

# Regional Planning

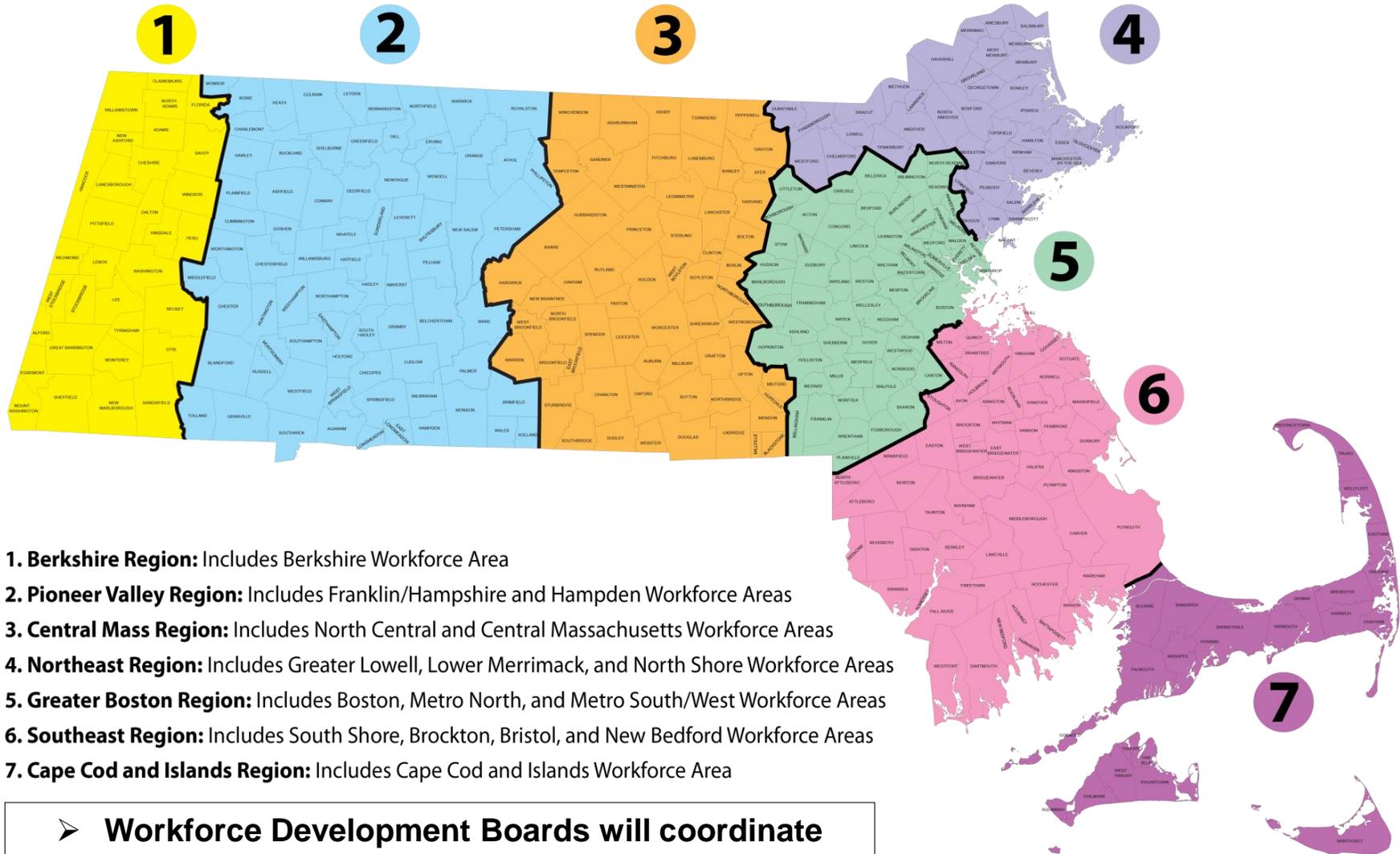
Massachusetts Workforce Skills Cabinet 2017



