-Trailer Truck Drivers	81	HS dplm/eqv
4	Cooks, Restaurant	73	less than HS
5	Physical Therapists	66	Doc or prof
6	First-Line Supervisors of Food Preparation and Serving Workers	62	HS dplm/eqv
7	Retail Salespersons	61	less than HS
8	Home Health Aides	56	less than HS
9	Carpenters	46	HS dplm/eqv
10	Waiters and Waitresses	43	less than HS
11	First-Line Supervisors of Retail Sales Workers	41	HS dplm/eqv
12	Occupational Therapists	40	Master's
12	Maids and Housekeeping Cleaners	40	less than HS
14	Customer Service Representatives	39	HS dplm/eqv
15	Social and Human Service Assistants	36	HS dplm/eqv
16	Licensed Practical and Licensed Vocational Nurses	35	PstScdtry non award
17	Light Truck or Delivery Services Drivers	34	HS dplm/eqv
17	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	34	less than HS
19	Combined Food Preparation and Serving Workers, Including Fast Food	33	less than HS
19	Nursing Assistants	33	PstScdtry non award
21	Construction Laborers	32	less than HS
21	First-Line Supervisors of Office and Administrative Support Workers	32	HS dplm/eqv
23	Dishwashers	31	less than HS
24	Maintenance and Repair Workers, General	30	HS dplm/eqv
25	Executive Secretaries and Executive Administrative Assistants	29	HS dplm/eqv

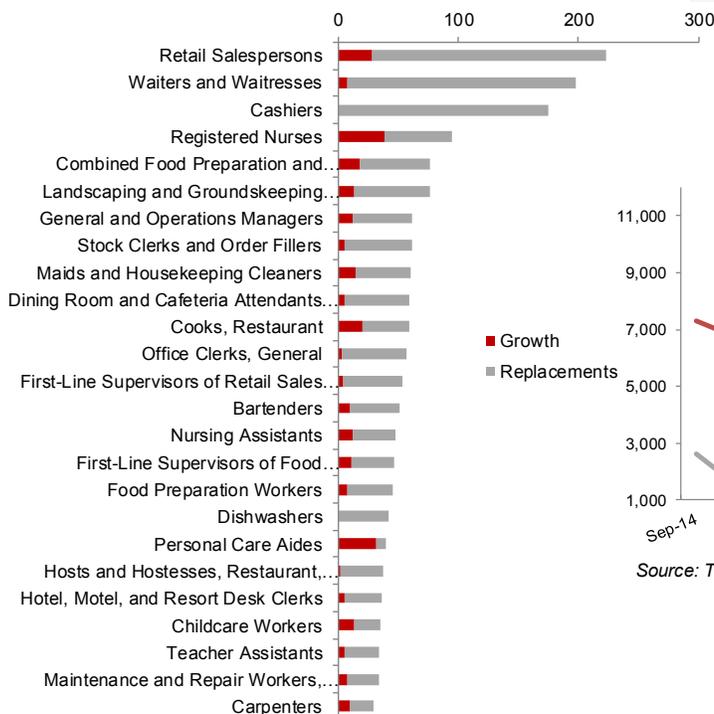
Annual average wages run lower in this area compared to the rest of the state with only Berkshire County reporting lower wages.

The labor market is heavily impacted by seasonality as a significant tightening can be clearly seen during the summer months. The number of jobs posted by businesses are seen to be up to 3,000 higher during the busiest months for hospitality related occupations.

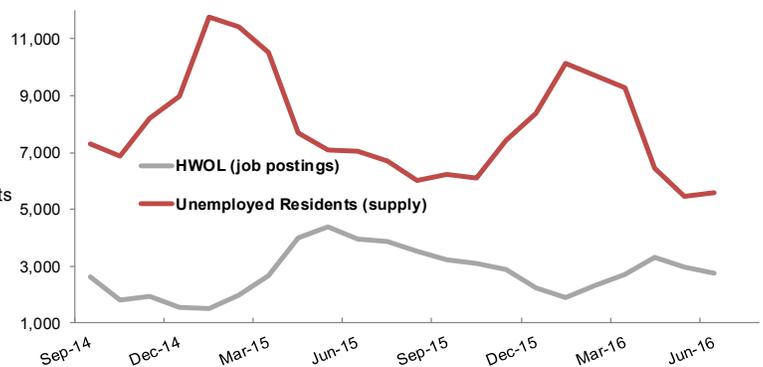
High demand jobs are unsurprisingly dominated by Healthcare and Food Services occupations. Registered Nurses consistently report the largest amount of on-line postings. Food Services occupations, similar to the Brockton area's retail occupation dynamic, show a high demand for First Line Supervisors relative to demand for Cooks, Wait Staff and other Food Service Preparation occupations.

The vast majority of projected openings are in occupations that have minimal entry requirements. Waiters and Waitresses, Retail Salespersons and Cashiers combined are projected to have 594 openings on an annual basis; however, only 34 of those openings are estimated to be generated from growth.

**Cape & Islands WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Cape & Islands WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

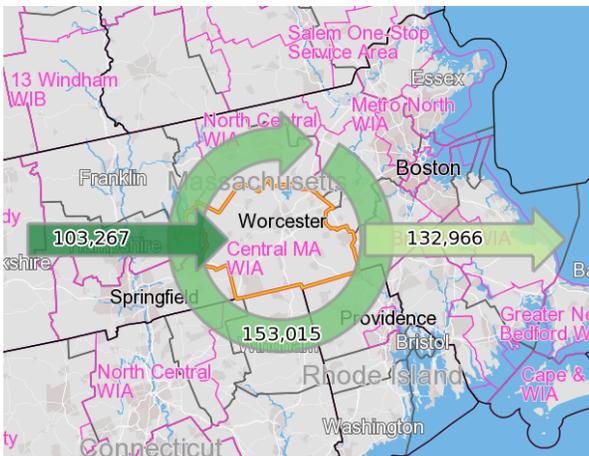
Central MA WDA

2015 vs. 2014 Snapshot

Employed Residents	290,995	
Share of MA Employment	8.6%	<u>Change</u>
Labor Force	306,933	-0.1%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	5.2%	-0.8%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$52,884	2.2%
MA Average Wage	\$64,116	4.1%
Number of Establishments	16,926	4.6%
MA Establishments	234,994	3.4%

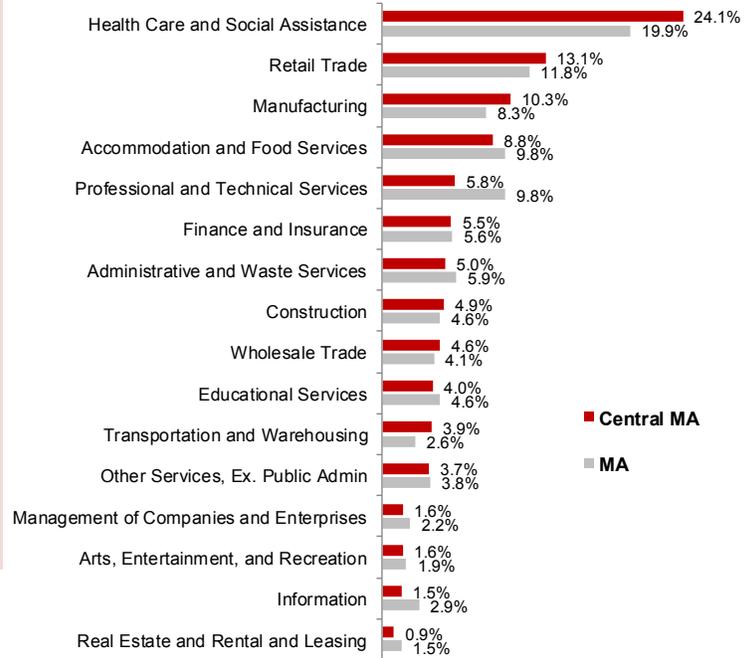
Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

Central MA WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

The Central Massachusetts WDA labor force remained basically the same, dipping a slight 0.1 percent while the unemployment rate was only 0.2 percent higher than the Massachusetts rate. From 2014 to 2015, the rate declined at virtually the same pace.

There was a balance of commuters where 53.5 percent of Central MA residents worked in this area and the remaining 46.5 percent traveled to areas of employment outside of the WDA.

Healthcare and Social Assistance accounts for one of the higher shares of employment in the Commonwealth with almost a quarter of all jobs in Central MA falling into this category. Manufacturing also comprises of a large component of jobs in this area dominated primarily by durable goods productions sub categories. In particular, Computer and Electronic Manufacturing and Fabricated Metal Product Manufacturing are the highest. Underscoring the importance of manufacturing to this area, there were 40 establishments producing Computer and Electronic products and 161 establishments which produced fabricated metal products in 2015.

Central MA WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	8,030	\$21,536
2	Registered Nurses	7,220	\$83,728
3	Office Clerks, General	6,490	\$31,568
4	Cashiers	6,260	\$20,908
5	General and Operations Managers	5,360	\$98,470
6	Nursing Assistants	5,040	\$29,840
7	Combined Food Preparation and Serving Workers, Including Fast Food	4,790	\$19,737
8	Customer Service Representatives	4,540	\$36,192
9	Stock Clerks and Order Fillers	4,100	\$23,986
10	Waiters and Waitresses	3,900	\$22,172

Central MA WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly Postings	Education
1	Registered Nurses	624	Associate's
2	Heavy and Tractor-Trailer Truck Drivers	325	HS dplm/eqv
3	Customer Service Representatives	300	HS dplm/eqv
4	Social and Human Service Assistants	282	HS dplm/eqv
5	Retail Salespersons	234	less than HS
6	First-Line Supervisors of Retail Sales Workers	220	HS dplm/eqv
7	First-Line Supervisors of Office and Administrative Support Workers	170	HS dplm/eqv
8	Maintenance and Repair Workers, General	144	HS dplm/eqv
9	Executive Secretaries and Executive Administrative Assistants	143	HS dplm/eqv
10	First-Line Supervisors of Production and Operating Workers	140	PstScdry non award
11	Light Truck or Delivery Services Drivers	134	HS dplm/eqv
12	Medical and Health Services Managers	130	Bachelor's
13	Industrial Engineers	125	Bachelor's
13	First-Line Supervisors of Food Preparation and Serving Workers	125	HS dplm/eqv
15	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	122	HS dplm/eqv
16	Accountants and Auditors	121	Bachelor's
17	Computer Systems Analysts	117	Bachelor's
18	Computer User Support Specialists	112	Associate's
19	Home Health Aides	108	less than HS
20	Physical Therapists	107	Doc or prof
21	Bookkeeping, Accounting, and Auditing Clerks	103	HS dplm/eqv
21	Computer Occupations, All Other	103	Bachelor's
23	Stock Clerks and Order Fillers	99	less than HS
24	Medical Scientists, Except Epidemiologists	94	Doc or prof
25	Cooks, Restaurant	90	less than HS

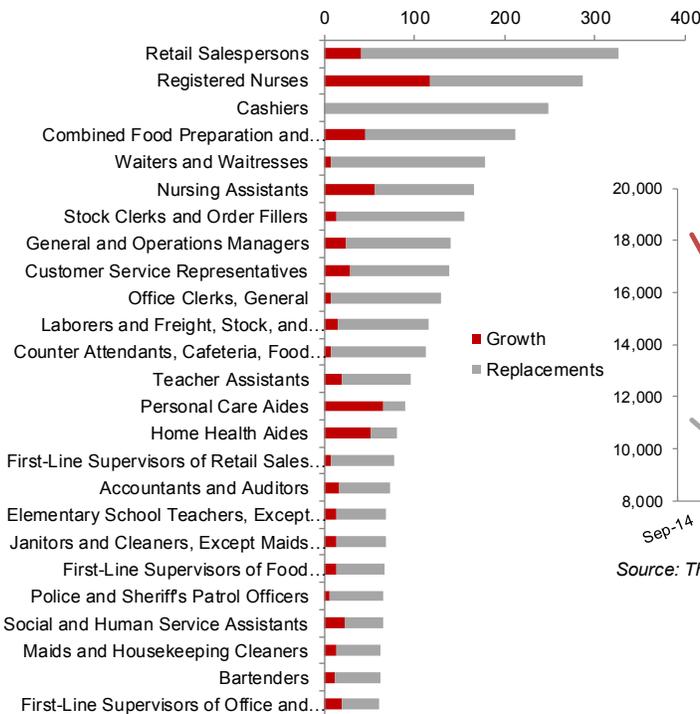
Average wages were slightly lower than the state as a whole and rose at a slower pace relative to other WDAs. Expectedly, the majority of the occupations support Central MA's three largest industries. This area also employed a higher percentage of Police and Sheriffs Patrol Officers when compared to other WDA.

The volume of job postings in the area was somewhat elastic as demand for jobs spiked upward for the majority of 2015. The approximation of labor supply, demonstrated by the counts of unemployed residents looking for work, also showed variation month to month but has trended downward overall.

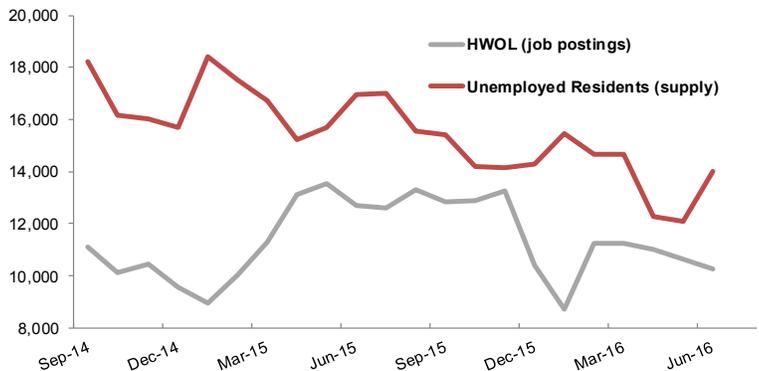
Current demand for occupations again reflect the largest industries in Central MA with Registered Nurses and Retail Salesperson atop the list of the largest volume of ads being posted by employers. Similar to several other WDAs where there is significant demand for high churn occupations which tend to pay lower than average wages; there is almost equal demand for frontline supervisors relative to those occupations.

