

METRO SOUTH/WEST WORKFORCE
DEVELOPMENT AREA
GREATER BOSTON REGION
WIOA LOCAL PLAN
FISCAL YEAR 2018

Partnerships for a Skilled Workforce
Sylvia Beville, Executive Director

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The Massachusetts Local Plan represents the unified efforts of several state and local partners to administer an effective and efficient workforce system for the Commonwealth.

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WIOA LOCAL PLAN OVERVIEW

FISCAL YEARS 2018-2021

Massachusetts' WIOA 4-Year Local Plan, as required at WIOA section 108, is the culmination of a deliberate strategy to align all of the WIOA required activities in a coherent manner that averts duplication. The MA WIOA Local Plan builds upward and outward from the documents listed in the Table of Contents, which coalesce into the first year of the Massachusetts 4-year local plan.

For FY18, the Commonwealth has focused on Local Memoranda of Understanding (MOU) that articulate integrated service strategies for priority WIOA populations and Regional Data Packages, comprised of critical data and analysis illustrating employer demand and worker supply in each of the seven new planning regions. In addition, the Local Plan includes the local Strategic Plan for the Workforce Board that describes local career pathway models, and current local data and information addressing the needs of the local Adult Basic Education population as well as performance indicators and participant summaries to support customer service planning.

SECTION I: REGIONAL DATA PACKAGE & ADULT BASIC EDUCATION ALIGNMENT

DATA PACKAGE

DEMOGRAPHIC CONTEXT

Population growth: Projections through 2035 show the share of older residents in Massachusetts increasing, with working age population declining.

Trends in race, ethnicity, and national origin: Population growth is driven by immigration, and by the growth of non-white racial groups.

Regional commuter patterns: Illustrates percentage of residents employed in region but living outside it, residents living and employed in the region, and the percentage of residents living in region but employed outside it.

EMPLOYER DEMAND SUMMARY

General employment patterns: Comparison of state and regional unemployment rates between 2005 and January 2017, along with a comparison of median state wages and median regional wages.

Industry data: A comprehensive view of regional sector makeup, organized according to total wages and total employment. Prominent industry groups are highlighted and arranged according to average weekly wages. The largest fifteen employers of each top industry in the region are identified and ranked.

Occupational data: Jobs and professions defined by SOC codes are indexed according to share of employment, employer demand, and Demand Star Ranking.

CAREER PATHWAYS

Projected employment through 2024 and median annual earnings for key career pathways important to the region.

INVESTIGATING THE EMPLOYMENT SUPPLY GAP

Supply gap ratio: A proxy measure for understanding which occupations present labor supply deficiencies that are outstripped by employer demand. It shows which occupations have more job openings than qualified workers to fill those same job openings.

Labor supply/employer demand = supply gap ratio

ADULT BASIC EDUCATION SURVEY

SURVEY RESULTS ANALYSIS

The Massachusetts Department of Education's Adult and Community Learning Services (ACLS) Request for Proposal for Adult and Community Learning Service grants will provide adult education direct services in each of the 16 workforce development areas. The grants will support the development of innovative adult education programs to effectively serve shared customers. This section provides comprehensive information that will assist bidders in aligning Adult Education activities and services with the workforce system.

Greater Boston Regional Data Package

Massachusetts Workforce Skills Cabinet 2017

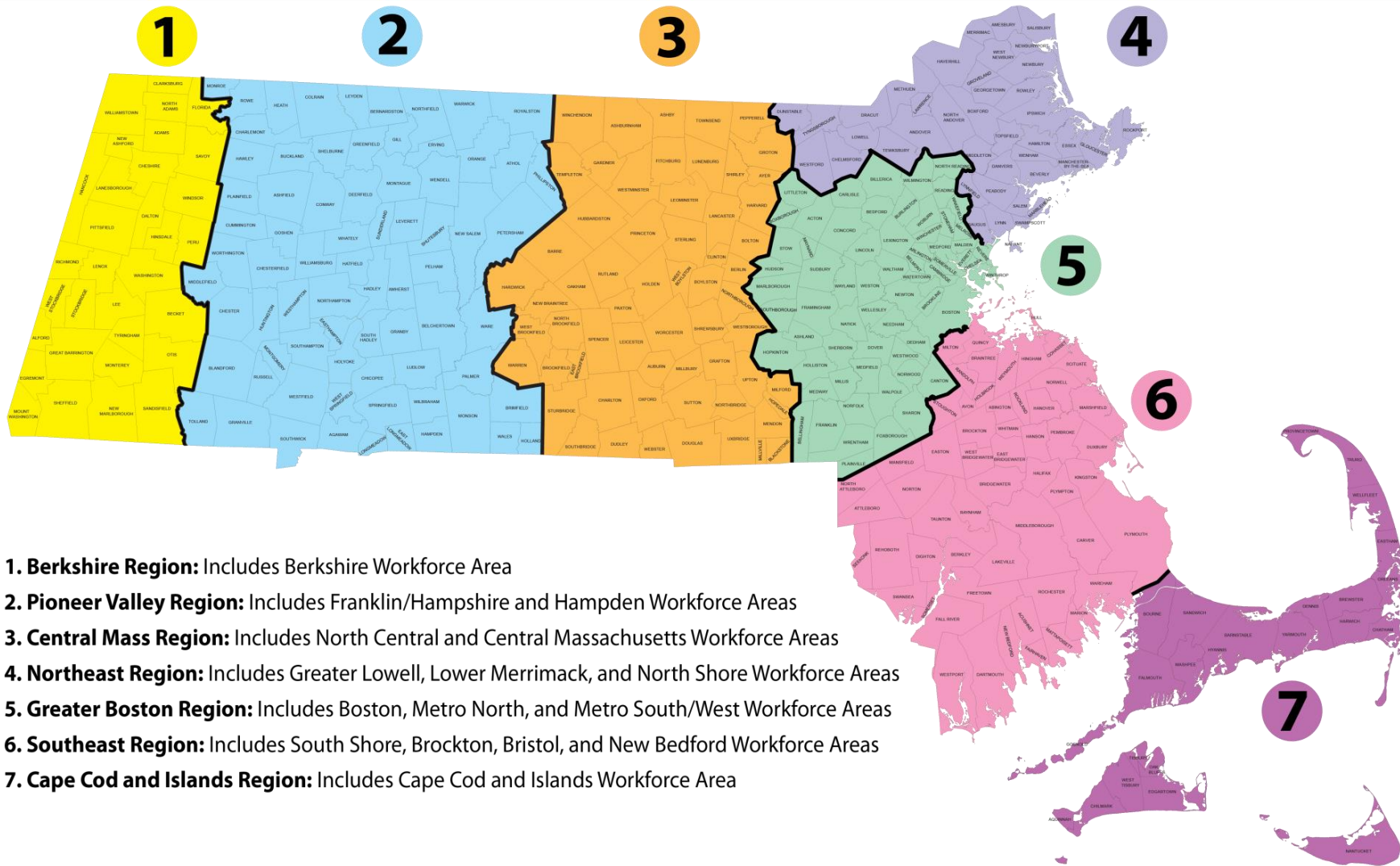


Table of Contents

This report contains critical data and analysis illustrating employer demand and worker supply in the region. Developed under the auspices of the Massachusetts Workforce Skills Cabinet to inform workplace service strategies.

- I. Regional Map
- II. Demographic Context and Overview
- III. Employer Demand Data
- IV. Supply Gap Data

Regional Structure – Workforce Skills Cabinet Planning Regions



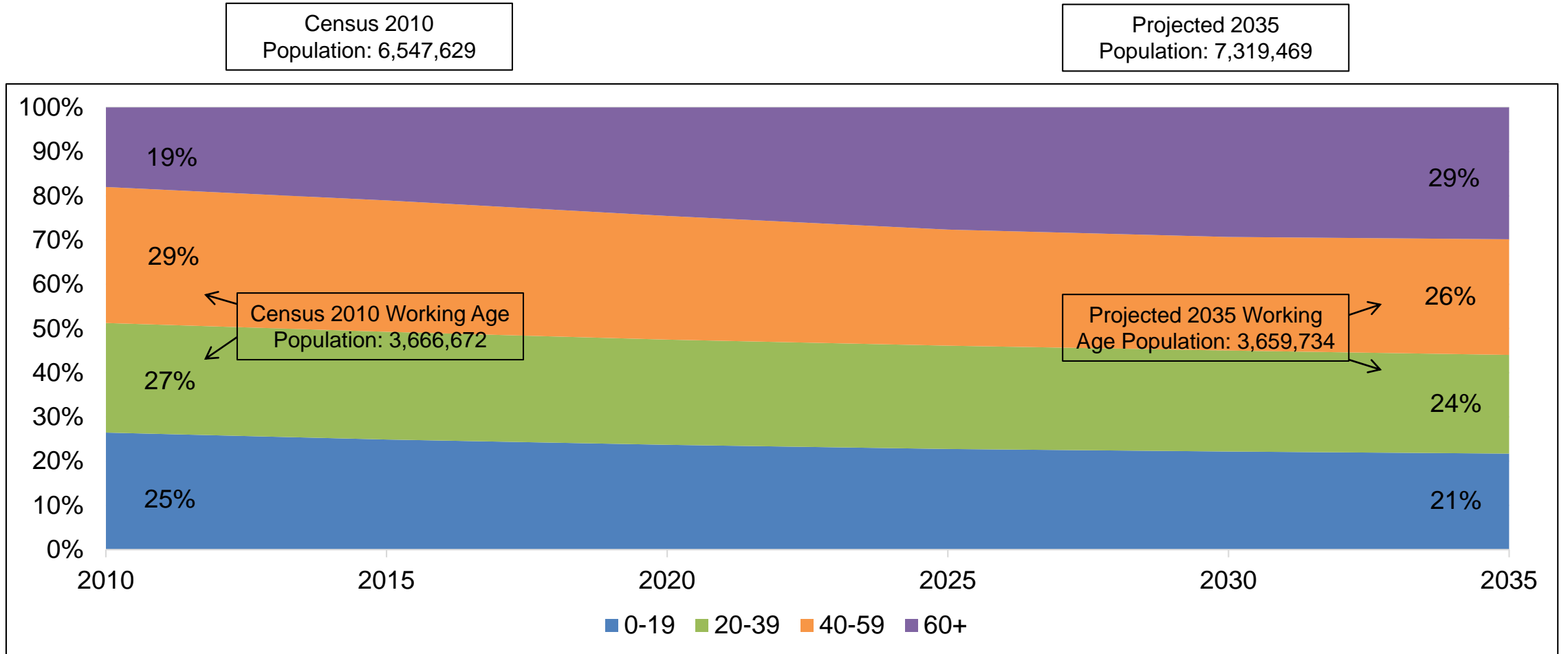
- 1. Berkshire Region:** Includes Berkshire Workforce Area
- 2. Pioneer Valley Region:** Includes Franklin/Hampshire and Hampden Workforce Areas
- 3. Central Mass Region:** Includes North Central and Central Massachusetts Workforce Areas
- 4. Northeast Region:** Includes Greater Lowell, Lower Merrimack, and North Shore Workforce Areas
- 5. Greater Boston Region:** Includes Boston, Metro North, and Metro South/West Workforce Areas
- 6. Southeast Region:** Includes South Shore, Brockton, Bristol, and New Bedford Workforce Areas
- 7. Cape Cod and Islands Region:** Includes Cape Cod and Islands Workforce Area

II. Demographic Context and Overview

- *Population trends in age, race, ethnicity, and immigration*
- *Commuter patterns in and out of the region*
- *Data summary*

Projected **State** Population Growth by Age, 2010-2035

The share of older residents is increasing, while the share and number of the working age population is declining.



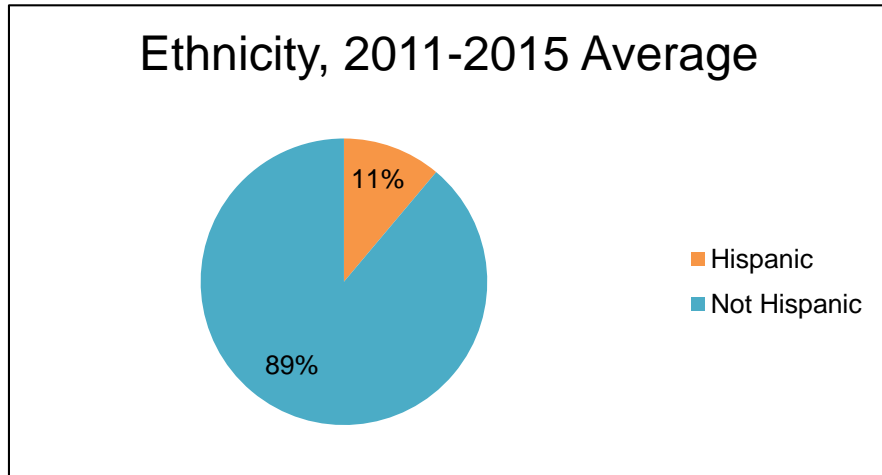
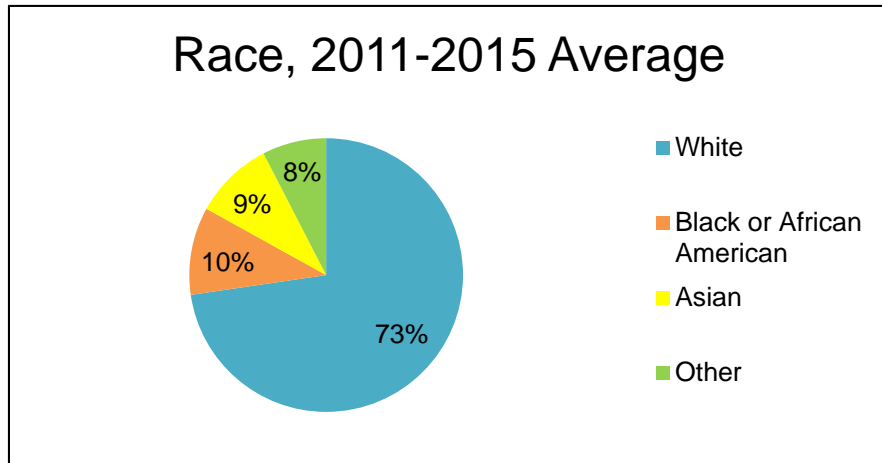
State Trends, Race/Ethnicity and Place of Origin

Massachusetts population growth is driven by immigration and growth in diverse populations.

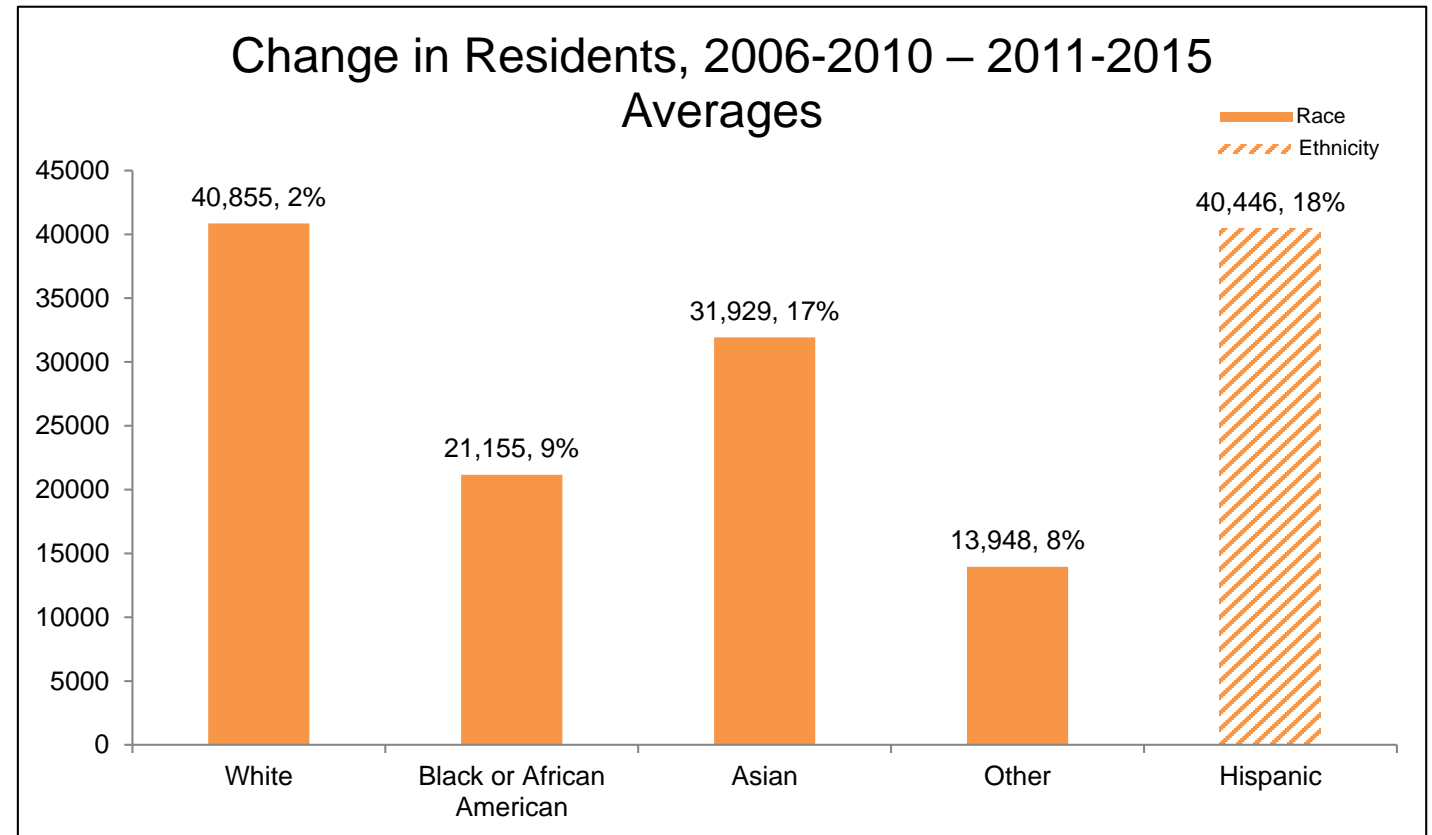
Massachusetts	2000	2012-2014	Share of Total Population 2012-2014	Absolute Change	Percent Change	Average Annual Growth Rate
Total Population*	6,131,752	6,447,295	100%	315,543	5.1%	0.4%
Nativity						
Native Born	5,279,860	5,326,213	83%	46,353	0.9%	0.1%
Foreign Born**	851,892	1,121,082	17%	269,190	31.6%	2.1%
Race/Ethnicity						
White, non-Hispanic	5,026,398	4,817,401	75%	-208,997	-4.2%	-0.3%
Black, non-Hispanic	300,758	407,723	6%	106,965	35.6%	2.4%
Asian, non-Hispanic	224,242	375,130	6%	150,888	67.3%	4.0%
Hispanic	412,496	678,193	11%	265,697	64.4%	3.9%
Other race, non-Hispanic	167,858	168,848	3%	990	0.6%	0.0%
*Civilian non-institutional population						
**Foreign born is defined here as those born outside of the 50 states and the District of Columbia, who was not born to American parents abroad, and people born in Puerto Rico and other U.S. territories.						

Regional Trends, Race/Ethnicity

Population growth in Greater Boston is driven by non-white residents; increases in the Hispanic and Asian population are most notable.

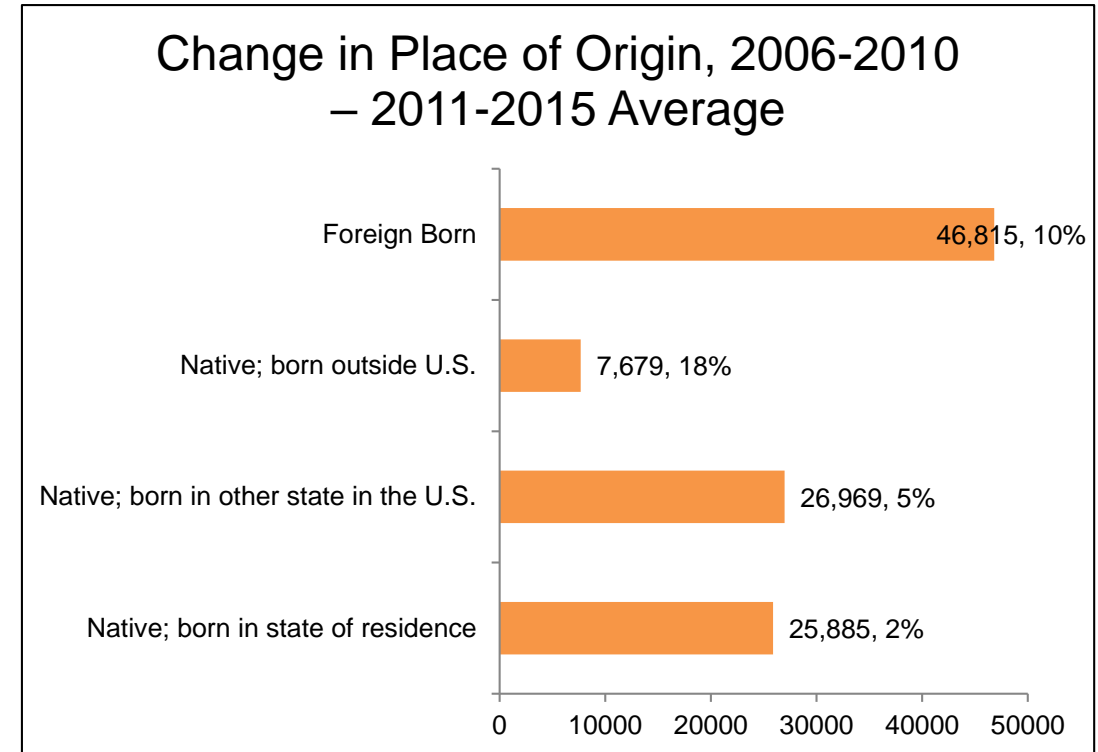
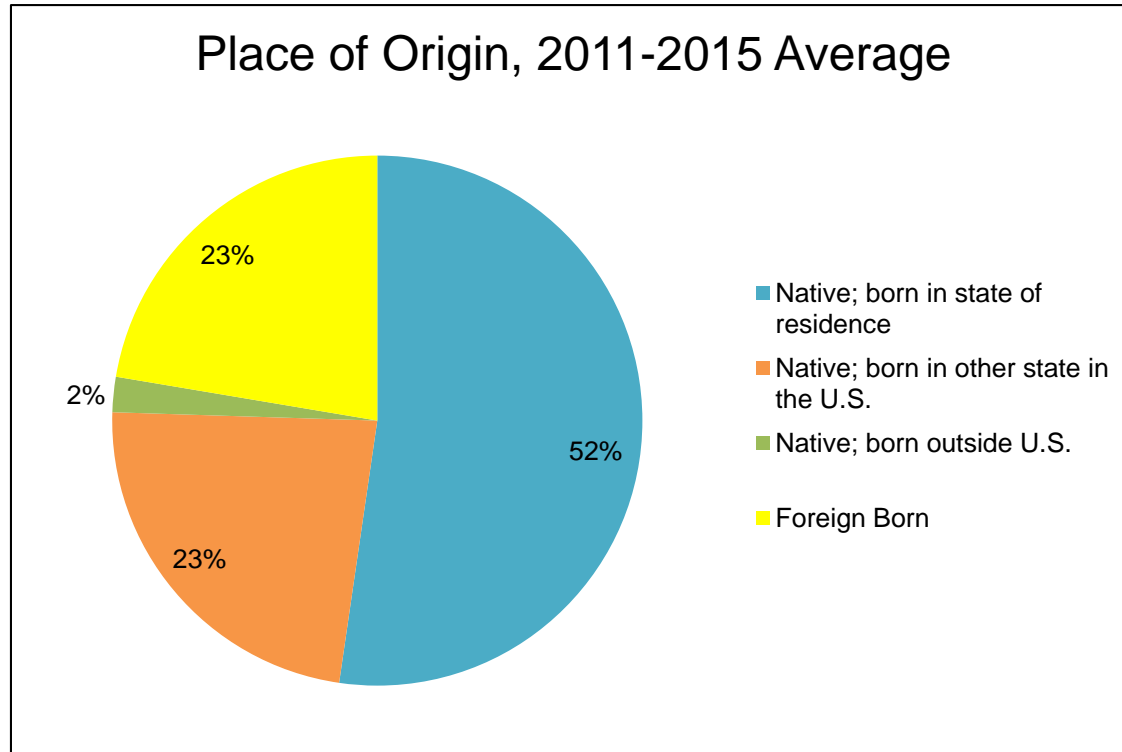


Total Population Estimate, All Ages: 2,369,596
2011-2015 Average



Regional Trends, Place of Origin

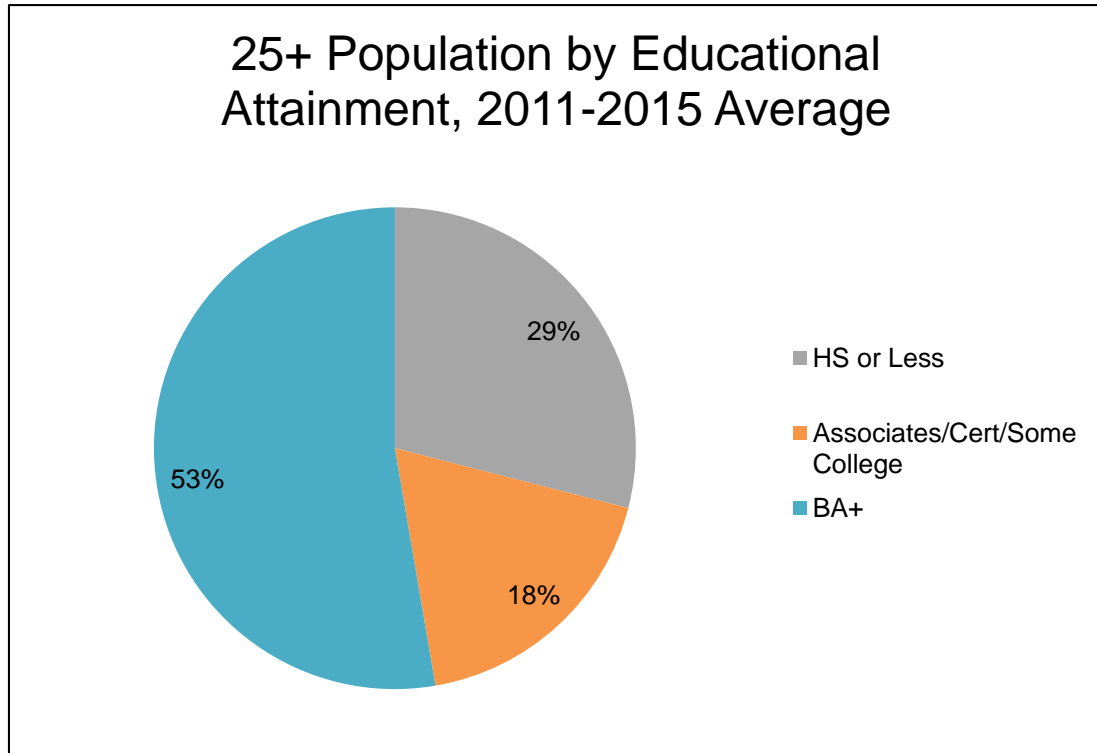
The foreign-born population demonstrates the most dramatic increase in the Greater Boston area.



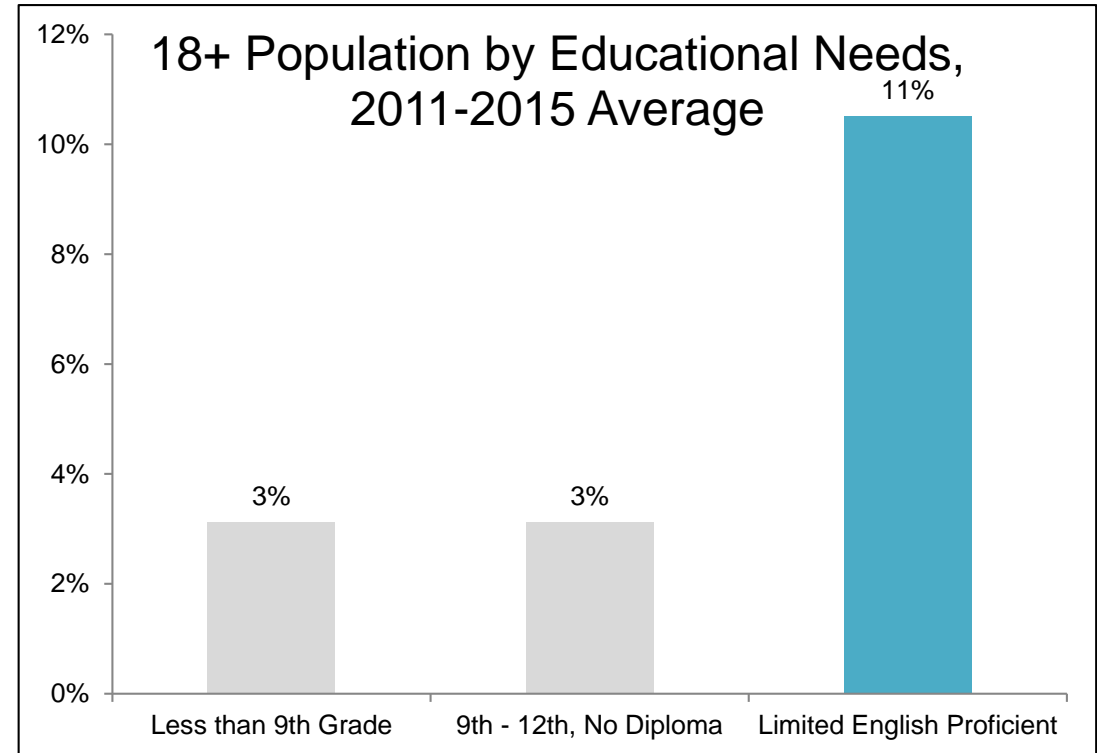
Total Population Estimate, All Ages: 2,369,596

Regional Trends, Education

Although much of Greater Boston is highly educated, a portion of residents require additional remediation or language support.



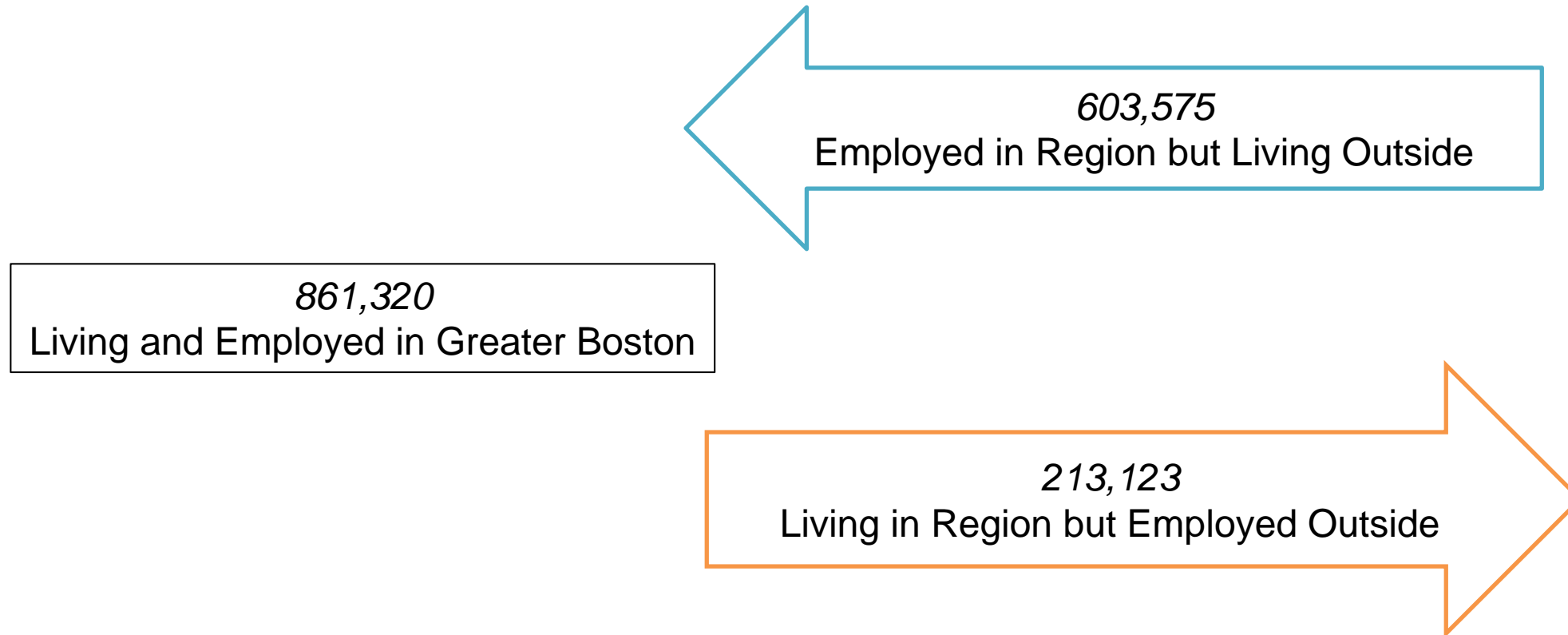
Total Population Estimate, 25+: 1,629,236



Total Population Estimate, 18+: 1,362,887

Regional Commuter Patterns

Greater Boston sends approximately 200,000 residents outside the region to work, and attracts approximately 600,000 residents from outside its borders, resulting in a net increase of workers in the Greater Boston area.