strategy matters



# What are we asking you to do?

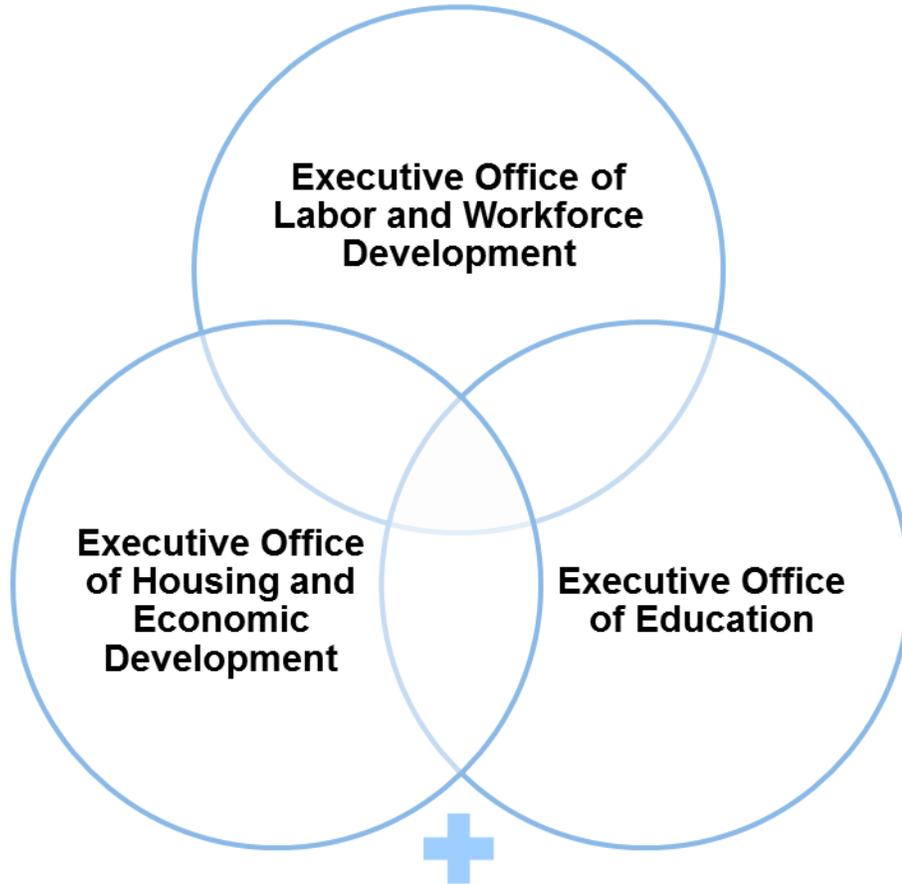


- 1. **Berkshire Region:** Includes Berkshire Workforce Area
- 2. **Pioneer Valley Region:** Includes Franklin/Hampshire and Hampden Workforce Areas
- 3. **Central Mass Region:** Includes North Central and Central Massachusetts Workforce Areas
- 4. **Northeast Region:** Includes Greater Lowell, Lower 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

➤ **Workforce Development Boards will coordinate Regional Planning Teams in 7 Regions**