Projected openings indicate that similar occupations with respect to Healthcare and Retail Sales will have the highest annual volume with the difference being that a larger portion of healthcare openings will be generated by growth.

**Central MA WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Central MA WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

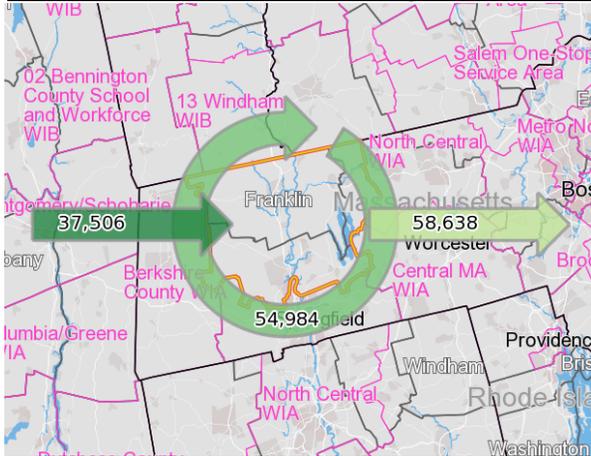
Franklin/Hampshire WDA

2015 vs. 2014 Snapshot

Employed Residents	127,854	
Share of MA Employment	3.8%	<u>Change</u>
Labor Force	133,971	0.1%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	4.6%	-0.6%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$43,004	4.4%
MA Average Wage	\$64,116	4.1%
Number of Establishments	7,039	2.3%
MA Establishments	234,994	3.4%

Source: DUA LAUS/QCEW Annual Averages

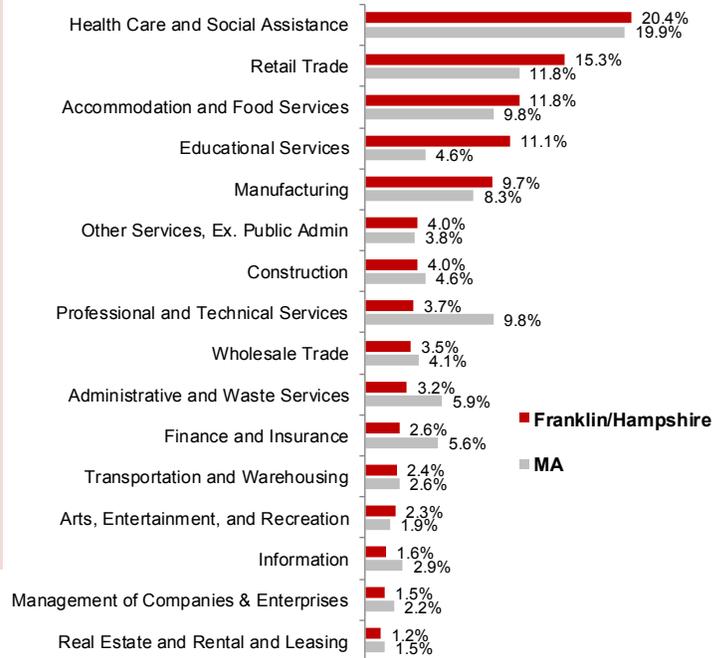
US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

Franklin/Hampshire WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	8,590	\$20,846
2	Cashiers	3,790	\$20,081
3	Stock Clerks and Order Fillers	3,560	\$22,405
4	Combined Food Preparation and Serving Workers, Including Fast Food	3,330	\$19,352
5	Registered Nurses	2,910	\$75,627
6	Waiters and Waitresses	2,890	\$19,690
7	Office Clerks, General	2,880	\$33,151
8	General and Operations Managers	2,720	\$93,054
9	Customer Service Representatives	2,430	\$33,708
10	Laborers and Freight, Stock, and Material Movers, Hand	2,430	\$26,789

Franklin/Hampshire WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

Franklin/Hampshire's labor force remained relatively unchanged, ticking up 0.1 percent. Unemployment was slightly below the Massachusetts average, declining from 2014 to 2015 at a rate similar to other areas.

Of the total number of workers in the area, 59.4 percent live there as well, one of the higher rates in the Commonwealth. The balance of Franklin/Hampshire residents who commute inside versus outside of the area is almost even at 48.4 percent and 51.6 percent respectively.

The industry composition is similar to other areas in that Health Care, Retail Trade, and Accommodation and Food Services are the industries with the large share of jobs. Franklin/Hampshire differs in that it has one of the highest shares of jobs in Educational Services in the Commonwealth at 11.1 percent, second only to Greater Lowell.

The Educational Services industry in this WDA hosts a wide variety of occupations with the most common being: Teachers Assistant; Elementary School and Secondary School Teachers; Business and Financial Operations Occupations; Building and Grounds keeping; Secretaries and Administrative Assistants; and Computer and Mathematical Occupations.

Franklin/Hampshire WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly Postings	Education
1	Registered Nurses	169	Associate's
2	Social and Human Service Assistants	86	HS dplm/eqv
3	Heavy and Tractor-Trailer Truck Drivers	53	HS dplm/eqv
4	Retail Salespersons	52	less than HS
5	Customer Service Representatives	43	HS dplm/eqv
6	First-Line Supervisors of Retail Sales Workers	40	HS dplm/eqv
7	First-Line Supervisors of Food Preparation and Serving Workers	39	HS dplm/eqv
7	Executive Secretaries and Executive Administrative Assistants	39	HS dplm/eqv
9	First-Line Supervisors of Office and Administrative Support Workers	38	HS dplm/eqv
10	Physical Therapists	36	Doc or prof
11	Home Health Aides	34	less than HS
12	Combined Food Preparation and Serving Workers, Including Fast Food	31	less than HS
13	Nursing Assistants	28	PstScdry non award
14	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	27	less than HS
14	Speech-Language Pathologists	27	Master's
14	Teacher Assistants	27	HS dplm/eqv
17	Cooks, Restaurant	26	less than HS
17	Vocational Education Teachers, Postsecondary	26	Doc or prof
19	Light Truck or Delivery Services Drivers	25	HS dplm/eqv
19	Education Administrators, Postsecondary	25	Master's
19	Medical and Health Services Managers	25	Bachelor's
22	Personal Care Aides	23	less than HS
23	Maintenance and Repair Workers, General	21	HS dplm/eqv
23	Secondary School Teachers, Except Special and Career/Technical Education	21	Bachelor's
25	Licensed Practical and Licensed Vocational Nurses	20	PstScdry non award

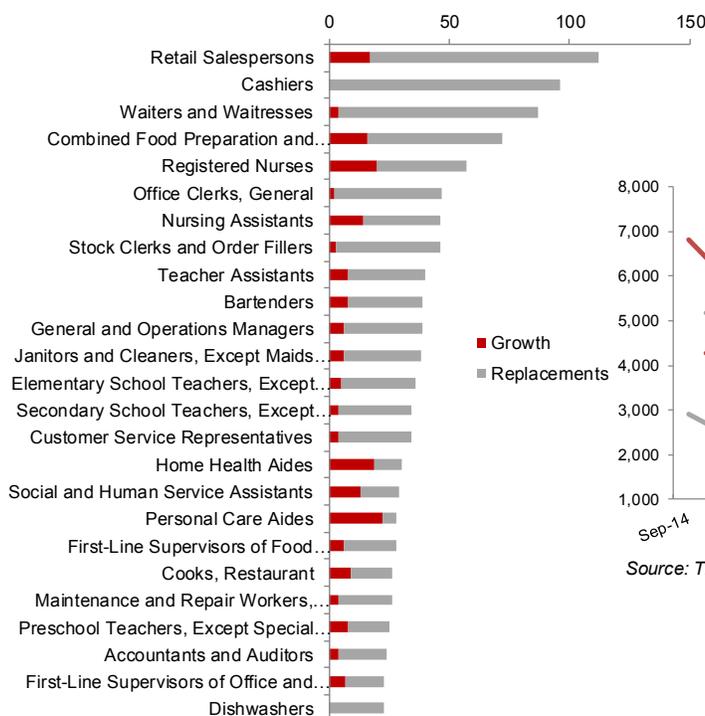
Average annual wages in the region are considered one of the lowest in the Commonwealth but increased from 2014 at one of the quicker paces. Registered Nurses, one of the most frequent sought after occupations, had an annual wage in 2015 of \$74,998 in Franklin/Hampshire, over \$13,000 less than the statewide average.

Signals are that the labor market is fairly slack with the average number of online posting for jobs ranging from 2,000 to 3,000 each month. The supply of unemployed residents was almost double the volume of real-time demand throughout the majority of 2015.

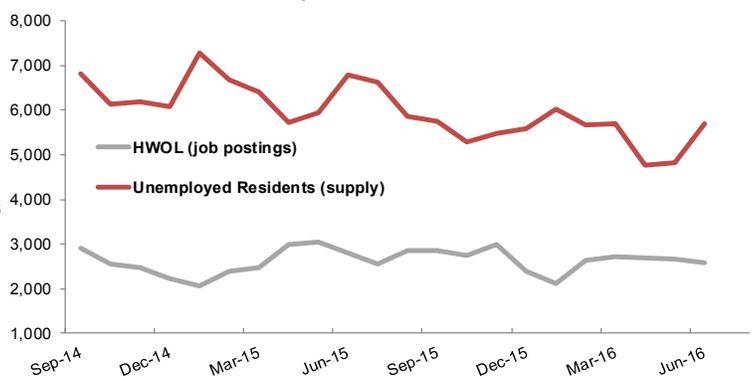
Outside of Healthcare occupations, demand was generally driven by occupations with minimal entry requirements. However, three out of the ten occupations with highest volume of demand were for supervisory roles.

Similar to Central MA, the bulk of projected openings will stem from replacements in the Retail industry while Healthcare occupations are projected to generate more openings from growth.

**Franklin/Hampshire WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Franklin/Hampshire WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

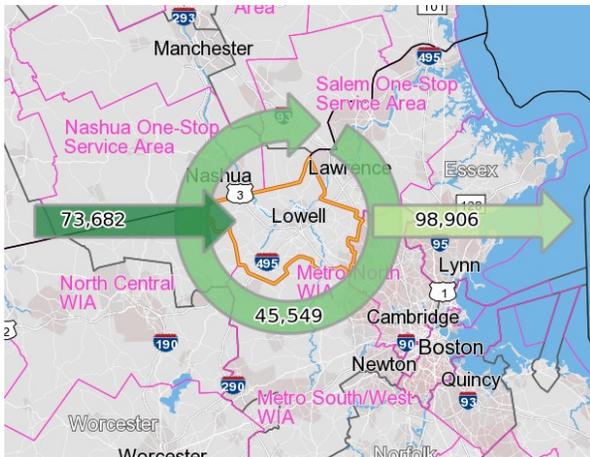
Greater Lowell WDA

2015 vs. 2014 Snapshot

Employed Residents	141,903	
Share of MA Employment	4.2%	<u>Change</u>
Labor Force	149,647	0.8%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	5.2%	-0.8%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$65,780	3.0%
MA Average Wage	\$64,116	4.1%
Number of Establishments	7,996	4.3%
MA Establishments	234,994	3.4%

Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

Greater Lowell WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

The Greater Lowell WDA had the highest percentage gain in its labor force relative to other areas in Massachusetts at 0.8 percent. The pace of the decrease in average unemployment from 2014 to 2015 was comparable to the state figures.

The great majority of workers at establishments in Greater Lowell, at 61.8 percent, generally commuted there with 38.2 percent of workers living in the area.

Manufacturing overtook Healthcare and Social Assistance as Greater Lowell's industry with the largest share of jobs. Educational Services followed closely behind, expanding its percentage of jobs from 10 percent to over 14 percent. Greater Lowell had the highest percentage of Educational Services share and the second highest share of Manufacturing in Massachusetts.

Similar to the mix of manufacturing industries in Central MA, the predominant subsectors are Durable Goods Producing. These include: Computer and Electronic Product Manufacturing; Machinery Manufacturing; and Fabricated Metal Product Manufacturing.