Summary of Demographic Trends

- As our State's population ages, the share of working age and young people is declining.
- Population growth in Greater Boston is driven by non-white and immigrant populations.
- Greater Boston attracts more workers to the region than it loses to outside the region

III. Employer Demand Data

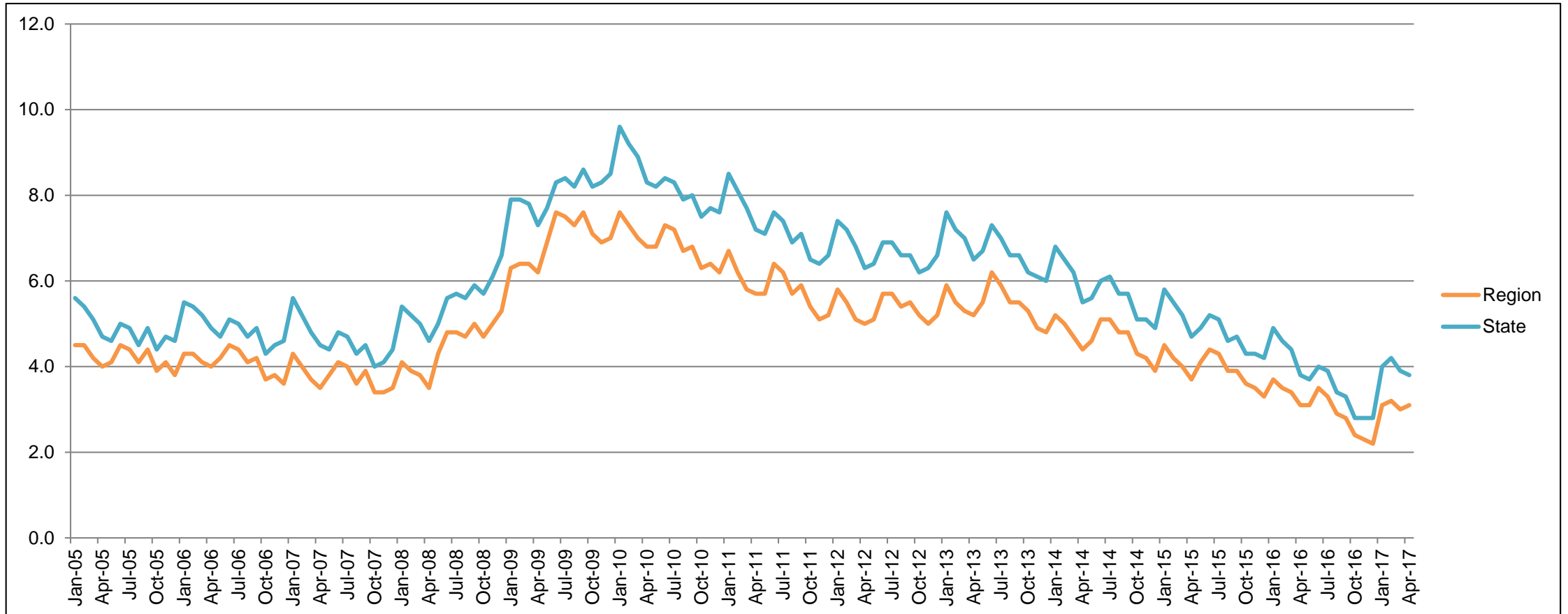
- A. Context
- B. Industry Overview
- C. Occupation Overview
- D. Career Pathways

Employer Demand Data

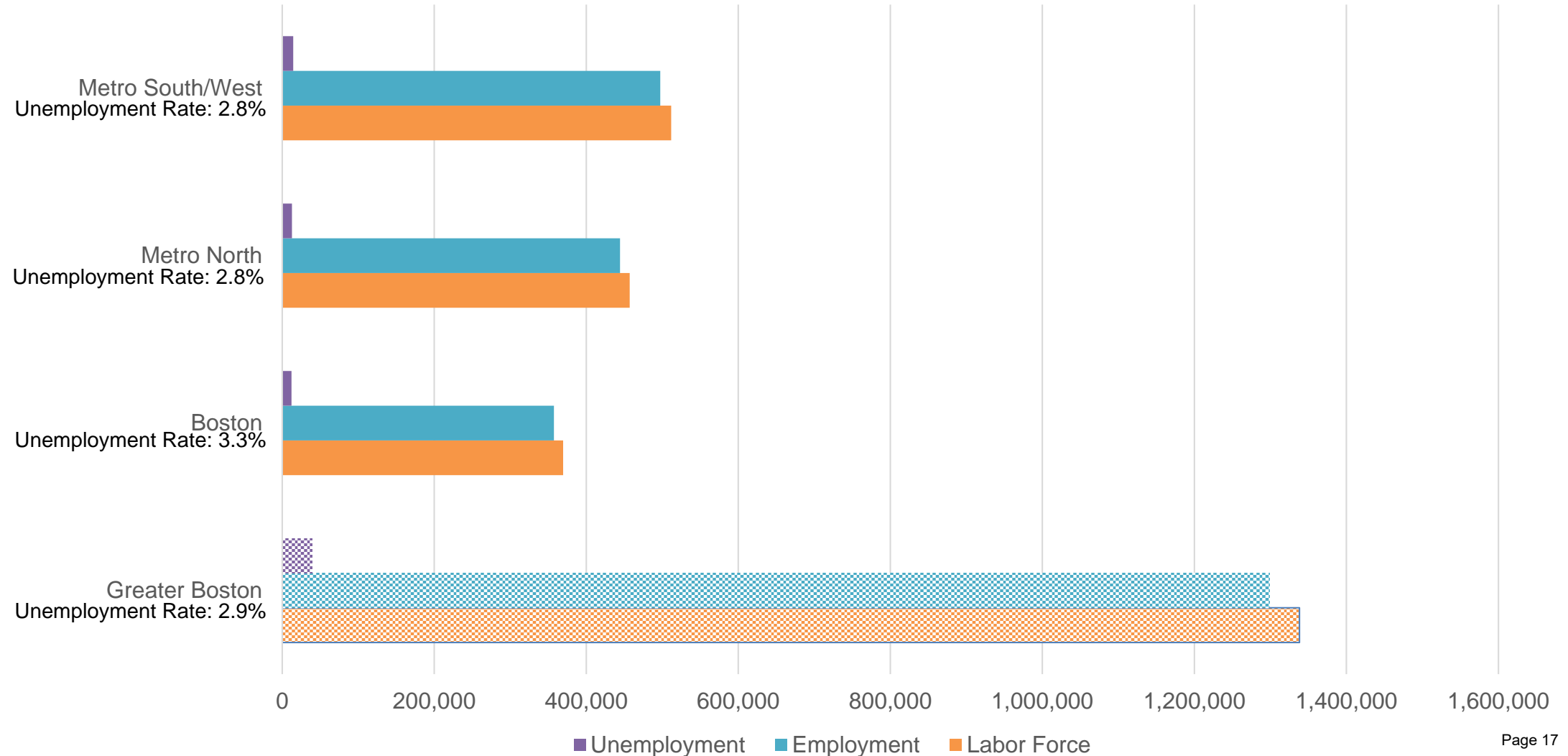
- **Contextual data** illustrates broadly the employment patterns in the region.
- **Industry data** shows which **employers** are prominent in the region.
- **Occupation data** shows which **jobs** people in the region do. People often perform the same jobs at different types of employers, and in different industries.
- This data is organized across several different criteria, and should guide your consensus and decision-making process.
- Consider how to layer in criteria to view and set priorities regionally.

State and Regional Unemployment Rate

Greater Boston's unemployment rates trend about a .5-1 percentage point below those of the State.

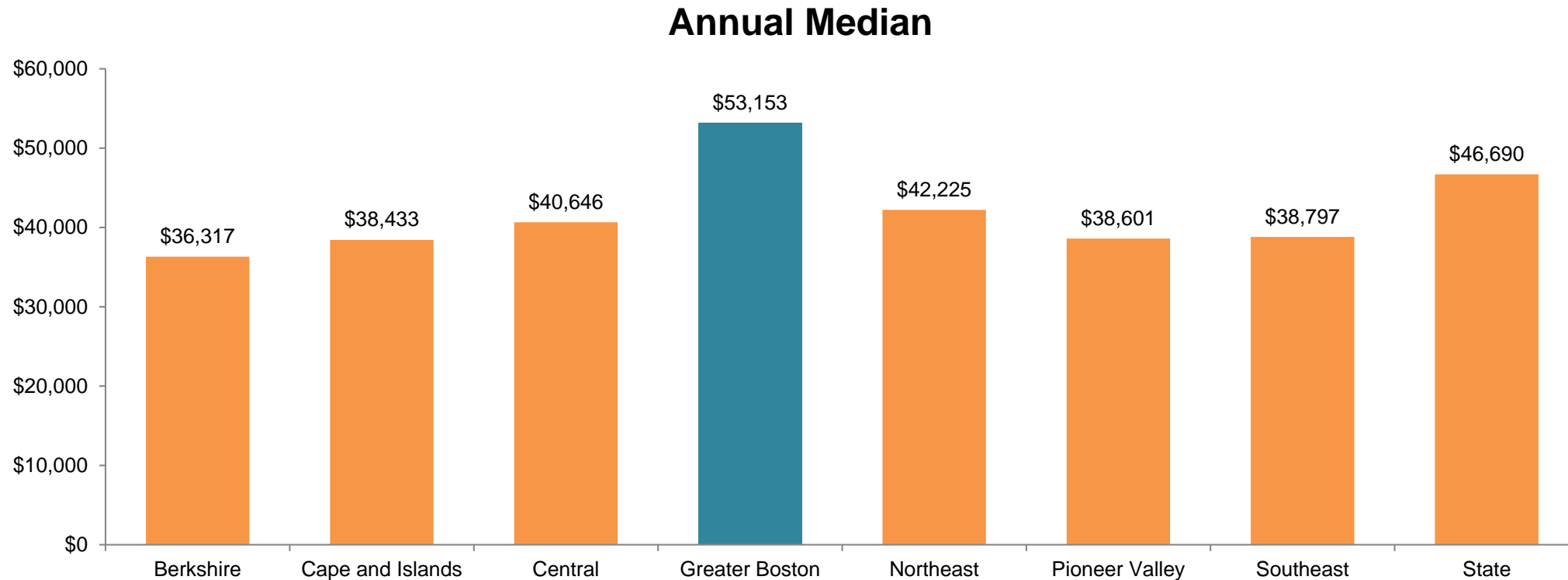


Regional and Workforce Development Area Labor Force and Unemployment Rates between June 2016 and May 2017



Median Wage

Greater Boston has the highest regional median wage, approximately \$6,000 higher than the State's median wage.



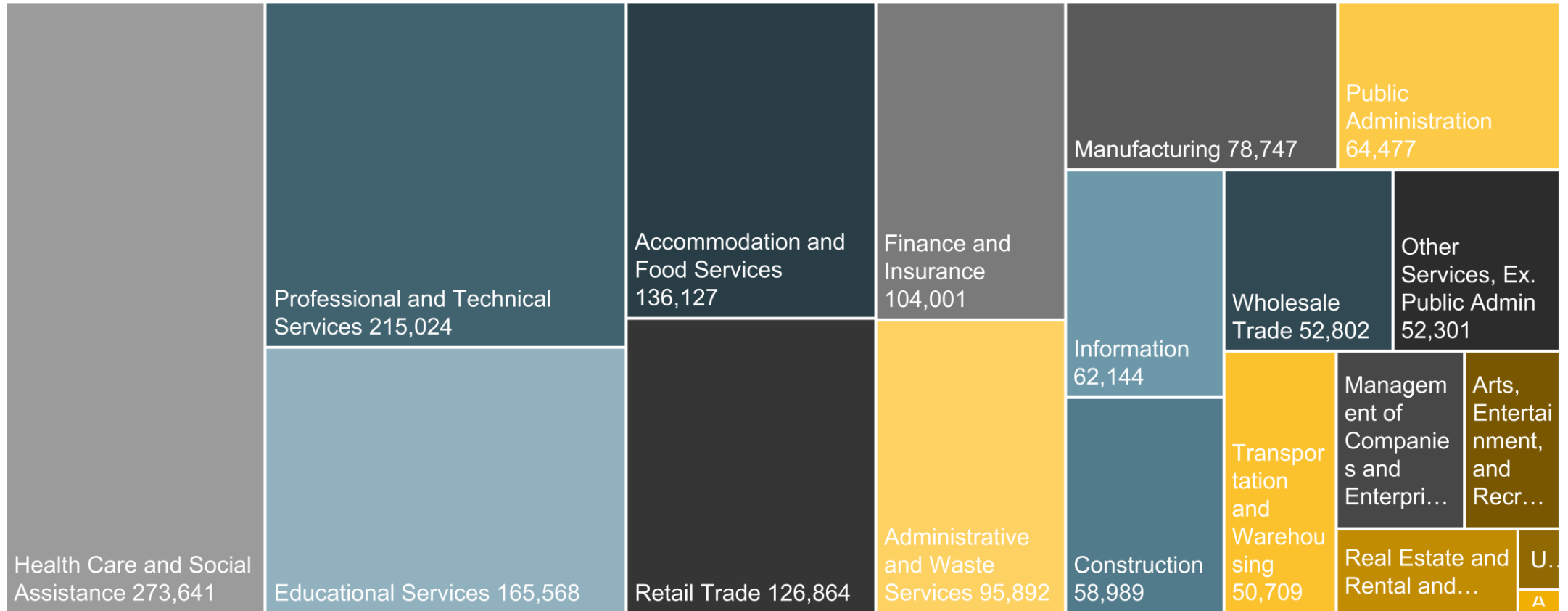
Occupational Employment Statistics Wages, 2015

Industry Terminology

Industry Sector	Sectors that represent general categories of economic activities, 2 digit NAICS
Industry Group	More detailed production-oriented combinations of establishments with similar customers and services, 4 digit NAICS
Total Employment	Total number of workers

Greater Boston Region Sector Makeup

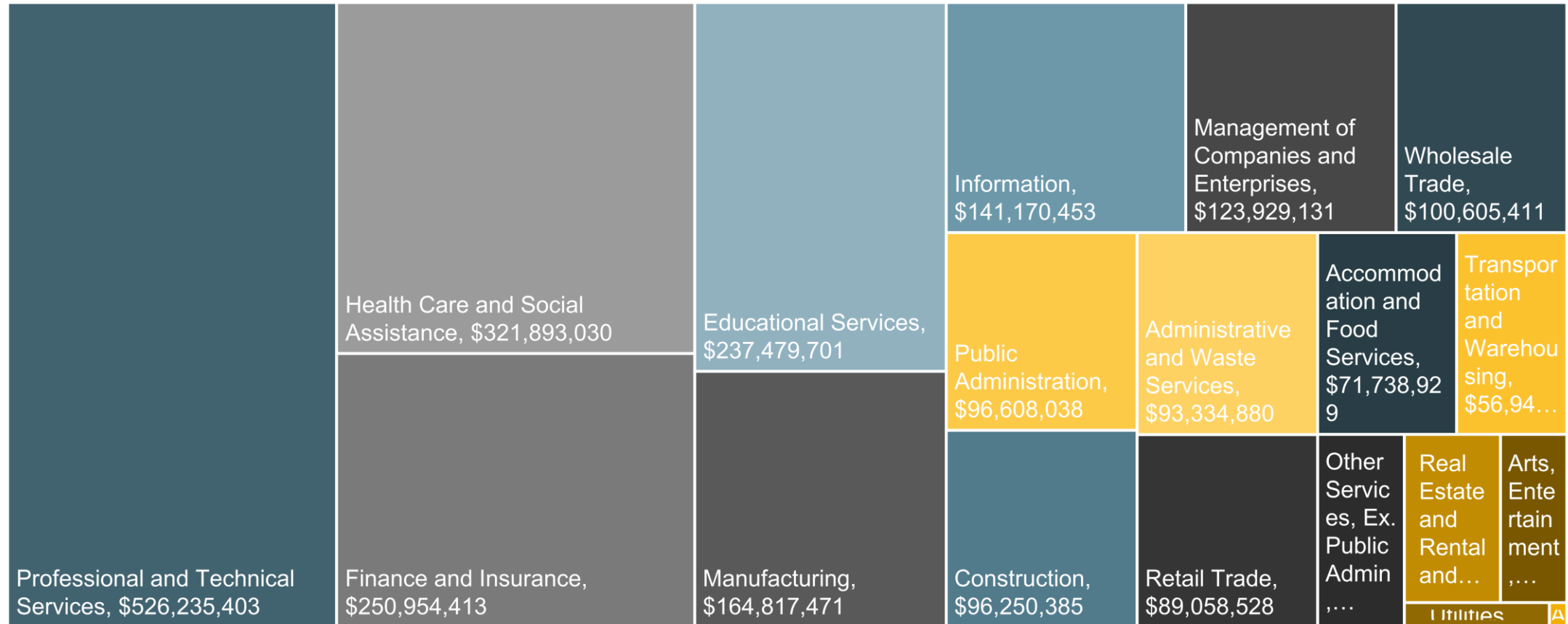
by total employment



Management 39,152
 Arts 29,284
 RE 26,489
 Utilities 4,445
 Agriculture 1,768

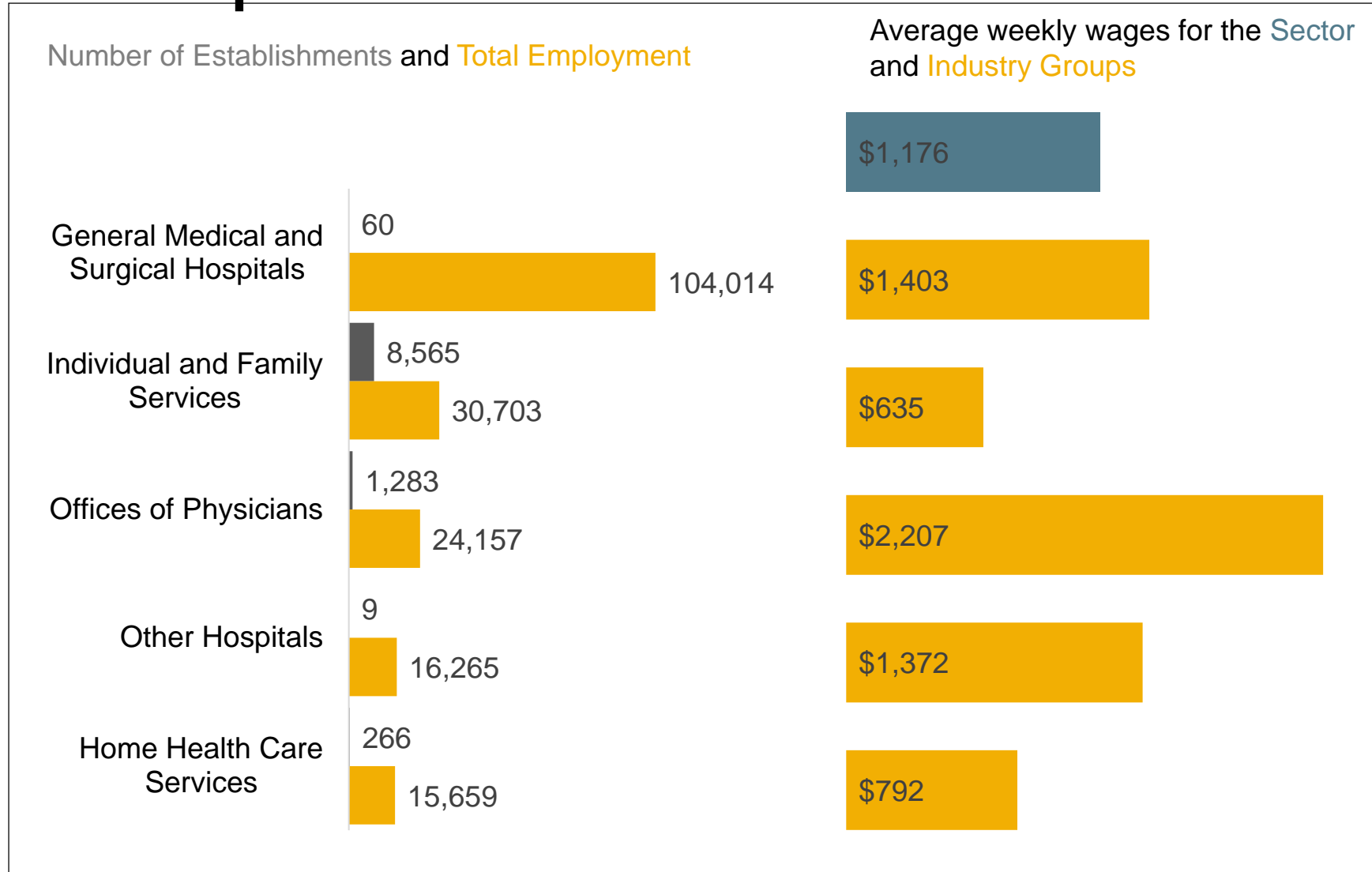
Greater Boston Region Sector Makeup

by total wages



Other Services \$43M
 RE \$41M
 Arts \$28M
 Utilities \$9M
 Agriculture \$1M

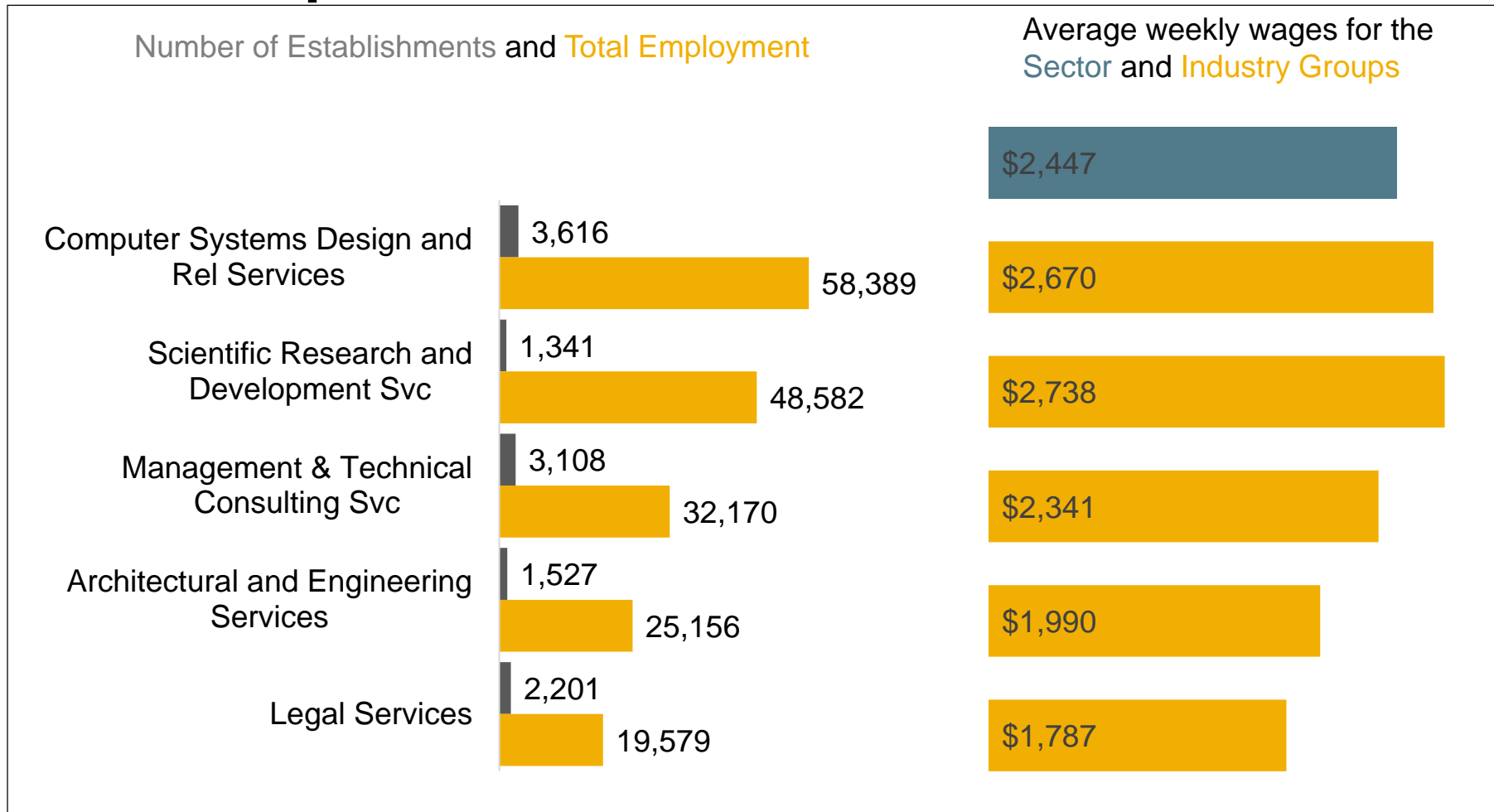
Health Care and Social Assistance Industry Groups



Largest Employers by 12-month Job Postings

Employer	Postings
Harvard Medical School	1,640
Lahey Clinic, Inc	973
Beth Israel Medical Center	815
Kindred Healthcare	796
Cambridge Health Alliance	566

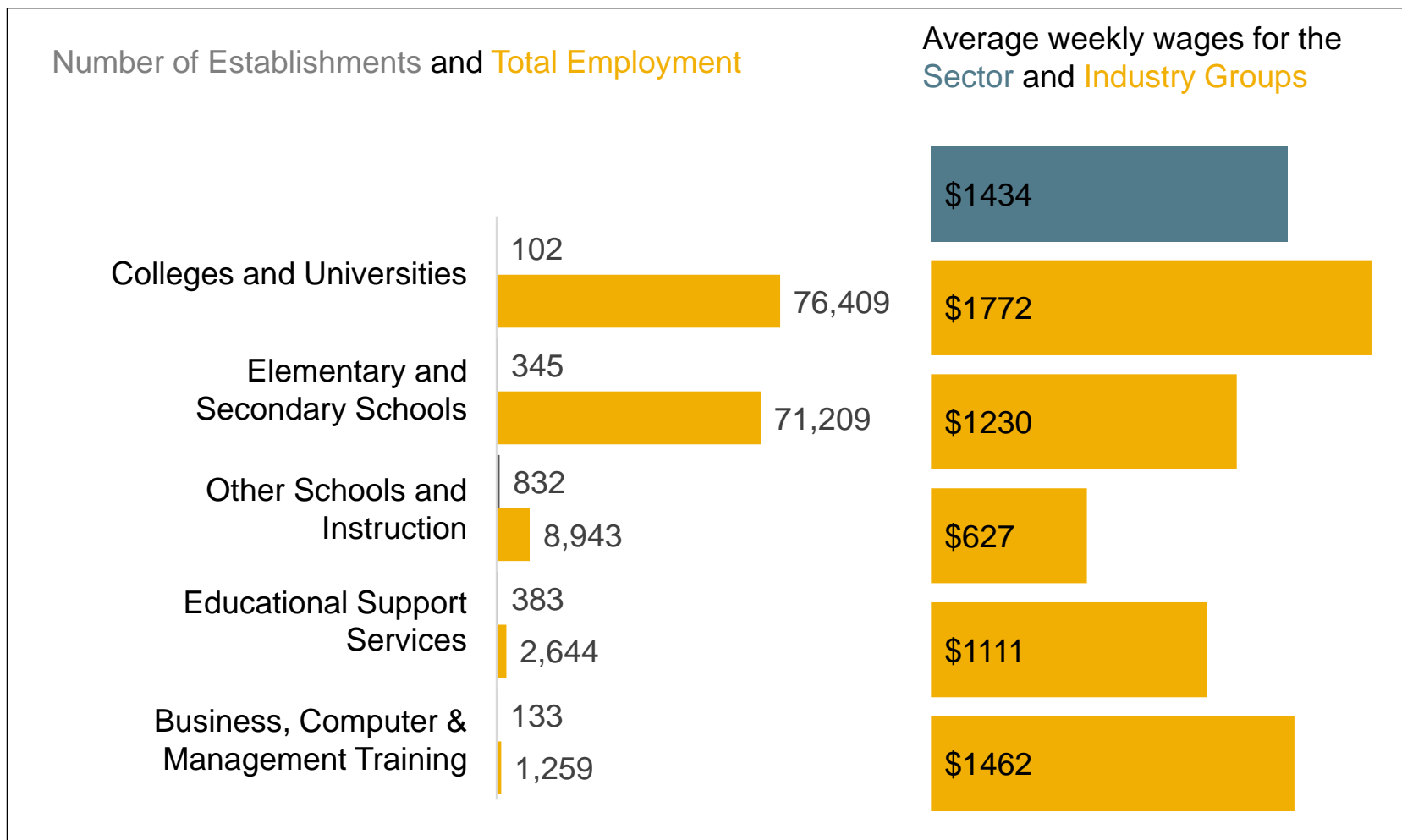
Professional and Technical Industry Groups



Largest Employers by 12-month Job Postings

Employer	Postings
Harvard Clinical Research Institute	2,576
Tufts-New England Medical Center	1,289
Broad Institute	707
Biogen Idec	664
Pfizer	554

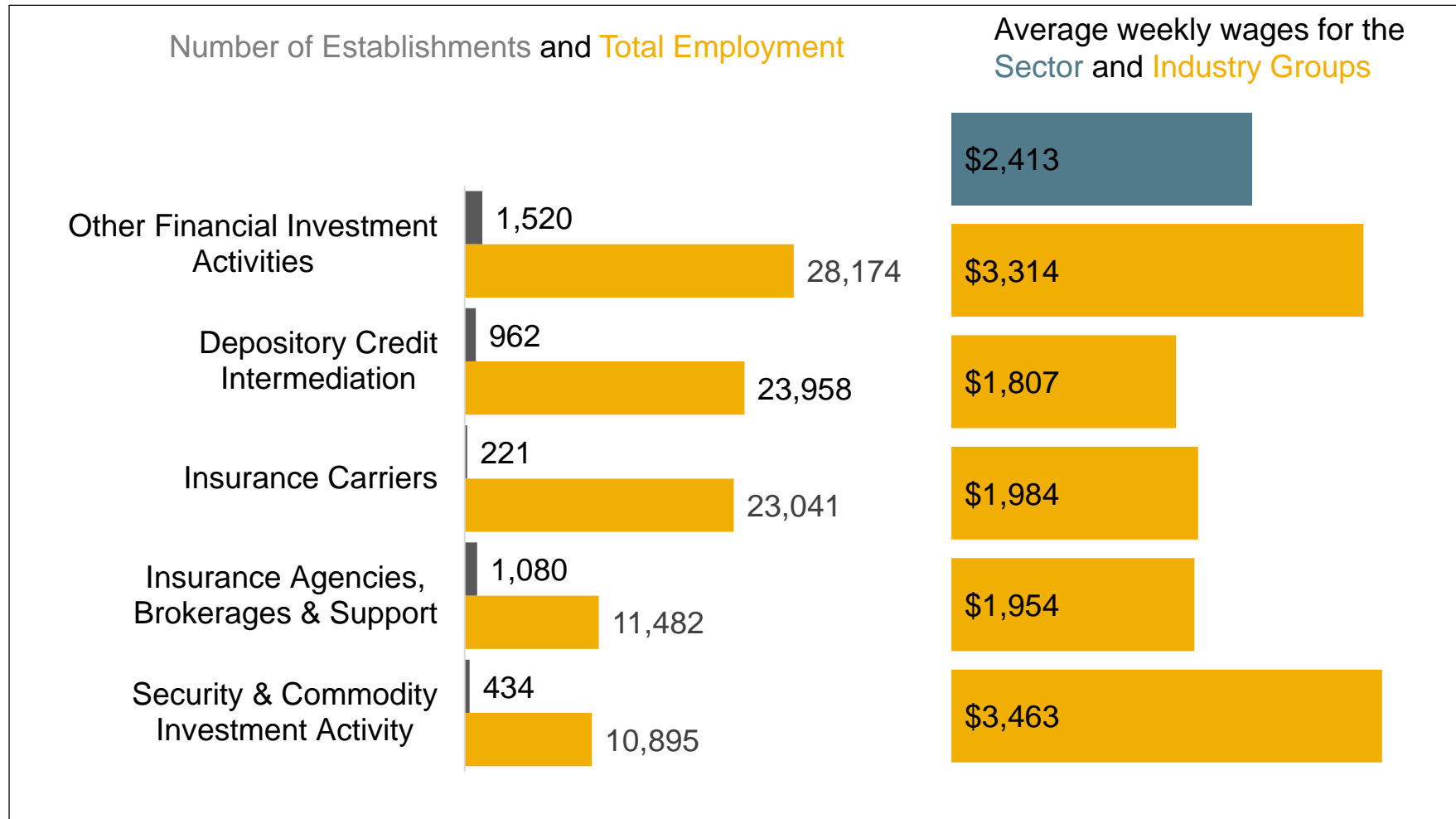
Educational Services Industry Groups



Largest Employers by 12-month Job Postings

Employer	Postings
Boston University	2,383
Harvard Medical School	916
Tufts University	551
University of Massachusetts Boston	328
Framingham Public Schools	260

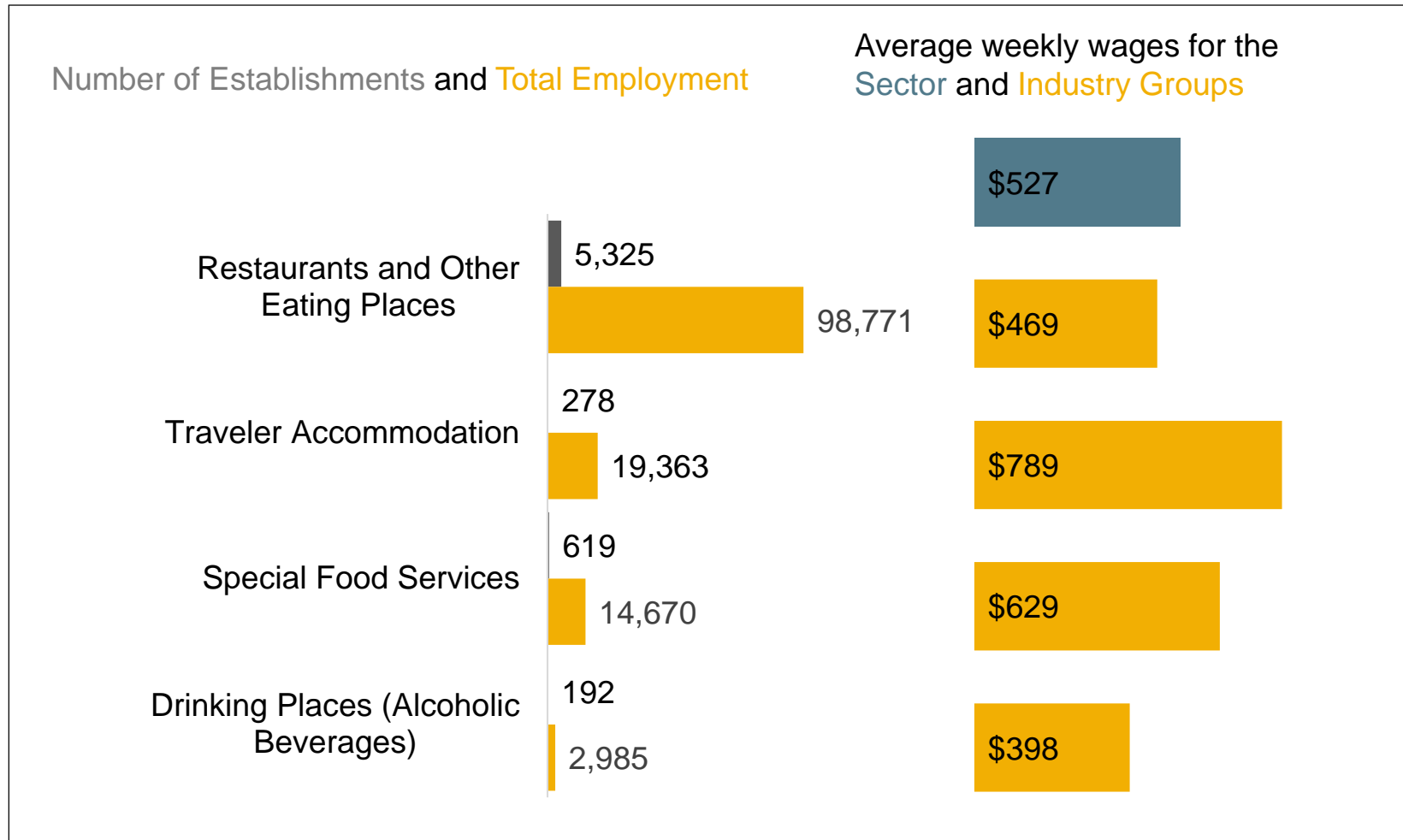
Finance and Insurance Industry Groups



Largest Employers by 12-month Job Postings

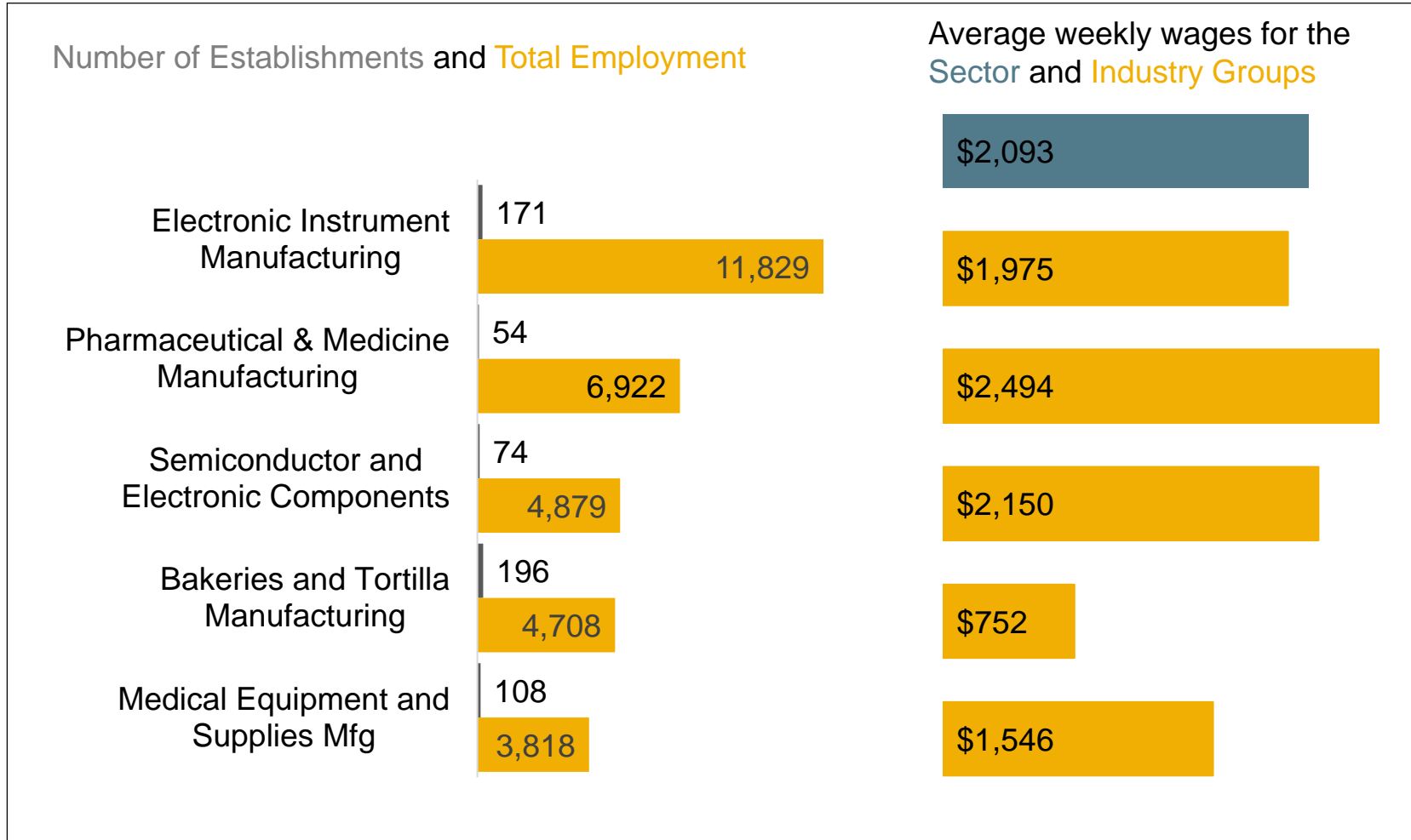
Employer	Postings
AthenaHealth	1,959
The Bank of New York Mellon Corp.	414
Citizens Bank	409
Manulife Financial Corporation	402
Liberty Mutual	324