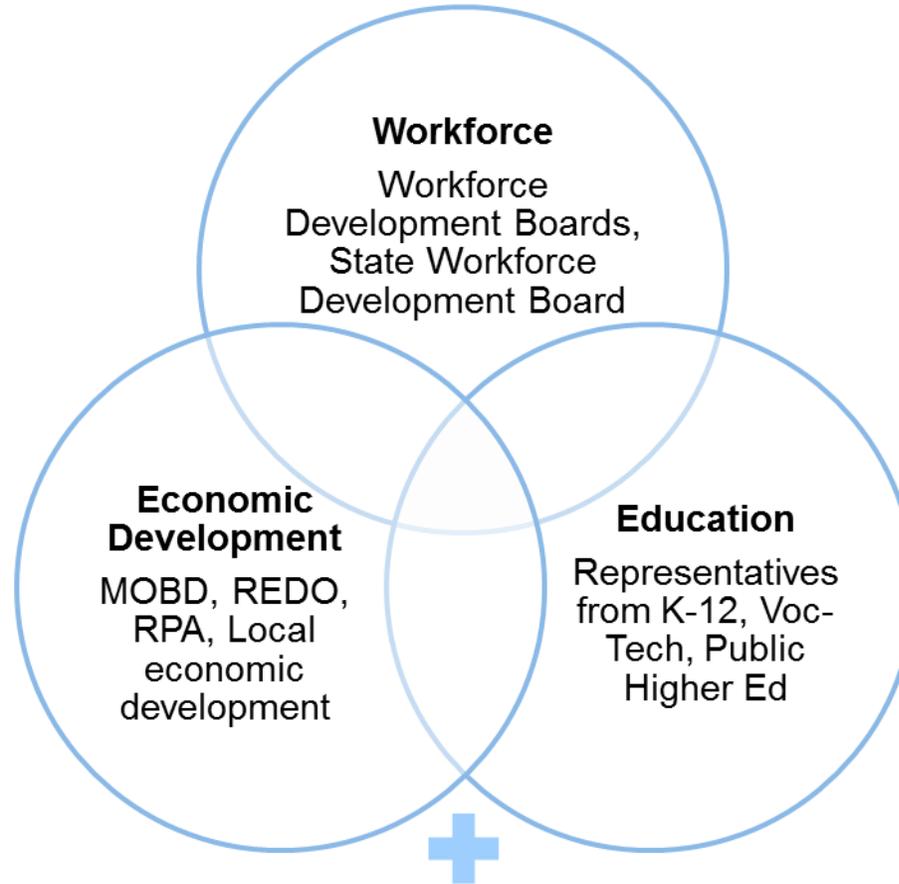
# New State-Regional Structure

## Workforce Skills Cabinet



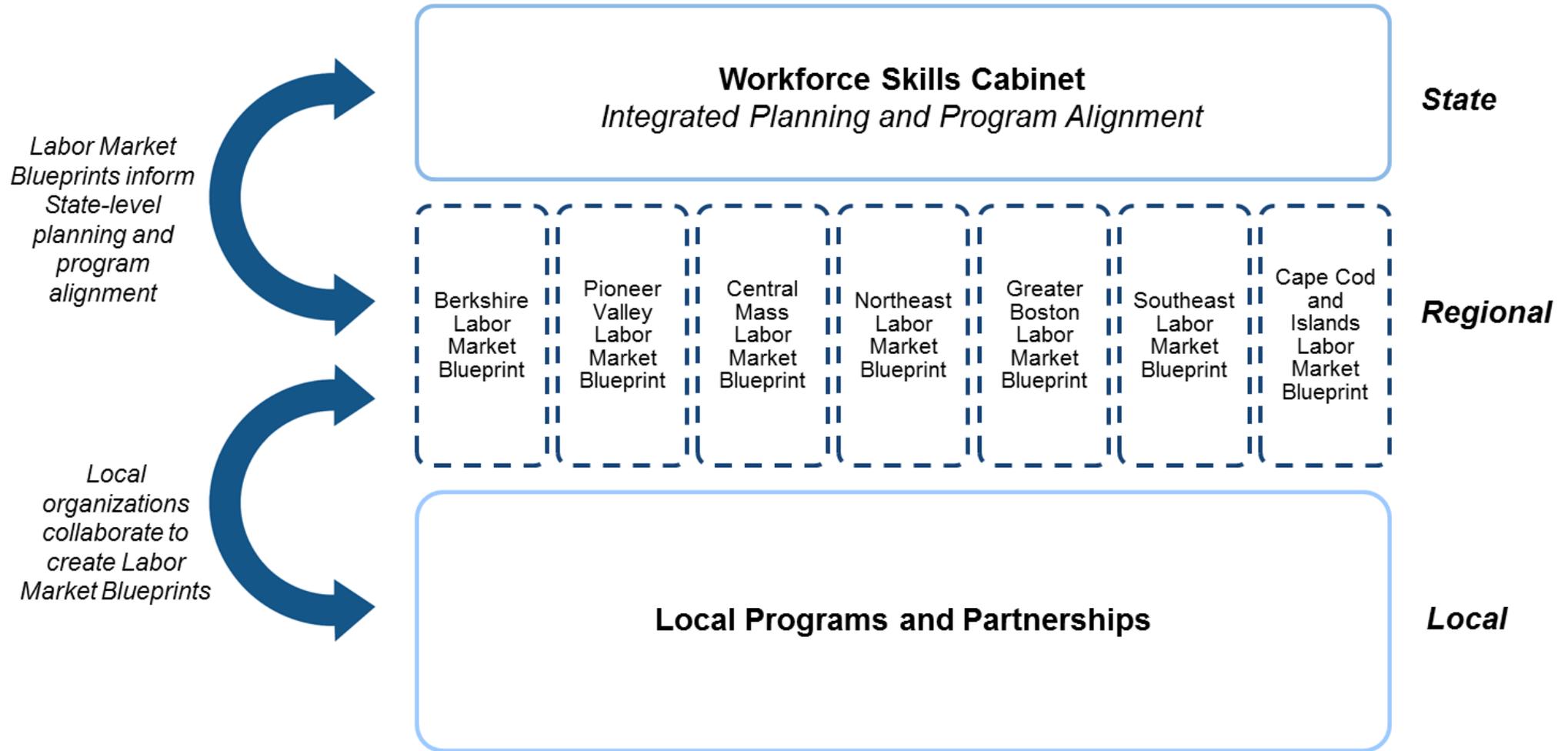
----- State-Level Stakeholder Engagement-----