Greater Lowell WDA Top 10 OES Occupations		Employment	Median Wage
1	Office Clerks, General	2,740	\$34,649
2	Combined Food Preparation and Serving Workers, Including Fast Food	2,610	\$19,384
3	Cashiers	2,590	\$21,026
4	Retail Salespersons	2,520	\$22,950
5	Laborers and Freight, Stock, and Material Movers, Hand	2,290	\$25,646
6	Customer Service Representatives	2,190	\$37,270
7	Stock Clerks and Order Fillers	2,030	\$24,529
8	Nursing Assistants	1,850	\$28,200
9	Waiters and Waitresses	1,680	\$19,973
10	Bookkeeping, Accounting, and Auditing Clerks	1,580	\$43,354

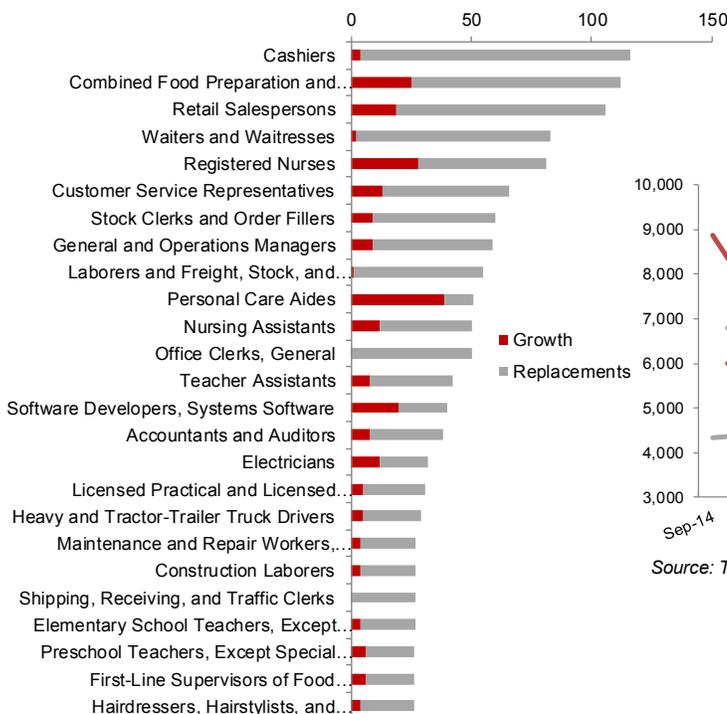
Greater Lowell WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Software Developers, Applications	199	Bachelor's
2	Computer Occupations, All Other	155	Bachelor's
3	Industrial Engineers	120	Bachelor's
4	Registered Nurses	119	Associate's
5	Computer Systems Analysts	111	Bachelor's
6	Marketing Managers	103	Bachelor's
7	Heavy and Tractor-Trailer Truck Drivers	102	HS dplm/eqv
8	Network and Computer Systems Administrators	96	Bachelor's
9	Accountants and Auditors	84	Bachelor's
9	Customer Service Representatives	84	HS dplm/eqv
11	Computer User Support Specialists	72	Associate's
11	First-Line Supervisors of Office and Administrative Support Workers	72	HS dplm/eqv
13	Electrical Engineers	68	Bachelor's
14	Software Developers, Systems Software	66	Bachelor's
15	Social and Human Service Assistants	65	HS dplm/eqv
16	First-Line Supervisors of Retail Sales Workers	58	HS dplm/eqv
17	Light Truck or Delivery Services Drivers	52	HS dplm/eqv
18	Managers, All Other	51	HS dplm/eqv
19	Web Developers	45	Bachelor's
19	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	45	HS dplm/eqv
21	Executive Secretaries and Executive Administrative Assistants	44	HS dplm/eqv
21	First-Line Supervisors of Food Preparation and Serving Workers	44	HS dplm/eqv
23	Medical Scientists, Except Epidemiologists	43	Doc or prof
24	Management Analysts	42	Bachelor's
25	Maintenance and Repair Workers, General	41	HS dplm/eqv

Differing from Franklin/Hampshire's staffing pattern for Educational Services; the makeup of occupations show a greater concentration of actual teaching roles as opposed to support occupations. These include Elementary, Middle School and Secondary School Teachers as well as substitute teachers and teacher's assistants.

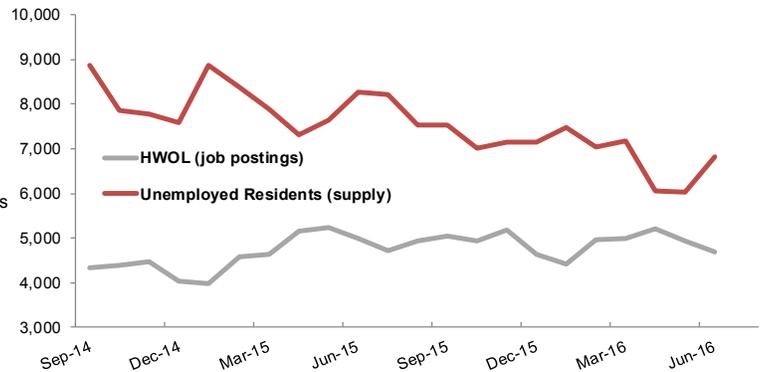
Average wages in the area are just above the statewide figure and grew from last year at a relatively modest pace. Wages in this area could see an even greater rate of increase in the future if the trend towards a tightening labor market continues. Overall demand for jobs increased slightly as the number of unemployed residents looking for work has steadily dropped.

In general, employers were demanding higher entry level requirements than other areas. Demand for IT related occupations was particular high in terms of the volume of jobs being posted. Projected demand indicates that IT related occupations, in particular Software Developers and Computer System Analysts, will generate over a third of their annual openings due to growth. These factors, coupled with a contracting labor market, could make it more difficult to fill IT occupations from within the WDA.

**Greater Lowell WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Greater Lowell WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

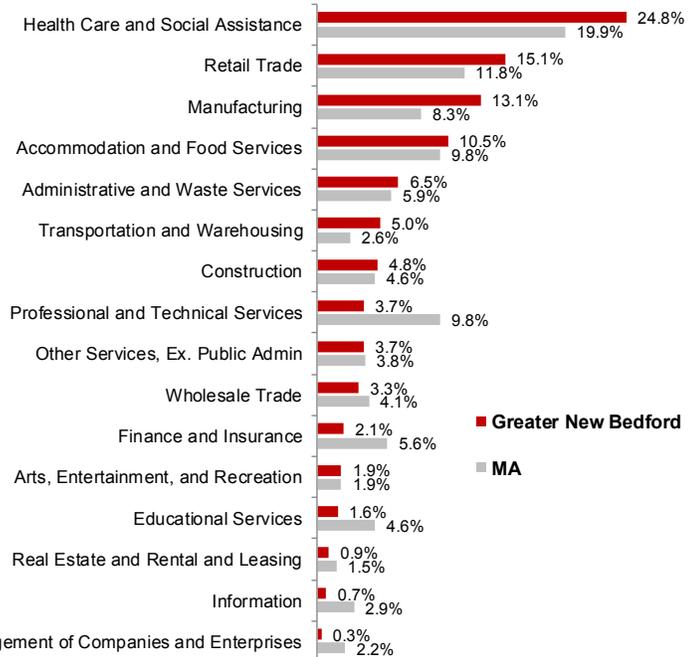
Greater New Bedford WDA

Greater New Bedford WDA vs. Statewide Private Industry Share of Jobs

2015 vs. 2014 Snapshot

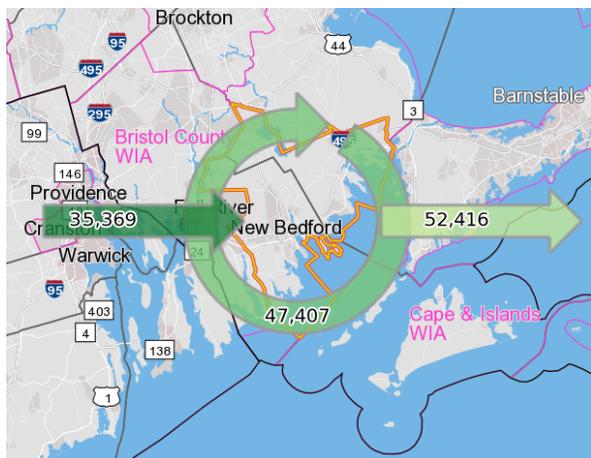
Employed Residents	106,661	
Share of MA Employment	3.1%	<u>Change</u>
Labor Force	113,695	0.3%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	6.9%	-1.0%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$45,188	2.5%
MA Average Wage	\$64,116	4.1%
Number of Establishments	6,831	4.0%
MA Establishments	234,994	3.4%

Source: DUA LAUS/QCEW Annual Averages



Source: DUA QCEW 2015 Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- ▶ Live in WDA, employed outside
- ▶ Employed and live in the WDA
- ▶ Employed in the WDA, live outside

Greater New Bedford has one of the smallest labor forces in Massachusetts with only Berkshire County being smaller. Add to that, this area also had the highest average unemployment rate despite dropping a full percentage point from 2014.

Roughly half of the residents commute outside the area for work at 52.5 percent while 47.5 percent both live and work within the Greater New Bedford area.

Similar to most areas, Healthcare and Social Assistance and Retail are the largest in terms of jobs in regard to Greater New Bedford's industry composition. Manufacturing is the third highest industry in this regard, behind only North Central and Greater Lowell.

While most manufacturing jobs fall under the Miscellaneous Manufacturing category, there are a high number of jobs in Food Manufacturing, more specifically Seafood Product Preparation and Packaging. Other sub sectors that figure strongly are the production of Computer and Electronic Product as well as Plastics and Rubber Products.

Greater New Bedford WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	3,950	\$21,414
2	Cashiers	2,310	\$19,881
3	Registered Nurses	2,210	\$74,606
4	Combined Food Preparation and Serving Workers, Including Fast Food	2,190	\$19,404
5	Nursing Assistants	2,030	\$27,229
6	Office Clerks, General	1,890	\$31,599
7	Packers & Packagers, Hand	1,460	\$21,882
8	Stock Clerks and Order Fillers	1,450	\$22,987
9	General and Operations Managers	1,360	\$77,731
10	Healthcare Social Workers	1,280	\$36,927

Greater New Bedford WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	175	Associate's
2	Heavy and Tractor-Trailer Truck Drivers	120	HS dplm/eqv
3	Retail Salespersons	67	less than HS
4	First-Line Supervisors of Retail Sales Workers	53	HS dplm/eqv
5	Physical Therapists	50	Doc or prof
6	Customer Service Representatives	46	HS dplm/eqv
6	Social and Human Service Assistants	46	HS dplm/eqv
8	Carpenters	40	HS dplm/eqv
9	Licensed Practical and Licensed Vocational Nurses	39	PstScdry non award
10	Home Health Aides	33	less than HS
11	Light Truck or Delivery Services Drivers	31	HS dplm/eqv
12	Medical and Health Services Managers	30	Bachelor's
13	Executive Secretaries and Executive Administrative Assistants	29	HS dplm/eqv
13	First-Line Supervisors of Office and Administrative Support Workers	29	HS dplm/eqv
13	Nursing Assistants	29	PstScdry non award
13	Maintenance and Repair Workers, General	29	HS dplm/eqv
17	First-Line Supervisors of Food Preparation and Serving Workers	27	HS dplm/eqv
18	Stock Clerks and Order Fillers	26	less than HS
18	Medical Secretaries	26	HS dplm/eqv
20	Speech-Language Pathologists	25	Master's
20	First-Line Supervisors of Production and Operating Workers	25	PstScdry non award
22	Accountants and Auditors	24	Bachelor's
22	Cooks, Restaurant	24	less than HS
24	Construction Laborers	23	less than HS
24	Receptionists and Information Clerks	23	HS dplm/eqv

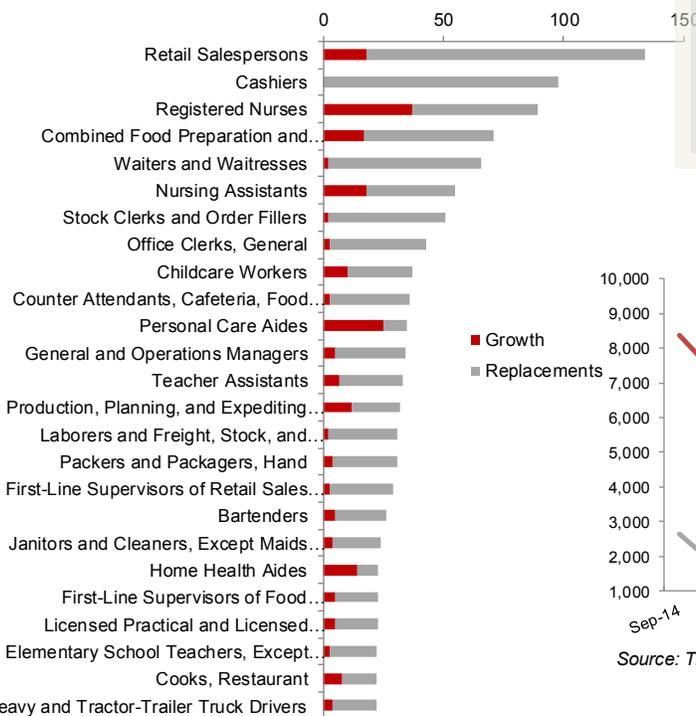
Retail Sales Persons and Cashiers dominate the occupational composition for the area, accounting for over 6,200 individuals in these roles. While employment levels are high for these occupations, average wages are not, with mean wages of roughly \$20,000 a year.

Average wages overall run lower in this area than in others and have showed a slower pace of growth. Looking comparatively at occupations in the area's largest industry, Healthcare and Social Assistance and Registered Nurses make \$14,044 less than the state average and Certified Nursing Assistants make \$2,525 less.

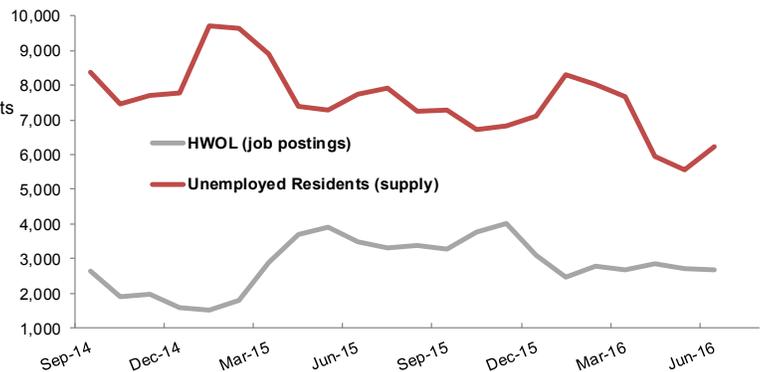
The labor demand versus labor supply is an indication of a slack labor market. There does appear to be some indications that it is contracting slightly as the approximated supply of labor continues to trend downward. Demand for jobs is driven by Registered Nurses, Heavy Tractor Trailers Truck Drivers and Retail Salespersons, which all support Greater New Bedford's top industries.