Accommodation and Food Services Industry Groups



Largest Employers by 12-month Job Postings	
Employer	Postings
Compass Group	538
Ritz-Carlton	305
Chipotle	261
Hilton Worldwide	195
Panera Bread	170

Manufacturing Industry Groups



Largest Employers by 12-month Job Postings	
Employer	Postings
Biogen Idec	1,540
Thermo Fisher Scientific Inc.	1,440
Vertex Pharmaceuticals	875
Alkermes, Inc.	717
Boston Scientific	689

C. Occupation Overview

C1: Occupations Indexed by Share of Employment

C2: Occupations Indexed by Employer Demand

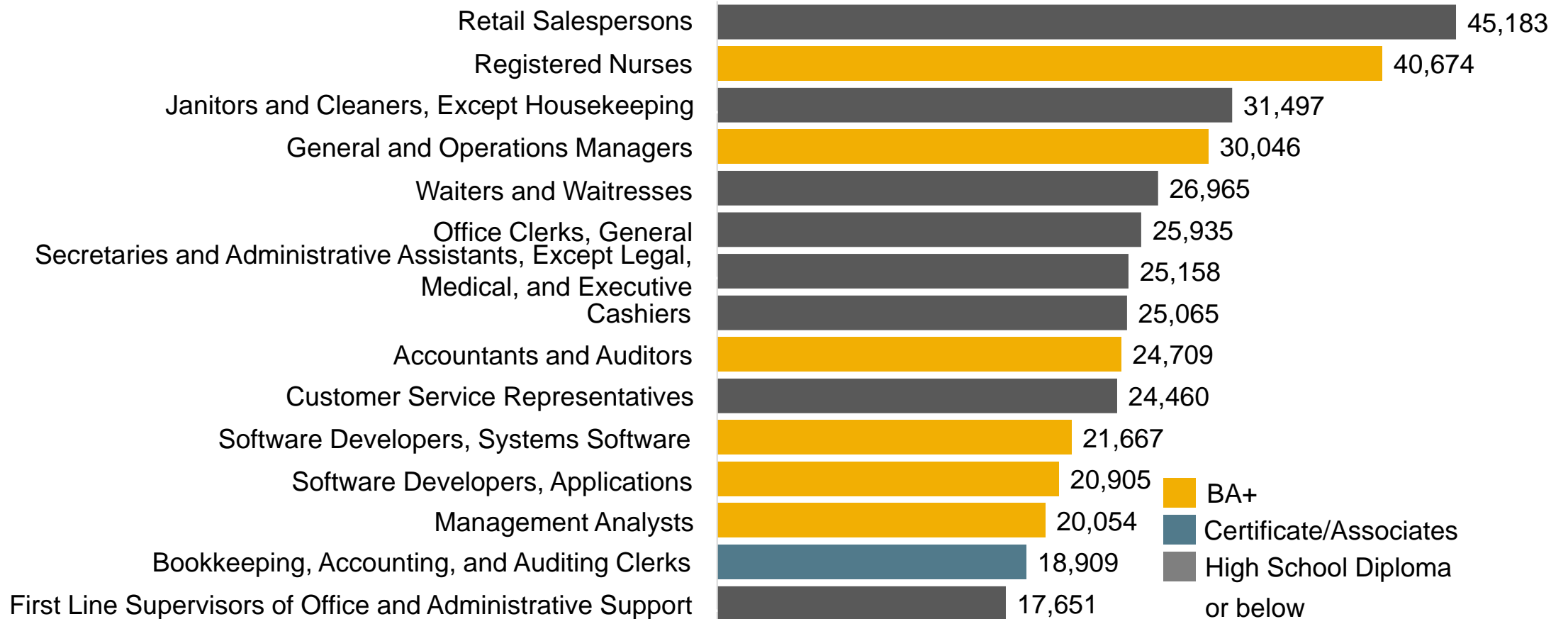
C3: Occupations Indexed by Demand Star Ranking

What jobs are people doing, and what types of work do employers need people to do.

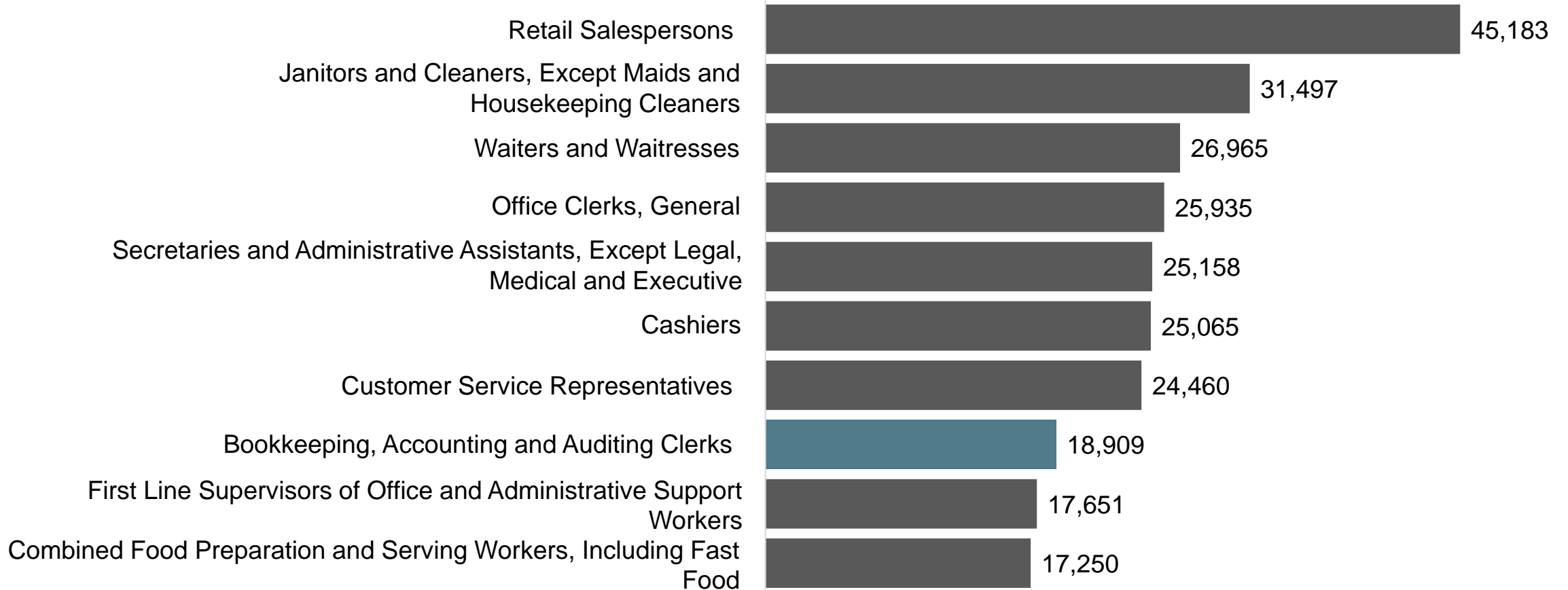
Occupation Terminology

Employment Share	Number of employees currently working in a specific industry or sector across all employers
Occupation	A job or profession, not specific to an industry, defined by SOC code

Top 15 Occupations by Share of Employment, 2015

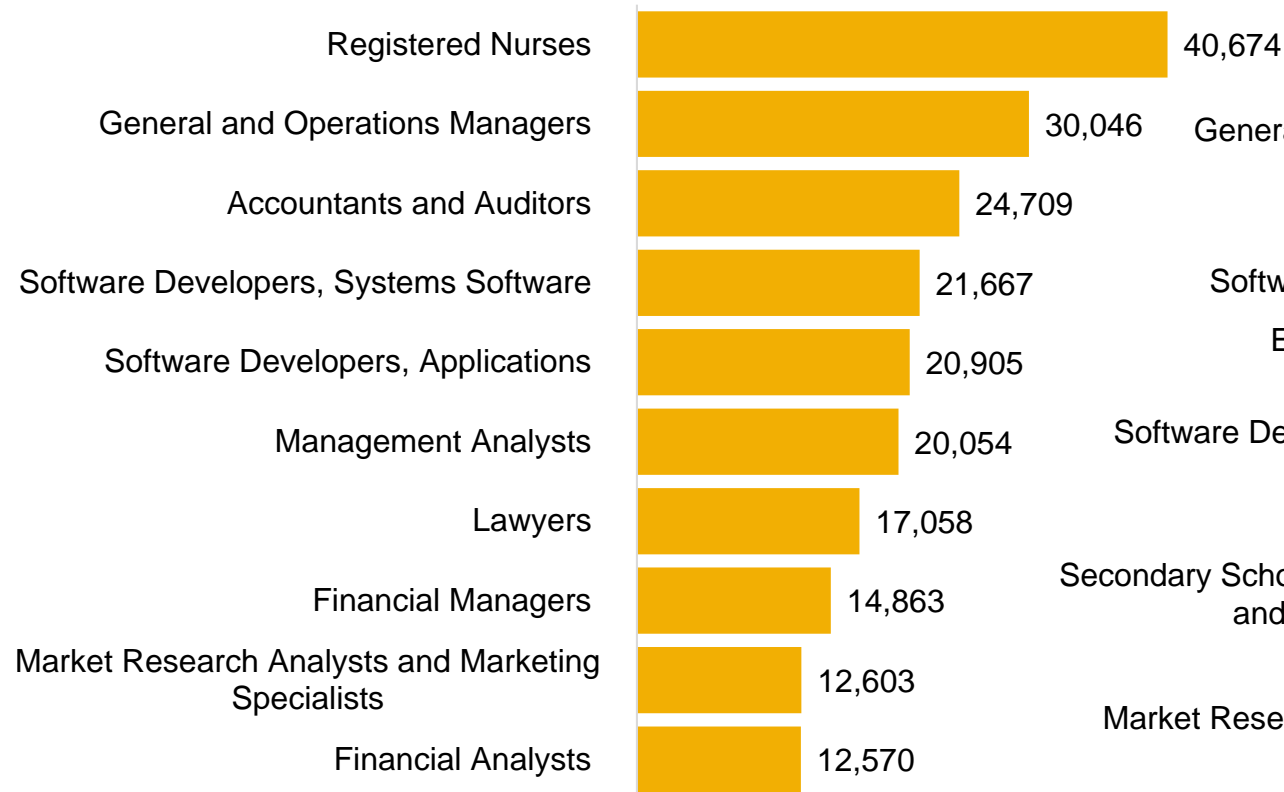


Top 10 Occupations by Employment Share, 2015 Sub-BA todo

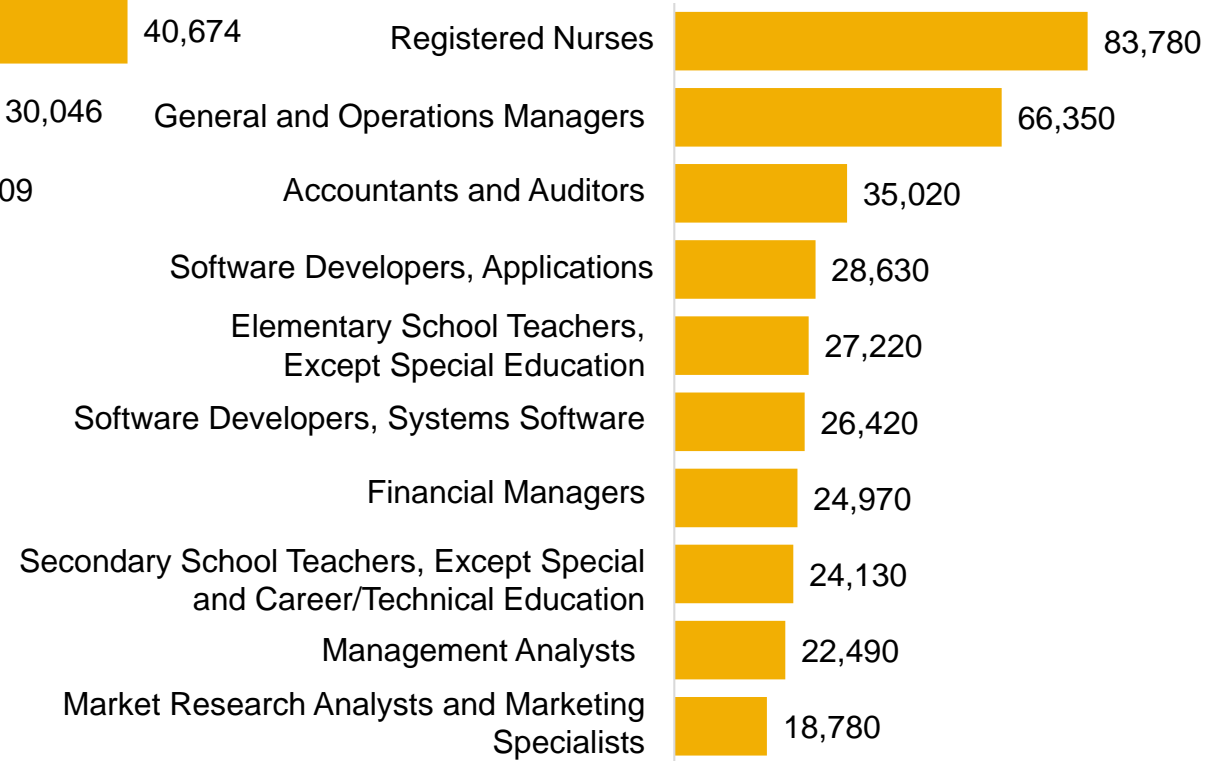


Top 10 Occupation by Employment Share, 2015, BA+

Greater Boston



Statewide



Employer Demand Terminology

Employment Projections

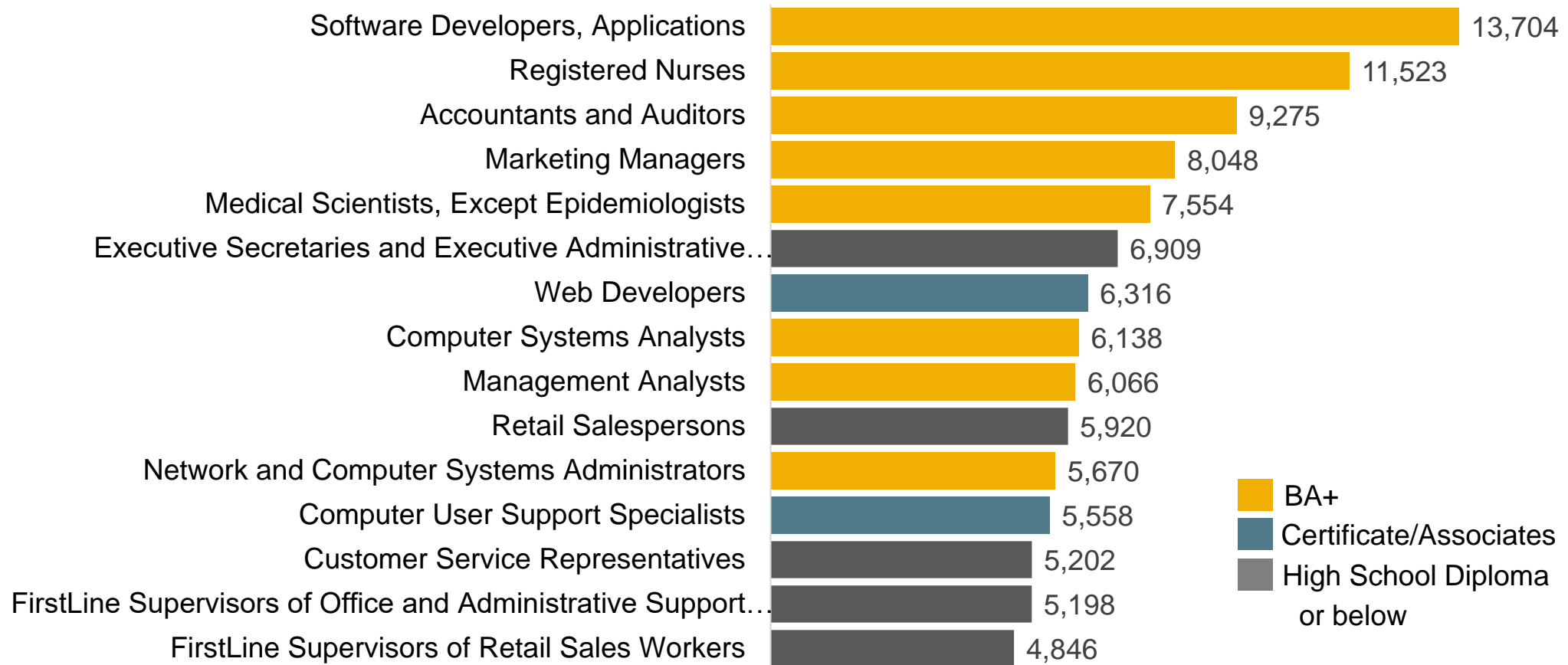
Expected employment in 2017 (short term) and 2024 (long term) for a particular occupation, based on surveyed employers

Weighted Employer Demand

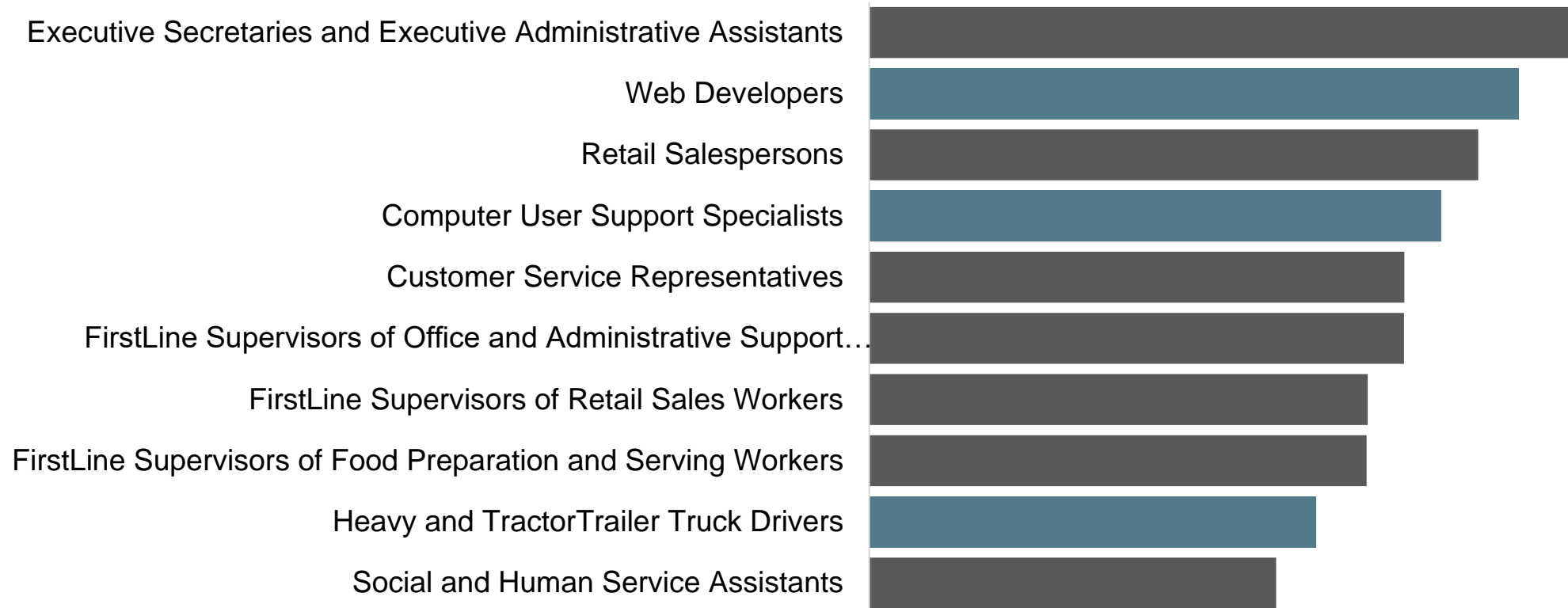
Short term openings from replacement and growth (2017), long term openings from replacement and growth (2024), and advertised online postings, averaged

Note: there are many different ways to measure “employer demand.” The WSC team acknowledges that none are perfect, and thus an average of three different measures seeks to find middle ground.

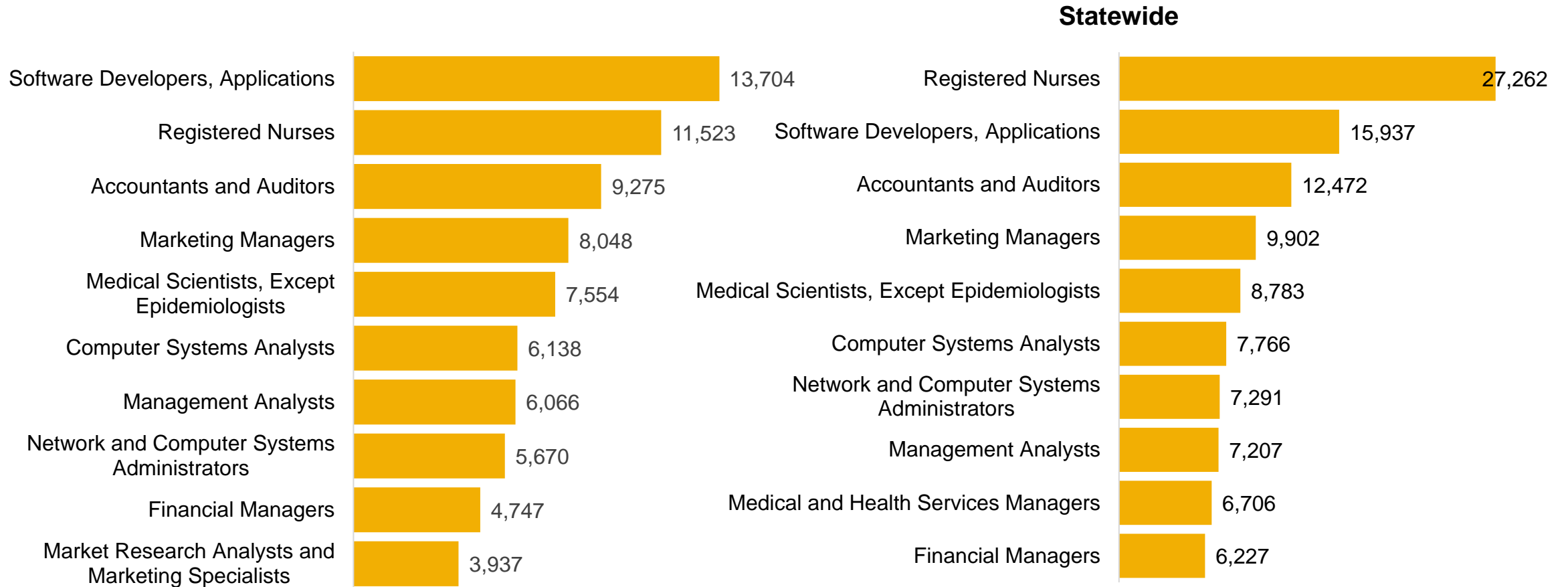
Top 15 Occupations by Indexed Employer Demand, All Education Levels



Top 15 Occupations by Indexed Employer Demand, Sub-BA



II.C.3: Top 15 Occupations, BA+, by Indexed Employer Demand



Terminology

Demand Star Ranking

Ranking of highest-demand, highest-wage jobs in Massachusetts, based on short-term employment projections (2017), long-term employment projections (2024), current available openings from Help Wanted Online, and median regional wage.

Ranking developed by State of Louisiana's workforce system and implemented with support of Boston Federal Reserve.

Selected 4- and 5- Star Occupations Requiring a High School Diploma

Occupation	Related Industry	Median Wage
Customer Service Representatives	Finance and Insurance	\$41,177
Production, Planning, and Expediting Clerks	Manufacturing	\$51,918
Executive Secretaries and Executive Administrative Assistants	Educational Services	\$60,420
Legal Secretaries	Professional and Technical Services	\$55,553
Medical Secretaries	Health Care and Social Assistance	\$41,657
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	Professional and Technical Services	\$45,943
Office Clerks, General	Health Care and Social Assistance	\$36,566
FirstLine Supervisors of Construction Trades and Extraction Workers	Construction	\$81,360
Brickmasons and Blockmasons	Construction	\$83,849
Carpenters	Construction	\$63,691
Construction Laborers	Construction	\$63,216
Operating Engineers and Other Construction Equipment Operators	Construction	\$70,550

Selected 4- and 5-Star Occupations Requiring an Associates/Certificate

Occupation Title	Associated Industry	Wages Annual Median
Web Developers	Professional and Technical Services	\$79,864
Computer User Support Specialists	Professional and Technical Services	\$60,892
Computer Network Support Specialists	Information	\$78,221
Electrical and Electronics Engineering Technicians	Manufacturing	\$67,847
Paralegals and Legal Assistants	Professional and Technical Services	\$48,778
Preschool Teachers, Except Special Education	Educational Services	\$36,150
Respiratory Therapists	Health Care and Social Assistance	\$72,186
Dental Hygienists	Health Care and Social Assistance	\$85,307
Cardiovascular Technologists and Technicians	Health Care and Social Assistance	\$78,211
Diagnostic Medical Sonographers	Health Care and Social Assistance	\$84,805
Radiologic Technologists	Health Care and Social Assistance	\$73,065
Magnetic Resonance Imaging Technologists	Health Care and Social Assistance	\$85,609
Surgical Technologists	Health Care and Social Assistance	\$49,341
Licensed Practical and Licensed Vocational Nurses	Health Care and Social Assistance	\$55,133

Selected 5-Star Occupations Requiring a BA+

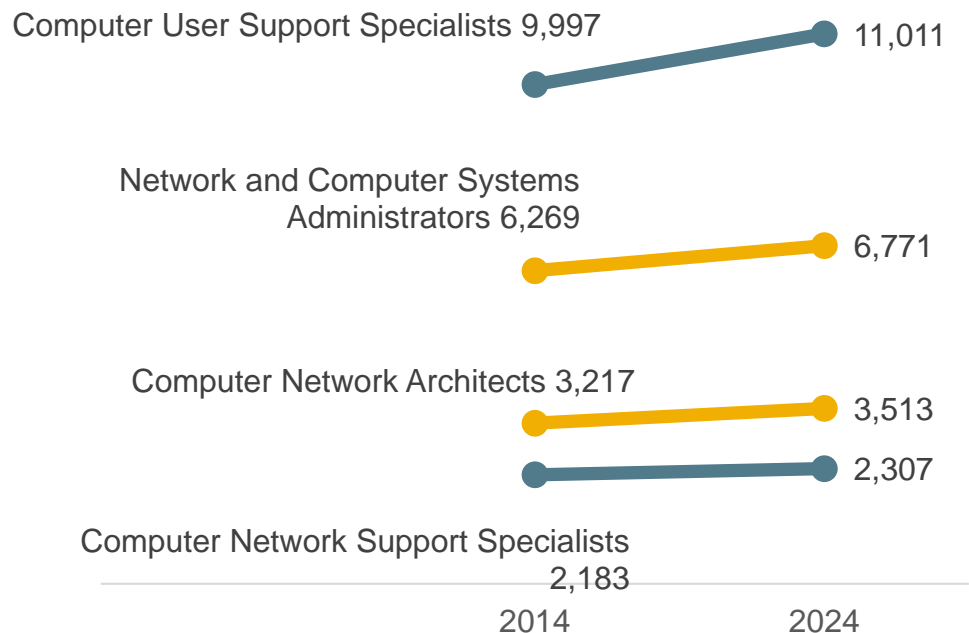
Occupation Title	Associated Industry	Annual Median Wages
General and Operations Managers	Professional and Technical Services	\$129,718
Advertising and Promotions Managers	Professional and Technical Services	\$117,321
Marketing Managers	Professional and Technical Services	\$133,966
Sales Managers	Retail Trade	\$141,627
Public Relations and Fundraising Managers	Educational Services	\$114,665
Administrative Services Managers	Professional and Technical Services	\$100,505
Computer and Information Systems Managers	Professional and Technical Services	\$140,912
Financial Managers	Finance and Insurance	\$129,369
Industrial Production Managers	Manufacturing	\$107,964
Purchasing Managers	Manufacturing	\$122,377
Compensation and Benefits Managers	Professional and Technical Services	\$129,819
Human Resources Managers	Professional and Technical Services	\$118,626
Training and Development Managers	Professional and Technical Services	\$123,377
Construction Managers	Construction	\$110,573
Education Administrators, Preschool and Childcare Center/Program	Educational Services	\$67,598
Education Administrators, Elementary and Secondary School	Educational Services	\$106,439

D. Career Pathways

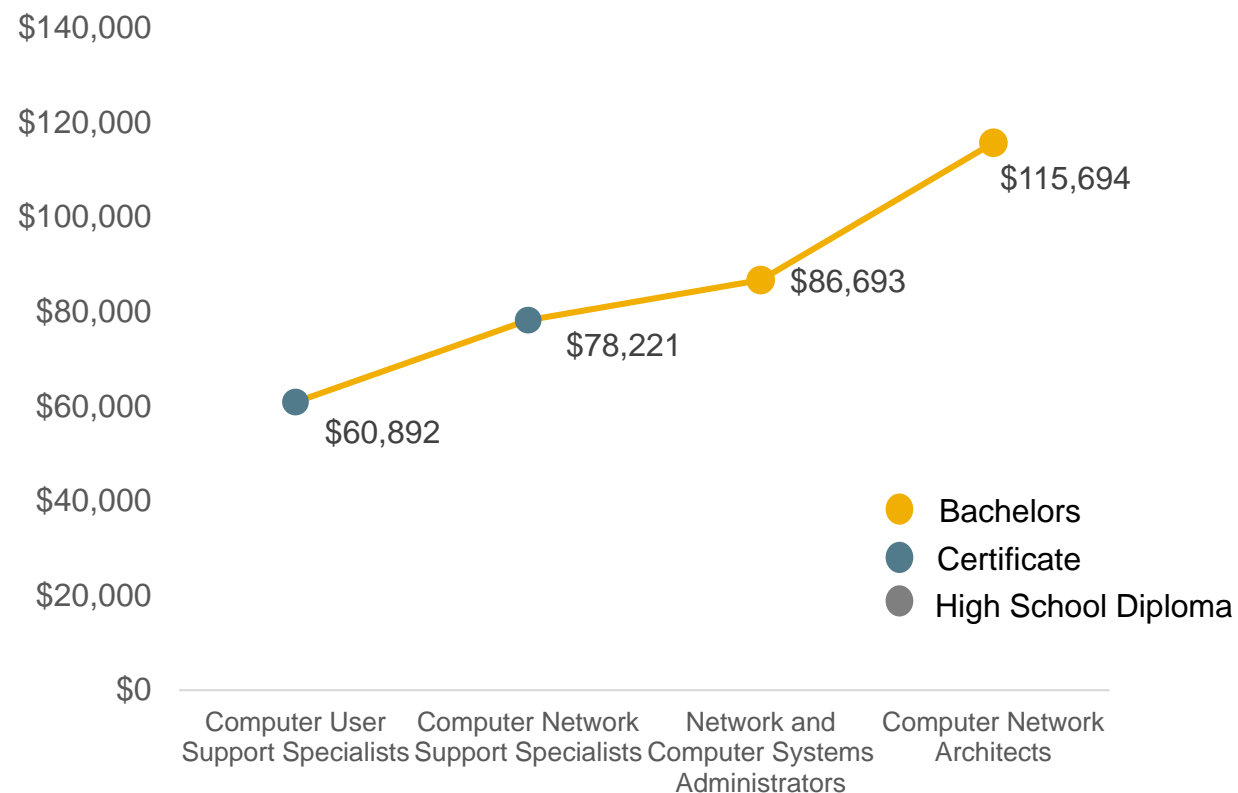
- *Projected employment and median earnings for key career pathways important to the region*