## Regional Planning Team



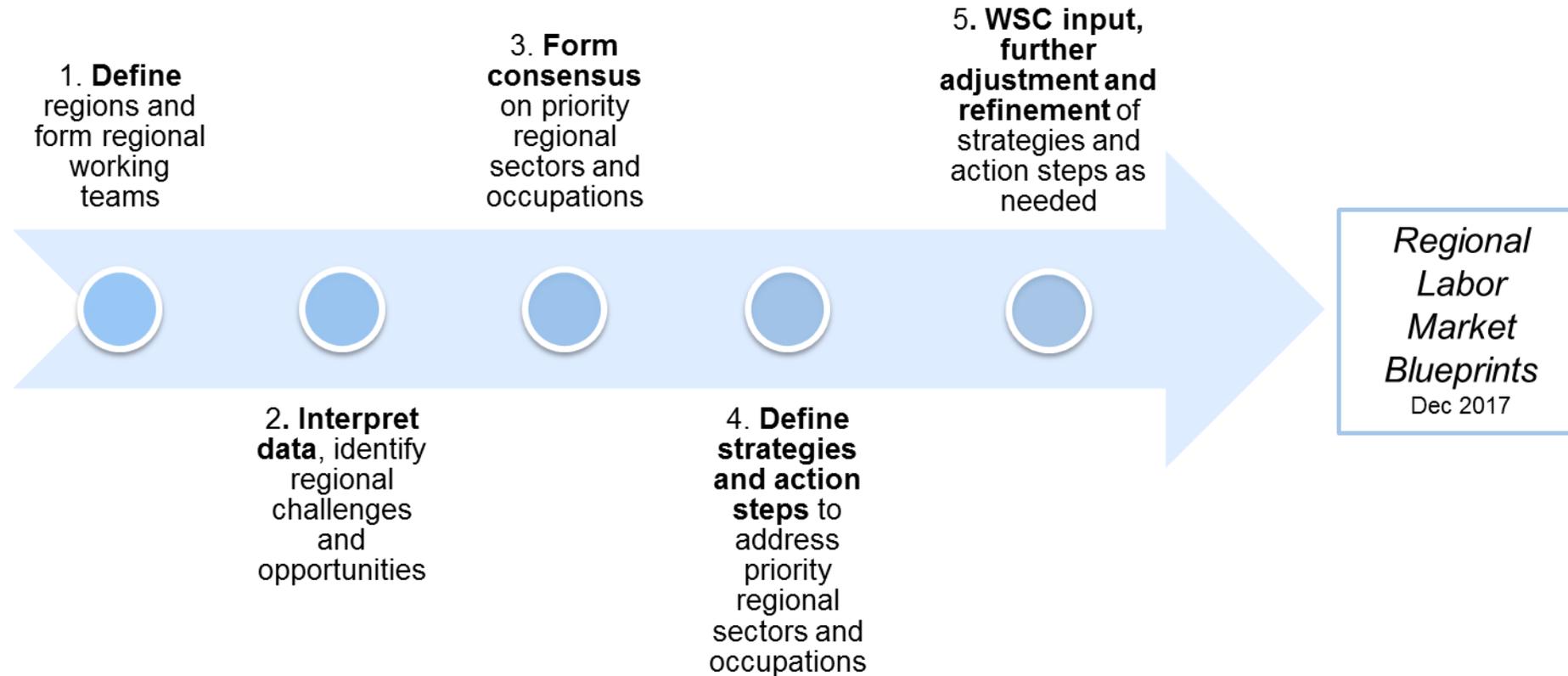
----- Regional Stakeholder Engagement-----

# Why is this important?



# What are we asking you to do?

## *The Path to Regional Labor Market Blueprints: Core Regional Working Groups*



# Blueprint Components

## ANALYSIS\*

- ✓ Regional Industry Trends in Employment
- ✓ Demand Trends for Occupations (Across Industries)
  - Weighted Demand
  - Current Openings (HWOL)
  - Short/Long Term Projects
  - Star Ranked Occupations
- ✓ “Talent” Gap
  - Available workforce for priority occupations (UI claimants, graduates of Voc Tech, certificates, degrees)
  - Which occupations show the biggest gaps?
- ✓ Career Pathway Opportunities

## STRATEGIES

- ✓ Priority Industries/Occupations:
  - Consensus from Team on top 3-5 occupational pathways that need more workforce capacity
  - Asset map of existing credential pathways
- ✓ Concrete Strategies to Grow Talent Pipeline:
  - Increases “seat” capacity or graduates
  - Increase retention of existing graduates in region
  - Better matching of existing workers with jobs
  - Recruit workers from other areas
- ✓ Measures/ Shared Accountability for Regional Priority Pipelines

\*All data sources, analysis and initial occupational ranking tables are available through the data tool. The initial PPT packages for the region were organized into data “chapters” based on the needed analysis (e.g. industry profile, weighted demand, star ranking, career pathways etc.)

# Goals for **today** and for our **process**:

## **PROCESS**

- Build shared understanding of anticipated changes and challenges in the region's ability to meet labor market needs
- Create shared understanding of the outcomes each region wants to achieve in relation to priority sectors and occupations
- Identify existing assets and regional collaborations to be leveraged
- Identify role and understand strengths/capacity of each regional planning group sector to achieve outcomes
- Develop consensus around a clear strategy and work plan to achieve agreed-upon regional outcomes

## **TODAY**

- Introduce new Regional Team
- Build shared understanding of the planning region's employer demand through industry and occupation lens
- Begin to build consensus around criteria that determine priority sectors and occupations
- Begin to build consensus around priority sectors and occupations
- Identify next steps for the Regional Team

# How did we get here?

Fill in the timeline with events in each category (10 minutes)

After the timeline is made, read it.