Annual openings for Registered Nurses and Personal Care Assistants are estimated to have a high amount from new growth. While IT occupations haven't figured as prominently as other occupations in this area, Software Developers are also projected to have relatively higher openings from growth. The need for replacement workers puts high turnover occupations including Cashier, Food Preparation and Serving, and Retail Salespersons at the top of the list of projected openings overall.

**Greater New Bedford WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Greater New Bedford WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

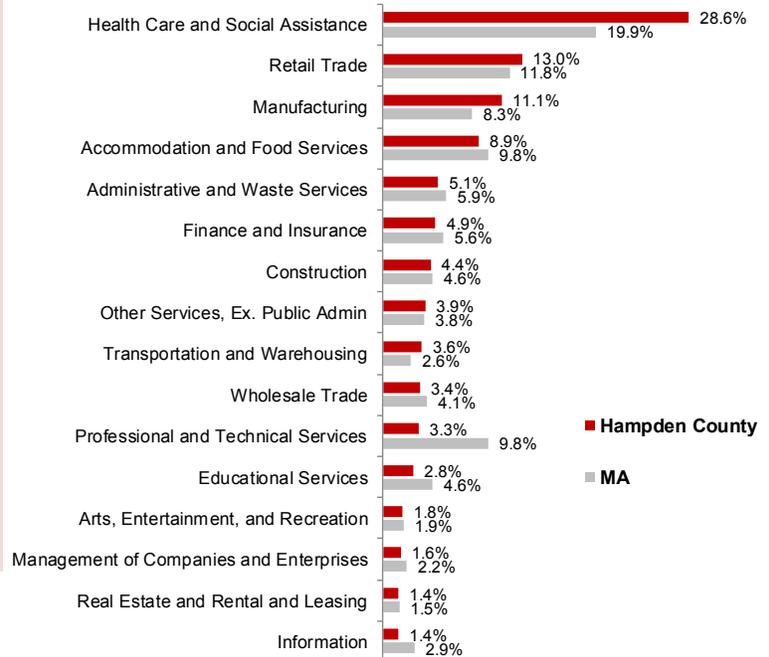
Hampden County WDA

2015 vs. 2014 Snapshot

Employed Residents	206,291	
Share of MA Employment	6.1%	<u>Change</u>
Labor Force	221,258	-0.3%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	6.8%	-1.0%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$47,736	2.5%
MA Average Wage	\$64,116	4.1%
Number of Establishments	16,928	4.3%
MA Establishments	234,994	3.4%

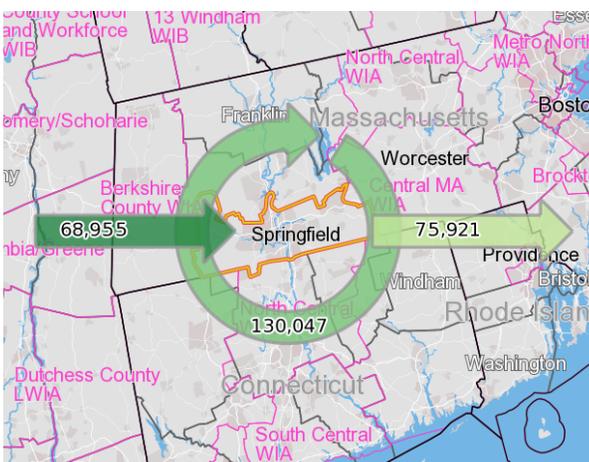
Source: DUA LAUS/QCEW Annual Averages

Hampden County WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- ▶ Live in WDA, employed outside
- ▶ Employed and live in the WDA
- ▶ Employed in the WDA, live outside

Hampden County's moderately sized labor force decreased from 2014 to 2015 by a scant 0.3 percent. The area does have the second highest rate of unemployment in the Commonwealth, second only to Greater New Bedford's 6.9 percent. Like Greater New Bedford, Hampden County's rate dropped a full percentage point from 2014.

Residents of Hampden County are more likely to work in the area as well. With one of the larger ratios of commuters in versus outside the WDA, 63.1 percent of residents commute within the area for employment while 36.9 percent travel outside.

The Healthcare and Social Assistance industry is vital to the Hampden County economy. Almost 30 percent of all jobs in the area fall into this category. Not only is this the highest share of jobs in Healthcare statewide, but it is also the largest concentration of jobs in any one particular industry.

The Social Assistance subsector is the largest contributor to Hampden County's Healthcare industry. It's comprised of Child Day Care Services, Vocational Rehabilitation Services, Emergency and other Relief Services, and followed by Ambulatory Health Care Services; Hospitals and Nursing; and Residential Care Facilities.

Hampden County WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	7,370	\$21,758
2	Registered Nurses	5,780	\$72,695
3	Office Clerks, General	3,930	\$29,594
4	Combined Food Preparation and Serving Workers, Including Fast Food	3,880	\$19,479
5	Personal Care Aides	3,780	\$26,835
6	Cashiers	3,710	\$19,561
7	Customer Service Representatives	3,500	\$35,060
8	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	3,210	\$26,201
9	Waiters and Waitresses	2,900	\$19,377
10	General and Operations Managers	2,840	\$87,891

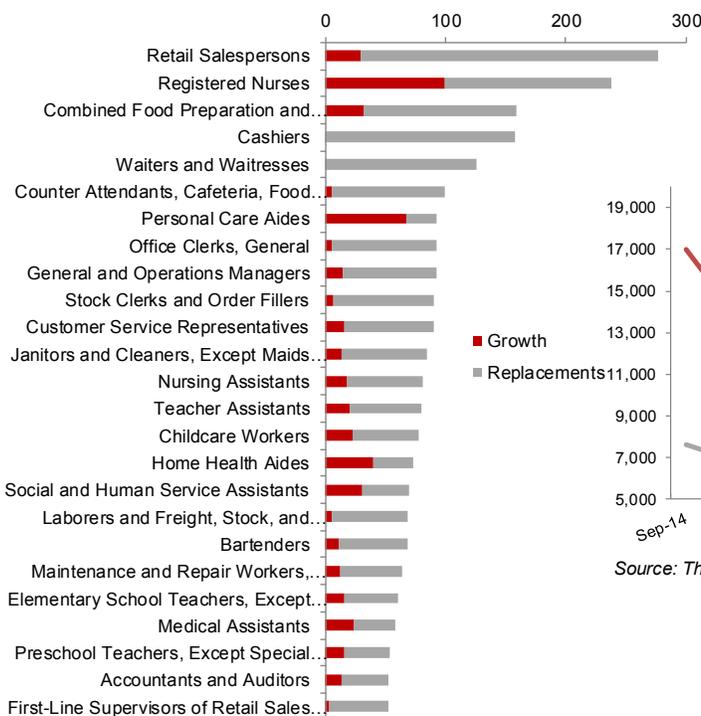
Hampden County WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	549	Associate's
2	Heavy and Tractor-Trailer Truck Drivers	285	HS dplm/eqv
3	Retail Salespersons	159	less than HS
4	First-Line Supervisors of Retail Sales Workers	141	HS dplm/eqv
5	Customer Service Representatives	122	HS dplm/eqv
6	Social and Human Service Assistants	120	HS dplm/eqv
7	Medical and Health Services Managers	104	Bachelor's
8	Speech-Language Pathologists	103	Master's
9	First-Line Supervisors of Office and Administrative Support Workers	90	HS dplm/eqv
10	Physical Therapists	89	Doc or prof
11	Home Health Aides	87	less than HS
12	Computer Systems Analysts	86	Bachelor's
13	Elementary School Teachers, Except Special Education	81	Bachelor's
13	Licensed Practical and Licensed Vocational Nurses	81	PstScdry non award
15	Accountants and Auditors	76	Bachelor's
15	Computer User Support Specialists	76	Associate's
17	Light Truck or Delivery Services Drivers	72	HS dplm/eqv
18	Executive Secretaries and Executive Administrative Assistants	68	HS dplm/eqv
18	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	68	HS dplm/eqv
18	Bookkeeping, Accounting, and Auditing Clerks	68	HS dplm/eqv
21	First-Line Supervisors of Production and Operating Workers	67	PstScdry non award
22	Computer Occupations, All Other	65	Bachelor's
22	Nursing Assistants	65	PstScdry non award
24	Maintenance and Repair Workers, General	62	HS dplm/eqv
25	First-Line Supervisors of Food Preparation and Serving Workers	61	HS dplm/eqv

On average, Registered Nurses are paid the lowest of any WDA's at \$72,695. Annual wages in general are lower and increased at a slower pace than compared with the rest of the Commonwealth.

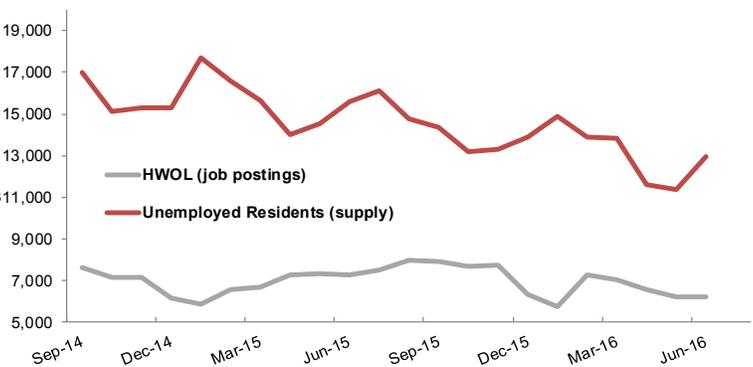
Overall, demand for labor showed slack with marginal contraction as the supply of unemployed residents in the area looking for work decreased. Unsurprisingly, Registered Nurses showed the highest volume of postings by employers; almost double that of the Heavy and Tractor Trailer Truck Drivers, the second highest occupation. Amongst other healthcare occupations, demand for Medical and Health Services Manager demonstrated relatively high volume as well.

And factoring heavily again as seen in projected annual openings, Registered Nurse are predicted to have the most openings stemming from growth. Nursing Assistants follow close behind in that regard forecasting the continued importance of the Health Care and Social Assistance industry to the area. Retail Salespersons are projected to have the largest total of openings, generated almost entirely from the need for replacement workers.

**Hampden County WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Hampden County WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

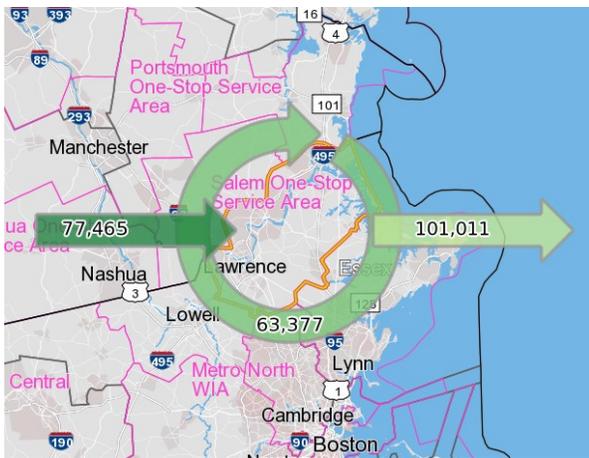
Lower Merrimack Valley WDA

2015 vs. 2014 Snapshot

Employed Residents	169,957	
Share of MA Employment	5.0%	<u>Change</u>
Labor Force	180,096	1.1%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	5.6%	-0.9%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$58,032	1.7%
MA Average Wage	\$64,116	4.1%
Number of Establishments	10,441	4.7%
MA Establishments	234,994	3.4%

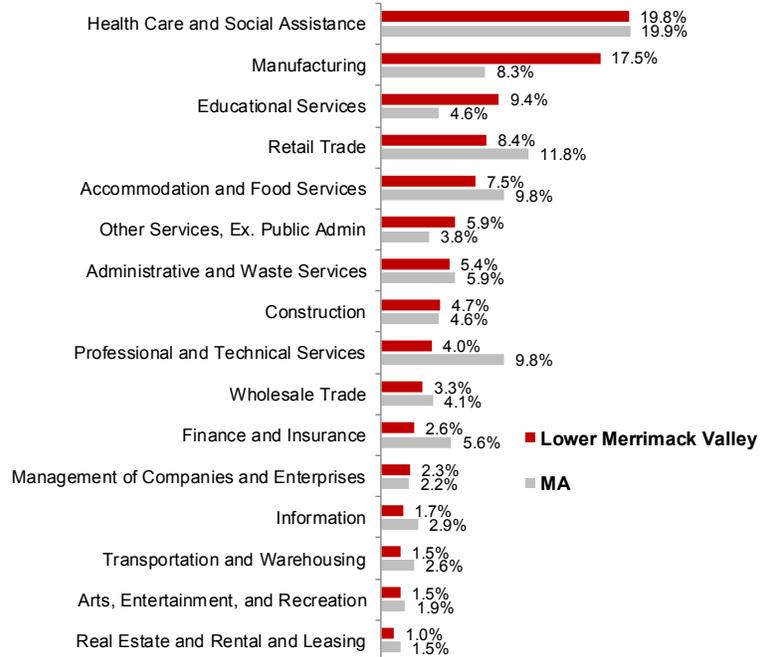
Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

Lower Merrimack Valley WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

The labor force in the Lower Merrimack Valley ticked slightly upward from 2014 to 2015 adding another 2,378 individuals, the highest percentage jump amongst the other WDAs.