IT Career Pathway

Projected Employment

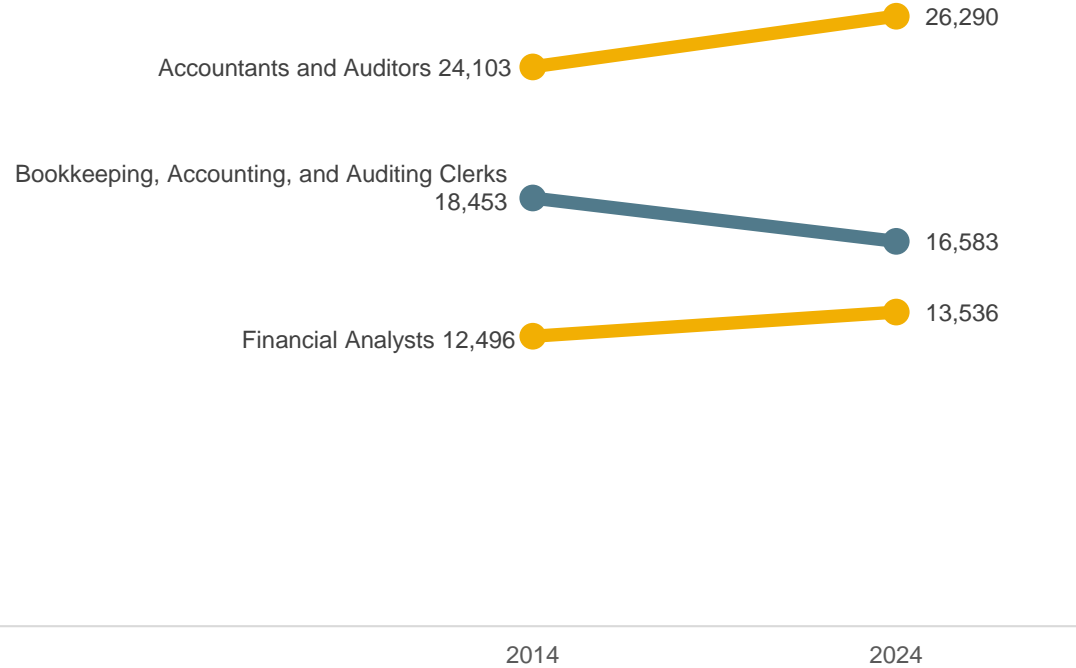


Median Annual Wage

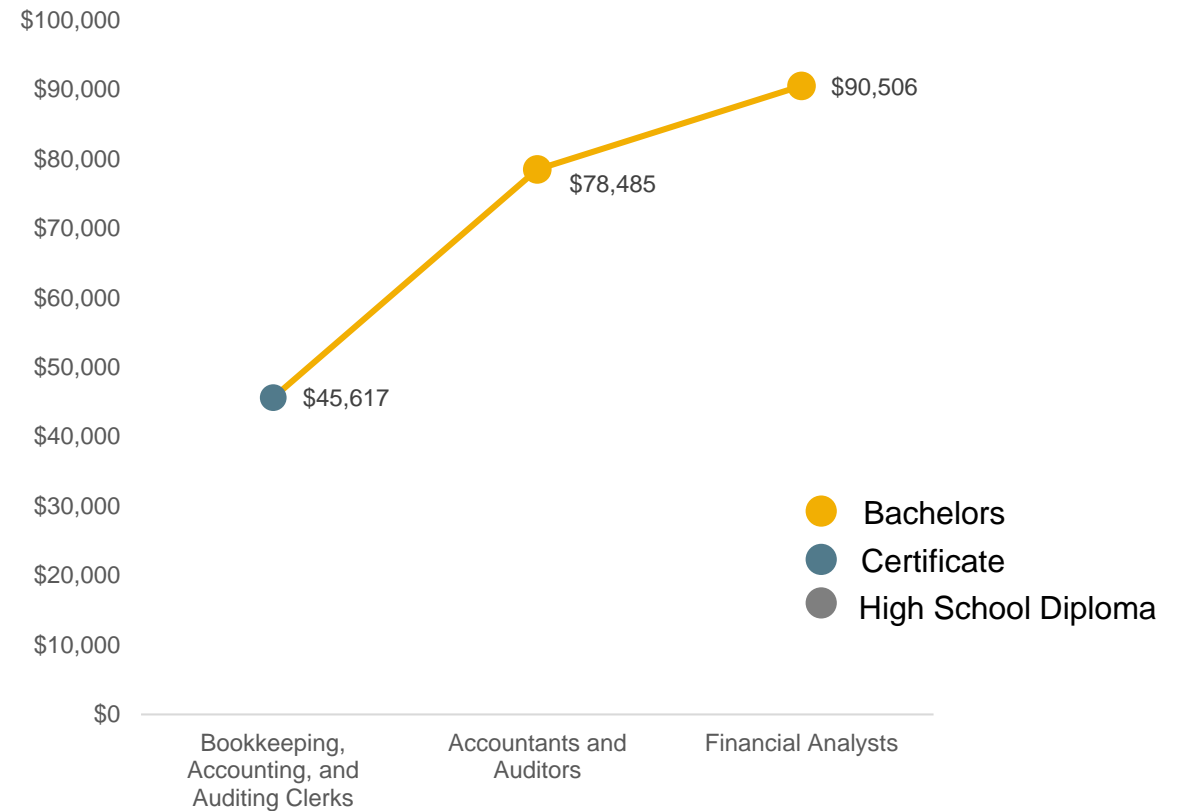


Accounting Career Pathway

Projected Employment

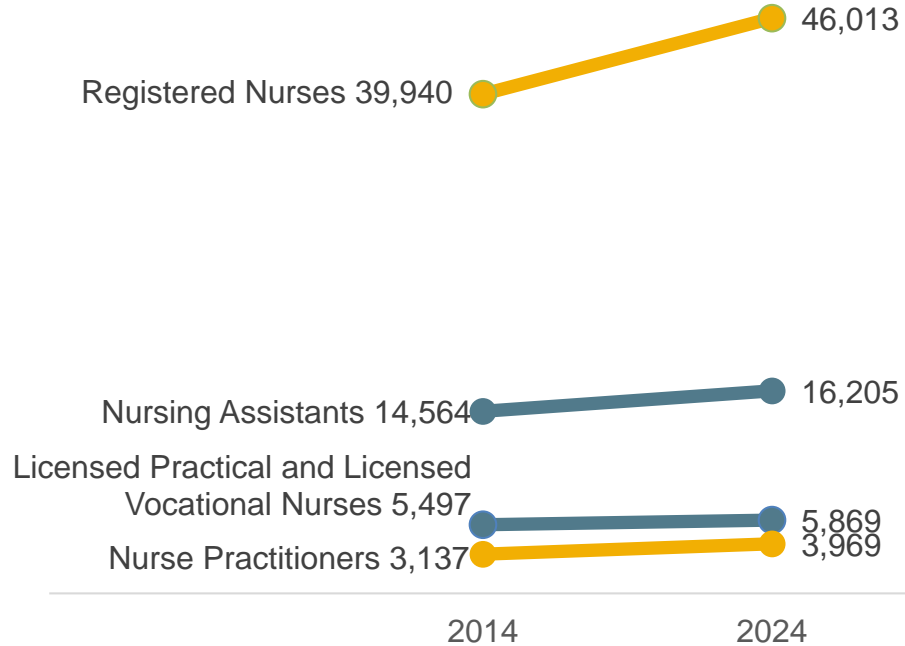


Median Annual Wages

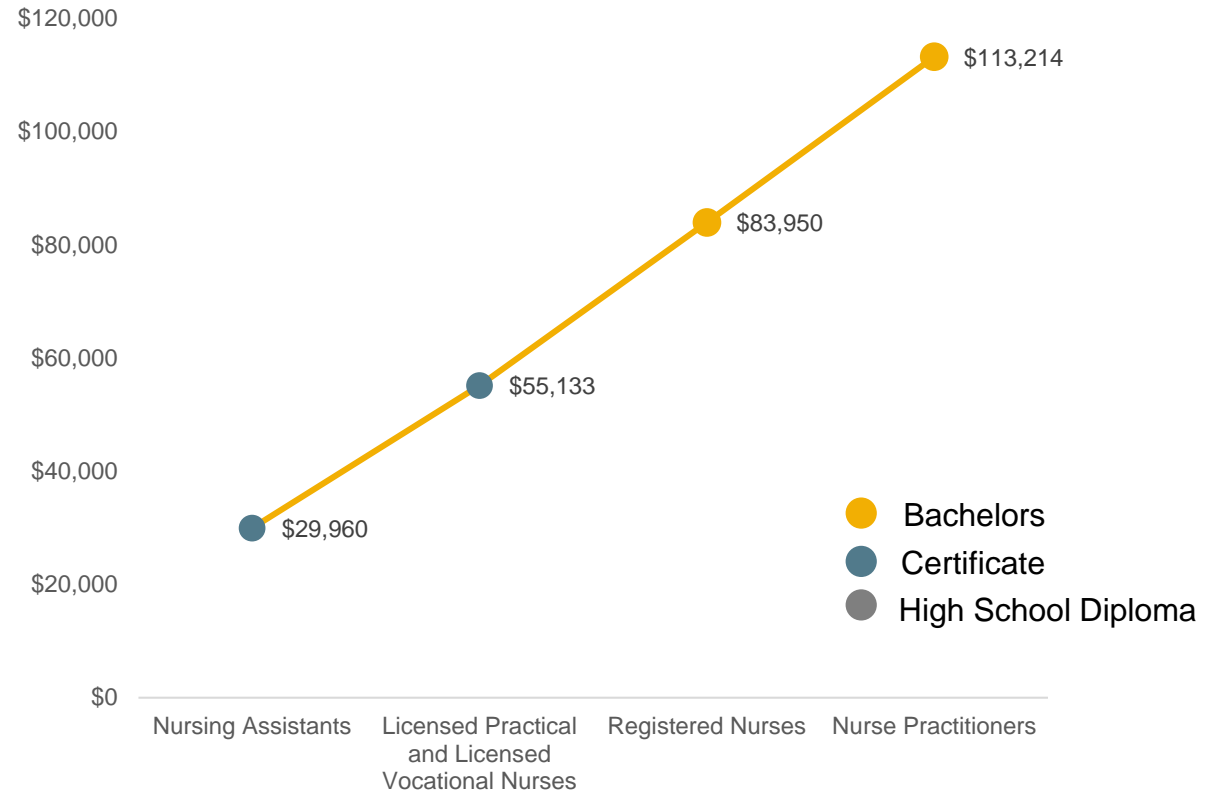


Nursing Career Pathway

Projected Employment

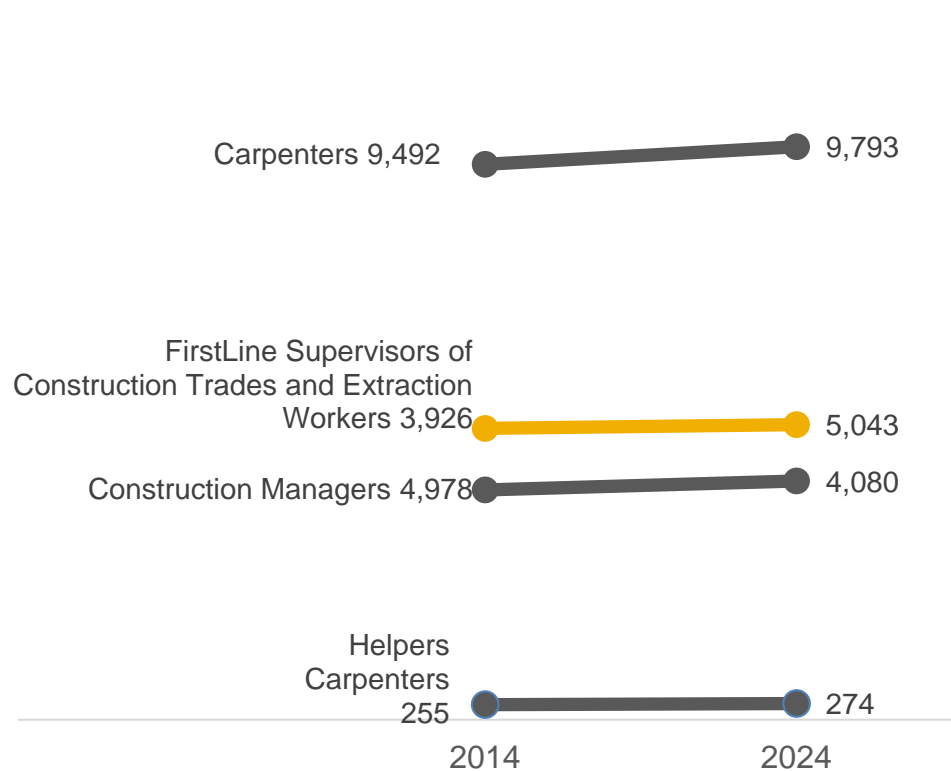


Median Annual wages

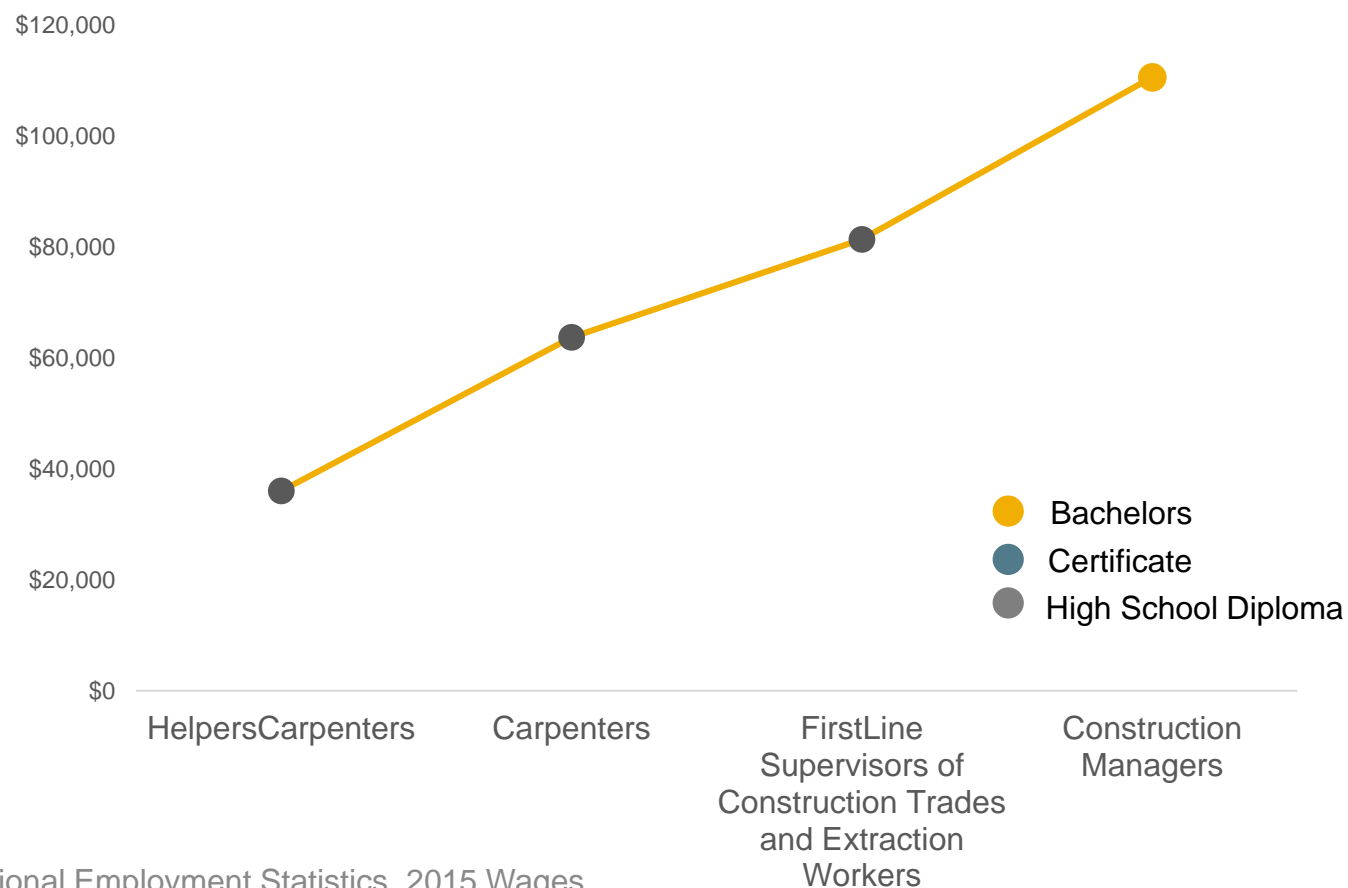


Construction Career Pathway

Projected Employment

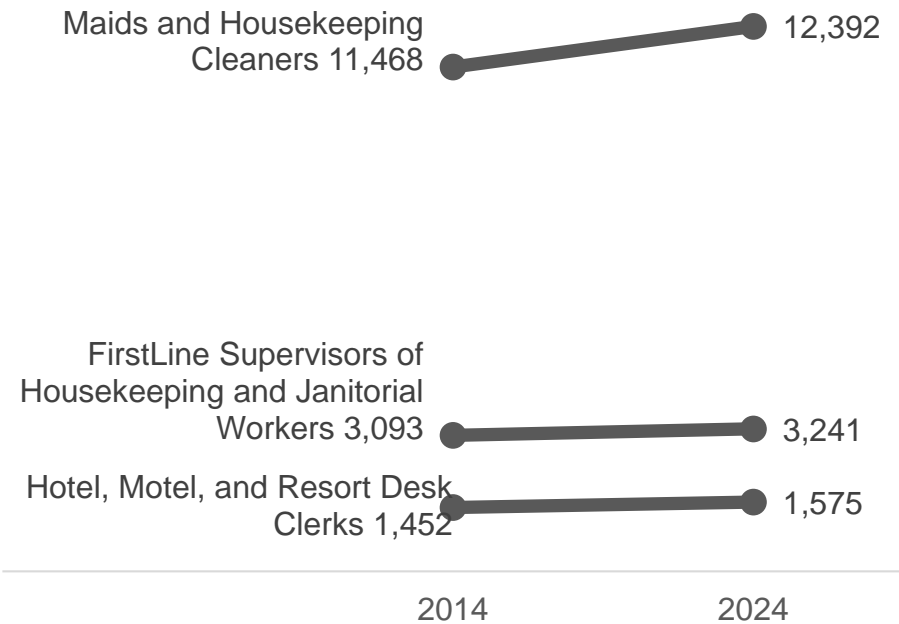


Median Annual Wages

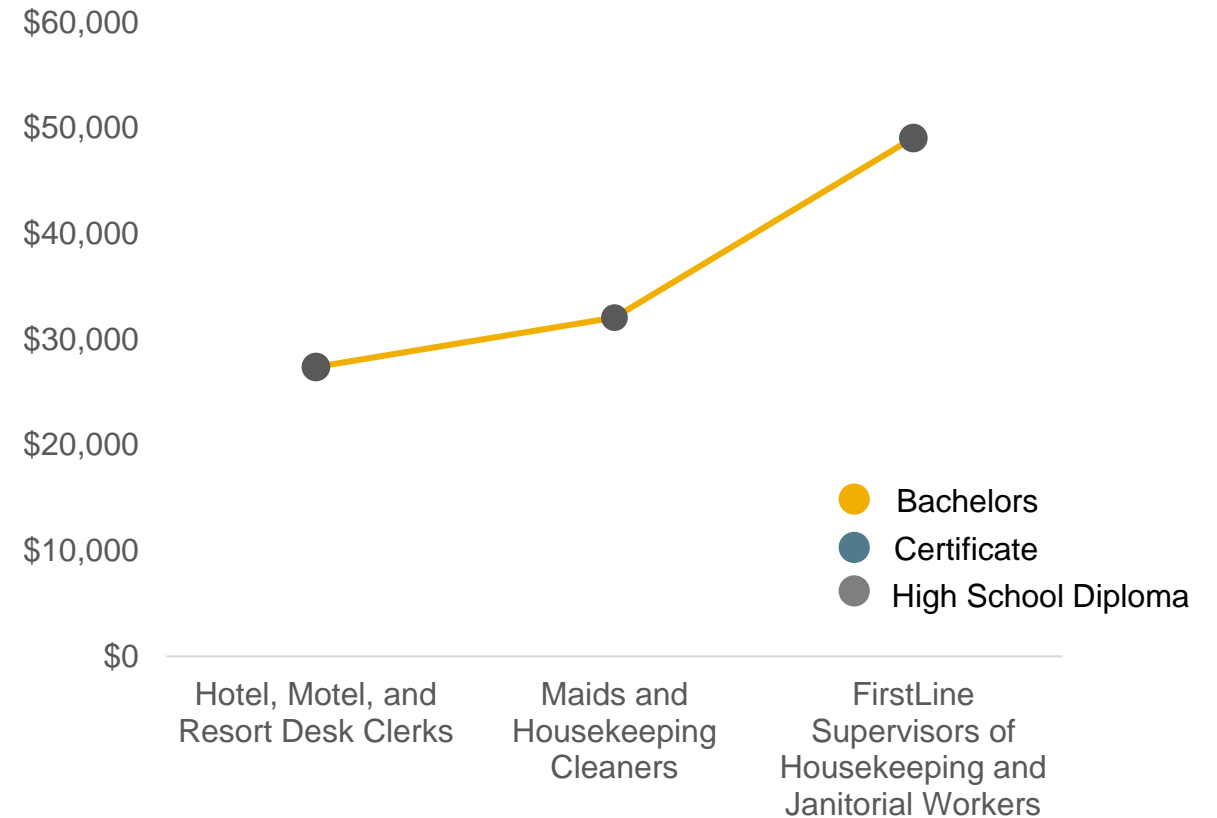


Hotel Career Pathway

Projected Employment



Median Annual Wages



IV. Supply Gaps

- A. Calculating Supply Gap Ratio
- B. Calculating Labor Demand & Labor Supply
- C. Supply Gap Analysis

How do we calculate a supply gap ratio?

Supply Gap Ratio = Projected Qualified Individuals Per Opening

- Supply Gap Ratio is a **proxy measure** for understanding what occupations are likely to not have enough talent to meet employer demand.
- Supply / Demand = Supply Gap Ratio
 - 100 qualified individuals / 50 potential openings = supply gap ratio of 2
 - 2 qualified individuals per opening (More supply than demand)
 - 6 qualified individuals / 12 potential openings = supply gap ratio of 0.5
 - 0.5 qualified individuals per opening (Less supply than demand)

Calculating the Supply Gap Ratio

Supply Gap Ratio = Projected Qualified Individuals Per Opening

- Supply Gap Ratio is a **proxy measure** for understanding which occupations are likely to NOT have enough talent to meet employer demand.
- Supply / Demand = Supply Gap Ratio
 - 100 qualified individuals / 50 potential openings = supply gap ratio of 2
 - 2 qualified individuals per opening (More supply than demand)
 - 6 qualified individuals / 12 potential openings = supply gap ratio of 0.5
 - 0.5 qualified individuals per opening (Less supply than demand)

Calculating Labor Demand & Labor Supply

Demand

How many potential job openings do are expected for a given occupation?

Average of total number of jobs for each occupation across three data sets...

- 2017 projections from openings and replacement (OES)
- 2024 projections from openings and replacement (OES)
- Help Wanted Online annualized 2016 job postings

Supply

How many qualified individuals are potentially available to fill a relevant job opening?

Sum of available workers or graduates related to an occupation from multiple data sets...

- Unique UI claims, 2016 (DUA)
- Relevant completer data
 - Voc-Tech completers, 2013-2015 average (DESE), 50% available*
 - Community College completers, 2013-2015 average (DHE), 90% available
 - State University completers, 2013-2015 average (DHE), 71% available
 - Private University completers, 2013-2015 average (iPEDS), 55% available

*All retention figures are statewide, studies cited in Data Tool

**Occupations requiring post-secondary education only

How do we calculate demand and supply?

Demand

How many potential job openings do we expect for a given occupation?

Average of total number of jobs for each occupation across three data sets...

- 2017 projections from openings and replacement (OES)
- 2024 projections from openings and replacement (OES)
- Help Wanted Online annualized 2016 job postings

Supply

How many qualified individuals do we potentially have available to fill a relevant job opening?

Sum of available workers or graduates related to an occupation from multiple data sets...

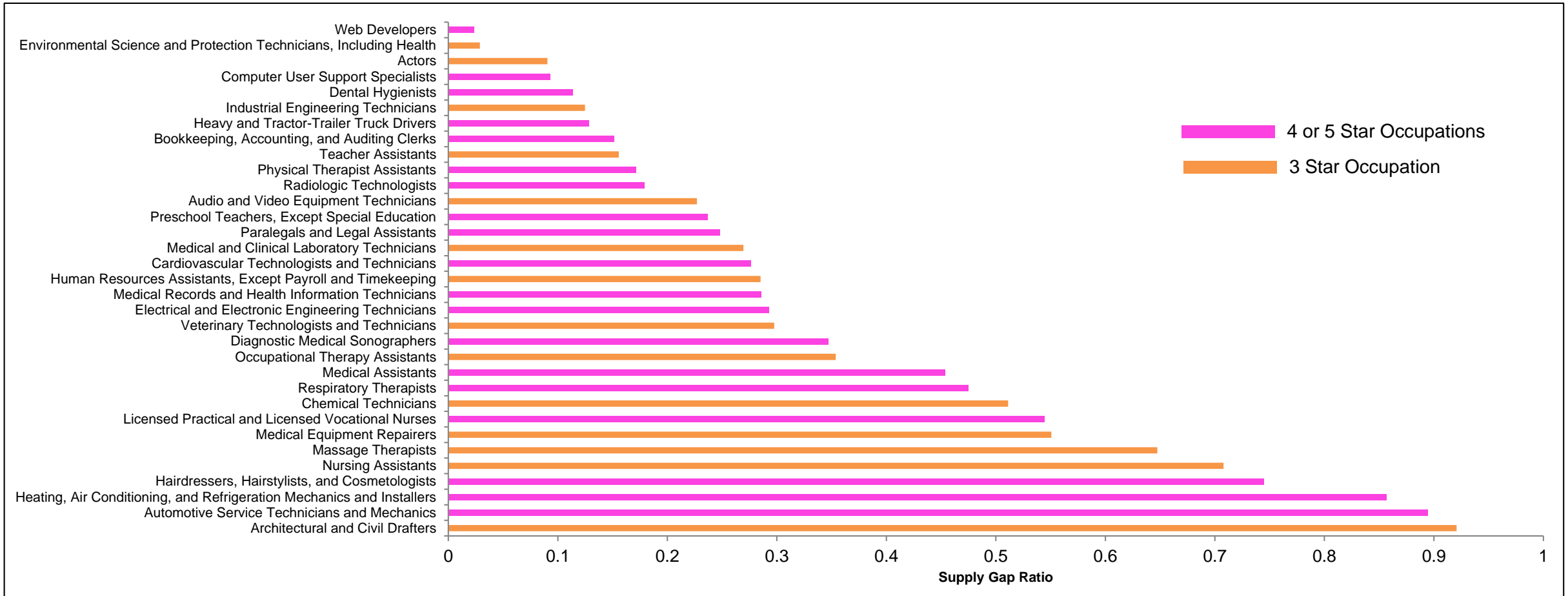
- Unique UI claims, 2016 (DUA)
- Relevant completer data
 - Voc-Tech completers, 2013-2015 average (DESE), 50% available*
 - Community College completers, 2013-2015 average (DHE), 90% available
 - State University completers, 2013-2015 average (DHE), 71% available
 - Private University completers, 2013-2015 average (iPEDS), 55% available

*All retention figures are statewide, studies cited in Data Tool

**Occupations requiring post-secondary education only

More Openings than Qualified: **Regional** Sub-BA Occupations

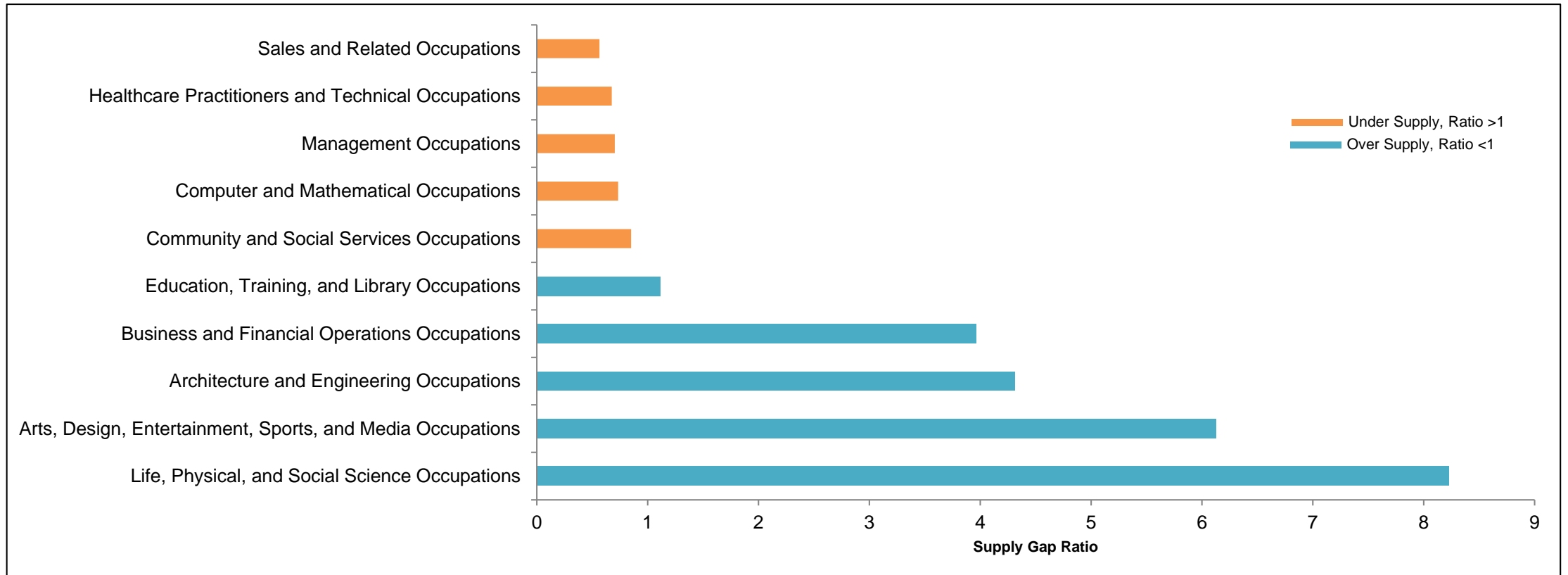
Among all occupations requiring an Associates or Certificate, a number of four and five star occupations in STEM fields do not have enough regional supply to meet employer demand.



Occupations requiring a postsecondary non-degree award, some college, or an Associate's Degree, 100+ Demand Index Only

State Supply Gap Overview: BA Clusters

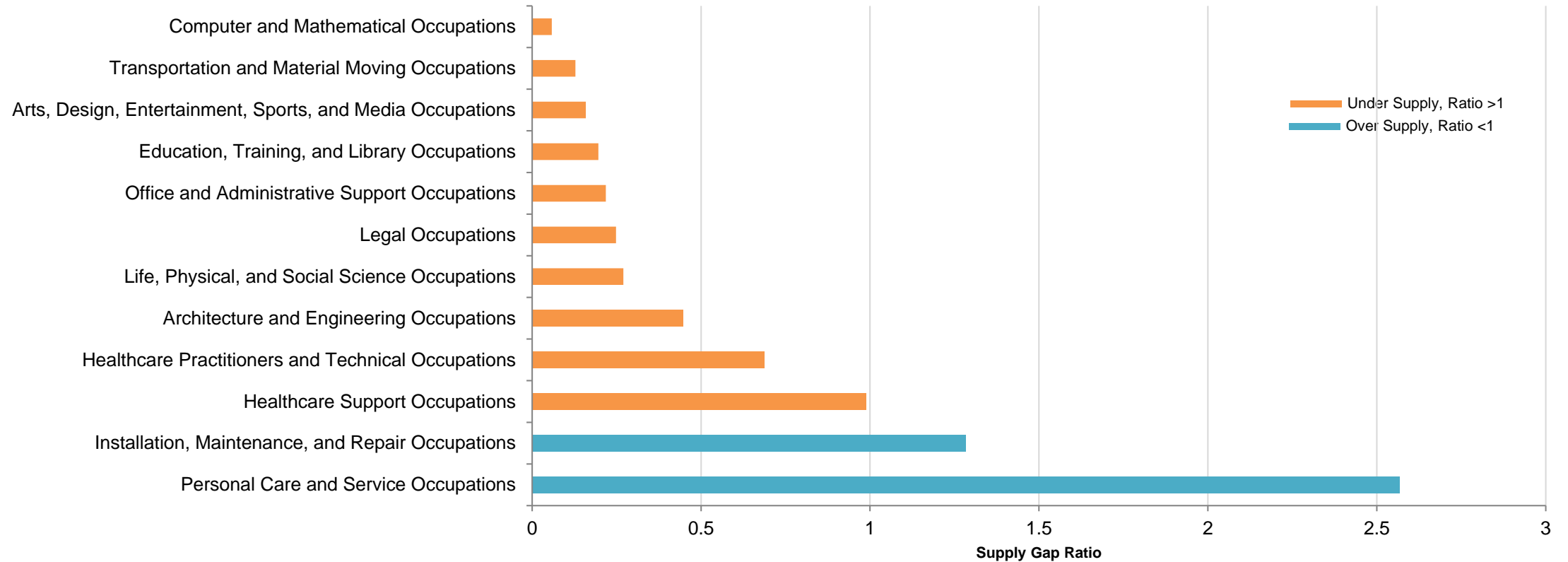
Sales, Healthcare, Management, and Computer and Mathematical Occupations average the lowest ratios of qualified individuals per opening at the BA level.



Occupations requiring a Bachelor's Degree, Demand Index 100+ Only

Regional Supply Gap Overview: Sub-BA Clusters

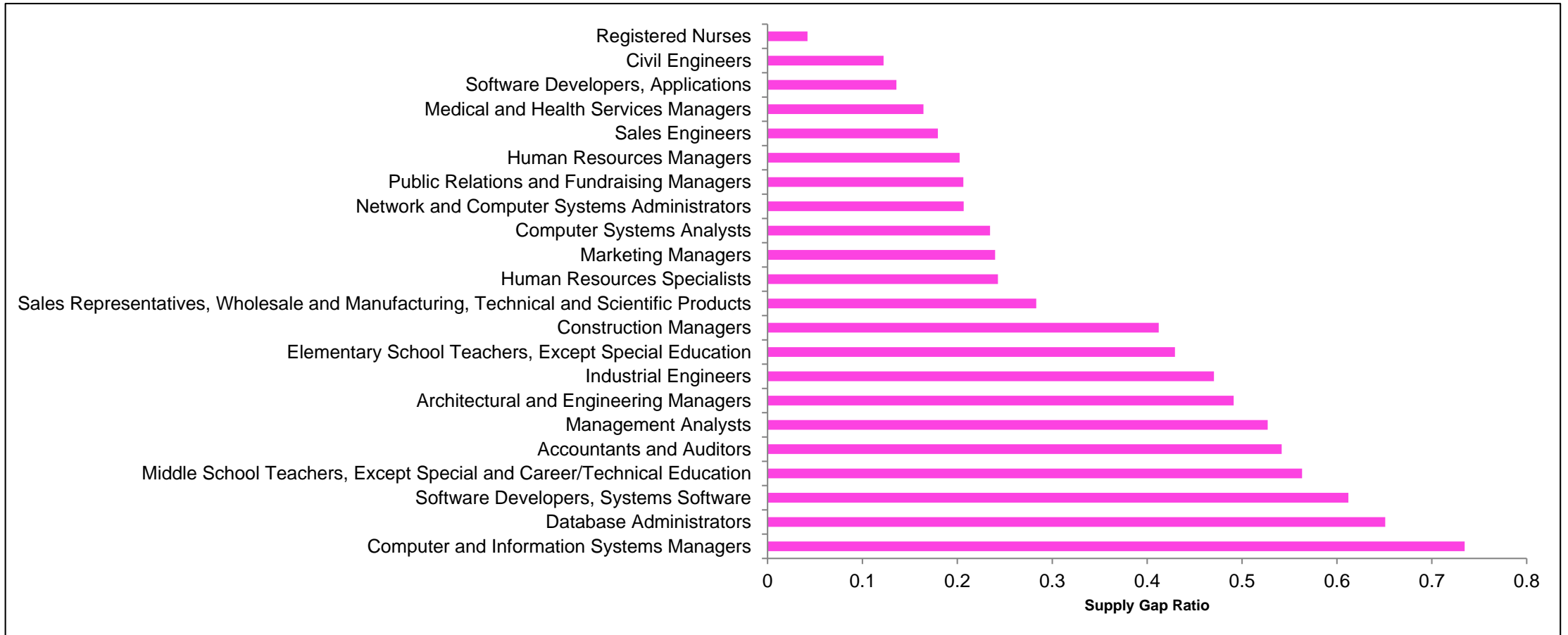
Computer and Mathematical occupations face the largest supply gap.