Join your # group and then together answer these questions:

What is the story here?

How did we get to the place we're in now?

# Greater Boston Region Data Package

Massachusetts Regional Planning Initiative 2017



strategy matters



# LMI Overview

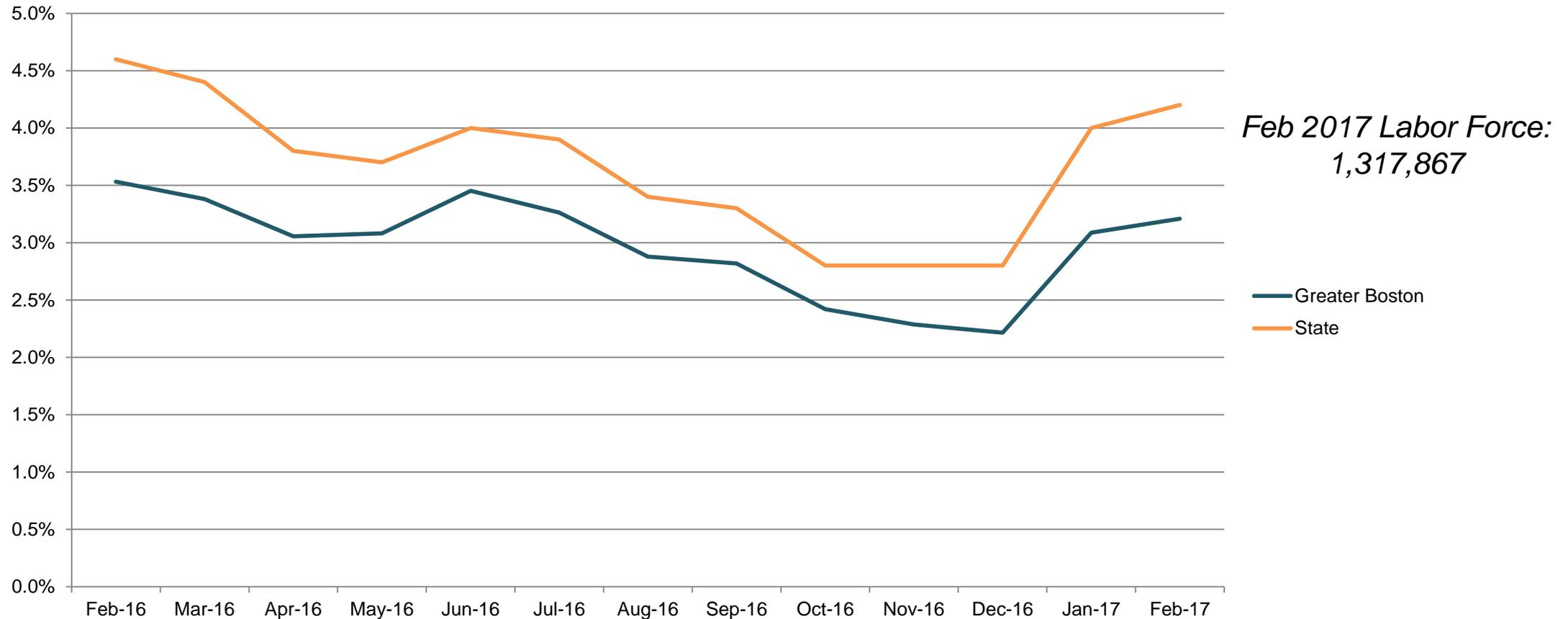
- Employers in our region have difficulty filling available openings.
- This **team** – representing education, workforce development, and economic development – is asked to identify skill gaps in priority sectors and occupations in your region and prioritize solutions to these skill gap problems.
- We need to understand how occupations and industries stack up against each other given different sets of **criteria**. For example:
  - Which jobs are plentiful, and make up a large share of an industry or employer base?
  - Which jobs pay well, and have a low barrier to entry?
  - Where do employers have a hard time finding skilled workers?
  - Which jobs are critical to an emerging industry in our region?
  - Which jobs are part of a career pathway, allowing workers to graduate from a lower-skill, lower-pay job to a higher-skill, higher-pay job?
- This initial data package and forthcoming data tool demonstrate different sets of criteria to frame your team's conversations around priority sectors and occupations. Remember, this data is a starting point -- we expect that you will start here, and complement and verify this with on the ground information and stakeholder feedback.