Average unemployment hovered above the statewide figure and decreased from 2014 at virtually the same pace.

Fewer residents remain in the area for work than average, with 61.4 percent of them traveling outside the WDA to their place of employment. Of the individuals who work in Lower Merrimack Valley, just over half, at 55 percent, flow in from outside the area.

The Healthcare industry is the largest source of jobs in the area with virtually the same share as the Massachusetts average. Closely following is Manufacturing at 17.5 percent, the second highest share amongst the other areas.

There is a varied mix of durable and non-durable goods producing jobs that make up the Manufacturing snapshot. The largest is Computer and Electronic Products comprising roughly 20 percent of jobs. A second tier of sub sectors that each account for 5 percent to 11 percent of manufacturing jobs includes: Food Manufacturing, Miscellaneous Manufacturing, Fabricated Metal Product Manufacturing, Chemical Manufacturing, Machinery Manufacturing, Printing and Related Support Activities, and Plastics & Rubber Products Manufacturing.

Lower Merrimack Valley WDA Top 10 OES Occupations		Employment	Median Wage
1	Registered Nurses	3,950	\$76,388
2	General and Operations Managers	2,970	\$100,794
3	Retail Salespersons	2,710	\$22,621
4	Combined Food Preparation and Serving Workers, Including Fast Food	2,680	\$19,836
5	Cashiers	2,670	\$21,860
6	Office Clerks, General	2,610	\$34,729
7	Customer Service Representatives	2,350	\$38,686
8	Waiters and Waitresses	1,950	\$21,167
9	Nursing Assistants	1,860	\$28,791
10	Stock Clerks and Order Fillers	1,860	\$23,990

Lower Merrimack Valley WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	243	Associate's
2	Industrial Engineers	89	Bachelor's
3	Computer Occupations, All Other	85	Bachelor's
4	Social and Human Service Assistants	82	HS dplm/eqv
5	Customer Service Representatives	78	HS dplm/eqv
6	Heavy and Tractor-Trailer Truck Drivers	77	HS dplm/eqv
6	Accountants and Auditors	77	Bachelor's
8	Software Developers, Applications	75	Bachelor's
9	Medical and Health Services Managers	74	Bachelor's
10	Marketing Managers	73	Bachelor's
11	Network and Computer Systems Administrators	70	Bachelor's
12	Management Analysts	64	Bachelor's
13	First-Line Supervisors of Food Preparation and Serving Workers	62	HS dplm/eqv
14	First-Line Supervisors of Office and Administrative Support Workers	58	HS dplm/eqv
15	Physical Therapists	51	Doc or prof
15	Computer User Support Specialists	51	Associate's
15	Computer Systems Analysts	51	Bachelor's
18	Secondary School Teachers, Except Special and Career/Technical Education	50	Bachelor's
18	First-Line Supervisors of Retail Sales Workers	50	HS dplm/eqv
20	Executive Secretaries and Executive Administrative Assistants	47	HS dplm/eqv
20	Maintenance and Repair Workers, General	47	HS dplm/eqv
20	Medical Scientists, Except Epidemiologists	47	Doc or prof
20	Software Developers, Systems Software	47	Bachelor's
24	First-Line Supervisors of Production and Operating Workers	45	PstScdry non award
25	Managers, All Other	44	HS dplm/eqv

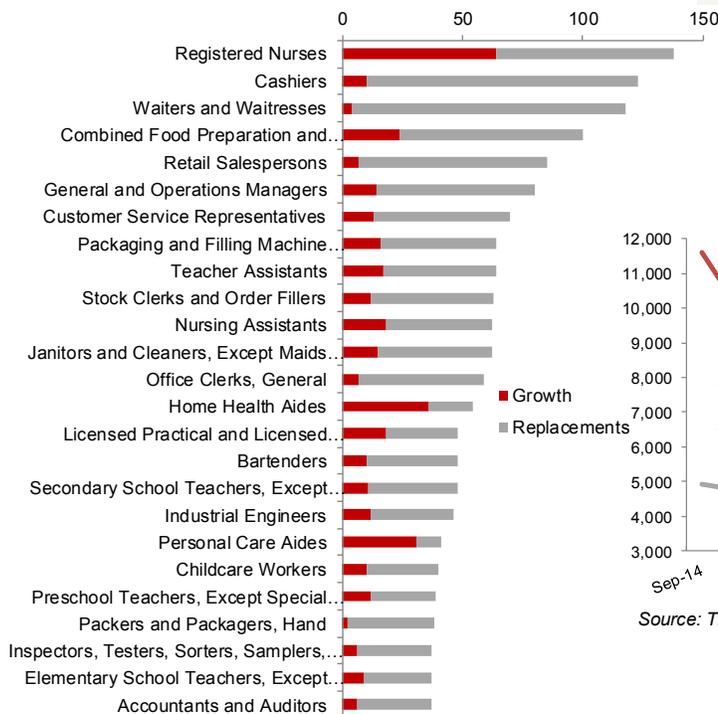
There is a diverse mix of occupations in this area as well. Healthcare Practitioners; Food Preparation and Serving; Education, Training, and Library; Management; and Computer and Mathematical occupations all rank high in employment levels.

The average annual wage in this area is slightly lower than the statewide average at \$58,032, increasing from 2014 at the slowest pace amongst WDA's. This pace could quicken if the demand for labor continues to trend upward and the labor market shows continued tightening.

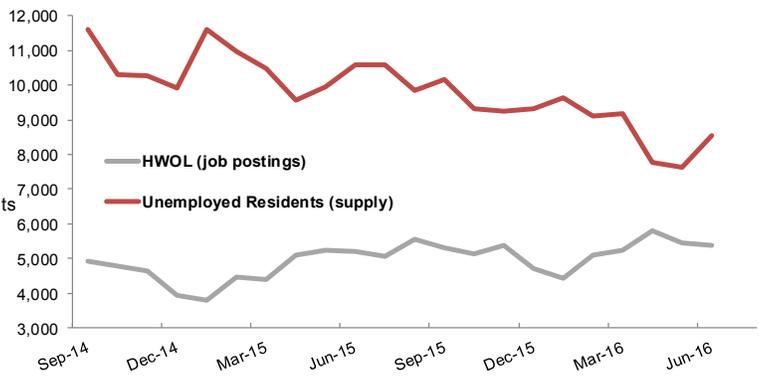
A large driver of demand were Registered Nurses. Employers posted job ads for this role at nearly three times the volume of the next closest occupation, Industrial Engineers. Employer demand was also strong for IT related occupations with several factoring in the top 25 that were not necessarily reflected in current employment levels indicating potentially emerging demand.

Cashiers along with Waiters and Waitresses are estimated to have the most openings on an annual basis, with a fair amount due to growth relative to other occupations. Estimated growth of Health Care related occupations, combined with high levels of current demand suggest expansion of the Health Care and Social Assistance industry and to a lesser extent, Educational Services.

**Lower Merrimack Valley WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Lower Merrimack Valley WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

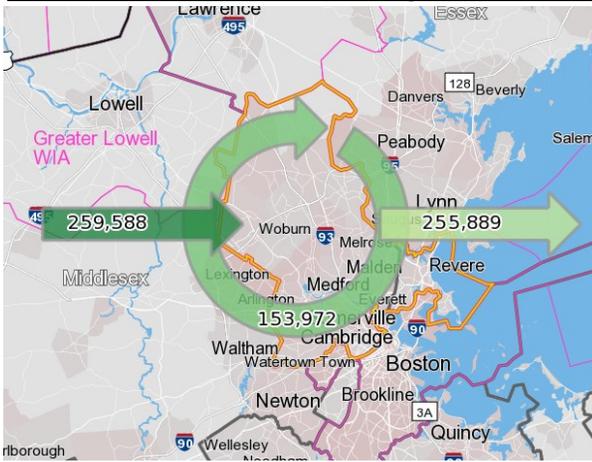
Metro North WDA

2015 vs. 2014 Snapshot

Employed Residents	430,518	
Share of MA Employment	12.7%	<u>Change</u>
Labor Force	448,081	0.6%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	3.9%	-0.6%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$77,740	4.9%
MA Average Wage	\$64,116	4.1%
Number of Establishments	24,146	3.3%
MA Establishments	234,994	3.4%

Source: DUA LAUS/QCEW Annual Averages

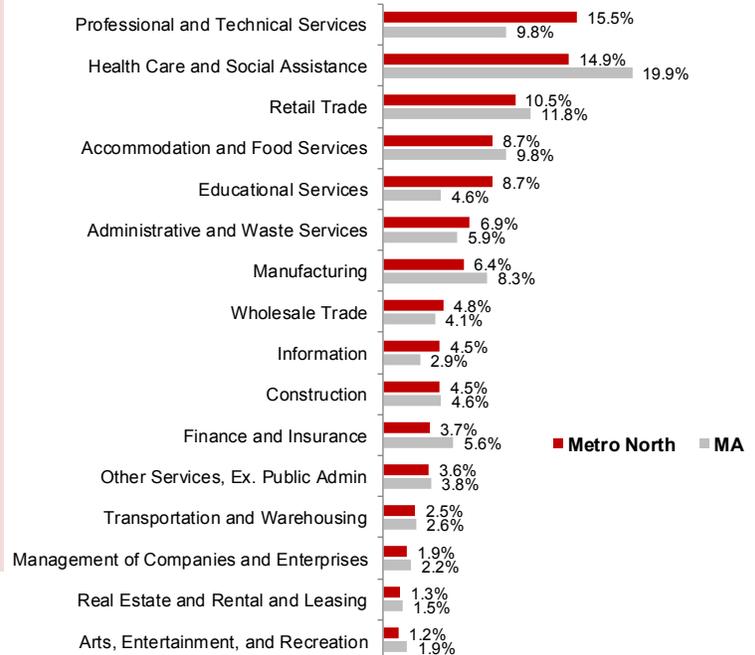
US Census On-The-Map Commuting Inflow / Outflow



- Live in WDA, employed outside
- Employed and live in the WDA
- Employed in the WDA, live outside

Metro North WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	9,960	\$24,075
2	General and Operations Managers	9,840	\$117,291
3	Registered Nurses	8,380	\$86,798
4	Cashiers	8,130	\$20,254
5	Office Clerks, General	7,750	\$36,756
6	Waiters and Waitresses	7,570	\$25,222
7	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	7,530	\$36,954
8	Customer Service Representatives	7,400	\$40,561
9	Software Developers, Applications	7,360	\$104,106
10	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	7,330	\$47,954

Metro North WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

The Metro North WDA area contains one of the largest labor forces in the Commonwealth, second only to Metro South/West. Growing virtually at the same pace as the overall Massachusetts labor force, Metro North added just over 4,000 individuals in 2015.

The majority of those who work in the Metro North WDA commute from outside the area. Only 37.6 percent of residents in the area work here as well, with the remaining 63.4 percent of residents traveling to other WDAs for employment.

The Professional and Technical Services industry is the area's leader in employment share, slightly ahead of Healthcare and Social Assistance. With 15.5 percent of Metro North jobs in this industry, it has the highest share in the Commonwealth, well over the state average of 9.8 percent. The large majority of these jobs fall under two sub sectors: Scientific Research & Development Services and Computer Systems Design & Related Services which combined employ over 38,000 individuals. While Healthcare, Retail Trade and Accommodation and Food Services all have shares similar to the Massachusetts average. Educational Services is another key industry in the Metro North area that differs from the state as a whole with a significantly higher share of jobs in the area.

Metro North WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Software Developers, Applications	875	Bachelor's
2	Medical Scientists, Except Epidemiologists	874	Doc or prof
3	Registered Nurses	686	Associate's
4	Computer Occupations, All Other	616	Bachelor's
5	Executive Secretaries and Executive Administrative Assistants	472	HS dplm/eqv
6	Marketing Managers	471	Bachelor's
7	Accountants and Auditors	367	Bachelor's
8	Retail Salespersons	355	less than HS
9	First-Line Supervisors of Retail Sales Workers	350	HS dplm/eqv
10	Computer Systems Analysts	340	Bachelor's
11	Managers, All Other	338	HS dplm/eqv
12	Network and Computer Systems Administrators	334	Bachelor's
13	Web Developers	328	#N/A
14	Customer Service Representatives	297	HS dplm/eqv
15	Heavy and Tractor-Trailer Truck Drivers	295	HS dplm/eqv
16	Computer User Support Specialists	293	Associate's
17	First-Line Supervisors of Office and Administrative Support Workers	274	HS dplm/eqv
18	Industrial Engineers	260	Bachelor's
19	First-Line Supervisors of Food Preparation and Serving Workers	234	HS dplm/eqv
20	Medical and Health Services Managers	221	Bachelor's
21	Financial Managers	213	Bachelor's
22	Natural Sciences Managers	212	Bachelor's
23	Social and Human Service Assistants	188	HS dplm/eqv
24	Management Analysts	183	Bachelor's
25	Bookkeeping, Accounting, and Auditing Clerks	168	HS dplm/eqv

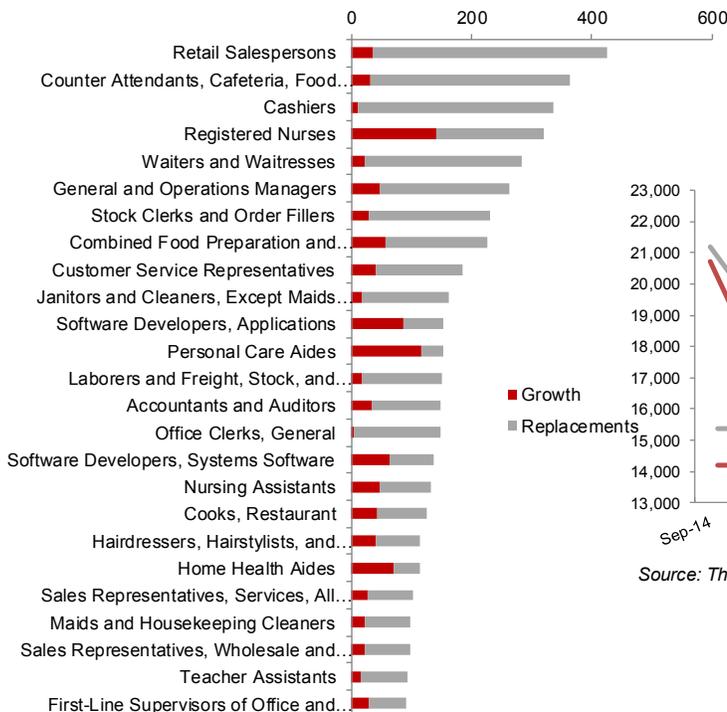
There are higher employment levels for IT related occupations in this region compared to other areas, in particular Software Developers for Systems and Software Developers for Applications which pay well above the average annual salary of \$77,740. In general wages are higher than the Massachusetts average and grew from 2014 to 2015 at one of the fastest paces at 4.9 percent.