Occupations requiring a postsecondary non-degree award, some college, or an Associate's Degree, 100+ Demand Index only

More Openings than Qualified: **State** BA Occupations

A number of 4 and 5 star occupations, largely in STEM fields, are in short supply.



Occupations requiring a Bachelor's Degree, 4 and 5 stars, Demand Index 100+ only

Labor Supply Gap Summary

Associate's, Some college, Post-secondary Certificate

- In Greater Boston, can expect a wide variety of supply gaps in 4 and 5 star occupations, including healthcare support and IT/computer/engineering professions.

Bachelor's Degree

- Across the State, we expect supply gaps in 4 and 5 star occupations primarily in STEM fields, with an emphasis on Healthcare and Computer and Mathematical occupations.

Partners for a Skilled Workforce, Inc.
Metro South West Workforce Board
Local Area Information Related to Adult Education and Literacy

1. ALIGNMENT WITH ADULT EDUCATION AND LITERACY ACTIVITIES

The emphasis for the next couple of years will be to integrate adult education and literacy activities through the Memorandum of Understanding.

2. EDUCATIONAL AND SERVICE NEEDS OF PRIORITY POPULATIONS

The priority populations throughout the region that can benefit from the services the adult learning centers provide are (1) unemployed workers with limited literacy and numeracy and (2) employed workers with low literacy levels. In communities like Framingham and Hudson, ESOL learners are the priority. The intent would be to work with the adult learning centers to develop career pathways that would meet employers needs and be attractive to adult learners.

3. PROJECTED NEED FOR ADULT EDUCATION AND ESOL PROGRAMS

Please review prior year service levels to gauge need.

4. CAREER PATHWAYS FOR ABE AND ESOL POPULATIONS

PSW has targeted the following industries: health care and retail; and is exploring IT.

SECTION II: WORKFORCE BOARD STRATEGIC PLAN

STRATEGIC VISION

The Strategic Plan demonstrates utilization of “business intelligence” to develop data driven strategies based on analysis of Labor Market Information. The Strategic Plan includes strategies for the Board to convene, broker and leverage partnerships with key stakeholders, e.g., WIOA Core Partners, career and technical education, community colleges and other higher education entities, organized labor, and others.

The Strategic Plan develops and/or replicates successful career pathway models and industry sector interventions that involve significant employer engagement activity and includes use of job driven strategies & innovative use of work-based models of training interventions – OJT, apprenticeship, internship, etc. It describes the role of the board in the development of the region’s comprehensive economic development strategies as well as the coordination of the workforce activities with economic development strategies.

PARTNERSHIPS FOR A SKILLED WORKFORCE

ADVANCING

THE METRO SOUTHWEST

KNOWLEDGE INNOVATION ECONOMY

Foreword

The Metro Southwest Region of the Commonwealth has a competitive advantage, both in the Commonwealth and across the nation, in health care, information technology, manufacturing, and professional and business services. The information and professional and business service companies are strong players in international markets with access to venture capital and the research and development capability of colleges and universities in Greater Boston. The region has one of the most highly educated labor pools in the nation with substantial numbers of scientists, engineers, mathematicians and skilled technical workers. In both policy and practice, the region must sustain those advantages to retain the region's competitive edge.

However, there are significant challenges facing policy makers, educators and workforce development organizations. Actions must be taken to:

- Ensure that there are an adequate number of people in the workforce by supporting the growth of jobs that are attractive and accessible to people who left the workforce during the recession and maximize the potential of the immigrant population
- Create a job-driven education and training system that re-skills those who are currently unemployed and prepares the workforce of the future by strengthening working relationships between business, industry and education at all levels
- Dramatically expand opportunities for all young people to work and learn through co-op programs, internships and paid work

The collective talent across the region was assembled in various forums to develop strategies to meet those challenges. Their advice is reflected in this document. We would like to thank the Board of Directors and recognize others who gave generously of their time.

Mary Feeney
Chair, Partner, Bowditch & Dewey

Economic Opportunity for All Residents

Career Centers

HealthcareWorks

Young Adult Employment Initiative

Services for 16 – 21 Year Olds

Services for 22 – 28 Year Olds

Organizational Development

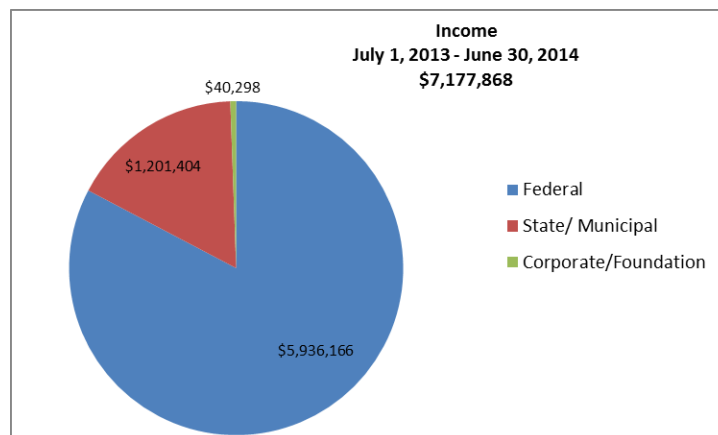
Partnerships for a Skilled Workforce, Inc. (PSW) builds *partnerships* with business, education, community organizations and government agencies that will:

- Help companies develop a well-trained workforce so that they will survive and prosper
- Enable individuals and families to reach economic self-sufficiency through education and training for 21st Century jobs

PSW's *vision* is:

- The workforce, current and future, has the skills demanded by business and industry
- Individuals of all ages, genders and racial and ethnic groups improve their economic status through education, training and job search support
- Low-income individuals and at-risk young people succeed in the labor market
- Labor supply grows in occupations where there are persistent vacancies because more women and minorities choose STEM careers

In FY14, \$7,177,868 was available to support achievement of the vision.



¹ The strategies articulated in the document are based on the labor market analysis, *The Knowledge Innovation Economy* and on experience over the past decade.

Goal One. . . Enhance the value of the Metro Southwest career centers, Employment and Training Resources, to business, industry and individuals of all ages.

Employment and Training Resources (ETR) is a partnership of the Metro South/West Employment and Training Administration and the Massachusetts Department of Career Services with centers in Framingham and Norwood, and satellites in Newton and Marlborough. The centers are the gateways through which job seekers access career counseling, job search assistance, and occupational training, and the talent organization through which companies find employees.

The FY14 funding for services to adults, dislocated workers and employers was \$6,068,999 (\$2,313,708 in FY13 and FY14 Workforce Investment Act Adult and Dislocated Workers allocations; \$174,007 in Wagner-Peyser Employment Service funds; \$3,018,363 in National Emergency Grants from the US Department of Labor; and \$562,921 in state funds)

Objectives

The objectives are:

- Increase the employability of unemployed and underemployed individuals, giving priority to residents who are 45 and older in the region, through training and coaching
- Increase the ratio of job seeker customers who find employment through staff job placement efforts to the total number of job seeker customers, including those that do not have individualized staff support
- Increase penetration in the employer market in targeted industries
- Keep career centers current and contemporary so employers see the value in using the centers
- Refine the customer service model through better understanding the unique needs of the long-term unemployed, using technology, employing customer engagement strategies, measuring outcomes and activities, and contracting with a third-party evaluator

Need

7,570 ETR customers have been unemployed for 27 weeks or more.

Although there is a debate about the size and persistence of a skills gap that would prevent or stall the growth of key sectors in the region—information technology, advanced manufacturing, business and professional services, and health care—skills gaps do exist in niches in the labor market.

Structural issues impede collaboration and innovation within the career centers, among service providers, and between education and business and industry. There must be system integration with the job seeker and employer at the center.

Program Design

Two major studies of career centers over the past several years have shown that:

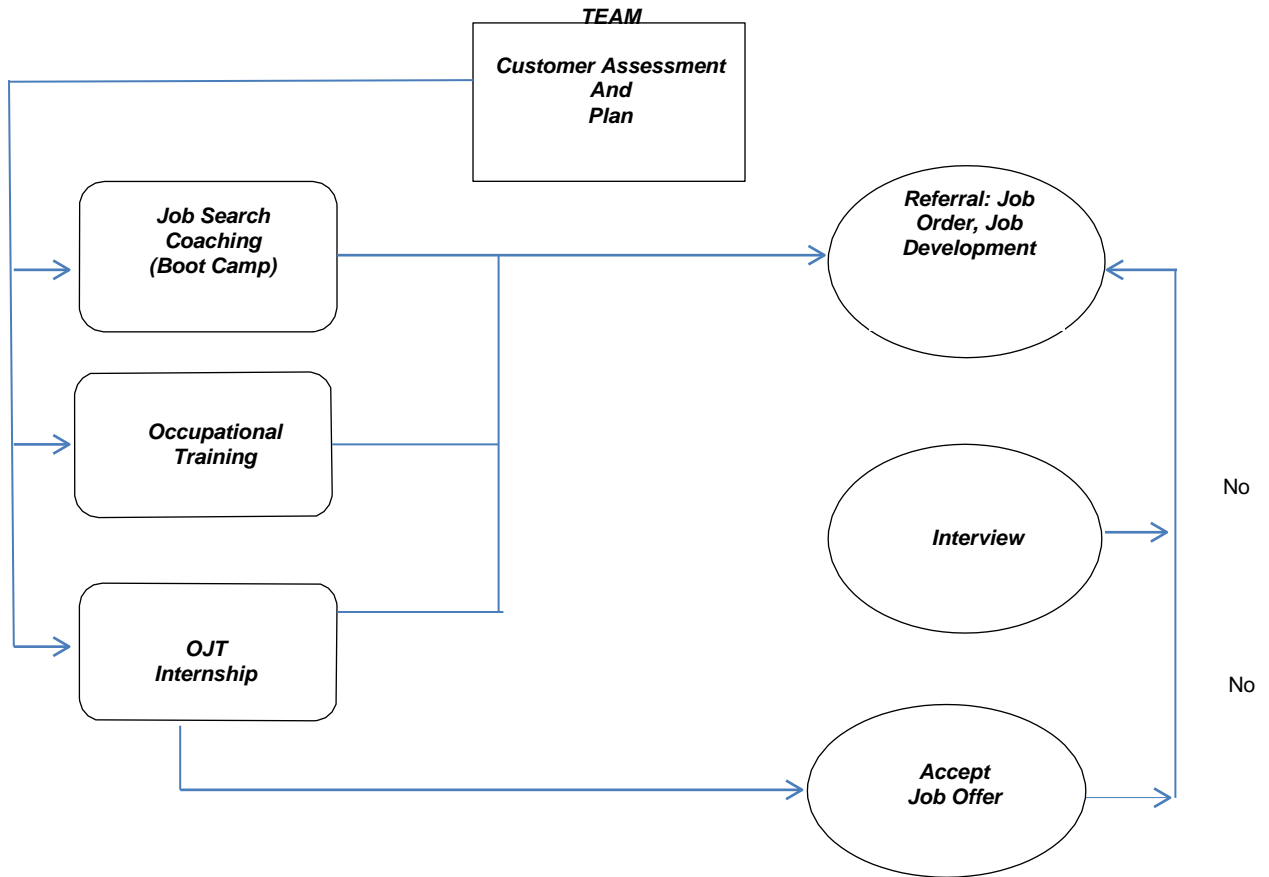
- Job seekers are more likely to find employment when the number of job orders and direct referrals to jobs increases (Sum, et. al)
- Career centers who have deep sustained relationships with employers have higher placement rates (Good, et. al)

The program design reflects the importance of employers. Three major industry sectors have been targeted for services: health care (hospitals, nursing homes); business and professional services (health information technology, architecture and engineering); and manufacturing (pharmaceuticals, medical devices). The intersection between services to employers and services to job seekers is shown in the diagram below.

Career Advisors, Business Service Representatives, Job Developers and Resource Room Staff work together as a team, combining their expertise to connect job seekers and employers.



With the support of an ETR team of career advisors and business services representatives, job seekers move from assessment to a job.



50% of the job seekers receiving services from the teams will be long-term unemployed or underemployed as a result of a layoff or plant closing. The characteristics of the 7,570 long-term unemployed individuals who received one or more services at the career centers in the region from July 1, 2013 through January 2014 are shown in the table below.² Ninety-three percent were not employed at the time of registration.

Characteristic	Number	Percent
Gender		
Males	3,905	52
Females	3,665	48

² The occupations of 2,087 individuals or 28% of the total 7,570 were not coded. The percentages are calculated by dividing the number of individuals in each category by the total number that were coded—5,483. An individual may be counted in more than one occupational category.

Characteristic	Number	Percent
Age		
14 - 21	92	1
22-45	2,548	34
46-54	2,008	27
55+	2,922	39
Race/Ethnicity		
White	6,111	81
Black or African American	428	6
Hispanic or Latino	485	5
Asian	471	6
Other or Unknown	342	5
Education		
High School Student	32	0
High School Dropout	134	2
High School Graduate or Equivalent	1,706	23
Some College or Technical School	1,551	20
College Graduate (4 Years or More)	3,982	53
Unknown	121	2
Other		
Individual with Disabilities	320	4
Basic Skills Deficient	85	1
Low Income/Economically Disadvantaged	1,562	21
Veterans	450	6
Top Nine Occupations*		
Management	1,802	33
Office and Administrative Support	1,340	24
Sales and Related	836	15
Business and Financial Operations	706	9
Computer and Mathematical	576	11
Education, Training and Library	426	9
Production	355	7
Architecture and Engineering	353	6
Art, Design, Entertainment, Sports and Media	352	6

Impact

The success of the teams will be measured by comparing the results of the teams with the overall placement rates for the centers. Metrics will be:

- The ratio of total job placements (development and referral) to the total number of people registered with ETR
- The total number of job placements from job development and referral from the team
- The ratio of job placements (development and referral) for team customers to the number of people receiving services from the teams

The scope and impact on employers will be measured by:

- The number of new employers who list job orders
- The number of repeat employers who list job orders
- The number of company contacts made each quarter by each business service representative

A third-party evaluation will be funded in FY15 to assess the effectiveness of the process used by the teams and to measure the outcomes in FY16. Examples of questions a

- Do job seekers have the competencies that employers demand as a result of services provided by the teams?
- Do employers value the services provided by the BSR's?
- How do employers evaluate the quality of the candidates referred by the career centers?
- Do the jobs pay 300% of the federal poverty level?

Goal Two . . . Through the HealthcareWorks Initiative, reduce the gap between the skills of current and future health care workers and the changing requirements of hospitals, nursing homes, community health centers and other health care facilities in a reform and cost-containment environment.

The program is just right for me. It is what I need to get ready to go to the next level. My goal is to become a nurse or radiology tech. Thanks for the program to help with the transition and preparation for college.

HCLN™ Scholar

[HCLN™] has been a great experience. Perfect for my busy schedule and because of the way the course runs and the teachers, I didn't quit. They kept me motivated from the first time I started.

HCLN™ Scholar

Need

The need to prepare the health care workforce is an ongoing challenge as health care needs continue to expand, jobs continue to increase in skills required due to changing regulations, and the aging workforce nears retirement. Recent cost containment legislation demands efficiency, with all professional practicing at the top of their licenses. Front-line workers are a source of talent for professional jobs and support for nurses and other health care professionals, yet many aspiring workers lack the skills and knowledge to enter and succeed in college

The Health Care Learning Network™

HCLN™ is a web-based, instructor-facilitated remediation education system—preparing front-line health care workers and other people interested in a health care career to complete post-secondary education programs, and become licensed nurses and allied health professionals. Using the latest in instructional and learning outcomes management technology, HCLN™ delivers health care industry-specific college preparatory coursework to front-line health care workers.

The first students enrolled in October 2007 on the North Shore under the sponsorship of the North Shore Workforce Investment Board. Since that time, over 600 students on the North Shore and in Metro Southwest have been enrolled in HCLN™. Ninety-five percent are women. Students range in age from 22 to 63. Most are English language learners and have at least a high school diploma or GED. About half work in health care in entry-level jobs. The remainder work in retail, food service and similar entry-level positions. A small percentage is unemployed.

HCLN™ has three courses—Computers for College, Introduction to Allied Health and Nursing (academic reading, writing, career exploration, and health care terminology); Health Mathematics (math and pre-algebra), and Health Care Science (scientific thinking, biology, chemistry, anatomy and physiology). All courses include the core competencies required of health care workers for customer service and patient interaction: thinking skills (creative thinking, decision making, reasoning, problem solving, and learning-to-learn); self-management skills; and techniques for managing learning, work and family responsibilities.

The coursework is contextualized to health care. Lessons and assignments are based on problems and circumstances that are encountered in the health care work place. The content and organization of learning is driven by both the current and future skills requirements of the health care industry, the career aspirations and educational needs of health care workers, and the knowledge needed to pass college entrance examinations.

Adult students need both personal and academic support if they are to surmount the challenges of combining work, family and academic study. Support in HCLN™ is provided in three ways: career coaching, communities of learning and academic tutoring.

Effectiveness of Distance Learning

Studies³ have shown that distance learning can be an effective educational method for selected populations when the instructional design:

- Supports the learner’s ability to work independently, take initiative and manage time
- Motivates students through achievement and making instruction fun—the courses are divided into manageable modules and incorporate games
- Creates a real life context, i.e., contextualized to work settings
- Provides hands on activities—students complete case studies and science experiments
- Encourages communication between students and teachers
- Makes technical support available—students complete Computers for College and have access to technical support personnel

The HLCN™ instructional designers built HLCN™ around these principles.

Impact of HCLN™

One hundred fifteen students were enrolled in fiscal years 2013 and 2014. 86 students (75% of total) have persisted and been retained in the program. 17 students (20% of those retained) have completed their course of study. Of the 17, two have been promoted, one has become a Certified Nursing Assistant and is working in health care and 14 are in college. The table summarizes HLCN™ activity from July 2011 when PSW received the first 1199SEIU Training and Upgrading Fund contract to the present.

Program	Start Date	Total Enrollment	Retention	Completion
1199SEIU Training & Upgrading Fund	July 2011	33	22	5
Framingham Adult ESL ^{Plus}	July 2012	22	14	9
Operation Bootstrap	October 2012	11	10	1
Middlesex Community College Adult Learning Center, Bedford	February 2013	15	12	0
Quinsigamond Community College, Assabet Valley Regional Technical School	February 2013	22	16	2
Blue Hills Regional Technical School	October 2013	9	9	0
Totals		112	83	17

³ US Department of Education. *Review of Distance Learning Research, 1996 – 2008*. Askov, Johnston, Petty and Young, 2003. Johnson and Aragon, 2003. Porter. *California Distance Learning Project*. 2005. Mary L. Gatta. *New Jersey On-Line Learning Project*. Rutgers University.

A recent evaluation conducted under a grant from the Massachusetts Department of Elementary and Secondary Education's Career Pathways Program, showed significant support and enthusiasm for HCLN™ from adult education students, teachers and administrators. The model provides a method of learning for those desiring to enter or advance careers in health care that is not readily available, and fills a gap in adult educational services. Current partners listed in the table above overwhelmingly supported continued funding of HCLN™. Major findings include:

- Ninety-two percent of the students believed that HCLN™ would be helpful in reaching their health care education and employment goals
- Student engagement was strengthened when face-to-face learning labs were implemented
- Teachers valued HCLN™ as an additional resource for their students, but asked for more teacher's meetings where they could evaluate and improve their experience

Goal Three . . . Through the Young Adult Employment Initiative⁴ empower disengaged 16 to 21 year olds whose incomes do not exceed 300% of the poverty level by providing the tools they need to overcome barriers to employment and move into jobs in growing industries.

My name is Alejandro, and I'm a 19-year-old high school student. My parents split up when I was a kid, and my mother and I lived with my grandparents. My mother helped my grandparents with the rent and other expenses until she remarried and moved out. I stayed with my grandparents, but I didn't make enough money at my job to cover any of the bills. The stress led me to drugs, and I've been in and out of rehabilitation programs more than once.

I missed so many days of school, that in my senior year I was told I would not graduate due to absences. Now that I was clean, I began on online curriculum program, and I approached the high school career specialist. It told her I was, "in dire need of a job." She helped me write a resume, cover letter, and reference sheet; and she spent time with me practicing answers to interview questions.

I interviewed and was offered a position at AXLE Brand Promotions, a marketing and events organization. With this job I can finally help my grandparents. Last winter I purchased pellet fuel to heat the house, and I paid for groceries and other things.

For the first time in my life I am feeling successful.

Need

Teen youth employment is at a low of twenty-six percent and is even lower for low-income and minority young adults. Unemployment as a teen increases the probability of unemployment as an adult and reduces life-long earnings.

Too many young people leave high school having never worked and too many young college graduates are having difficulty finding a college job.

Twenty-two to 28 year olds are not eligible for Workforce Investment Act youth programs, because they are over the age of 21. Few, however, have been served by the career centers.

Objectives

The Young Adult Initiative Board established the following objectives:

- Provide services and support to enable young people to complete secondary education and transition to post-secondary education
- Help youth not engaged in school to follow the educational pathway that meets their needs—reentering high school, obtaining a GED or alternative high school diploma, finding a post-secondary education program that enables them to complete high school and technical certification simultaneously

⁴ For additional information see Young Adult Initiative Board Strategic Plan or contact Kelley French, Youth Director, PSW, kfrench@pswinc.org.

- Young people who succeed in the 21st Century must have the skills to navigate the labor market and flourish in the work place. The skills should be acquired and evaluated in both the classroom and the workplace
- Young people in targeted communities will learn to work by working in the summer, after school, and on weekends in paid employment and internships
- The members of the Young Adult Initiative Board will put transportation for youth employment on the agendas of government, community leaders and employers and encourage young people to exercise leadership, advocating for themselves
- The YAIB will support community partnerships that provide multiple pathways to education and employment
- To measure the impact of its strategies on youth employment, the YAIB will complete a self-evaluation on a bi-annual basis. Evaluation will include youth surveys and focus groups and use the data to improve the effectiveness of its investments in youth development and employment

Programs that succeed in increasing young people's success in education and in the labor market have the following features:⁵

- Continuity of contact with caring adults, teachers, employers, community members and others who are committed to the participants' labor market success and on-going, long-term support
- A focus on the strengths of young people, not on their weaknesses
- Connections to employers, using paid work and internships as a motivator and venue for learning
- Learning in both the classroom and the work place
- A clear definition of the knowledge and skills necessary to succeed in the labor market and a variety of options for acquiring them
- Hands-on experiential training in areas of labor market growth and community rebuilding
- Financial and non-financial incentives for achievement
- Opportunities for leadership development, self-governance and decision-making

⁵ Sar Levitan Center for Policy Studies, Johns Hopkins University, Baltimore, Maryland; American Youth Policy Forum, Washington, D.C.; Grobe, Terry. Dollars and Sense, "How 'Career First' Programs like Year Up Benefit Youth and Employers. Jobs for the Future. May 2010. The White House Council for Community Solutions. Community Solutions for Opportunity Youth. June 2012.

Services for 16 to 21 Year Olds

3,348 young people participated in Fiscal Year 2013. Seventy-three percent were low-income with annual incomes at two hundred percent or less of the Federal poverty level. Fifty-four percent were males and forty-six percent were female. Fifty percent were white; 27%,

Hispanic; 12%, Black; and 11% were from other racial or ethnic groups. Young people gain access to services at high schools or in youth centers in Marlborough, Framingham, Waltham, and Bellingham. They participated in one or more of the following activities:

- Career planning—assessment and career inventories, career days, job shadowing, visits to colleges
- Job readiness—resume writing, interviewing techniques, employer expectations discussions, completing job applications, driver's education
- Education and training—GED tutoring, certificate program, college coursework
- Job placement—internships, full and part-time paid employment

They may receive financial support to cover the costs of education and training, gas cards and bus passes, uniforms and tools.

In order to expand access to services, the Young Adult Employment Initiative will use online technologies, allowing young people to explore careers and become job ready on the web.

Goal Four . . . Through the Young Adult Employment Initiative and the career centers, increase the number of unemployed or underemployed 22 to 28 year olds whose incomes are less than 300% of the federal poverty level who find jobs using career center services

In FY15, the Career Center Initiative Board and the Young Adult Initiative Board will:

- Define the needs of 22-28 year olds, develop a program design that meets their needs and identify the resources, both at the career centers and in the community, necessary to attract and serve larger number of individuals in this age group at the career centers.
- Ensure that there is a continuum of services for youth ages 22 to 28.
- Identify five to ten employer champions willing to provide internships and hire young people.

Goal Five . . . Continue to increase the visibility of the organization through partnerships and labor market research.

To fulfill its mission PSW must be an effective workforce development broker in Metro Southwest. The labor market in the United States is fragmented—a market in which there is no formal structure for the exchange of information about the labor market itself or for developing effective strategies to address labor market problems. It is a maze of agencies and organizations difficult to negotiate for its customers—business, industry, organized labor, workers and the unemployed. PSW fills that void.

PSW is a neutral broker, assuming several roles *not* assumed by economic development agencies, educational institutions, government and other non-profit agencies. The roles of PSW are:

- Facilitator, providing a forum in which business, organized labor, education, government and service organizations have a voice in the investment of public workforce development monies
- Labor market analyst, continually scanning the market to identify issues, e.g., structural change in the industry and occupational mix in the region, skills shortages, sluggish labor force growth, the increasing importance of foreign-born residents as a source of workers, youth unemployment and the plight of individuals with limited skills and education
- Advocate, seeking change in policies and labor force strategies in the state and the nation, and increasing public and private revenues available for workforce development
- Intermediary, bringing together public institutions and businesses to find and implement solutions to labor market problems and financing for those strategies
- Catalyst for change, supporting regional experiments designed to ensure that there is a skilled workforce available to business and that individuals' earnings increase

The Board's actions must increase community leaders', business', educators' and funders' understanding of the dynamics of the labor market in Metro Southwest, the impact of workforce shortages now and in the future, and sustainable options for reducing the skills gap. In FY15, the Board will convene a skills summit to answer the questions:

- Is there a gap between the skills the unemployed have and industry need?
- If so, what occupations and skills are in short supply in what industries.

KNOWLEDGE INNOVATION ECONOMY

PARTNERSHIPS FOR A SKILLED WORKFORCE
September 2015

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Metro Southwest . . . Technology Heartland of Massachusetts

Covering the area between Routes 128/I495, and serving 43 communities, Metro Southwest is one of the largest of the 16 workforce regions in Massachusetts.

The Metro Southwest (MSW) region contains communities that are defined by high-growth, high-paying knowledge and innovation industries, exceptional educational attainment and outstanding research and education institutions.

MSW is a college labor market in which jobs requiring post-secondary education dominate and college-educated residents thrive. Those without post-secondary education do not.

The Great Recession and the Recovery

MSW employment level exceeds employment at the beginning of the recession

MSW lost 3.3% of the jobs in the Great Recession, while job loss in the state as a whole was 4.0%.¹

MSW had the strongest growth among all state's regional labor markets, increasing 2.6% between the fourth quarters of 2009 and 2010.²

In the first quarter of 2008, there were 468,967 jobs in the region. In May 2014 employment was at 512,851.

Like the state as a whole, the recovery has spanned industries

EMPLOYMENT IN KEY METRO SOUTHWEST INDUSTRY SUPERSECTORS			
Industry	Q1/2008	Q2/2013	% Difference
Scientific Research & Development	9,837	12,129	23.3%
Computer Systems Design	19,425	23,809	22.6%
Health Care	45,708	52,814	15.5%
Professional & Technical Services	66,422	67,569	1.7%
Telecommunications	1,788	2,589	44.8%

Job vacancies rates rising

The job vacancy rate in Greater Boston was 3.4% at the end of 2007, declining by more than a percentage point at the end of 2009 and rising to near 3.0% as the economy recovered. Greater Boston has 45% of employment, but 55% of the vacancies across the state.³

As reported in the 2013 Greater Boston Job Vacancy Survey conducted by the Executive Office of Labor and Workforce Development, the vacancy rate for all occupations was 4.7%, with the highest rates reported for computer and mathematical occupations (6.8%), protective series (5.2%), building and grounds cleaning and maintenance (5.2%), personal care and service jobs (6.6%), and sales (5.8%).

The vacancy rate for all industries was 4.8%. Vacancy rates exceeded five percent in retail trade; real estate rental and leasing; management of companies; arts, entertainment and recreation; and accommodation and food services.

Labor force participation has increased over the past year

In June 2014 503,997 residents were either employed or actively looking for work. By June 2015 that number had increased to 516,503. This represents 14% of the Commonwealth's workforce.

Unemployment remains the lowest in the state, but almost 40% experience long periods of joblessness

The unemployment rate in MSW jumped to 6.5% during the recession, up from 3% in 2007—but it was the lowest among all workforce regions in the state.⁴

The MSW rate increased over the past year—from 5.2% in June 2012 to 5.8% in June 2013, still well below the state rate of 7.4%.

By June 2015 the unemployment rate for the region had fallen to four percent, below the Massachusetts rate of 4.9%

20,501 people who were looking for employment remained unemployed—12.1% of the states' unemployment.

In July 2013, 37.0% of the unemployed had been unemployed for 27 weeks or longer. The average weekly spell of unemployment was slightly over 36 weeks. The median was 15.7 weeks.⁵

The unemployed in MSW were older and more educated than the unemployed in the state as a whole

Almost one-third of the unemployed have a high school diploma or less, compared to one-half in the state. However, as a consequence of the highly educated workforce in MSW, 52.7% of the unemployed in MSW have a bachelor's degree or higher, substantially higher than the 27.7% statewide.⁶

Youth did not fare well in the recession and have not regained employment in the recovery

17.5% of the unemployed are ages 16 to 24, but they are only 9.5% of the workforce. However, youth unemployment in Metro Southwest is significantly below the state as a whole. 26.4% of the unemployed in the state are between the ages of 16 and 24.

Population

Without the influx of immigrants, the population in MSW would have declined over the past decade

At 1,038,784 residents, MSW accounted for 16.6% of the state's population at the end of 2010, behind the Southeast (21%) and Boston/Metro North (19.2%)⁷

After experiencing the second fastest population growth rate (0.4%) early in the decade, MSW was one of only three regions to experience a decline in population in recent years—0.1%.⁸

From 877,860 in 2000, the native born population fell to 859,444 in 2010, while the immigrant population grew by 2.7% to 179,340 in 2010.⁹

In the period 2000–2007, the growth of working-age immigrants was 3.6%, larger than in Massachusetts at 2.8% and in the United States at 3.2%. Immigration slowed in 2010 to 1.5%, less than in Massachusetts at 2.0% and in the United States at 2.3%.¹⁰

The region became more ethnically and racially diverse over the decade, with a 6.3% increase in the number of Hispanic residents and a 5.2% increase in Asian residents.¹¹

Income Sufficiency

MSW is a high-income region, but not all individuals share in the prosperity, and poverty rates have increased slightly even in the recovery

From 2009 to 2013, the median household income was \$82,090 in Middlesex County and \$84,916 in Norfolk County, well above \$66,866 in Massachusetts.¹²

For the same time period, per capita income in Norfolk County was \$44,692 and \$42,861 in Middlesex County compared to the state per capita income of \$35,763.¹³

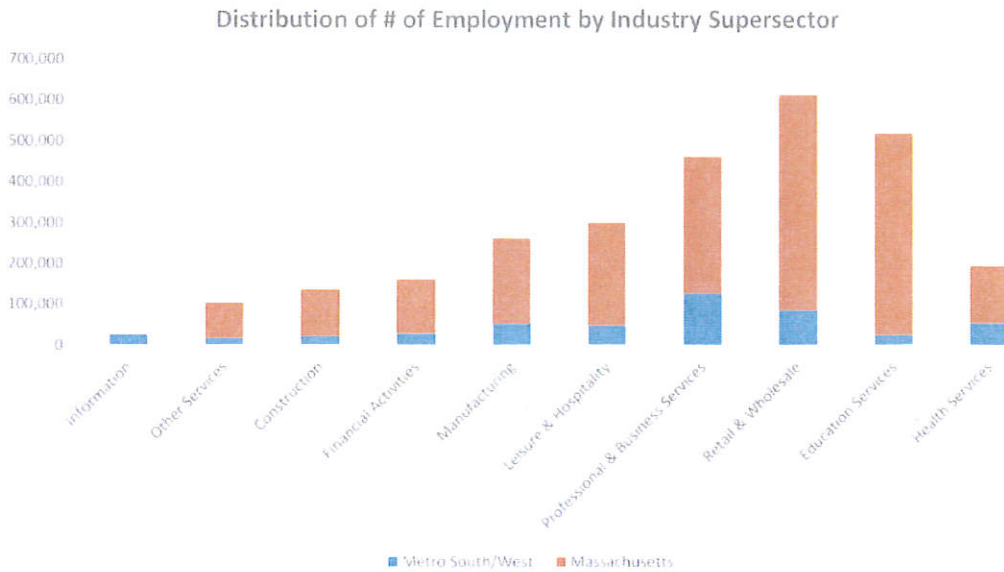
8.1% of the population in Middlesex County and 6.6% of the population in Norfolk County fell at or below the federal poverty level (the federal government defines poverty as \$15,510 for a family of two up to \$39,630 for a family of 8) compared to 11.4% of the residents in the state.¹⁴

Youth poverty rates for 15 to 24 year olds in Metro Southwest range from 16.6% in Brookline, 11.5% in Waltham, 7.8% in Framingham to 0/0.7% in Dover. The average poverty rate for all 43 cities and towns is 4.9%.

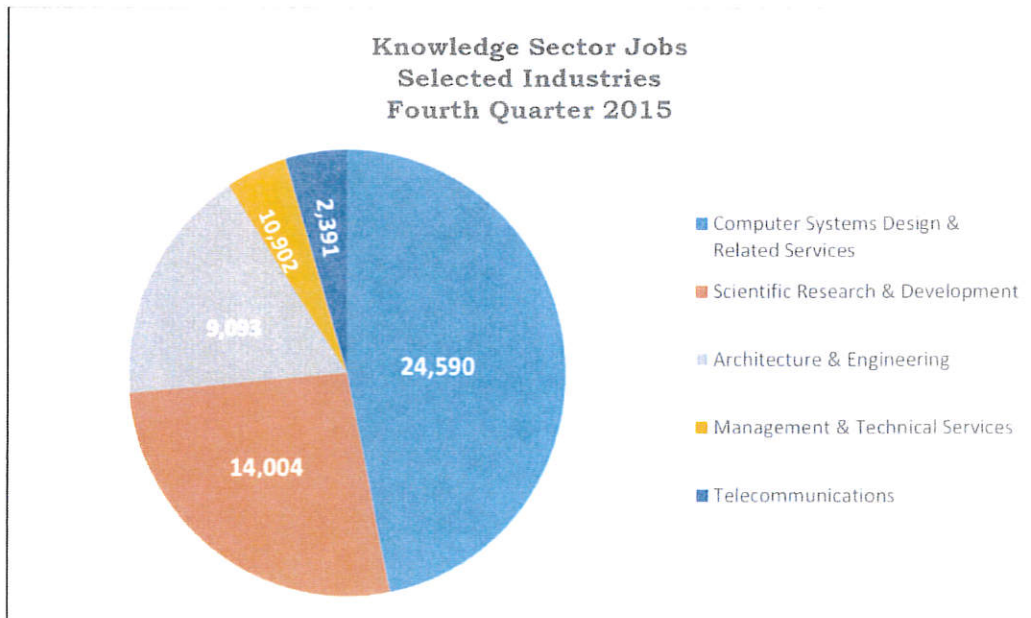
The MSW Labor Market: Demand

MSW has 17.52% of the state's employment-512,851 jobs

In the fourth quarter of 2014 professional and business services dominate the region with 26% (126,972) of the jobs in the region- -one quarter of the professional and business services jobs in the state.