# LMI Overview - Continued

- **Contextual data** will give us background on birds-eye view employment in our region.
- **Industry data** will show us what **employers** in the region look like.
- **Occupation data** shows us what **jobs** people in our region do. People often perform the same jobs at different types of employers and in different industries.
- This data will be organized across several different criteria and begin to guide your consensus and decision-making process.
- The data package will focus on demand data today. The slides will move through a thinking process on how to layer in criteria to see priorities within your region.

# Labor Market Overview: Unemployment Rate

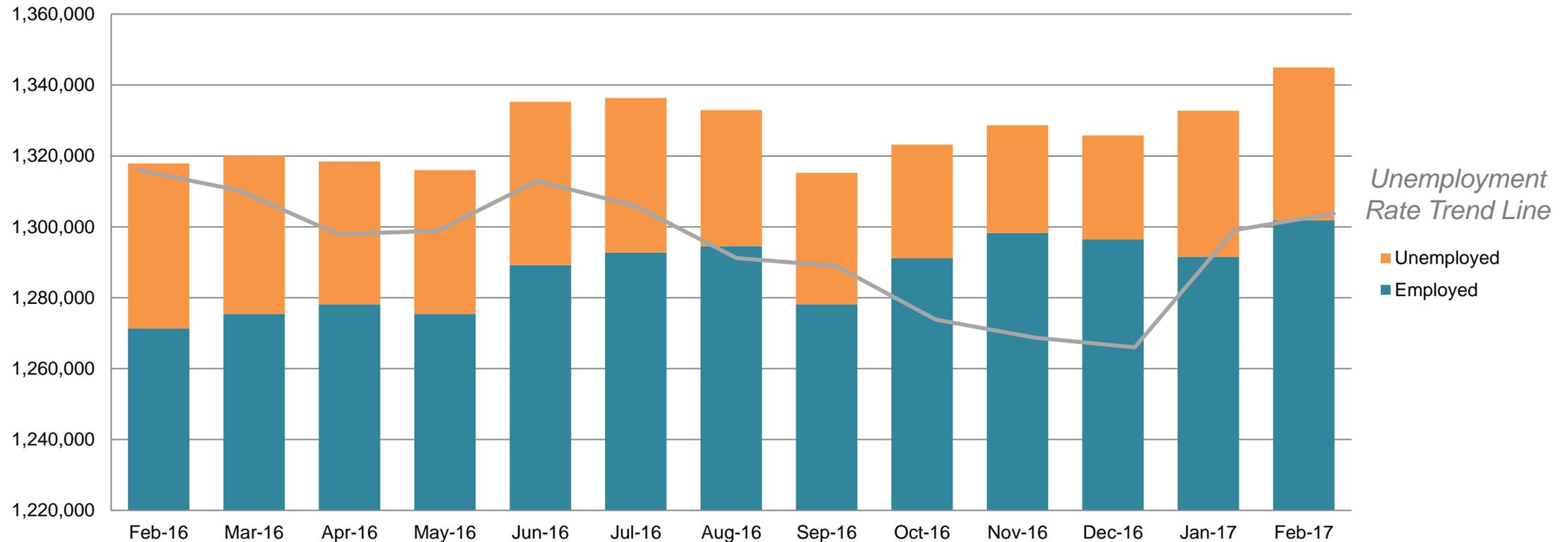
Greater Boston unemployment is typically lower than that of the State.