Similar to other metropolitan WDAs, Metro North's Labor Market is extremely tight, with the number of job postings well exceeding the number of unemployed individuals looking for work, a proxy of labor supply.

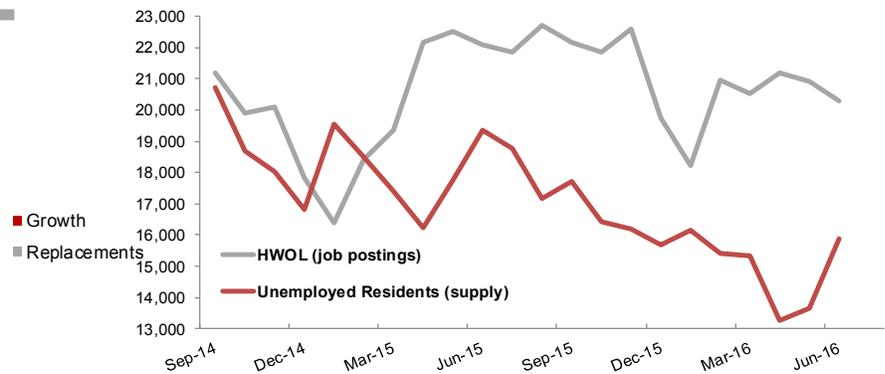
In general, demand was made up of occupations with higher entry level requirements. Six out the ten highest in demand occupations required a Bachelor's Degree or higher. IT functions were the most sought after by Metro North businesses, including Software Application Developers, Computer Systems Analysts and Computer Occupations, All Other.

These occupations are also projected to add some of the highest number of openings from growth. Software Developers are projected to add job openings on par with Registered Nurses while Retail Sales openings are estimated to have the highest total openings, primarily from turnover.

**Metro North WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Metro North WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

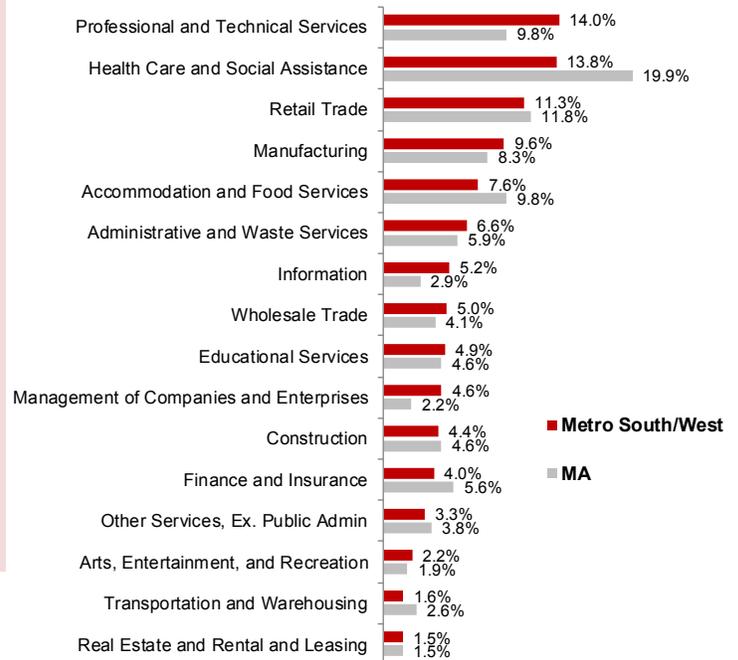
Metro South/West WDA

2015 vs. 2014 Snapshot

Employed Residents	482,959	
Share of MA Employment	14.2%	<u>Change</u>
Labor Force	502,167	0.6%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	3.8%	-0.6%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$77,428	5.1%
MA Average Wage	\$64,116	4.1%
Number of Establishments	35,593	2.0%
MA Establishments	234,994	3.4%

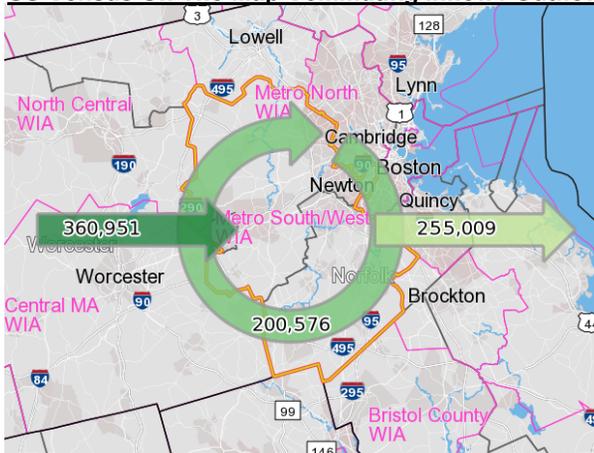
Source: DUA LAUS/QCEW Annual Averages

Metro South/West WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

An area similar in several ways to Metro North, The Metro South/West area has the largest labor force amongst all other WDAs and has continued to expand in 2015 at roughly the same pace as the Commonwealth as a whole. This area also has the lowest rate of unemployment at 3.8 percent.

Similar to Metro North, the majority of Metro South/West's workers flow into the area. In 2014, 360,951 or 64 percent of their workers travel to their jobs from other WDAs.

The industry composition is also similar to that of Metro North in that Professional and Technical Services contains the highest number of jobs followed by Health Care and Retail Trade. The largest sub sectors are also Scientific Research & Development Services and Computer Systems Design & Related Services.

There is a slightly higher concentration of Management & Technical Consulting Service industry jobs compared to Metro North. Manufacturing is the area's fourth largest share of employment, adding some balance between Metro South/West as a service based versus a goods producing economy.

Metro South/West WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	23,720	\$23,058
2	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	12,730	\$34,446
3	Software Developers, Systems Software	12,270	\$115,235
4	General and Operations Managers	12,210	\$132,825
5	Software Developers, Applications	10,840	\$107,559
6	Cashiers	10,690	\$22,131
7	Customer Service Representatives	10,220	\$41,388
8	Registered Nurses	9,710	\$81,305
9	Office Clerks, General	8,980	\$35,536
10	Stock Clerks and Order Fillers	7,960	\$24,226

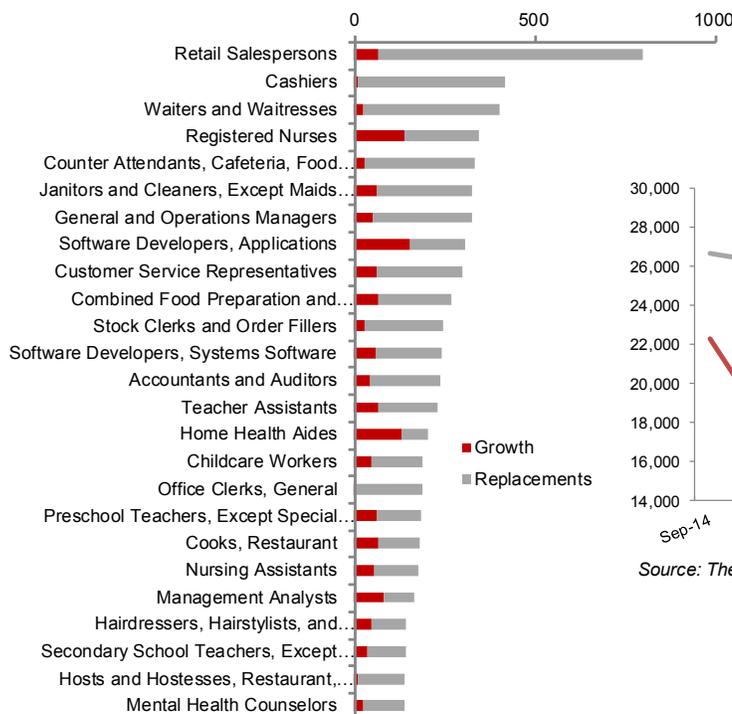
Metro South West WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Software Developers, Applications	1248	Bachelor's
2	Computer Occupations, All Other	1028	Bachelor's
3	Registered Nurses	819	Associate's
4	Marketing Managers	694	Bachelor's
5	Customer Service Representatives	585	HS dplm/eqv
6	Network and Computer Systems Administrators	563	Bachelor's
7	Retail Salespersons	513	less than HS
8	First-Line Supervisors of Retail Sales Workers	510	HS dplm/eqv
9	Accountants and Auditors	502	Bachelor's
10	Computer Systems Analysts	476	Bachelor's
11	Computer User Support Specialists	474	Associate's
12	Web Developers	448	Bachelor's
13	Industrial Engineers	410	Bachelor's
14	Executive Secretaries and Executive Administrative Assistants	408	HS dplm/eqv
15	First-Line Supervisors of Office and Administrative Support Workers	389	HS dplm/eqv
16	Management Analysts	336	Bachelor's
17	First-Line Supervisors of Food Preparation and Serving Workers	324	HS dplm/eqv
18	Medical Scientists, Except Epidemiologists	323	Doc or prof
19	Market Research Analysts and Marketing Specialists	294	Bachelor's
20	Social and Human Service Assistants	265	HS dplm/eqv
21	Managers, All Other	264	HS dplm/eqv
22	Bookkeeping, Accounting, and Auditing Clerks	240	HS dplm/eqv
23	Software Developers, Systems Software	237	Bachelor's
24	Securities, Commodities, and Financial Services Sales Agents	211	Bachelor's
25	Teacher Assistants	194	HS dplm/eqv

Metro South/West's top 10 occupations also look similar to Metro North's top 10. In particular, Software Developers for Applications and for Systems had 23,110 individuals that were employed, which is close to the number of individuals employed as Retail Salespersons.

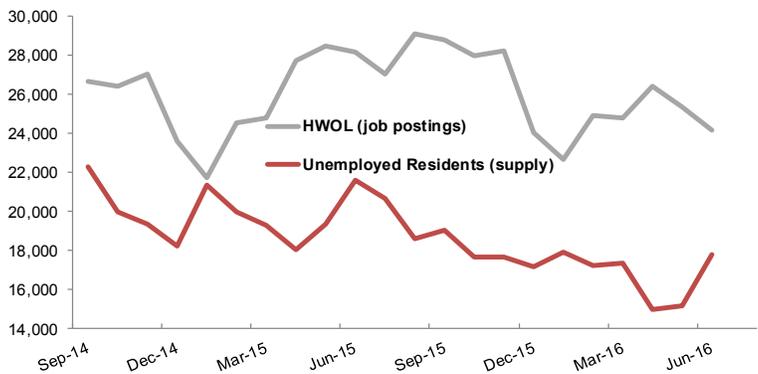
Demand for jobs began to separate early in 2015 from the supply of available unemployed workers and remained elevated. Employer demand for IT was evident as jobs ads for Software Application Developers and All Other Computer Occupations more than doubled that of Registered Nurses.

The trajectory of annual openings for occupations in terms of growth favors Nursing occupations over Software Developers; however, Janitors and Cleaners, Except Maids and Housekeeping Cleaners are estimated to have the largest growth. High churn occupations are projected to have the most openings overall based upon the need to replace departing workers.