Knowledge technology jobs dominate in Metro Southwest



Firms with 100 or more employees accounted for almost one-half of the jobs in MSW

The majority of companies (86.5%) had fewer than 20 employees, but they accounted for only 21.8% of employment.

MSW Labor Market: Supply

MSW is a net importer of workers

MSW is a net importer of workers with 60,000 more employees commuting into the region for work than residents commuting out.¹⁵

Labor force growth slowed by 2010

Between 2000 and 2005, the labor force grew by 4.6%, compared to Massachusetts, 4.4% and the United States, 4.8%. By 2010 the growth rate of the MSW labor force slowed to 2.2%, less than that of Massachusetts, 3.0% and the United States, 3.2%.¹⁶

MSW has the oldest workforce in the Commonwealth

Slightly over 50% of the unemployed in MSW are 45 or older, compared to 36.6% in the state.¹⁷

Between 2000 and 2010, the number of 45–64 year olds in the workforce in MSW increased by 5.6%; 16–24 year olds increased by 1.8%. The prime working age group, 25–44 year olds, declined by 4.5%.¹⁸

Best educated workforce in the Commonwealth

80% of MSW workers had completed some post-secondary education by the end of the decade, compared to 70% in Massachusetts and 60% in the nation.¹⁹

Nearly 30% of MSW's workers had a master's degree or higher, almost double the share of workers in Massachusetts with a master's.²⁰

46.7% of the unemployed in MSW have a bachelor's or higher, compared to 22.8% in the state.²¹

The number of people in the labor force in the region without a high school diploma or GED fell by 2.0% to 29,248 in 2010.²²

Educational attainment falls sharply by age cohort. The largest potential shortfall is in associate's degrees; 12,600 people in MSW between 45 and 54 have an associate's degree. Fewer than 5,000 people between the ages of 25 and 34 have an associate's.²³

The 128 loop encompasses 58 institutions of higher education—18 in Metro Southwest.²⁴

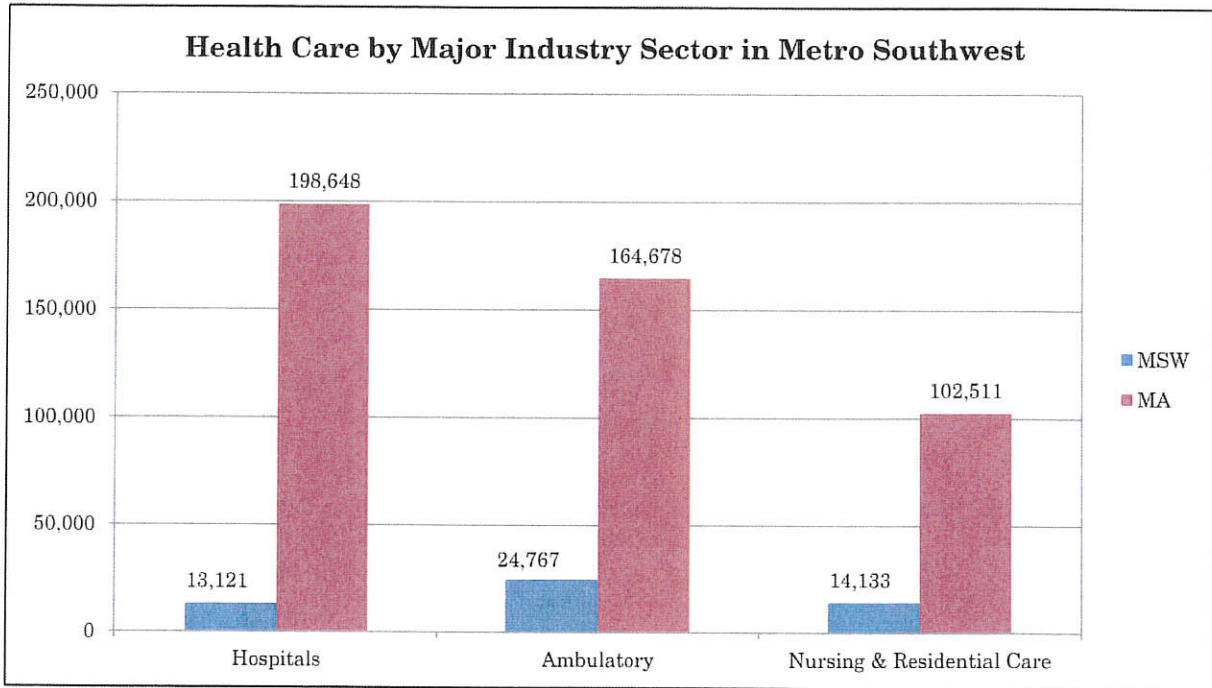
INSTITUTIONS OF HIGHER EDUCATION IN METRO SOUTHWEST	
Brookline	Boston Graduate School of Psychoanalysis Hellenic College and Holy Cross Greek Orthodox School of Theology New England Institute of Art Newbury College Pine Manor College
Canton	Massasoit Community College
Marlborough	Quinsigamond Community College
Needham	Franklin W. Olin College of Engineering
Newton	Andover Newton Theological School Boston College Hebrew College Lasell College Mt. Ida College
Waltham	Bentley University Brandeis University
Wellesley	Babson College Massachusetts Bay Community College Wellesley College

MSW is home to 44 secondary school districts

In addition to the 40 “comprehensive” high schools, there are four regional career technical schools—Minuteman in Lexington, Tri-County in Franklin, Blue Hills in Canton, Joseph P. Keefe in Framingham and Assabet Valley Regional Technical High School in Marlborough

Health Care

In the second quarter of 2013, ambulatory care made up 48.9% of the 52,814 health care jobs in MSW



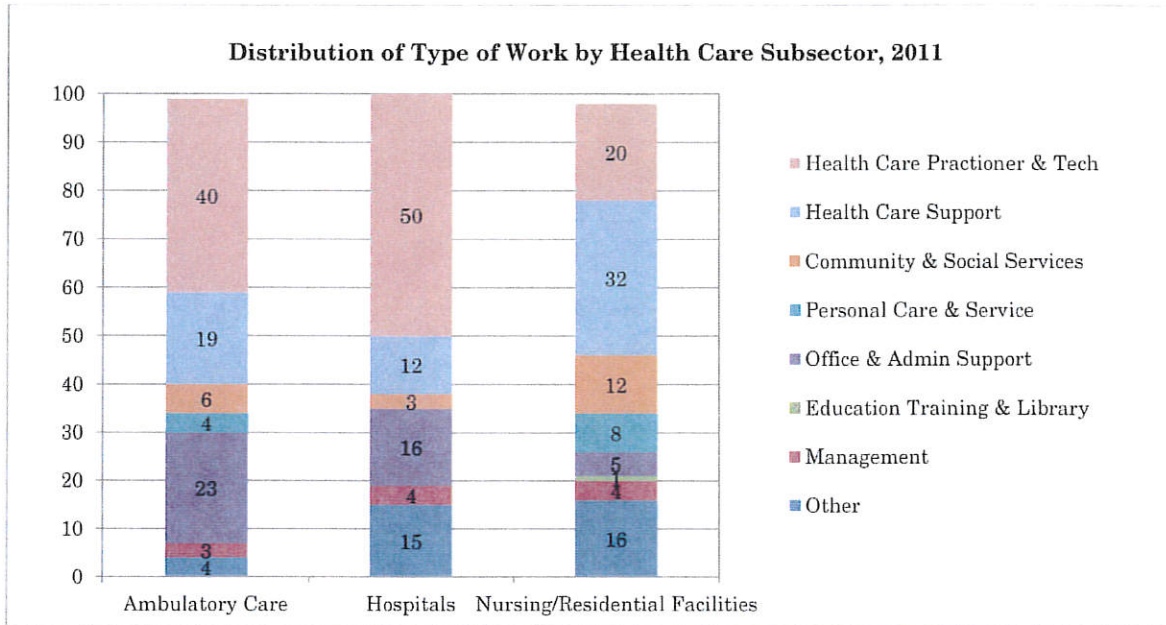
Hospitals include medical, surgical, psychiatric and substance abuse hospitals.

Ambulatory care includes doctor's and dentist's offices, medical and diagnostic labs and home health care.

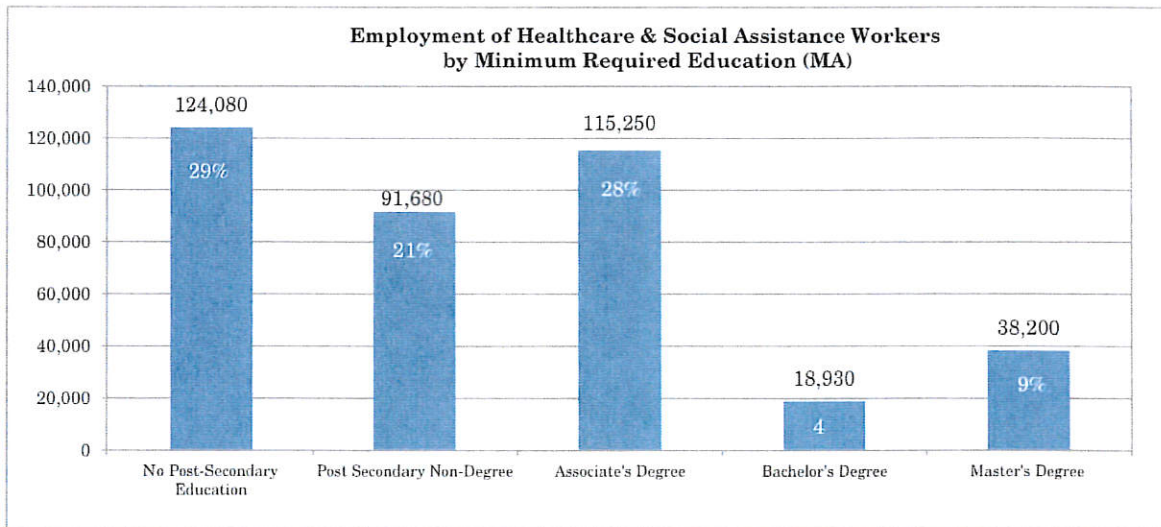
Nursing and residential care include nursing homes, residential mental health facilities, and community care facilities for the elderly.

Occupational distributions vary by health care subsectors

Health care practitioners and technicians make up 40% of the ambulatory care workforce compared to 50% of the hospital workforce and 20% of the nursing and residential care workforce.²⁵



78% of the health care jobs do not require a bachelor's degree.²⁶



These percentages do not sum to 100 because the occupations requiring a Doctorate are omitted.

Health care jobs are a pathway to economic self-sufficiency

Salaries range from \$22,430 for jobs not requiring a post-secondary degree (pharmacy aide) to \$89,960 for jobs requiring a master’s degree (physician assistant).²⁷

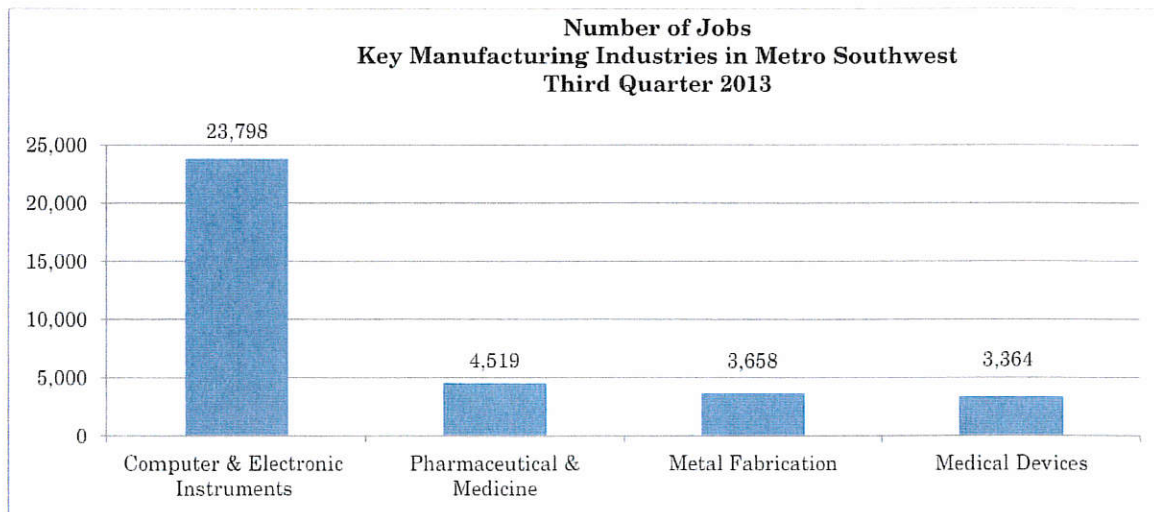
AVERAGE ANNUAL SALARIES BY ACHIEVEMENT	
Education Requirement	Salary Range
No post-secondary education requirement	\$22,430–\$47,480
Certificate required	\$28,480–\$47,480
Associate's degree	\$35,160–\$67,200
Bachelor's degree	\$37,710–\$86,450
Master's degree	\$35,940–\$89,960

Advanced Manufacturing

The majority of MSW manufacturing firms fit the definition of “advanced manufacturing”²⁸

ADVANCED MANUFACTURING
Innovate, turning raw materials into complex products
Compete with high standards, in design, production, delivery and product life cycle management
Pay well for a highly skilled workforce
Participate in a network of scientists, researchers, precision machinists, engineers, financiers, business developers and entrepreneurs
Believe that the network is the strength of innovation and problem solving

Three of the top manufacturing industries in MSW, computers, electronics and pharmaceuticals are classified as “high tech” by the Organization for Economic Cooperation and Development. (The classification is based on the products produced .)²⁹



Manufacturing accounts for almost one in ten jobs in MSW³⁰

MSW manufacturing firms employed 51,929 workers in the second quarter of 2013, down from 55,564 in the first quarter of 2008.³¹

67% of the almost 700 employers surveyed across the state in 2011 reported moderate or severe shortages in skilled production jobs (machinists, craft workers and technicians). Only 8% reported difficulty filling entry-level jobs, down from 43% in 2008.³²

MSW firms report difficulty in filling R&D engineer, chemist and other highly educated specialist jobs.³³

Eleven of the 25 largest medical device companies in the Commonwealth are located in MSW³⁴

LARGEST MEDICAL DEVICE COMPANIES IN MSW	
Thermo Fisher Scientific	Nova Biomedical Corporation
Boston Scientific	HartWare International
Alere, Inc.	Tegra Medical
PerkinElmer	Tanika Therapeutics, Inc.
Hologic, Inc.	TEI Biosciences, Inc.
Insulet Corporation	

Manufacturing firms in MSW hire a greater proportion of professional and technical workers than manufacturing firms in other regions of Massachusetts³⁵

OCCUPATIONAL PROFILE KEY METRO SOUTHWEST MANUFACTURING SECTORS MAY 2011				
Occupation	Pharmaceutical & Medicine	Computers & Electronic Instruments	Metal Fabrication	Medical Devices
Managers	19.0	13.3	7.0	7.8
Business & Financial Occupations	6.7	7.9	1.8	5.3
Computation & Mathematics	2.7	24.1		3.1
Engineers	10.4	20.7	2.9	15.0
Life, Physical & Social Scientists	27.9	0.5		
Sales		4.6		6.8
Office & Administrative Support	9.9	8.4	10.3	11.5
Installation, Maintenance & Repair	23.4	1.5	1.8	4.0
Production		16.0	70.7	41.0
Transportation & Material Moving			3.2	5.0
Miscellaneous		3.0	2.3	0.5
	100.0	100.0	100.0	100.0

Manufacturing workers in MSW are well paid

MEDIAN ANNUAL INCOME KEY METRO SOUTHWEST MANUFACTURING SECTORS MAY 2011			
Industry Sector	Managers	Engineers & Technicians	Production Workers
Pharmaceuticals & Medicine	\$116,301	\$52,572	\$30,625
Computer & Electronic Instruments	\$139,015	\$86,761	\$37,686
Metal Fabrication	\$102,241	N/A	\$30,073
Medical Devices	\$129,841	\$75,087	\$31,756

The majority of manufacturing workers in MSW are well educated

In 2010, 21.9% of MSW workers had some college or an associate’s degree. 52.9% had a bachelor’s or higher.³⁶

Information Technology

Four subsectors make up the Massachusetts IT industry³⁷

Massachusetts Core Information Technology Sectors & Subsectors

<p>IT Services Systems development & integration Computer support & maintenance Web design & development Training Data hosting & processing, etc.</p>	<p>Software System software Middleware/integration software Application software Custom computer programming</p>
<p>Hardware Semiconductors & equipment Computer peripherals & devices (including storage) Network hardware Communications equipment & devices (including mobile), etc.</p>	<p>Network Communications Wireline Telephone Cable Wireless Internet service providers (ISPs) Related communications Infrastructure, etc.</p>

IT has moved from hardware development and production to IT services and software over the decade

In 2000, almost 40% of the jobs were in the hardware sector. By 2008 only 32% of the jobs were in hardware. 54.5% of the jobs are now in IT services and software, up from 45.6% in 2000.³⁸

21 of the 70 fastest growing companies ranked by revenue growth between 2009 and 2012 were in information technology firms. Five were in MSW.³⁹

5 FASTEST GROWING TECH FIRMS IN MSW
EchoStor Technologies
Emservop
Solidas Technical Solutions
Syrinx Consulting Corporation
NWN Corporation

Although reduced in size since 2000, IT is still a significant presence in the Commonwealth and in MSW

At its height in 2000, IT firms statewide employed over 240,000 people. In 2008, that number had shrunk to 178,322. ⁴⁰

In the third quarter of 2012 there were 27,291 information jobs in MSW, slightly over five percent of all jobs in the region.

There is opportunity for workers with some post-secondary education, but not a bachelor's degree—middle skills jobs

In 2011, there were 153,560 IT middle skills job openings statewide.⁴¹

IT MIDDLE SKILLS JOBS IN MASSACHUSETTS	
Computer Network & Database System Administrators	32,610
IT & User Support	24,732
Web–Internet–Digital Media	21,541
Data & Information Management	20,093

Demand for software developers for network/computer systems is expected to rise by 71.7% between 2010 and 2020.⁴²

SOFTWARE DEVELOPER GROWTH AREAS	
Java/j2EE/Java Developer	SAP
Mobile	SharePoint
NET	Web Developer
Software Developers	Network Engineers
Security	Networking Cloud 900

IT industry salaries are higher than salaries in other industries in Massachusetts⁴³

COMPUTER SYSTEMS DESIGN & RELATED SERVICES		
Occupation	IT Median Annual Wage	Other Industry Median Annual Wage
Management	\$130,760	\$92,880
Computer & Mathematical Occupations	\$78,320	\$75,080
Business & Financial Operations	\$73,050	\$61,700
Office & Administrative Support	\$36,230	\$31,250

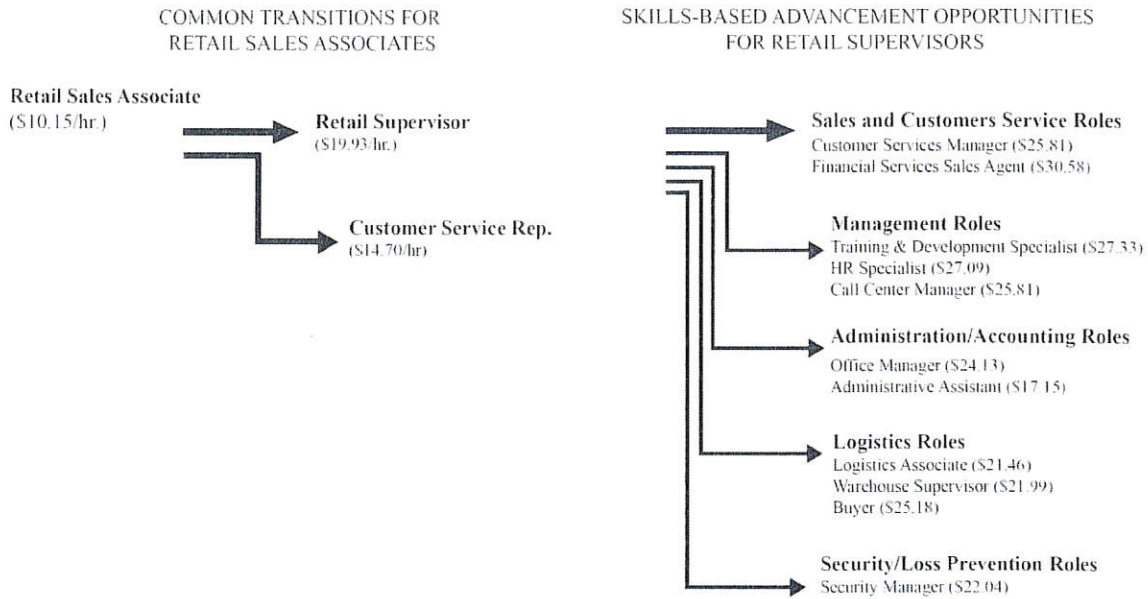
The median salary for software developers specializing in systems design was \$94,570 in 2011. Software application developers were not far behind at \$88,120, while computer systems analysts had a 2011 median salary of \$82,160.⁴⁴

Resale and Wholesale Trade

Trade is a significant presence in Metro Southwest with 86,039 jobs in the fourth quarter of 2014.



Although average weekly wages are low, some sectors may offer career pathways for people with limited education and work experience.



Methodology: Transition pathways are based on the frequency of career transitions observed in millions of resumes and analysis of skill requirements in Burning Glass proprietary database of more than 100 million online job postings. Wage data reflect the mean advertised hourly wage.

Challenges Ahead

With a diverse industry base and a well-educated workforce the region is well positioned to thrive over the next decade. However, there are significant challenges facing policy makers, educators and workforce development organizations. Action must be taken to:

- Ensure that there are an adequate number of people in the workforce by supporting the growth of jobs that are attractive and accessible to people who left the workforce during the recession and maximize the potential of the immigrant population
- Create a job-driven education and training system that re-skills those who are currently unemployed and prepares the workforce of the future by strengthening working relationships between business, industry and education at all levels
- Dramatically expand opportunities for all young people to work and learn through co-op programs, internships and paid work

-
- ¹ Clifford, Robert. Labor Market Trends in the Metro South/West Region. Commonwealth Corporation and the New England Public Policy Center of the Federal Reserve Bank of Boston. Boston, MA. June 2012. p. 21.
- ² Clifford, 21.
- ³ Clifford, 39.
- ⁴ Clifford, 17.
- ⁶ Clifford, 19
- ⁷ Clifford, 8.
- ⁸ Clifford, 8–9.
- ⁹ Clifford, 9.
- ¹⁰ Clifford, 10.
- ¹¹ Clifford, 9.
- ¹² US Census Bureau. Quick Facts. 2011.
- ¹³ US Census Bureau, Quick Facts. 2011.
- ¹⁴ US Census Bureau. Quick Facts. 2011.
- ¹⁵ Clifford, 20
- ¹⁶ Clifford, 11.
- ¹⁷ Clifford, 18.
- ¹⁸ Clifford, 9.
- ¹⁹ Clifford, 15.
- ²⁰ Clifford, 15.
- ²¹ Clifford, 15.
- ²² Clifford, 15.
- ²³ Clifford, 16.
- ²⁴ Wikipedia. List of colleges and universities in metropolitan Boston.
- ²⁵ Clifford, 33.
- ²⁶ Blakely and White, 26.
- ²⁷ Blakely and White, 27-31.
- ²⁸ Deloitte Consulting LLP. Reexamining advanced manufacturing in a networked world: Prospects for a resurgence in New England. The New England Council. December 2009.
- ²⁹ Bluestone. 36. Thomas Hatzichronoglou, "Revision of the High-Technology Sector and Product Classification." Paris: Organization for Economic Cooperation and Development.
- ³⁰ EOLWD.
- ³¹ EOLWD.
- ³² Bluestone, Barry, Anna Gartsman, Don Walsh, Russ Eckel, and James Huessy. Staying Power II: A Report Card on Manufacturing in Massachusetts. The Kitty and Michael Dukakis Center for Urban and Regional Policy, School of Public Policy and Urban Affairs, Northeastern University. Boston, MA. 2012.
- ³³ Beville, Sylvia, Kelley French. Manufacturing in Metro Southwest. Partnerships for a Skilled Workforce. Marlborough, MA. 2013.

³⁴ Boston Business Journal. August 16022, 2013.

³⁵ Clifford, 33.

³⁶ Clifford, 28.

³⁷ Goodman.

³⁸ Goodman.

³⁹ Boston Business Journal. Area's Fastest-Growing Private Companies. April 26, 2013.

⁴⁰ Goodman.

⁴¹ BATEC. An Analysis of Information Technology Middle Skill Job Openings 2011. Boston, MA. June 2012.

⁴² Boston Business Journal, August 2-8, 2013.

⁴³ Boston Business Journal, August 2-8, 2013.

⁴⁴ Boston Business Journal, August 2-8, 2013.

SECTION III: MEMORANDUM OF UNDERSTANDING

METHODS OF INTEGRATED SERVICE DELIVERY

The Local Board convened the OSCC Partners and other stakeholders into “MOU Teams” (defined locally) to strategize integrated, coordinated, person-centric service design and delivery within the One-Stop Career Center for youth, job seekers, and businesses. The OSCC service design is articulated in the Local WIOA Joint Partner Umbrella MOUs, effective July 1, 2017.

The Local Boards engage with businesses to understand their needs and develop an integrated education and workforce system that supports career pathways to prepare residents with foundation, technical, professional skills and information and connections to postsecondary education and training.

WIOA partners are working to construct career pathways aligned with business demand across federal, state and community-based partnerships that will improve foundation skills and facilitate the transition to postsecondary education and training for individuals with barriers to employment, including adults who are undereducated and with limited English proficiency.

*Partnerships for a Skilled Workforce
and
The WIOA Partners*

*Memorandum of Understanding
July 1, 2017 – June 30, 2020*

June 22, 2017

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June 22, 2017

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Purpose and Duration of the MOU

Partnerships for a Skilled Workforce (PSW) has led the debate and discussion regarding the career center model, the service delivery system, and the roles and responsibilities of each of the WIOA Partners. This MOU has been developed and implemented with the agreement of the General Manager of the Town of Norwood. The PSW Executive Director and the representative of the General Manager have worked closely to plan the meetings and frame the discussion. The purpose of the MOU is to establish the model for services in the region and define the roles and functions of each of the Partners.

This agreement shall begin July 1, 2017 and, unless it is substantially changed or terminated by agreement of all parties, end on June 30, 2020. The MOU will be updated not less than every three years to reflect changes in the signatory officials of PSW, the Partners, and Chief Elected Official; substantial improvements in the delivery of services; and/or changes to infrastructure cost contributions.

Partners

The WIOA Partners in the Metro Southwest workforce area of Massachusetts include:

- Massachusetts Department of Career Services, including Title I Adult and Dislocated Workers, Wagner-Peyser, Trade Adjustment Assistance, and Jobs for Veterans State Grants
- The PSW WIOA Youth Program
- The Massachusetts Department of Unemployment Assistance
- Adult Learning and Literacy Program:
 - Framingham Adult ESL^{Plus}
 - Hudson-Maynard Adult Learning Center
 - Assabet Valley Adult Education/Quinsigamond Community College/Marlborough
 - Middlesex Sheriff's Department Adult Basic Education
 - Norfolk House of Corrections
 - Blue Hills Regional Adult Basic Education
 - Middlesex Community College
- Massachusetts Rehabilitation Commission, Framingham Area Office
- Massachusetts Commission for the Blind, Metro West Region
- Department of Transitional Assistance, Transitional Assistance Office, Framingham, including Temporary Assistance for Needy Families Regional Office and the Supplemental Nutrition Assistance Program
- Senior Community Service Employment Program, Operation A.B.L.E. and Executive Office of Elder Affairs, and NAPCA/Greater Boston Chinese Golden Age Center

Process to Develop the MOU, Define the Shared Customer and Map Service Pathways

PSW convened the Partners in October 2015 to exchange information about each organization's customers, services, delivery systems and eligibility requirements. Representatives from the Department of Career Services, WIOA youth program and adult learning centers, Massachusetts Rehabilitation Commission, Operation A.B.L.E and the Department of Transitional Assistance were at the table. The agendas for fall 2015 and spring 2016 meetings included:

- The career center business model
- System mapping

June 22, 2017

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- The common customer
- Referrals of consumers to the Partners from the career center and from the career center to the Partners

In the fall of 2016 the original Partners were joined by the Massachusetts Department of Unemployment Assistance, and the Commission for the Blind. They met in September 2016 to approve a plan presented by PSW to complete the MOU by June 2017. The group was divided into four working teams: common customer, services to individuals, pathways, and business services. Each team presented a proposal on their topic for review and modification by the full Partners group on November 30, 2016. The products of the meeting were incorporated into the MOU for discussion at the January 25, 2017 meeting. A final review of the draft took place on March 29, 2017 and members agreed to circulate the draft in their agencies. The remainder of the year will focus on infrastructure and shared costs.

Career Center Objectives

Partnerships for a Skilled Workforce (PSW) and the WIOA Partners listed in the previous section agree to:

- Create a one-stop system that supports the development of a workforce with the skills employers require by implementing the business model described in the purpose section.
- Improve the economic standing of career center customers, both youth and adults.

Employment of individuals is the primary measure of success for career centers. However, One-Stop Career Centers cannot be a solution to all our region's workforce or economic needs. The engagement of the Partners in this MOU is key to success.

Successful Career Centers ¹

The Partners agree to build a system in which:

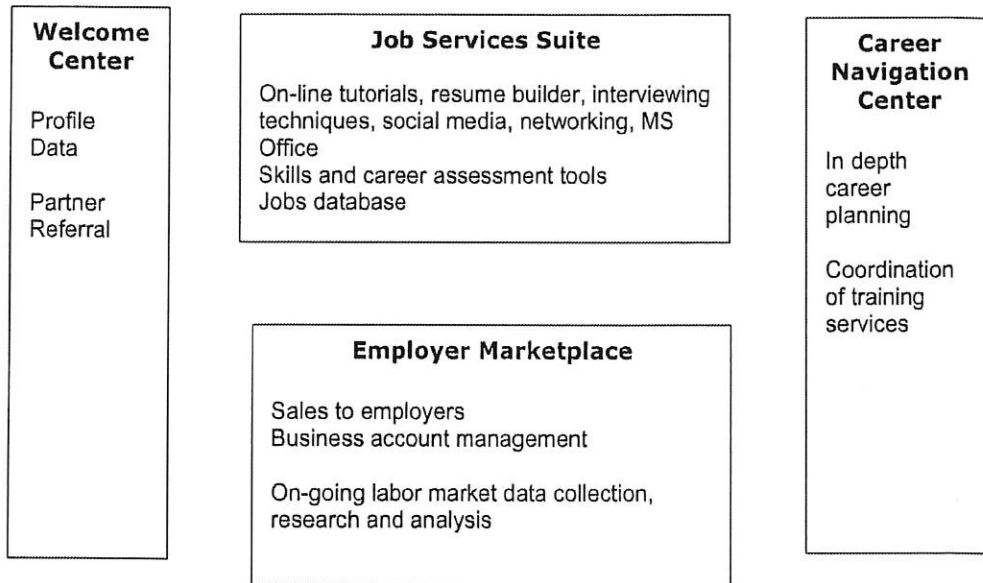
- Career centers are driven by the needs of employers. In Metro Southwest employer needs are the top priority and there are deep relationships between the career centers and employers.
- Training is closely aligned with employer skill requirements. In Metro Southwest job seekers will engage in a combination of work and learning simultaneously to gain market-relevant skills and credentials and achieve good paying jobs with career potential." ²
- Technology is employed thoughtfully to enhance services and reduce costs, freeing staff to concentrate on the content and quality of advice and services to both individuals and employers. In Metro Southwest well-designed platforms support individual learning, placement, management and continuous improvement.

The career center system will have four divisions: Welcome Centers(s), Career Navigation Center, Job Services Suite and Employer Marketplace. See the business and individual services section for a description of the purpose of each.

¹ Center for Labor Market Studies, Northeastern University. Evaluation of Metro Southwest Career Centers. June 2010. The White House. Ready to Work: Job Driven Training and American Opportunity. July 2014. WIOA Career Center Standards Work Group. 2015. Strong, Ed. One-Stop Career Centers Must be Re-invented to Meet Today's Labor Market Realities. Version 2.0. June 2013. Halbert, Hannah. Employment Connection: Demand-driven model increases job placement. Policy Matters Ohio. Workforce Policy.

² Strong, Ed. P5.

Metro Southwest Career Center Business Model



Work Plan

In the first year of this agreement, PSW and its Partners will take the first steps to build an employer driven, high tech, high touch career center system:

- Develop an integrated system of services
- Ensure that facilities, services and equipment are accessible to the customers of the MSW Partners
- Collect and analyze data and take action to respond to changing labor market conditions and to continuously improve services
- Develop a registration form and process to provide for the collection of information to be shared by the career center and its Partners until such time as the state-wide intake system is fully functional
- Create and implement a system of referral to services between the career center and the Partners, including a procedure for tracking customers, and devise an accountability system
- Establish a baseline of Partner referrals to the career center during the first year by tracking the number of referrals

The work plan in subsequent years will be based upon the lessons from the previous year. The Partners will have an annual work plan.

Target Job Seeker Markets: Priority Populations

The workforce system in Metro Southwest will address the needs of the following groups:

- The long-term unemployed
- Unemployment insurance claimants
- Low-income adults including TANF and SNAP recipients
- The homeless
- Adults enrolled in Adult Basic Education (ABE) programs
- Individuals with disabilities
- Veterans
- Older workers
- Offenders who are released from prisons and jails
- Young adults with barriers to employment

In Metro Southwest we will give priority to referrals from the WIOA Partners.

See Attachment A: The Knowledge Innovation Economy, for description of the labor market.

Shared Customers

Continuum of Services

Partners will give their customers the foundation knowledge and skills necessary to succeed in the career center environment and refer them to the career center for services. The customers most likely to benefit from career center career advising, training and placement services are those individuals who:

- Want to take the first step toward employment and/or education, are able and willing to work, and want a job
- Are able to complete digital and/or paper assessments
- Have a desire for services and are committed to training or retooling skills as necessary
- Are prepared to look for work
- Are able to work in the United States
- Are willing/able to sign a release of information form which will allow agencies to share applicable client information

Some customers will be supported as they progress through the services pathway by a Partner-career center team.

Career Center Services to Individuals

Service begins at the Welcome Center when a staff person with deep knowledge of the career center and Partners' specialized services determines the reason why the individual is at the career center, asks the person to complete a profile for employment, an educational history, and guides them to the first step in the service pathway—referral to the Career Navigation Center or the Job Services Suite and/or referral to a WIOA partner or community organization. The referral may be made via computer or telephone.

The package of services may vary in intensity and duration based upon customer need and eligibility. The menu of services available at the career center includes:

- Skills, interest and aptitude assessment, including literacy, numeracy, language fluency, and English language proficiency, marketable knowledge and skills, and supportive services. Methods include interviewing and diagnostic testing.
- A service plan based on a conversation(s) with the individual that includes a discussion of his or her skills, skills valued in the labor market and the match or gap between what is required, and the individual's knowledge, skills and abilities.
- Comprehensive and extensive career counselling based on actual labor market needs so individuals can make informed career decisions.
- Eligibility determination for adult, dislocated worker, and youth programs.
- Staff assistance in writing a plan leading to employment.
- Training programs provided through career and technical education school adult learning divisions, private and public colleges and universities, and other approved vendors that match their skills, interests, personality, and employment goals. Help navigating the financial aid system and applying for WIOA vouchers. A plan for financing education will be developed.
- Referral to Partner organizations and other community resources when individuals need services that are beyond the scope of the career navigation division and they agree to the referral.
- Job search preparation and placement.