# Labor Market Overview: Labor Force

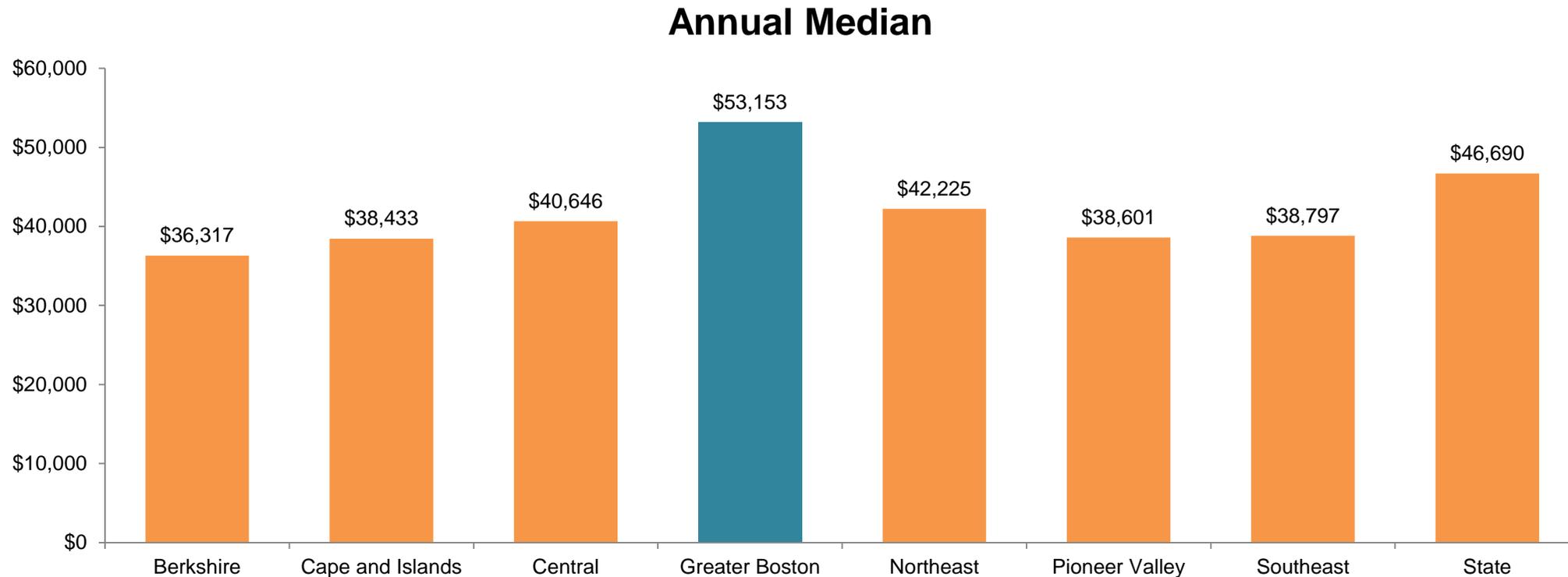
The unemployment rate alone is not the only indicator of employment levels in your region.

## Employed v. Unemployed in Labor Force



# Median Wage

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

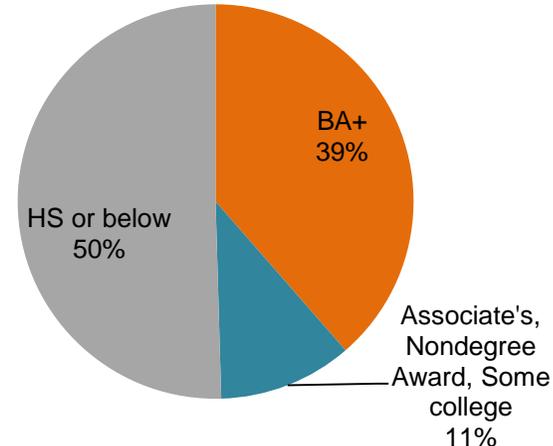


Occupational Employment Statistics Wages, 2015

# Educational Requirements for Employment

50% of occupations in Greater Boston require some post-secondary education. However, education alone does not imply a skill match.

## 2017 Projected Employment by Educational Requirement



Total Projected Employment: 1,668,530

# Preview

- Goal: a preliminary understanding of where we are
- Two lenses on employer demand:
  - Industry
  - Occupation
- Some criteria that we might choose to prioritize:
  - Employment share
  - Demand Index
  - Median wages + employment growth (STAR Ranking)
  - Career Pathways

# Part I: Regional Industry Overview and Profiles

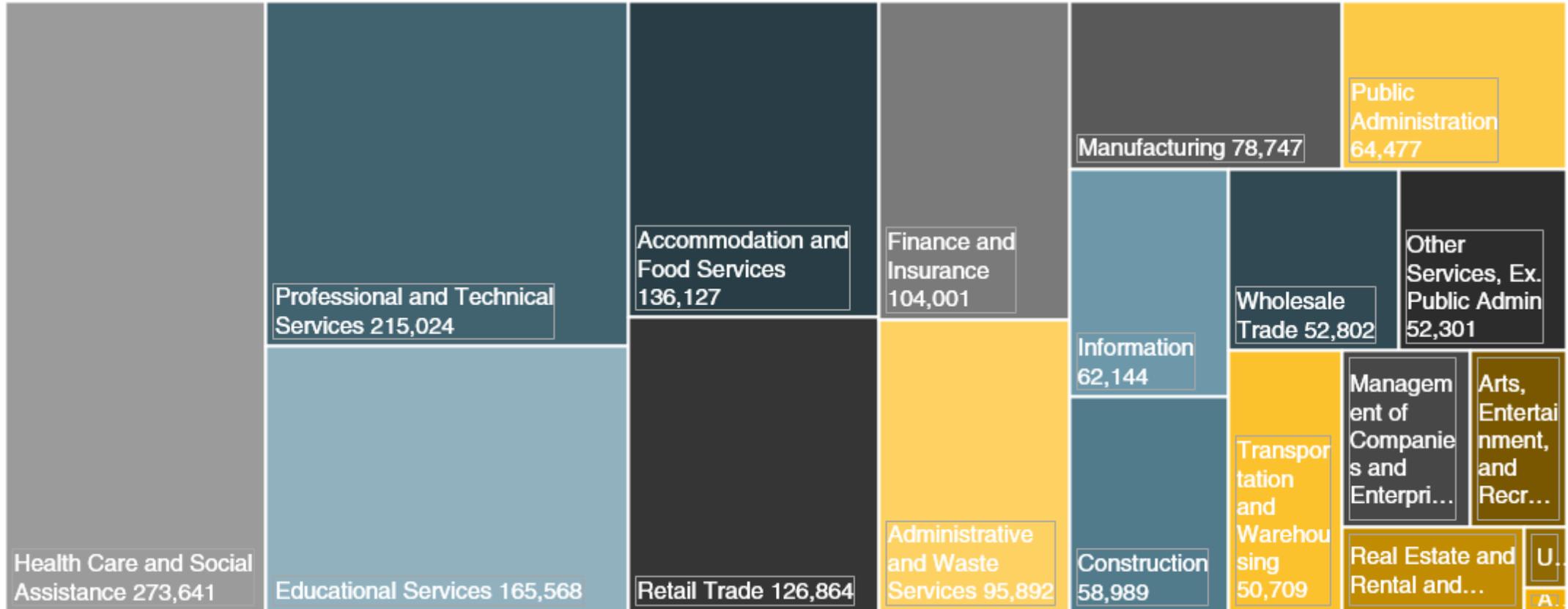
Who are the employers in our region?