**Metro South/West WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
Metro South/West WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

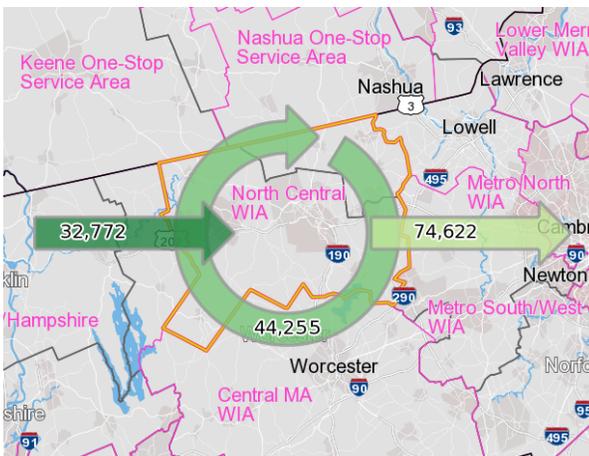
North Central WDA

2015 vs. 2014 Snapshot

Employed Residents	124,763	
Share of MA Employment	3.7%	<u>Change</u>
Labor Force	131,861	0.1%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	5.4%	-0.9%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$46,540	2.9%
MA Average Wage	\$64,116	4.1%
Number of Establishments	6,293	3.3%
MA Establishments	234,994	3.4%

Source: DUA LAUS/QCEW Annual Averages

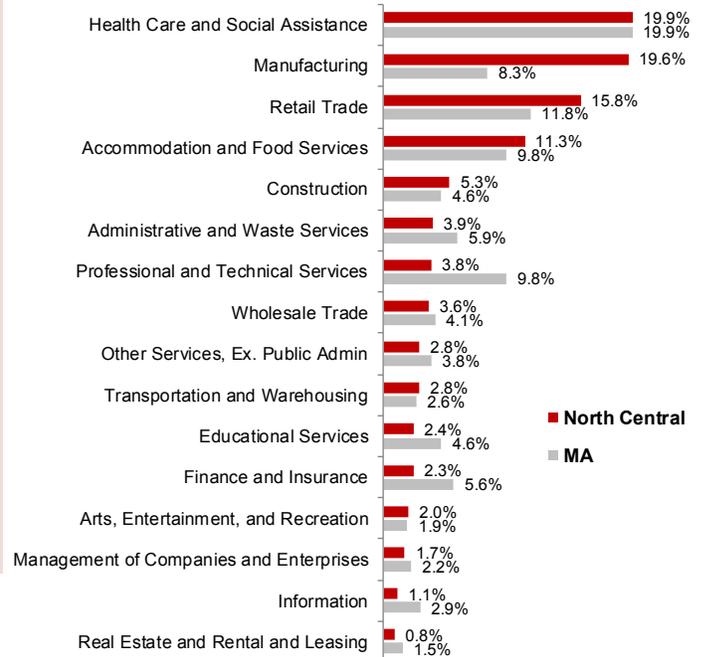
US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

North Central WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	2,930	\$22,803
2	Waiters and Waitresses	1,860	\$19,544
3	Cashiers	1,860	\$21,592
4	Registered Nurses	1,650	\$78,022
5	Office Clerks, General	1,650	\$29,365
6	General and Operations Managers	1,640	\$94,512
7	Teacher Assistants	1,580	\$29,417
8	First-Line Supervisors of Retail Sales Workers	1,100	\$38,262
9	Combined Food Preparation and Serving Workers, Including Fast Food	1,080	\$19,630
10	Stock Clerks and Order Fillers	1,030	\$23,840

North Central WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

The labor force in the North Central WDA is one of the smallest and remained essentially unchanged, increasing by a slight 0.1 percent from 2014. Average annual unemployment was slightly higher than the state average but dropped from 2014 to 2015 by a greater margin.

The majority of the labor force living in the North Central area, at 62.8 percent, commuted outside for work while the remaining 37.2 percent live and work within the area.

Health Care and Social Assistance along with Manufacturing were the primary industries within the North Central WDA in terms of their share of jobs. North Central leads all other WDAs in that 19.6 percent of its jobs is in Manufacturing. Within that, 25 percent of manufacturing jobs fall under Plastics & Rubber Products Production. A second tier of sub-sectors all comprising 8 percent to 10 percent of manufacturing jobs in North Central include: Machinery Manufacturing; Paper Manufacturing; Fabricated Metal Product Manufacturing; Chemical Manufacturing; and Printing and Related Support Activities.

The bulk of 2015 occupations had minimal entry requirements, as Retail Salesperson, Cashiers and Waiters/Waitresses made up the top three occupations in terms of employment counts.

North Central WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	137	Associate's
2	Social and Human Service Assistants	88	HS dplm/eqv
3	Heavy and Tractor-Trailer Truck Drivers	87	HS dplm/eqv
4	First-Line Supervisors of Retail Sales Workers	78	HS dplm/eqv
5	Retail Salespersons	76	less than HS
6	First-Line Supervisors of Production and Operating Workers	75	PstScdry non award
7	Helpers--Production Workers	53	less than HS
8	First-Line Supervisors of Food Preparation and Serving Workers	52	HS dplm/eqv
9	Maintenance and Repair Workers, General	48	HS dplm/eqv
10	Customer Service Representatives	47	HS dplm/eqv
11	Industrial Engineers	43	Bachelor's
12	Combined Food Preparation and Serving Workers, Including Fast Food	37	less than HS
12	Speech-Language Pathologists	37	Master's
14	Stock Clerks and Order Fillers	34	less than HS
15	First-Line Supervisors of Office and Administrative Support Workers	32	HS dplm/eqv
16	Teacher Assistants	31	HS dplm/eqv
17	Light Truck or Delivery Services Drivers	30	HS dplm/eqv
18	Automotive Service Technicians and Mechanics	29	HS dplm/eqv
18	Packaging and Filling Machine Operators and Tenders	29	HS dplm/eqv
20	Nursing Assistants	28	PstScdry non award
20	Medical and Health Services Managers	28	Bachelor's
22	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	27	less than HS
23	Physical Therapists	26	Doc or prof
23	Waiters and Waitresses	26	less than HS
23	Executive Secretaries and Executive Administrative Assistants	26	HS dplm/eqv

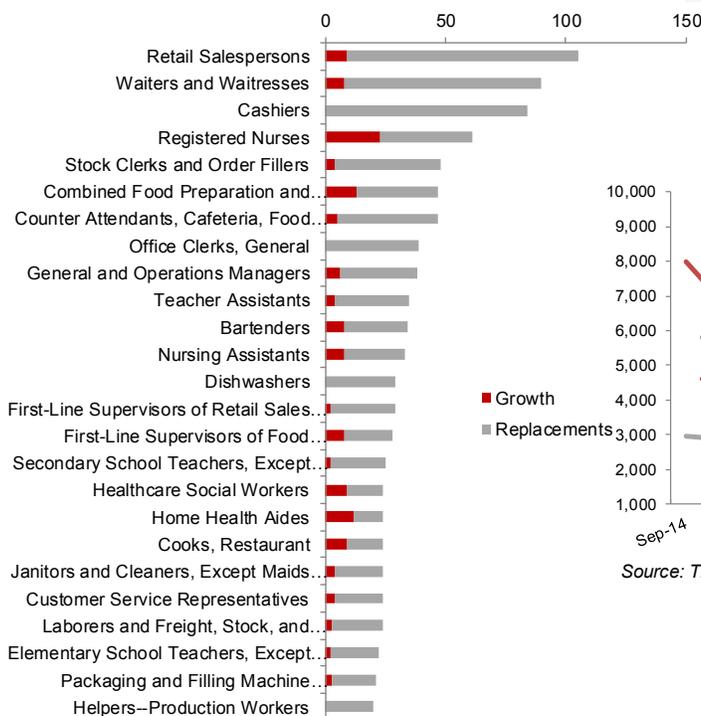
Average wages at \$46,540 were amongst the bottom quantile compared with other WDAs, rising modestly from 2014.

The labor market remained fairly slack over the course of 2015 as both the overall demand for jobs and the number of unemployed residents looking for work showed little variation.

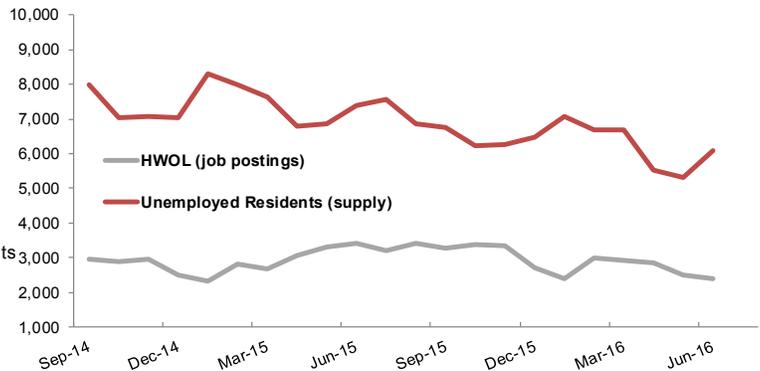
Demand in terms of job ads posted on-line was comprised largely of jobs with lower educational attainment demands, with 18 of the top 25 in demand occupations requiring a high school diploma or equivalent or less. Health Care occupations, specifically Registered Nurses drove demand, and what can be seen as a recurring theme in several other WDAs, demand for Front Line Supervisors was almost as high as their Front Line Worker counterparts.

Waiter and Waitresses are projected to yield the most openings on an annual basis both in terms of growth and by the need for replacement workers as well as Cashiers to a lesser extent. While not projected to add the same total numbers of openings each year, Taxi Drivers and Chauffeurs as well as Combined Food Preparation and Serving Workers, including Fast Food, are projected to add new openings from growth.

**North Central WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
North Central WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

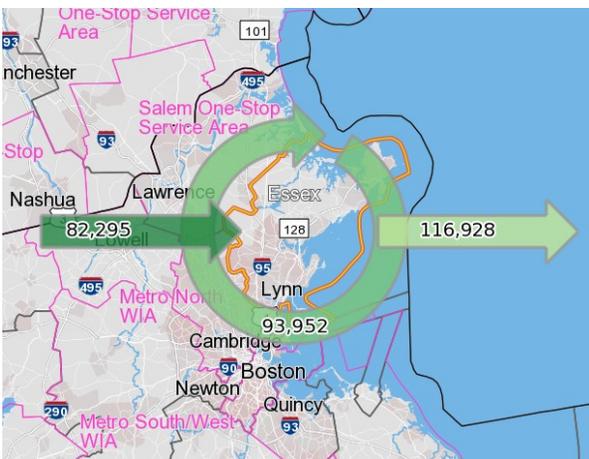
North Shore WDA

2015 vs. 2014 Snapshot

Employed Residents	214,821	
Share of MA Employment	6.3%	<u>Change</u>
Labor Force	225,610	0.0%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	4.8%	-0.7%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$51,792	2.7%
MA Average Wage	\$64,116	4.1%
Number of Establishments	12,821	3.5%
MA Establishments	234,994	3.4%

Source: DUA LAUS/QCEW Annual Averages

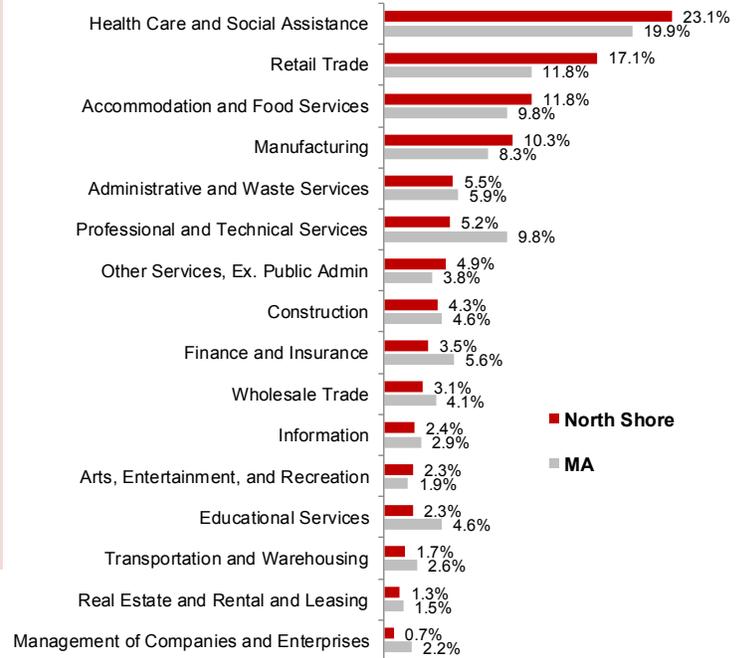
US Census On-The-Map Commuting Inflow / Outflow



- Live in WDA, employed outside
- Employed and live in the WDA
- Employed in the WDA, live outside

North Shore WDA Top 10 OES Occupations		Employment	Median Wage
1	Retail Salespersons	9,380	\$22,045
2	Waiters and Waitresses	4,810	\$22,554
3	Combined Food Preparation and Serving Workers, Including Fast Food	3,890	\$19,582
4	Cashiers	3,890	\$21,271
5	Registered Nurses	3,710	\$76,185
6	Office Clerks, General	3,380	\$34,135
7	Customer Service Representatives	3,150	\$38,164
8	Personal Care Aides	3,060	\$26,580
9	Home Health Aides	3,050	\$26,881
10	General and Operations Managers	2,980	\$96,160

North Shore WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

The North Shore WDA is home to a mid sized labor force relative to other WDAs, which remained statistically unchanged from 2014. The average rate of unemployment was slightly lower than Massachusetts as a whole as they both decreased at virtually the same pace from the prior year.

Of the work that takes place in the area, there was a balance of talent filling jobs from residents within and from workers coming in from other area. In 2014, 53.3 percent of workers in North Shore lived there, with the remaining 46.7 percent commuting into the area.

Healthcare and Social Assistance, like most other WDAs in Massachusetts, contained the highest volume of jobs. General Medical and Surgical Hospitals was the employer with the largest, fairly balanced mix of sub-sectors within Healthcare. In addition, Home Health Care Services, Individual and Family Services, Offices of Physicians, Nursing Care Facilities, as well Residential Mental Health Facilities, are some of the major sub sectors there, each one with over 2,000 jobs.

Slightly higher than the state average, Manufacturing is the fourth largest industry in the North Shore. It is composed mainly of Durable Goods production where 11,295 of jobs fall. Non-Durable Goods, primarily Food Production, accounted for 4,408 jobs.