The following services will be available to all individuals through the virtual Job Services Suite and the profile matching system, regardless of eligibility for services through WIOA and other special programs:

- Labor market data including information about industries and occupations where there are current and future opportunities for employment and advancement, the knowledge and skills requirements in those jobs, and relevant education and training programs
- Job search tutorials, including resume building and interviewing skills placement assistance
- On-line occupational training programs
- Notice of a job opening when their profile matches the requirements in the job order, assistance in completing the application, and preparation for selling themselves to the employer
- Information about filing for unemployment and/or addressing problems with their claims

Pathways to Services (See Attachment B – MSW WIOA Partner Services Roadmap)

There are multiple points of entry into the workforce development system in Metro Southwest, that, collectively, will lead to self-sustaining wages.

Supports and Services for Target Markets

The table in Attachment C (MSW WIOA Partner Services) lists the services provided by each of the Partners to prepare people for the career center or to respond to the needs of individuals referred by the career center.

Referral Procedures

A referral procedures manual will be produced in FY18.

Business Services: The Employer Marketplace

WIOA offers an opportunity to innovate and strengthen services to individuals, industries and businesses. We commit to working with employers who have persistent and deep worker skills shortages, are in a targeted industry, employ people in target occupations, and are committed to hiring people with disabilities. We will work together to identify employer needs in the current marketplace.

The WIOA Partners and the career center operator will:

- Participate in an inventory of business services among the Partners
- Collaborate on the development of common practices, processes and services for the Business Services Team to cultivate new and existing business partnerships
- Enter job orders into the matching system
- Target industries/businesses and occupations in our joint work
- Analyze the current employer database, identify data and share with Partners
- Collect data (including but not limited to the characteristics/ abilities, skills and knowledge in demand by the employer) and enter into the customer management system (CMS)
- Collect job seeker profiles and enter the profiles into CMS to match with job orders
- Participate in the analysis of employer data in CMS and use the measurement/performance criteria of Department of Labor (DOL) and PSW in order to identify best practices
- Be familiar with labor market analysis from PSW and other resources
- Participate in the development, implementation and evaluation of the Employer Marketplace

The business services flow chart in Attachment D (MSW WIOA Partner Business Services) shows the process to be followed by the staff of the Employer Marketplace. The “staff” includes people housed in the career center marketplace itself and those housed at a Partner organization.

Performance

Metro Southwest will focus on activities that evidence shows improves performance: demand driven approaches, sector projects, education and occupational training and social support.

In Metro Southwest performance will be measured using WIOA common performance measures for both the job seeker and employers, including:

Adults	Measures
Employment	Employed in the 2 nd quarter after exit
Employment Retention	Employed in the 4 th quarter after exit
Median Earnings	Median earnings in the 2 nd quarter after exit
Credential Attainment Rate	Obtain recognized postsecondary credential by 4 th quarter after exit
Measurable Skill Gains	During program year achieve documented skill gain from education/training

Youth	Measures
Employment	Employed or in education or training in the 2 nd quarter after exit
Employment Retention	Employed or in education or training in the 4 th quarter after exit
Median Earnings	Median earnings in the 2 nd quarter after exit
Credential Attainment Rate	Obtain recognized postsecondary credential by 4 th quarter after exit
Measurable Skill Gains	During program year achieve documented skill gain from education/training

Employers	Measures
Effectiveness in Serving Employers	Retention with the same employer in the 2 nd & 4 th quarter after exit
Effectiveness in Serving Employers	Employer penetration rate
Effectiveness in Serving Employers	Repeat business customer rate

Technology

Technology platforms will be available throughout the career center to support the Metro Southwest Business Model. Technology will facilitate the exchange of information and a continuum of services to individuals, employers and Partners.

The WIOA Partners and the career center operator will select and implement technology and systems with these characteristics:

- Systems (in-person, virtual, etc.) available during times when specific customers from Partner programs are available (e.g. evenings and weekends)
- Connection to the Contact Management System [CMS] database for Business & Job Seeker Profiles
- Platforms/systems for counseling, training, case management and the linking of Partner services
- Support integrated 'real-time' access between all areas of the career center, customers, and/or Partners, including tracking customers, an accountability system, and quality access for individuals of various education levels, career pathways, and physical or job search needs
- Compliance with applicable statues, regulations, and data security requirements
- Sharing of information to the greatest extent appropriate among Partners
- Compliance with common reporting principles and requirements

June 22, 2017

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- Meets confidentiality requirements
- Innovative, flexible and expandable
- Cost-effective

Data Sharing for Integrated Service Delivery for Shared Customers

Subject to applicable legal constraints, including but not necessarily limited to those contained in G. L. 151A and 20 C.F.R. Pt 603, the parties of this MOU agree to seek increased sharing of data with a view to improving the quality of service-delivery to both job-seekers and business-customers. The Party whose data is requested to be shared shall be the judge, in its sole discretion, of the legal constraints governing whether and how its data may be shared. The parties of this MOU understand that a shared data system is being designed at the state level and will fully support the development and implementation of a state-level data system, subject to the foregoing limitations.

Staff Development and Training

The following modules make up the staff development curriculum:

- Partner agency missions
- Services offered by each agency
- Target populations served and their characteristics
- Requirements for participant entry
- Accessibility of services (accommodations)
- The referral process to and from the career center and the criteria used to determine when a referral would be made
- Staff sensitivity. What it means to be multi-lingual, multi-cultural, disabled and other special populations, being able to serve all customers regardless of cultural or physical attributes
- Technology systems, data integrity and data entry, demonstrated proficiency in use, data entry and accuracy in reporting

Funding Agreement

“Funding” includes both cash payments and in-kind services, facilities and equipment.

The following agreements have been made contingent upon future staffing and state agency budget agreements:

- Continue current staffing levels
- Develop programs to be delivered by partner staff at the career center. For example, Massachusetts Commission for the Blind (MCB) staff may offer a resume writing workshop or offer training on adaptive equipment.
- Use FTEs as basis for allocating infrastructure costs
- Share responsibility for business services, referral of candidates to employers, and respect historical business relationships within the employer marketplace and Customer Management System (CMS)

Funding for Shared and Infrastructure Costs of the OSCC

The Parties of this MOU agree that all required partners have a joint funding responsibility to support and maintain an effective local integrated service delivery system. In addition all parties to the MOU recognize that
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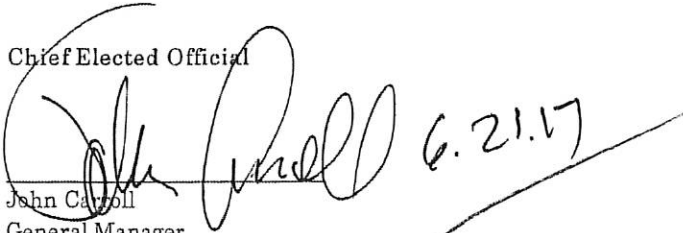
shared and infrastructure costs are applicable to the all required Partners. To ensure that the Local Board and all the required local Partners can focus on the provision of quality services to our shared customers, the State Level Partners will issue allocations for shared and infrastructure cost to the Local Workforce Area. State Partners will establish a methodology that will ensure costs are allowable, reasonable, necessary and allocable. As appropriate, State Partners will enter in Inter-agency Service Agreements (ISAs) with the Department of Career Services (DCS), the designated State Workforce Agency (SWA) to issue the local allocations. Local Boards will ensure all allocations are incorporated into the local integrated budget during the annual planning process.

Signatories

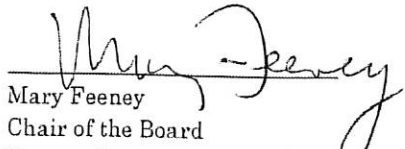
By signing this agreement, all parties agree to the provisions contained herein, subject to all applicable, Federal, State, and local laws, regulations and/or guidelines relating to nondiscrimination, equal opportunity, displacement, privacy rights of participants, and maintenance of data and other confidential information relating to One-Stop Career Center customers. By signatures affixed below, the parties specify their agreement:


By signing the MOU, all parties agree to reviewing and modifying the local MOU on an as-needed basis to ensure further development and alignment with local area priorities and strategies to serve shared customers as well as to update the MOU to satisfy all requirements as identified by WIOA.

Chief Elected Official

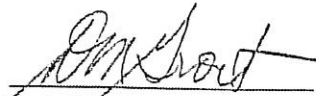

John Carroll
General Manager
Town of Norwood, MA

Partnerships for a Skilled Workforce, Inc.


Mary Feeney
Chair of the Board
Partnerships for a Skilled Workforce, Inc.


Sylvia Beville
Executive Director
Partnerships for a Skilled Workforce, Inc.

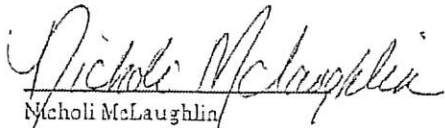
Massachusetts Department of Career Services (DCS)


Angie Grant
DCS Operations Manager
Framingham Career Center
Massachusetts Department of Career Services

June 22, 2017

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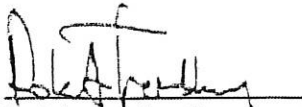
Nicholi McLaughlin
DCS Operations Manager
Norwood Career Center
Massachusetts Department of Career Services

The Massachusetts Department of Unemployment Assistance



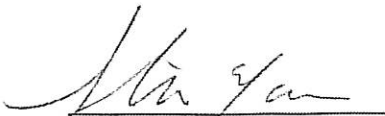
Marie-Lise Sobande
Deputy Chief of Staff
DUA Representative/Designee
The Massachusetts Department of Unemployment Assistance

Adult and Community Learning Services



Dr. Robert A. Tremblay
Superintendent, Framingham Public Schools
Framingham Adult ESL^{Plus}
Adult and Community Learning Services

Jodi Fortuna
Superintendent Hudson Public Schools
Hudson-Maynard Adult Learning Center
Adult and Community Learning Services



Stephen Mapini
Vice President of Administrative Services and Chief Financial Officer
Quinsigamond Community College - Adult Community Learning Center at Assabet
Adult and Community Learning Services



Mary Ellen McGorry
Director
Middlesex Sheriff's Department Adult Basic Education
Adult and Community Learning Services

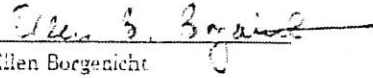
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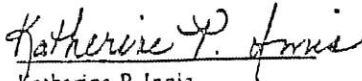


Chris Dawley
Director
Norfolk House of Corrections
Adult and Community Learning Services



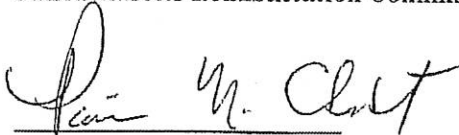
Ellen Borgenicht
Director
Blue Hills Regional Adult Basic Education
Adult and Community Learning Services

Thomas A. Turco, III
Commissioner of the Massachusetts Department of Correction
Massachusetts Department of Corrections
Adult and Community Learning Services



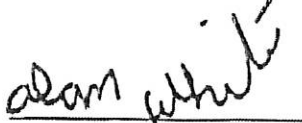
Katherine P. Innis
Director
Middlesex Community College
Adult and Community Learning Services

Massachusetts Rehabilitation Commission



Patricia Chabot
Area Director
Framingham Area Office
Massachusetts Rehabilitation Commission

Massachusetts Commission for the Blind



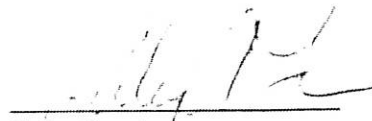
Alan White
Regional Director
Metro West Region
Massachusetts Commission for the Blind

June 22, 2017

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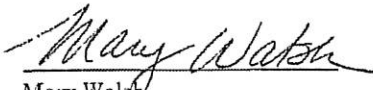
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WIOA Youth Program



Kelley French
Director – PSW Youth Careers
Partnerships for a Skilled Workforce, Inc.

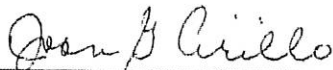
Department of Transitional Assistance, Transitional Assistance Office, including Temporary Assistance for Needy Families Regional Office and the Supplemental Nutrition Assistance Program



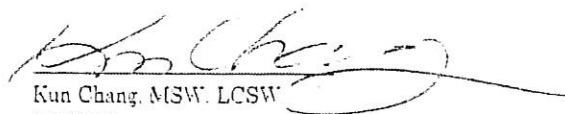
Mary Walsh
Director
Transitional Assistance Office, Framingham
Massachusetts Department of Transitional Assistance

Maria Deberandinis
Regional Director
Massachusetts Department of Transitional Assistance

Senior Community Service Employment Program, Operation A.B.L.E., Executive Office of Elder Affairs



Joan Cirillo
President & CEO
Operation A.B.L.E. of Greater Boston, Inc.



Kun Chang, MSW, LCSW
SCSEP Director
National Asian Pacific Center on Aging (NAPCA), Greater Boston Chinese Golden Age Center

June 22, 2017

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One-Stop Career Center Operator

To Be Determined

Title

Organization

One-Stop Career Center Operator

June 22, 2017

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KNOWLEDGE INNOVATION ECONOMY

PARTNERSHIPS FOR A SKILLED WORKFORCE
September 2015

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Metro Southwest . . . Technology Heartland of Massachusetts

Covering the area between Routes 128/I495, and serving 43 communities, Metro Southwest is one of the largest of the 16 workforce regions in Massachusetts.

The Metro Southwest (MSW) region contains communities that are defined by high-growth, high-paying knowledge and innovation industries, exceptional educational attainment and outstanding research and education institutions.

MSW is a college labor market in which jobs requiring post-secondary education dominate and college-educated residents thrive. Those without post-secondary education do not.

The Great Recession and the Recovery

MSW employment level exceeds employment at the beginning of the recession

MSW lost 3.3% of the jobs in the Great Recession, while job loss in the state as a whole was 4.0%.¹

MSW had the strongest growth among all state's regional labor markets, increasing 2.6% between the fourth quarters of 2009 and 2010.²

In the first quarter of 2008, there were 468,967 jobs in the region. In May 2014 employment was at 512,851.

Like the state as a whole, the recovery has spanned industries

EMPLOYMENT IN KEY METRO SOUTHWEST INDUSTRY SUPERSECTORS			
Industry	Q1/2008	Q2/2013	% Difference
Scientific Research & Development	9,837	12,129	23.3%
Computer Systems Design	19,425	23,809	22.6%
Health Care	45,708	52,814	15.5%
Professional & Technical Services	66,422	67,569	1.7%
Telecommunications	1,788	2,589	44.8%

Job vacancies rates rising

The job vacancy rate in Greater Boston was 3.4% at the end of 2007, declining by more than a percentage point at the end of 2009 and rising to near 3.0% as the economy recovered. Greater Boston has 45% of employment, but 55% of the vacancies across the state.³

As reported in the 2013 Greater Boston Job Vacancy Survey conducted by the Executive Office of Labor and Workforce Development, the vacancy rate for all occupations was 4.7%, with the highest rates reported for computer and mathematical occupations (6.8%), protective series (5.2%), building and grounds cleaning and maintenance (5.2%), personal care and service jobs (6.6%), and sales (5.8%).

The vacancy rate for all industries was 4.8%. Vacancy rates exceeded five percent in retail trade; real estate rental and leasing; management of companies; arts, entertainment and recreation; and accommodation and food services.

Labor force participation has increased over the past year

In June 2014 503,997 residents were either employed or actively looking for work. By June 2015 that number had increased to 516,503. This represents 14% of the Commonwealth's workforce.

Unemployment remains the lowest in the state, but almost 40% experience long periods of joblessness

The unemployment rate in MSW jumped to 6.5% during the recession, up from 3% in 2007—but it was the lowest among all workforce regions in the state.⁴

The MSW rate increased over the past year—from 5.2% in June 2012 to 5.8% in June 2013, still well below the state rate of 7.4%.

By June 2015 the unemployment rate for the region had fallen to four percent, below the Massachusetts rate of 4.9%

20,501 people who were looking for employment remained unemployed—12.1% of the states' unemployment.

In July 2013, 37.0% of the unemployed had been unemployed for 27 weeks or longer. The average weekly spell of unemployment was slightly over 36 weeks. The median was 15.7 weeks.⁵

The unemployed in MSW were older and more educated than the unemployed in the state as a whole

Almost one-third of the unemployed have a high school diploma or less, compared to one-half in the state. However, as a consequence of the highly educated workforce in MSW, 52.7% of the unemployed in MSW have a bachelor's degree or higher, substantially higher than the 27.7% statewide.⁶

Youth did not fare well in the recession and have not regained employment in the recovery

17.5% of the unemployed in MSW are ages 16 to 24, but they are only 9.5% of the workforce. However, youth unemployment in Metro Southwest is significantly below the state as a whole. 26.4% of the unemployed in the state are between the ages of 16 and 24.

Population

Without the influx of immigrants, the population in MSW would have declined over the past decade

At 1,038,784 residents, MSW accounted for 16.6% of the state's population at the end of 2010, behind the Southeast (21%) and Boston/Metro North (19.2%).⁷

After experiencing the second fastest population growth rate (0.4%) early in the decade, MSW was one of only three regions to experience a decline in population in recent years—0.1%.⁸

From 877,860 in 2000, the native born population fell to 859,444 in 2010, while the immigrant population grew by 2.7% to 179,340 in 2010.⁹

In the period 2000–2007, the growth of working-age immigrants was 3.6%, larger than in Massachusetts at 2.8% and in the United States at 3.2%. Immigration slowed in 2010 to 1.5%, less than in Massachusetts at 2.0% and in the United States at 2.3%.¹⁰

The region became more ethnically and racially diverse over the decade, with a 6.3% increase in the number of Hispanic residents and a 5.2% increase in Asian residents.¹¹

Income Sufficiency

MSW is a high-income region, but not all individuals share in the prosperity, and poverty rates have increased slightly even in the recovery

From 2009 to 2013, the median household income was \$82,090 in Middlesex County and \$84,916 in Norfolk County, well above \$66,866 in Massachusetts.¹²

For the same time period, per capita income in Norfolk County was \$44,692 and \$42,861 in Middlesex County compared to the state per capita income of \$35,763.¹³

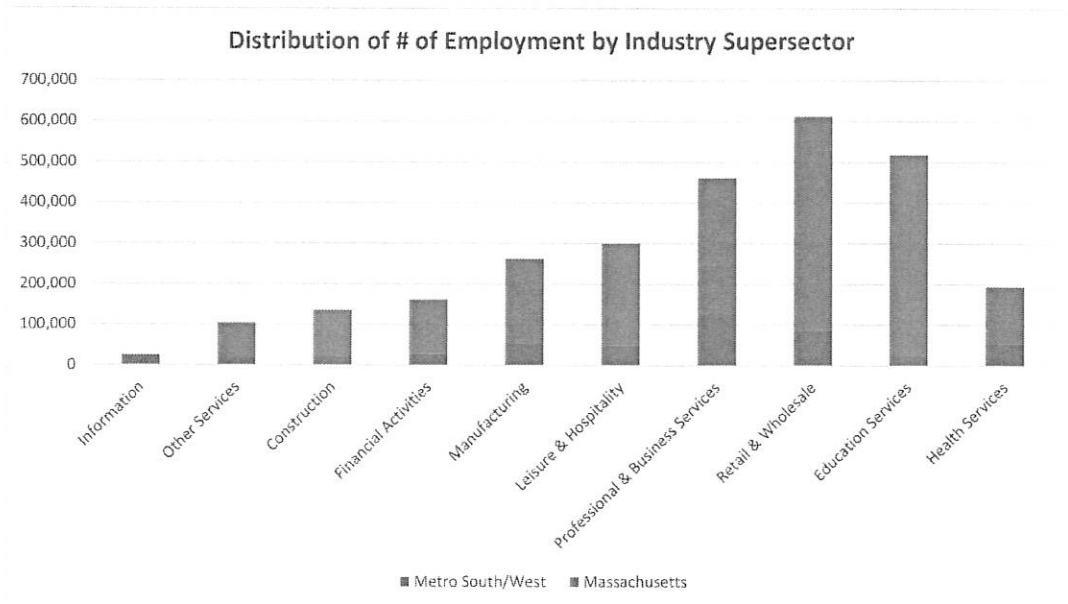
8.1% of the population in Middlesex County and 6.6% of the population in Norfolk County fell at or below the federal poverty level compared to 11.4% of the residents in the state.¹⁴ (The federal government defines poverty as \$15,510 for a family of two up to \$39,630 for a family of eight)

Youth poverty rates for 15 to 24 year olds in Metro Southwest range from 16.6% in Brookline, 11.5% in Waltham, 7.8% in Framingham to 0.7% in Dover. The poverty rate for all 43 cities and towns is 4.9%.

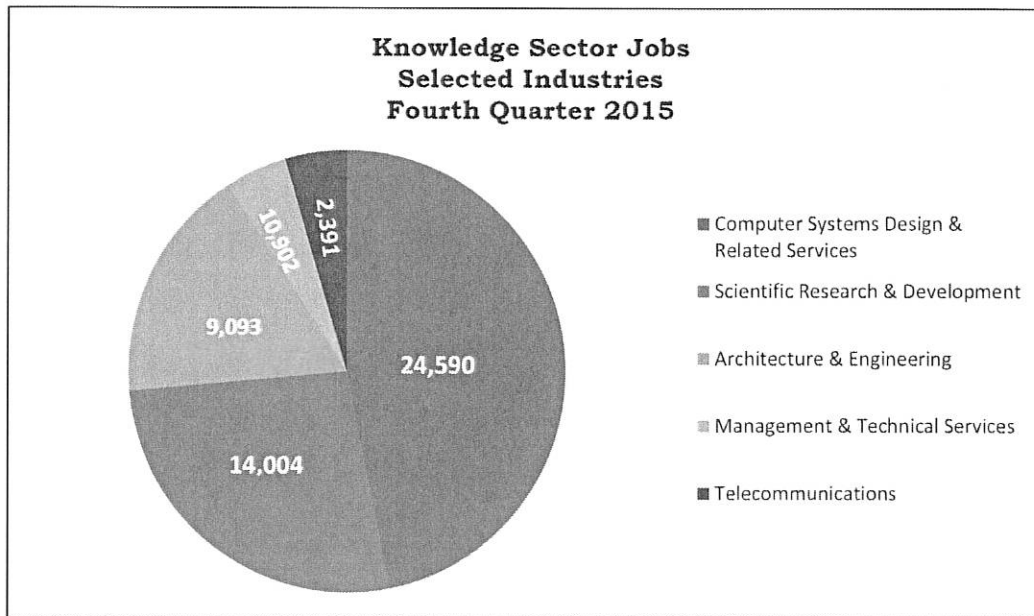
The MSW Labor Market: Demand

MSW has 17.52% of the state's employment—512,851 jobs

In the fourth quarter of 2014 professional and business services dominate the region with 26% (126,972) of the jobs in the region—one quarter of the professional and business services jobs in the state



Knowledge technology jobs dominate in Metro Southwest



Firms with 100 or more employees accounted for almost one-half of the jobs in MSW

The majority of companies (86.5%) had fewer than 20 employees, but they accounted for only 21.8% of employment.

The MSW Labor Market: Supply

MSW is a net importer of workers

MSW is a net importer of workers with 60,000 more employees commuting into the region for work than residents commuting out.¹⁵

Labor force growth slowed by 2010

Between 2000 and 2005, the labor force grew by 4.6%, compared to Massachusetts, 4.4% and the United States, 4.8%. By 2010 the growth rate of the MSW labor force slowed to 2.2%, less than that of Massachusetts, 3.0% and the United States, 3.2%.¹⁶

MSW has the oldest workforce in the Commonwealth

Slightly over 50% of the unemployed in MSW are 45 or older, compared to 36.6% in the state.¹⁷

Between 2000 and 2010, the number of 45–64 year olds in the workforce in MSW increased by 5.6%; 16–24 year olds increased by 1.8%. The prime working age group, 25–44 year olds, declined by 4.5%.¹⁸

Best educated workforce in the Commonwealth

80% of MSW workers had completed some post-secondary education by the end of the decade, compared to 70% in Massachusetts and 60% in the nation.¹⁹

Nearly 30% of MSW's workers had a master's degree or higher, almost double the share of workers in Massachusetts with a master's.²⁰

46.7% of the unemployed in MSW have a bachelor's or higher, compared to 22.8% in the state.²¹

The number of people in the labor force in the region without a high school diploma or GED fell by 2.0% to 29,248 in 2010.²²

Educational attainment falls sharply by age cohort. The largest potential shortfall is in associate's degrees; 12,600 people in MSW between 45 and 54 have an associate's degree. Fewer than 5,000 people between the ages of 25 and 34 have an associate's.²³

*The 128 loop encompasses 58 institutions of higher education—18 in Metro Southwest.*²⁴

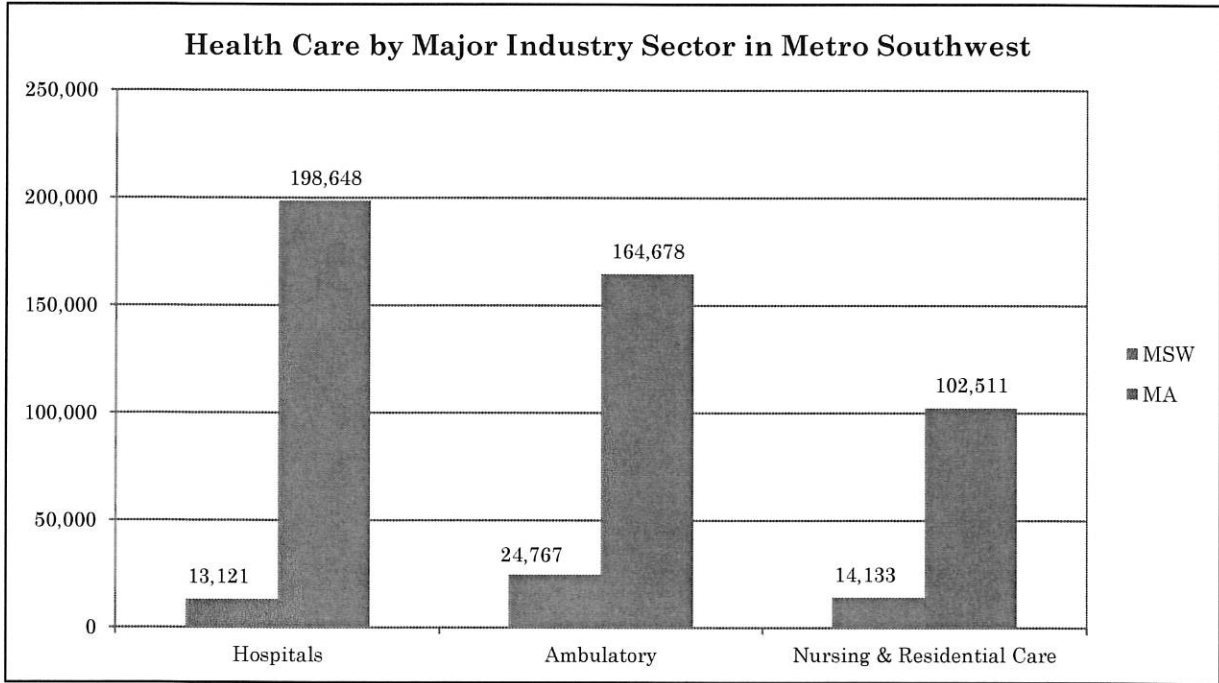
INSTITUTIONS OF HIGHER EDUCATION IN METRO SOUTHWEST	
Ashland	MassBay Community College Automotive Technology Center
Brookline	Boston Graduate School of Psychoanalysis Hellenic College and Holy Cross Greek Orthodox School of Theology New England Institute of Art Newbury College Pine Manor College
Canton	Massasoit Community College
Framingham	MassBay Community College
Marlborough	Quinsigamond Community College
Needham	Franklin W. Olin College of Engineering
Newton	Andover Newton Theological School Boston College Hebrew College Lasell College Mt. Ida College
Waltham	Bentley University Brandeis University
Wellesley	Babson College Massachusetts Bay Community College Wellesley College

MSW is home to 45 secondary school districts

In addition to the 40 “comprehensive” high schools, there are five regional career technical schools schools—Minuteman in Lexington, Tri-County in Franklin, Blue Hills in Canton, Joseph P. Keefe in Framingham and Assabet Valley Regional Technical High School in Marlborough

Health Care

In the second quarter of 2013, ambulatory care made up 48.9% of the 52,814 health care jobs in MSW



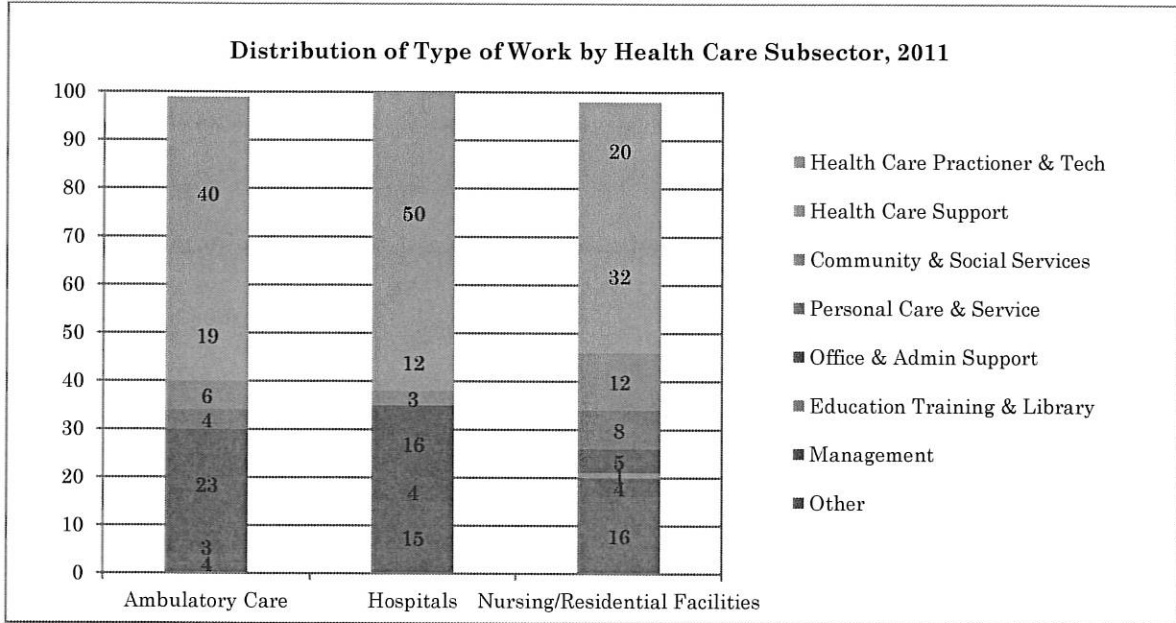
Hospitals include medical, surgical, psychiatric and substance abuse hospitals.

Ambulatory care includes doctor's and dentist's offices, medical and diagnostic labs and home health care.

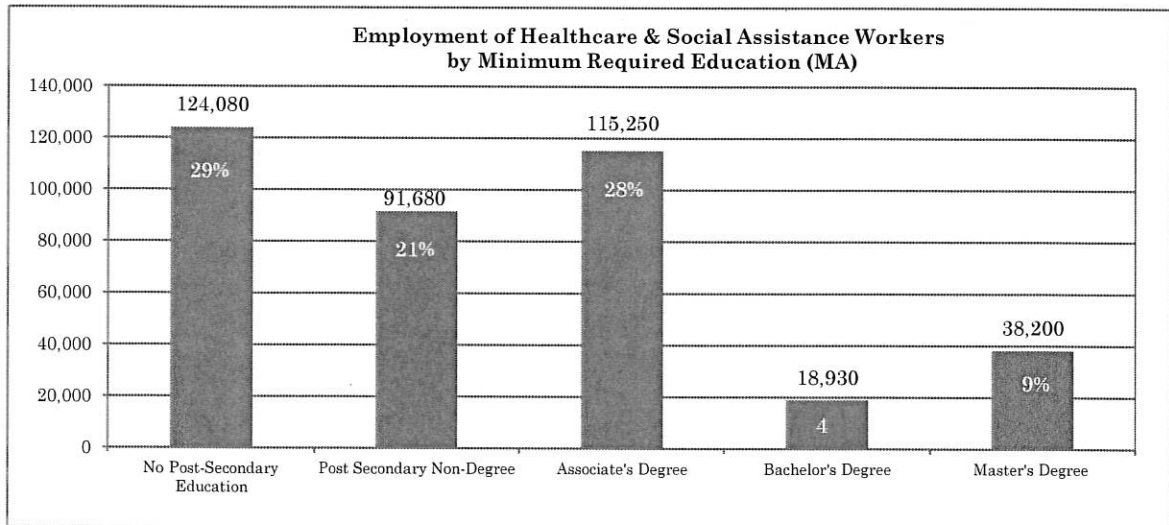
Nursing and residential care include nursing homes, residential mental health facilities, and community care facilities for the elderly.

Occupational distributions vary by health care subsectors

Health care practitioners and technicians make up 40% of the ambulatory care workforce compared to 50% of the hospital workforce and 20% of the nursing and residential care workforce. ²⁵



78% of the health care jobs do not require a bachelor's degree.²⁶



These percentages do not sum to 100 because the occupations requiring a Doctorate are omitted.