North Shore WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	303	Associate's
2	Retail Salespersons	247	less than HS
3	First-Line Supervisors of Retail Sales Workers	203	HS dplm/eqv
4	First-Line Supervisors of Food Preparation and Serving Workers	110	HS dplm/eqv
5	Customer Service Representatives	94	HS dplm/eqv
6	Social and Human Service Assistants	91	HS dplm/eqv
7	Home Health Aides	90	less than HS
8	Heavy and Tractor-Trailer Truck Drivers	78	HS dplm/eqv
9	First-Line Supervisors of Office and Administrative Support Workers	69	HS dplm/eqv
10	Combined Food Preparation and Serving Workers, Including Fast Food	68	less than HS
10	Industrial Engineers	68	Bachelor's
12	Accountants and Auditors	63	Bachelor's
13	Bookkeeping, Accounting, and Auditing Clerks	57	HS dplm/eqv
14	Computer User Support Specialists	54	Associate's
14	Executive Secretaries and Executive Administrative Assistants	54	HS dplm/eqv
16	Maintenance and Repair Workers, General	52	HS dplm/eqv
17	Speech-Language Pathologists	51	Master's
18	Physical Therapists	48	Doc or prof
18	Light Truck or Delivery Services Drivers	48	HS dplm/eqv
20	Waiters and Waitresses	47	less than HS
21	Marketing Managers	43	Bachelor's
21	Cooks, Restaurant	43	less than HS
21	Merchandise Displayers and Window Trimmers	43	HS dplm/eqv
21	Stock Clerks and Order Fillers	43	less than HS
25	Medical and Health Services Managers	42	Bachelor's

In terms of occupations, the North Shore demonstrated high volume for positions with minimal entry level requirements. Registered Nurses had the highest employment level in healthcare occupations, but lower relative to other WDAs, comprising 10.1 percent of Healthcare and Social Assistance jobs. As a whole, Massachusetts' staffing pattern for Healthcare and Social Assistance is 12.8 percent.

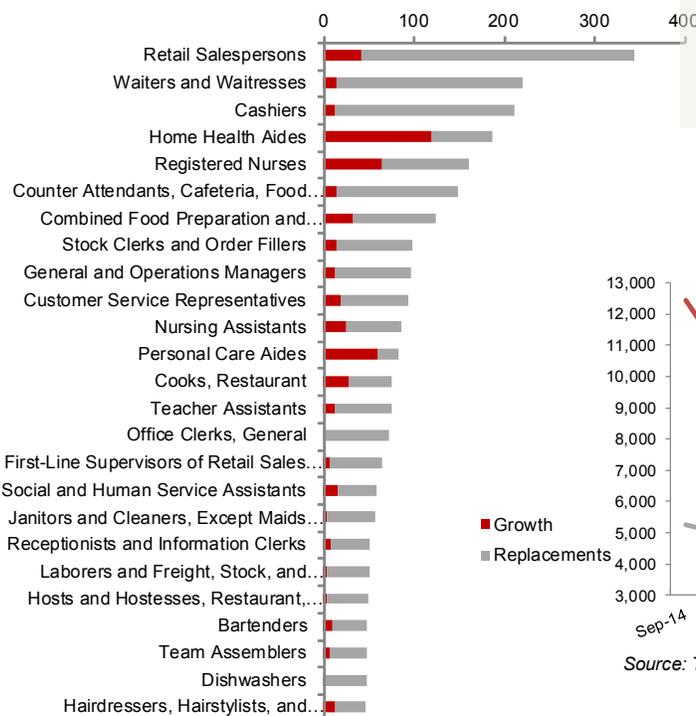
Annual wages were generally lower in this area compared to others and increased from 2014 at slower rate than the Commonwealth as a whole.

The supply of labor versus demand was somewhat slack but did show signs of tightening as the number of unemployed residents in the North Shores of labor steadily decreased through 2015.

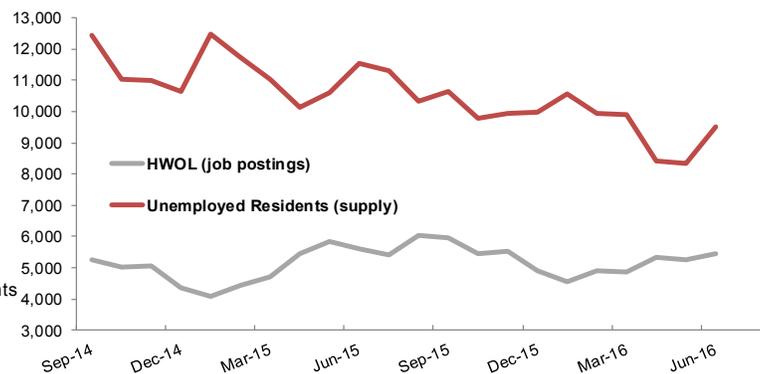
Demand for jobs was driven by occupations that support the area's largest industries in terms of job share. Companies sought out supervisory help with Food Preparation and Service workers in particular. Almost double the amount of jobs were posted for First Line Supervisors of Food Preparation workers as there were for the workers themselves.

Projections indicate that openings will grow for Food Service occupations including Waiters/Waitresses and Food Service Workers as well as for Healthcare occupations. These occupations also project higher numbers of total annual openings, signaling continued expansion of the Healthcare and Social Assistance and Accommodation and Food Service Industries on the North Shore.

**North Shore WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
North Shore WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections

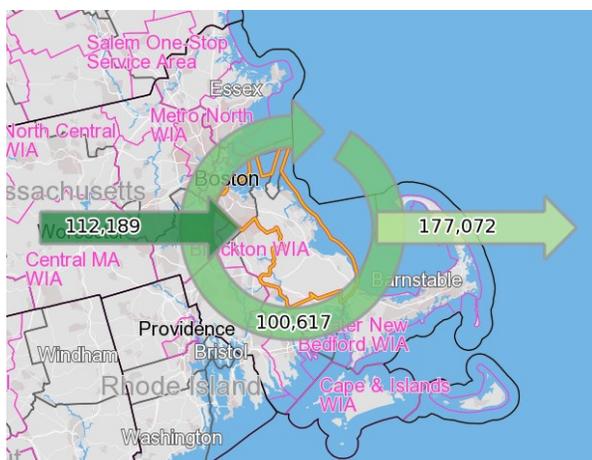
South Shore WDA

2015 vs. 2014 Snapshot

Employed Residents	272,696	
Share of MA Employment	8.0%	<u>Change</u>
Labor Force	286,679	0.5%
MA Labor Force	3,569,956	0.4%
Unemployment Rate	4.9%	-0.7%
MA Unemployment Rate	5.0%	-0.7%
Average Annual Wage	\$53,820	3.5%
MA Average Wage	\$64,116	4.1%
Number of Establishments	16,688	2.1%
MA Establishments	234,994	3.4%

Source: DUA LAUS/QCEW Annual Averages

US Census On-The-Map Commuting Inflow / Outflow



- █ Live in WDA, employed outside
- █ Employed and live in the WDA
- █ Employed in the WDA, live outside

South Shore WDA vs. Statewide Private Industry Share of Jobs



Source: DUA QCEW 2015 Annual Averages

Growth in the South Shore WDA's labor force was flat, adding slightly over 700 individuals from 2014 to 2015. The average annual unemployment rate's decrease from 2014 mirrored the Commonwealth as a whole.

Most of those who live in the South Shore travel outside the area for work, with a residential outflow of 63.8 percent. Jobs that are physically located in the area were filled with a balanced mix of 47.3 percent of residents and 52.7 percent of talent commuting in from outside the area.

Health Care and Social Assistance, Retail Trade, and Accommodation and Food Services are the largest industries in terms of employment; similar percentages with the rest of the Commonwealth.

At 9.1 percent, Financial Services has the fourth largest share of jobs, second only to the Boston WDA. The Insurance Carriers & Related Activities sub sector makes up the top tier of jobs for the Service composition in the South Shore. A second tier can be seen with Credit Intermediation and Related Activity and a third tier that includes Real Estate, Financial Investment and Related Activity, and Rental and Leasing Services.

South Shore WDA Top 10 OES Occupations			
	Employment	Median Wage	
1	Retail Salespersons	9,950	\$23,348
2	Cashiers	7,210	\$20,243
3	Customer Service Representatives	7,040	\$38,826
4	Office Clerks, General	4,800	\$33,297
5	Stock Clerks and Order Fillers	4,420	\$23,864
6	Registered Nurses	4,140	\$75,433
7	General and Operations Managers	4,050	\$102,148
8	Nursing Assistants	3,480	\$28,354
9	Personal Care Aides	3,270	\$27,013
10	First-Line Supervisors of Office and Administrative Support Workers	3,240	\$60,147

South Shore WDA - 2015 HWOL In-Demand Occupations			
	Occupational Title	Avg. Mly. Postings	Education
1	Registered Nurses	394	Associate's
2	Retail Salespersons	260	less than HS
3	First-Line Supervisors of Retail Sales Workers	219	HS dplm/eqv
4	Customer Service Representatives	165	HS dplm/eqv
5	Accountants and Auditors	122	Bachelor's
6	First-Line Supervisors of Food Preparation and Serving Workers	120	HS dplm/eqv
7	First-Line Supervisors of Office and Administrative Support Workers	107	HS dplm/eqv
8	Physical Therapists	106	Doc or prof
9	Computer User Support Specialists	104	Associate's
10	Social and Human Service Assistants	102	HS dplm/eqv
11	Securities, Commodities, and Financial Services Sales Agents	90	Bachelor's
11	Computer Occupations, All Other	90	Bachelor's
13	Web Developers	88	Bachelor's
14	Heavy and Tractor-Trailer Truck Drivers	86	HS dplm/eqv
15	Medical and Health Services Managers	83	Bachelor's
16	Network and Computer Systems Administrators	73	Bachelor's
16	Combined Food Preparation and Serving Workers, Including Fast Food	73	less than HS
18	Marketing Managers	70	Bachelor's
19	Software Developers, Applications	68	Bachelor's
20	Light Truck or Delivery Services Drivers	66	HS dplm/eqv
21	Speech-Language Pathologists	65	Master's
22	Bookkeeping, Accounting, and Auditing Clerks	63	HS dplm/eqv
22	Stock Clerks and Order Fillers	63	less than HS
22	Home Health Aides	63	less than HS
25	Financial Managers	62	Bachelor's

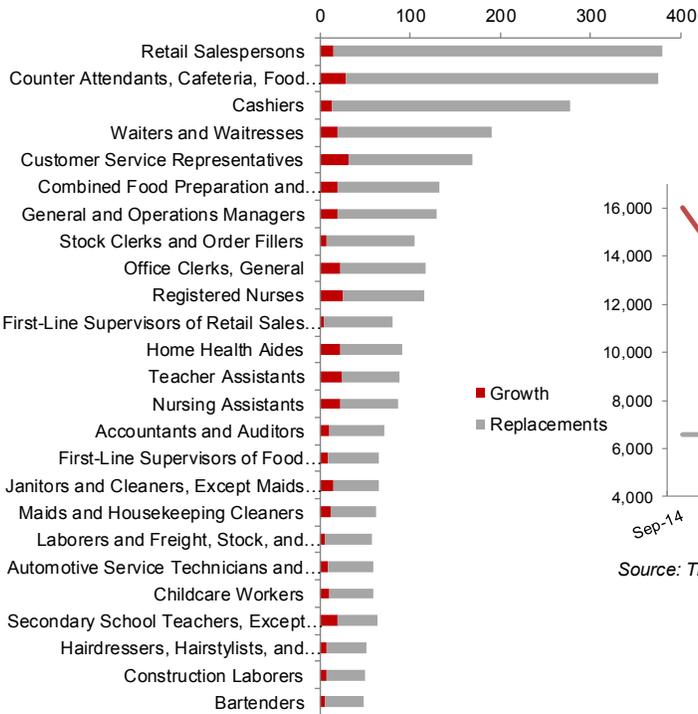
The most frequently seen occupations in the area supports the South Shore's three largest industries. Construction Labors and Electricians also showed higher numbers, underscoring the higher than average share of jobs contribution from the Construction Industry in the South Shore. Average annual wages and the rate of wage growth were slightly below the statewide figures.

The gap between labor demand and unemployed residents was significant but gradually contracted over the course of 2015. Monthly demand for jobs indicated by on-line postings hovered at roughly 6,000 while the approximated labor supply consistently declined.

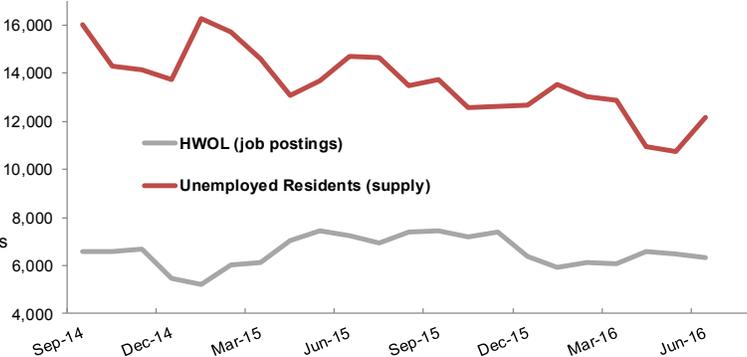
Demand was measured by a mix of Healthcare, Retail and IT related occupations. The trend of high levels of job postings for supervisors of entry level positions including Retail Sales persons, Food Preparation and Serving Workers, and Office and Administrative Support Workers can be seen here as well.

Projected openings from the largest growth occur in occupations that again, make up the Health Care and Social Assistance, Retail Trade, and Accommodation and Food Services industries. Total openings overall for these occupations are the highest as well, primarily due to the projected need for new workers to replace turnover.

**South Shore WDA
Projected Average Annual Openings**



**Labor Supply vs. Labor Demand
South Shore WDA Non-Seasonal Data**



Source: The Conference Board's HWOL Analytics, Bureau of Labor Statistics (BLS)

Source: DUA, 2014 - 2024 Occupational Projections