Health care jobs are a pathway to economic self-sufficiency

Salaries range from \$22,430 for jobs not requiring a post-secondary degree (pharmacy aide) to \$89,960 for jobs requiring a master’s degree (physician assistant).²⁷

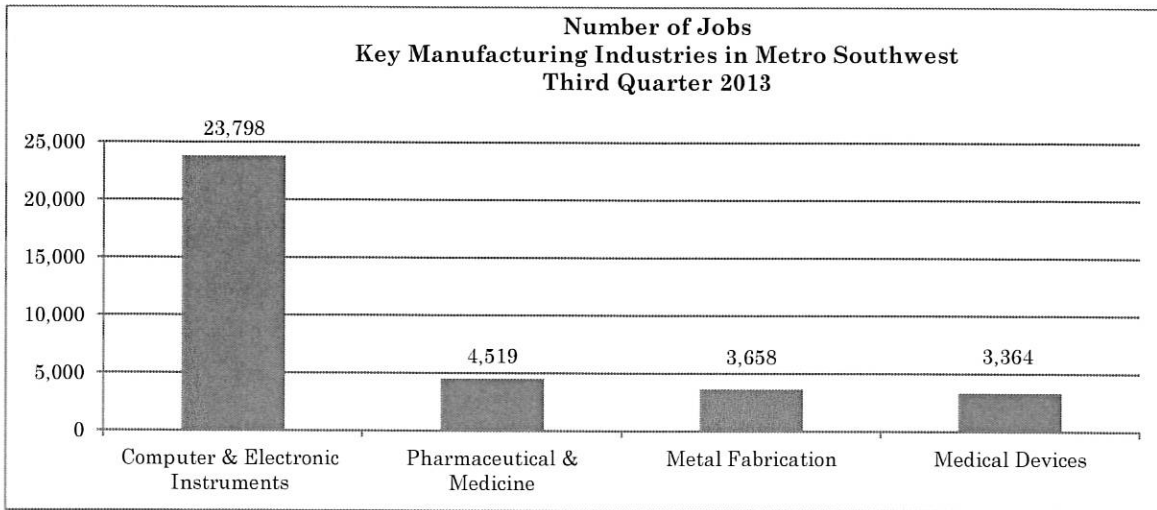
AVERAGE ANNUAL SALARIES BY EDUCATION	
Education Requirement	Salary Range
No post-secondary education requirement	\$22,430–\$47,480
Certificate required	\$28,480–\$47,480
Associate's degree	\$35,160–\$67,200
Bachelor's degree	\$37,710–\$86,450
Master's degree	\$35,940–\$89,960

Advanced Manufacturing

The majority of MSW manufacturing firms fit the definition of “advanced manufacturing”²⁸

ADVANCED MANUFACTURING
Innovate, turning raw materials into complex products
Compete with high standards, in design, production, delivery and product life cycle management
Pay well for a highly skilled workforce
Participate in a network of scientists, researchers, precision machinists, engineers, financiers, business developers and entrepreneurs
Believe that the network is the strength of innovation and problem solving

Three of the top manufacturing industries in MSW, computers, electronics and pharmaceuticals are classified as “high tech” by the Organization for Economic Cooperation and Development. (The classification is based on the products produced .)²⁹



Manufacturing accounts for almost one in ten jobs in MSW³⁰

MSW manufacturing firms employed 51,929 workers in the second quarter of 2013, down from 55,564 in the first quarter of 2008.³¹

67% of the almost 700 employers surveyed across the state in 2011 reported moderate or severe shortages in skilled production jobs (machinists, craft workers and technicians). Only 8% reported difficulty filling entry-level jobs, down from 43% in 2008.³²

MSW firms report difficulty in filling R&D engineer, chemist and other highly educated specialist jobs.³³

Eleven of the 25 largest medical device companies in the Commonwealth are located in MSW³⁴

LARGEST MEDICAL DEVICE COMPANIES IN MSW	
Thermo Fisher Scientific	Nova Biomedical Corporation
Boston Scientific	HartWare International
Alere, Inc.	Tegra Medical
PerkinElmer	Tanika Therapeutics, Inc.
Hologic, Inc.	TEI Biosciences, Inc.
Insulet Corporation	

Manufacturing firms in MSW hire a greater proportion of professional and technical workers than manufacturing firms in other regions of Massachusetts³⁵

OCCUPATIONAL PROFILE KEY METRO SOUTHWEST MANUFACTURING SECTORS MAY 2011				
Occupation	Pharmaceutical & Medicine	Computers & Electronic Instruments	Metal Fabrication	Medical Devices
Managers	19.0	13.3	7.0	7.8
Business & Financial Occupations	6.7	7.9	1.8	5.3
Computation & Mathematics	2.7	24.1		3.1
Engineers	10.4	20.7	2.9	15.0
Life, Physical & Social Scientists	27.9	0.5		
Sales		4.6		6.8
Office & Administrative Support	9.9	8.4	10.3	11.5
Installation, Maintenance & Repair	23.4	1.5	1.8	4.0
Production		16.0	70.7	41.0
Transportation & Material Moving			3.2	5.0
Miscellaneous		3.0	2.3	0.5
	100.0	100.0	100.0	100.0

Manufacturing workers in MSW are well paid

MEDIAN ANNUAL INCOME KEY METRO SOUTHWEST MANUFACTURING SECTORS MAY 2011			
Industry Sector	Managers	Engineers & Technicians	Production Workers
Pharmaceuticals & Medicine	\$116,301	\$52,572	\$30,625
Computer & Electronic Instruments	\$139,015	\$86,761	\$37,686
Metal Fabrication	\$102,241	N/A	\$30,073
Medical Devices	\$129,841	\$75,087	\$31,756

The majority of manufacturing workers in MSW are well educated

In 2010, 21.9% of MSW workers had some college or an associate’s degree. 52.9% had a bachelor’s or higher.³⁶

Information Technology

Four subsectors make up the Massachusetts IT industry³⁷

Massachusetts Information Technology Sectors & Subsectors

<p style="text-align: center;">IT Services</p> <p>Systems development & integration Computer support & maintenance Web Design & development Training Data hosting & processing, etc.</p>	<p style="text-align: center;">Software</p> <p>System software Middleware/ integration software Application software Custom computer programming</p>
<p style="text-align: center;">Hardware</p> <p>Semiconductors & equipment Computer peripherals & devices (including storage) Network hardware Communications equipment & devices (including mobile)</p>	<p style="text-align: center;">Network Communications</p> <p>Wireline Telephone Cable Wireless Internet service providers (ISPs) Related communications Infrastructure</p>

IT has moved from hardware development and production to IT services and software over the decade

In 2000, almost 40% of the jobs were in the hardware sector. By 2008 only 32% of the jobs were in hardware. 54.5% of the jobs are now in IT services and software, up from 45.6% in 2000.³⁸

21 of the 70 fastest growing companies ranked by revenue growth between 2009 and 2012 were in information technology firms. Five were in MSW.³⁹

5 FASTEST GROWING TECH FIRMS IN MSW
EchoStor Technologies
Emservop
Solidas Technical Solutions
Syrinx Consulting Corporation
NWN Corporation

Although reduced in size since 2000, IT is still a significant presence in the Commonwealth and in MSW

At its height in 2000, IT firms statewide employed over 240,000 people. In 2008, that number had shrunk to 178,322.⁴⁰

In the third quarter of 2012 there were 27,291 information jobs in MSW, slightly over five percent of all jobs in the region.

There is opportunity for workers with some post-secondary education, but not a bachelor’s degree—middle skills jobs

In 2011, there were 153,560 IT middle skills job openings statewide.⁴¹

IT MIDDLE SKILLS JOBS IN MASSACHUSETTS	
Computer Network & Database System Administrators	32,610
IT & User Support	24,732
Web–Internet–Digital Media	21,541
Data & Information Management	20,093

Demand for software developers for network/computer systems is expected to rise by 71.7% between 2010 and 2020.⁴²

SOFTWARE DEVELOPER GROWTH AREAS	
Java/j2EE/Java Developer	SAP
Mobile	SharePoint
NET	Web Developer
Software Developers	Network Engineers
Security	Networking Cloud 900

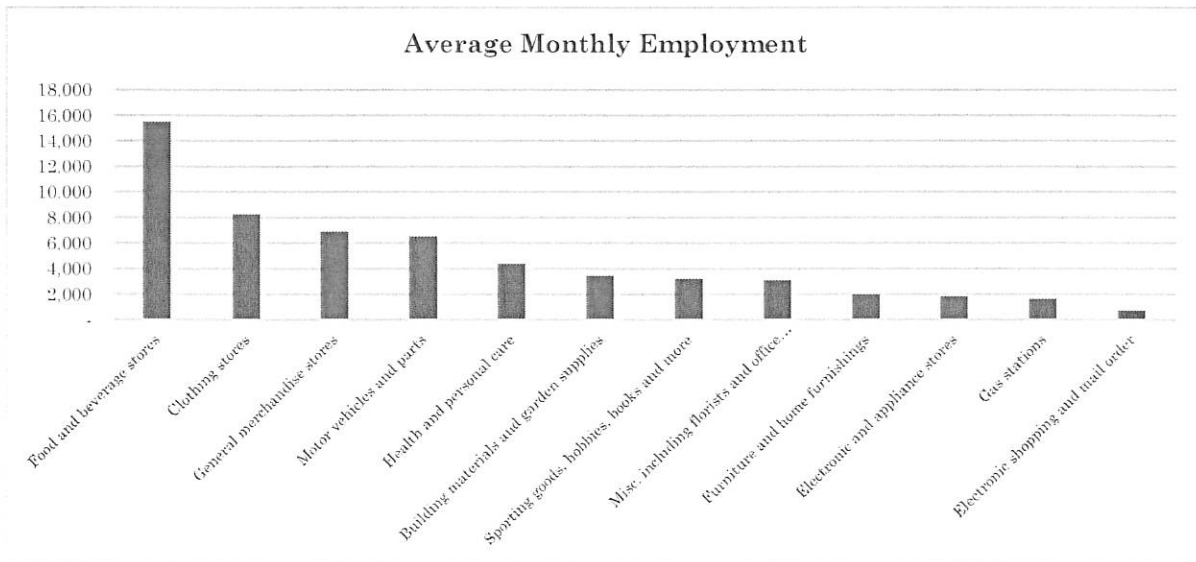
IT industry salaries are higher than salaries in other industries in Massachusetts⁴³

COMPUTER SYSTEMS DESIGN & RELATED SERVICES		
Occupation	IT Median Annual Wage	Other Industry Median Annual Wage
Management	\$130,760	\$92,880
Computer & Mathematical Occupations	\$78,320	\$75,080
Business & Financial Operations	\$73,050	\$61,700
Office & Administrative Support	\$36,230	\$31,250

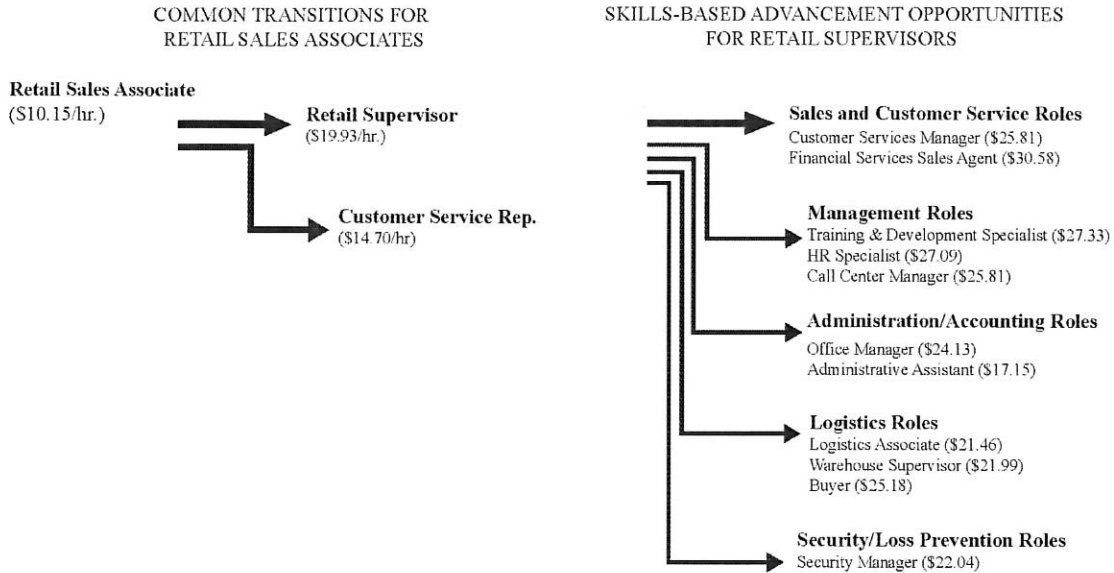
The median salary for software developers specializing in systems design was \$94,570 in 2011. Software application developers were not far behind at \$88,120, while computer systems analysts had a 2011 median salary of \$82,160.⁴⁴

Retail and Wholesale Trade

Trade is a significant presence in Metro Southwest with 86,039 jobs in the fourth quarter of 2014.



Although entry-level average weekly wages across retail sectors are low, most retail companies may offer career pathways for people with limited education and work experience.



Methodology: Transition pathways are based on the frequency of career transitions observed in millions of resumes and analysis of skill requirements in Burning Glass proprietary database of more than 100 million online job postings. Wage data reflect the mean advertised hourly wage.

Challenges Ahead

With a diverse industry base and a well-educated workforce the region is well positioned to thrive over the next decade. However, there are significant challenges facing policy makers, educators and workforce development organizations. Action must be taken to:

- Ensure that there are an adequate number of people in the workforce by supporting the growth of jobs that are attractive and accessible to people who left the workforce during the recession and maximize the potential of the immigrant population
- Create a job-driven education and training system that re-skills those who are currently unemployed and prepares the workforce of the future by strengthening working relationships between business, industry and education at all levels
- Dramatically expand opportunities for all young people to work and learn through co-op programs, internships and paid work

¹ Clifford, Robert. *Labor Market Trends in the Metro South/West Region*. Commonwealth Corporation and the New England Public Policy Center of the Federal Reserve Bank of Boston. Boston, MA. June 2012. p. 21.

² Clifford, 21.

³ Clifford, 39.

⁴ Clifford, 17.

⁵ EOLWD.

⁶ Clifford, 19

⁷ Clifford, 8.

⁸ Clifford, 8–9.

⁹ Clifford, 9.

¹⁰ Clifford, 10.

¹¹ Clifford, 9.

¹² US Census Bureau. Quick Facts. 2011.

¹³ US Census Bureau, Quick Facts. 2011.

¹⁴ US Census Bureau. Quick Facts. 2011.

¹⁵ Clifford, 20

¹⁶ Clifford, 11.

¹⁷ Clifford, 18.

¹⁸ Clifford, 9.

¹⁹ Clifford, 15.

²⁰ Clifford, 15.

²¹ Clifford, 15.

²² Clifford, 15.

²³ Clifford, 16.

²⁴ Wikipedia. List of colleges and universities in metropolitan Boston.

²⁵ Clifford, 33.

²⁶ Blakely and White, 26.

²⁷ Blakely and White, 27-31.

²⁸ Deloitte Consulting LLP. *Reexamining advanced manufacturing in a networked world: Prospects for a resurgence in New England*. The New England Council. December 2009.

²⁹ Thomas Hatzichronoglou, *Revision of the High-Technology Sector and Product Classification*. Paris: Organization for Economic Cooperation and Development.

³⁰ EOLWD.

³¹ EOLWD.

³² Bluestone, Barry, Anna Gartsman, Don Walsh, Russ Eckel, and James Huessy. *Staying Power II: A Report Card on Manufacturing in Massachusetts*. The Kitty and Michael Dukakis Center for Urban and Regional Policy, School of Public Policy and Urban Affairs, Northeastern University. Boston, MA. 2012.

³³ Beville, Sylvia, Kelley French. *Manufacturing in Metro Southwest*. Partnerships for a Skilled Workforce. Marlborough, MA. 2013.

³⁴ *Boston Business Journal*. August 16-22, 2013.

³⁵ Clifford, 33.

³⁶ Clifford, 28.

³⁷ Goodman.

³⁸ Goodman.

³⁹ Boston Business Journal. *Area's Fastest-Growing Private Companies*. April 26, 2013.

⁴⁰ Goodman.

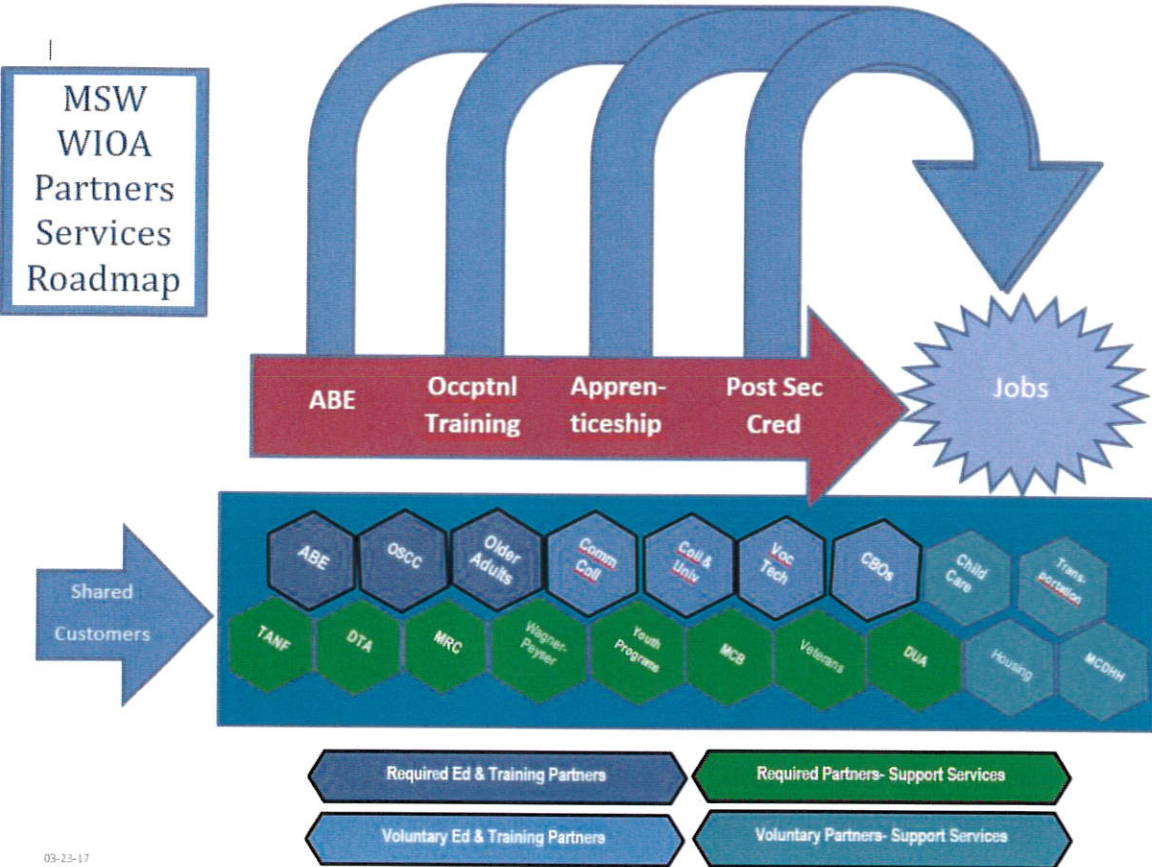
⁴¹ BATEC. *An Analysis of Information Technology Middle Skill Job Openings 2011*. Boston, MA. June 2012.

⁴² *Boston Business Journal*, August 2-8, 2013.

⁴³ *Boston Business Journal*, August 2-8, 2013.

⁴⁴ *Boston Business Journal*, August 2-8, 2013.

ATTACHMENT B. MSW WIOA Partner Services Roadmap



09-23-17

May 2, 2017

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ATTACHMENT C. MSW WIOA Partner Services

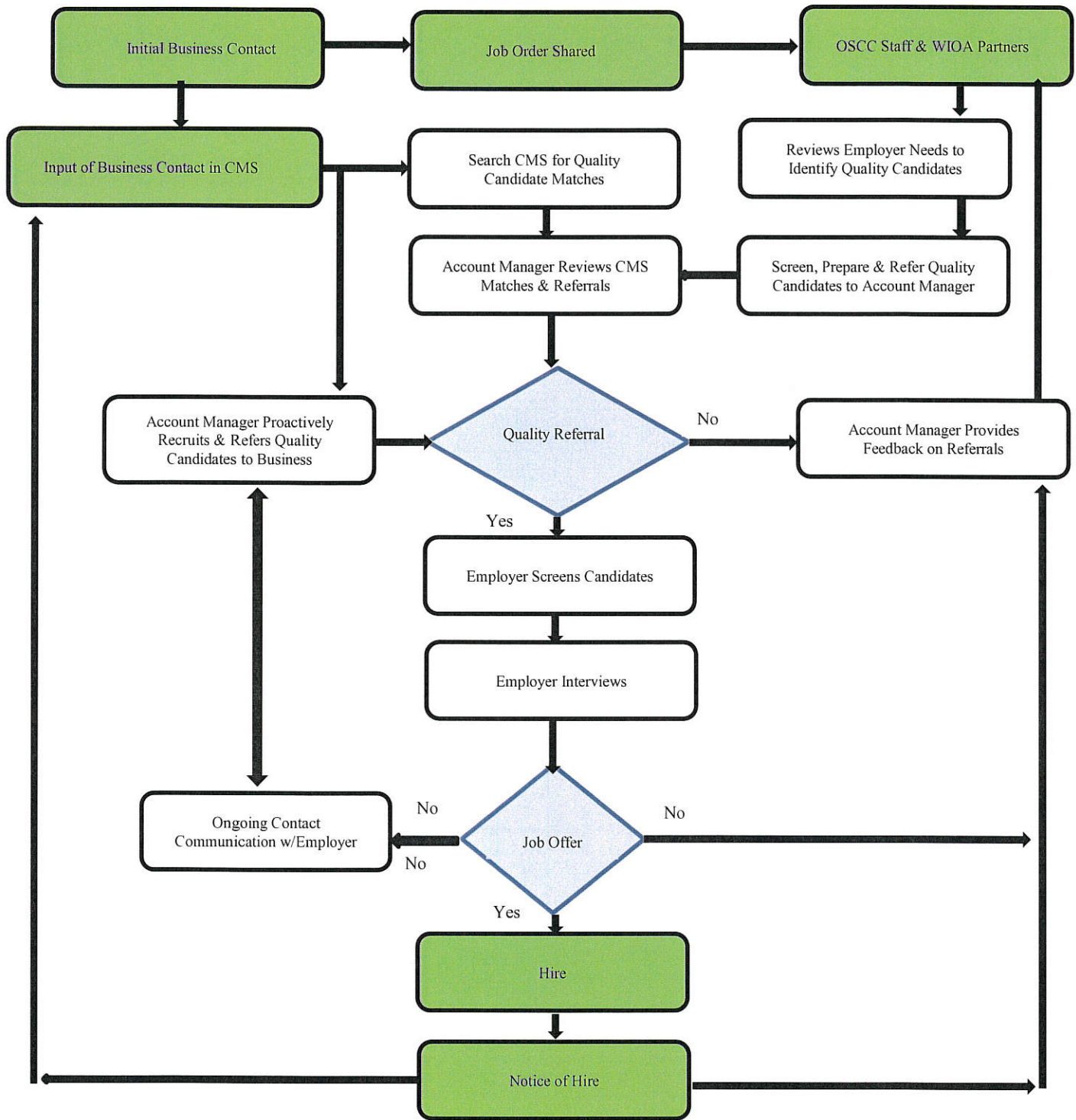
WIOA Partners Services																
	Adult Ed: Framingham Adult ESL	Hudson- Maynard Adult Learning Center	Assabet Valley Adult Education	Middlesex House of Correction	Norfolk House of Correction	Blue Hills Regional Adult Basic Education	Middlesex Community College	PSW WIOA Youth Program	Massachusetts Rehabilitation Commission (MRC) -Vocational Rehab	Massachusetts Department of Unemployment Assistance	Massachusetts Dept of Career Services / Career Centers*	Massachusetts Commission for the Blind	Senior Community Service Employment Program: Operation ABLE & Executive Office of Elder Affairs	Massachusetts Dept of Transitional Assistance: TANF; SNAP	Career- Technical Education; Perkins	
Job Readiness Services																
Career Planning/Counseling	YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES		YES	
Skills Assessment	YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	YES	
Labor Market Information								YES	YES		YES	YES	YES	YES	YES	
Contemporary Job Skills Information									YES		YES	YES	YES	YES		
Medical and Healthcare Office Training											YES		YES	YES	YES	
QuickBooks and Administrative Skills Course											YES		YES		YES	
Out of Area Job Search and Relo Assistance											YES	YES				
Vocational Counseling								YES	YES		YES	YES	YES	YES		
Resume Development Workshops and Training	YES	YES	YES	YES	YES	YES	YES	YES	YES		YES	YES	YES	YES	YES	
Job Exploration	YES	YES	YES	YES	YES	YES	YES		YES		YES					
Job Placement Services																
Job Search and Placement Assistance								YES	YES		YES	YES	YES	YES	YES	
Job Placement Follow up								YES	YES		YES	YES	YES	YES	YES	
Job Coaching	YES	YES	YES					YES	YES		YES	YES	YES		YES	
Vehicle Modifications									YES		YES			YES	YES	
Assistive or Rehabilitative Technology									YES			YES				
On the Job Training								YES	YES		YES	YES	YES	YES	YES	
Worksite Modifications												YES				
Childcare Assistance														YES		
Internships								YES	YES		YES	YES	YES	YES	YES	
Other Services																
Adult Basic Education Classes	YES	YES	YES	YES	YES	YES	YES								YES	YES
ESL Classes	YES	YES	YES	YES	YES	YES									YES	YES
Employer Outreach and Recruitment								YES	YES		YES	YES	YES	YES		
Citizenship Preparation	YES	YES	YES													
Unemployment Claim Information										YES	YES					
Computer Workshops	YES	YES	YES	YES	YES	YES	YES				YES		YES		YES	YES
Aptitude Testing and Diagnostic Evaluations									YES		YES	YES	YES	YES	YES	YES
Orientation and Mobility Training												YES				
Vision Rehabilitations Therapy (Rehabilitation Teaching)												YES				
College Counseling	YES	YES	YES	YES	YES	YES	YES	YES			YES					YES
Database	Access (in house) and DESE SMARTT	Access (in house) and DESE SMARTT	DESE SMARTT	DESE SMARTT	DESE SMARTT	DESE SMARTT	DESE SMARTT	MOSES	MRCIS (internal)		MOSES	Libera System 7 Case Management System; FY2017 Transition to Alliance's Aware Case Management System	SCSEP Performance and Results; Fundraising Access (proprietary); Client Access (proprietary)	BECON		
Funding Sources	DESE, Local CDBG Grant, Career Pathways, JFS, Business partnerships	DESE, Local CDBG Grant, Career Pathways, JFS, Business partnerships		ACLS	ACLS	ACLS	ACLS, Matching Funds from the College	WIOA, CA State, YW State	Federal 80%, State 20%			Federal 80%, State 20%	Trade Assistance Act, SNAP E & T, Veterans CDBG, NEG, NJT, & more			

*Program Details: Title I Adult & Dislocated Workers; Wagner-Peyser, Jobs for Veterans; Ex-Offender Program; Trade Adjustment Assistance

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ATTACHMENT D. MSW WIOA Partner Business Services

WIOA Partners Business Services Team
 The Business Services Team is OSCC & WIOA Partner Staff.



Contact Management System [CMS] is database for Business & Job Seeker Profiles
 Account Manager is the primary contact with a specific Business
 Green = Information added to CMS by all Partners
 Blue = Communication Points to Referring Partners

May 2, 2017

ATTACHMENT E. MSW WIOA Assurances

PSW and the Partners listed in this agreement agree to:

- Participate in the work of PSW through membership on the local board if appointed by the General Manager of the Town of Norwood
- Participate in committees and projects when time is available
- Participate in the selection of the one-stop operator following PSW guidelines and processes every four years
- Participate in the operation of the one-stop delivery system consistent with the terms of this MOU, the requirements of WIOA, and the requirements of Federal laws authorizing the programs and activities
- Participate in the implementation of the business model described in the Metro Southwest Career Center Business Model section of this MOU by:
 - Defining “shared” customers to create a clear understanding of how multiple providers, services and resources should support youth, job seekers, and businesses
 - Redesigning the customer flow and service practices across partner agencies to ensure accessibility and availability of services to “shared” customers
 - Utilizing technology tools to scale-up practices and support individuals with barriers to employment, including basic skills assessment, remediation, and career development tools
 - Tracking and evaluating outcomes for individuals who face barriers to employment
- Use a portion of the funds available for programs and activities to maintain the one-stop delivery system, including infrastructure and shared costs of one-stop centers using a method agreed to by PSW, the General Manager of the Town of Norwood, and the Partners

May 2, 2017

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SECTION IV: PARTICIPANT SUMMARIES AND PERFORMANCE INDICATORS

CAREER CENTER PARTICIPANT AND OUTCOME SUMMARIES

PROFILE OF CAREER CENTER CUSTOMERS

A profile of customers served at the One-Stop Career Centers in the workforce area during Fiscal Year 2017 (July 1, 2016 – June 30, 2017). Profiles and outcomes data are provided for customers who received services at the One-Stop Career Centers under the WIOA Title I Adult, Dislocated Worker and Youth Programs and the Trade Adjustment and Assistance Program.

WIOA TITLE I ADULT PARTICIPANTS SUMMARY

The Adult program provides job search assistance and training opportunities to unemployed and other job seekers, with priority to public assistance recipients, low-income individuals, and those that are basic skills deficient and others who face barriers to employment.

WIOA TITLE I DISLOCATED WORKER PARTICIPANTS SUMMARY

The Dislocated Worker program provides job search assistance and training opportunities to individuals experiencing job dislocation resulting from a layoff or business closing or who have exhausted Unemployment Insurance, to help them return quickly to the labor force.

WIOA TITLE I YOUTH PARTICIPANTS SUMMARY

The Youth program provided employment and training activities to provide youth assistance in achieving careers and academic and employment success and provides opportunity for training and supportive services.

WIOA TRADE ADJUSTMENT ASSISTANCE

The Trade Adjustment Assistance (TAA) program assists workers impacted by foreign Trade providing training, employment and case management services, job search and relocation allowances, wage supplements for those 50 or older, and Trade Readjustment Allowances (TRA).

WIOA PRIMARY INDICATORS OF PERFORMANCE

The Primary Indicators of Performance for the WIOA Title I Programs, WIOA Title III, Wagner Peyser and WIOA Title II, Adult Education will be used to measure and evaluate performance for the local area. These are federal performance indicators negotiated with the U.S. Department of Labor and the U.S. Department of Education.

ADDITIONAL PERFORMANCE DATA

Career Center Performance Reports are located at: <http://www.mass.gov/massworkforce/ccpr/>

**PROFILE OF CAREER CENTER CUSTOMERS
METRO SOUTH WEST WORKFORCE DEVELOPMENT AREA
FISCAL YEAR 2017**

Total Individuals Served	11,291	
Gender		
Male	6,100	54%
Female	5,191	46%
Ethnicity		
White	8,684	77%
Black or African American	946	8%
Hispanic or Latino	850	8%
American Indian or Alaskan Native	93	1%
Asian	751	7%
Hawaiian Native or Other Pacific Islander	18	0%
Other	1,027	9%
Age		
18 or under	117	1%
19-21	185	2%
22-45	4,242	38%
46-54	2,948	26%
55+	3,799	34%
Education		
Less than High School	355	3%
High School Diploma or Equivalent	1,843	16%
Some College/Vocational Degree	1,441	13%
Associate Degree	946	8%
Bachelors Degree	3,955	35%
Advanced Degree	2,560	23%
Self-Identified Persons With Disabilities	533	5%
Unemployment Insurance Claimants	10,013	89%
Veterans	550	5%
Employers Served	971	
Employers Listing Job Orders	343	35%
Employers Receiving Referrals	369	38%
Employers Who Hired a Job Seeker Referral	52	5%

METRO SOUTH WEST WORKFORCE DEVELOPMENT AREA - FY 2017 - 3RD QUARTER ENDING MARCH 2017

TITLE I YOUTH PARTICIPANT SUMMARY

	In-School	Out-of-School	Total Youth
Participant Characteristics (%)			
Total	51	42	93
Age 14-18	94%	19%	60%
Age 19-21	6%	48%	25%
Age 22-21	0%	33%	15%
Female	63%	52%	58%
Disabled	76%	36%	57%
HS Student	96%	0%	53%
HS Dropout	0%	26%	12%
Limited English	4%	0%	2%
Math or Reading Level <9.0	4%	19%	11%
Offender	0%	2%	1%
Welfare	12%	14%	13%
Foster Child	0%	0%	0%
Homeless/Runaway	4%	2%	3%
Pregnant/Parenting	10%	24%	16%
Requires Additional Assistance	8%	19%	13%
Enrollments By Activity			
Educ., Trng, & Tutoring	27	14	41
ABE/GED or Alternative	27	17	44
Financial Literacy	10	7	17
Summer Employment Opportunity	28	19	47
Work Experience/OJT	33	20	53
Occupational Skills Trng	3	15	18
Leadership Dev/Community Services	12	2	14
Mentoring	36	25	61
Guidance/Comprehensive Counseling	48	17	65
Other (non program)	0	0	0
Exit and Outcome Summary			
Total Exits YTD	19	26	45
Entered Employments YTD	7	21	28
Entered Post-HS Training YTD	8	2	10
Placed in Employment/Education Rate	79%	88%	84%
Average Wage	\$10.96	\$12.25	\$11.93
Degree/Certification	18	16	34

Note: Data on entered employments and wages obtained from the participants.

Source: DCS, CCPR <http://www.mass.gov/massworkforce/ccpr/fy-2017/>

METRO SOUTH WEST WORKFORCE DEVELOPMENT AREA - FY 2017 - 3RD QUARTER ENDING MARCH 2017

TITLE I ADULT AND DISLOCATED WORKER, AND TRADE PARTICIPANT SUMMARIES

	Title I Adult	Title I Dislocated Worker	Trade Adjustment Assistance
Participant Characteristics (%)			
Total Participants YTD	78	376	184
Female	74%	52%	48%
Age 55 or Over	15%	41%	42%
Less than High School	3%	1%	3%
Limited English	1%	0%	3%
Math or Reading Level <9.0	6%	2%	0%
Disabled	6%	3%	0%
Cash Welfare	18%	na	na
UI Claimant	na	83%	82%
Offender	0%	0%	0%
Veteran	4%	5%	3%
Single Parent	51%	14%	12%
Low Income	100%	na	6%
Enrollments By Activity			
Total Program Participants YTD	78	376	33
New Program Enrollments	43	191	24
New Training Enrollments	36	104	18
New & Carry-in Training Enrollments	48	201	26
ABE/GED or Equivalent	0	1	1
ESL	0	1	1
Occupational Skills Training	51	201	26
OJT	3	11	0
Other.	0	10	0
Exit and Outcome Summary			
Total Exits YTD	26	184	14
Entered Employments YTD	18	156	12
Entered Employment Rate at Exit	75%	87%	54%
Average Pre-Wage	na	na	\$41.01
Average (Post) Wage	\$18.42	\$33.47	\$38.90
Wage Retention Rate (post/pre-wage)	na	na	95%
Degree/Certification	14	72	na

Note: Data on entered employments and wages obtained from the participants.

Source: DCS, CCPR <http://www.mass.gov/massworkforce/ccpr/fy-2017/>

METRO SOUTH/WEST WORKFORCE DEVELOPMENT AREA		
PRIMARY INDICATORS OF PERFORMANCE	FISCAL YEAR 2017 7/1/16 -6/30/17	FISCAL YEAR 2018 7/1/17 – 6/30/18
WIOA TITLE I ADULT		
Employed 2 nd Quarter After Exit	83%	86%
Employed 4 th Quarter After Exit	75%	77%
Median Earnings at 2 nd Quarter After Exit	\$4900	\$5200
Credential Attainment Rate	Baseline Indicator	
Measureable Skill Gains	Baseline Indicator	
Effectiveness in Serving Employers	Baseline Indicator	
WIOA TITLE 1 DISLOCATED WORKER		
Employed 2 nd Quarter After Exit	84%	86%
Employed 4 th Quarter After Exit	83%	85%
Median Earnings at 2 nd Quarter After Exit	\$7500	\$7600
Credential Attainment Rate	Baseline Indicator	
Measureable Skill Gains	Baseline Indicator	
Effectiveness in Serving Employers	Baseline Indicator	
WIOA TITLE 1 YOUTH		
Employed 2 nd Quarter After Exit	80%	80.5%
Employed 4 th Quarter After Exit	72%	73%
Median Earnings at 2 nd Quarter After Exit		
Credential Attainment Rate	Baseline Indicator	
Measureable Skill Gains	Baseline Indicator	
Effectiveness in Serving Employers	Baseline Indicator	
WIOA TITLE III WAGNER-PEYSER		
Employed 2 nd Quarter After Exit	60.0%	64.0%
Employed 4 th Quarter After Exit	60.0%	62.0%
Median Earnings at 2 nd Quarter After Exit	\$5,100.00	\$5,500.00
WIOA TITLE II ADULT EDUCATION		
Measureable Skill Gains	41.0%	42.0%

Goal Setting:

- State level performance goals for Title I and Wagner-Peyser programs were negotiated by the Department of Career Services, Executive Office of Labor and Workforce Development (DCS/EOLWD) with the U.S. Department of Labor, Employment and Training Administration. (DOL/ETA).
- DCS/EOLWD negotiated performance goals for Title I with each local Workforce Development Board. Local Boards adopt the State Wagner-Peyser goals.
- Adult and Community Learning Services, Massachusetts Department of Elementary and Secondary Education (ACLS/DESE) negotiated for Measureable Skill Gains only with the U.S. Department of Education, Office of Career, Technical, and Adult Education (ED/OCTAE). Each provider's final performance will be assessed against the State goals based on individual local factors.
- A Baseline Indicator is one for which States did not propose goals. Data will be collected during FY17 and FY18 that will be used for goal setting beginning in FY19.