# 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

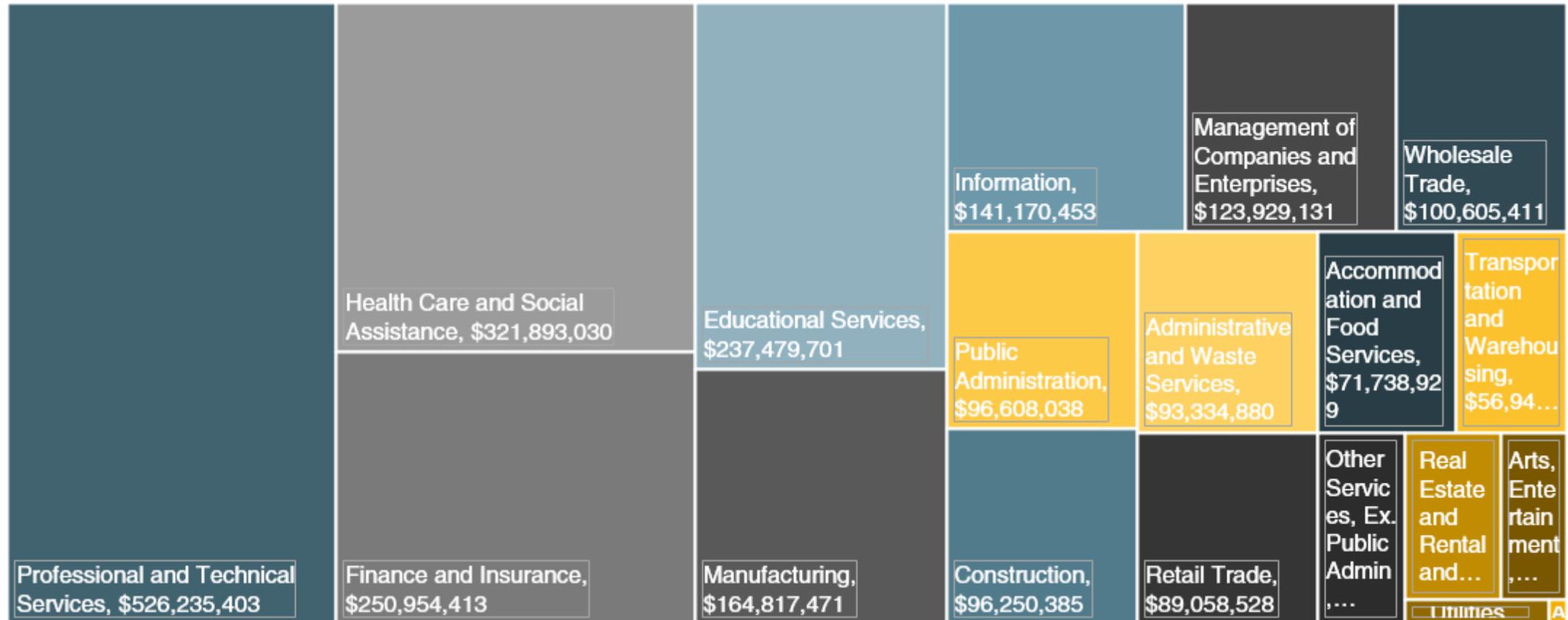
# I.A.1: Greater Boston Region Sector Makeup

by total employment



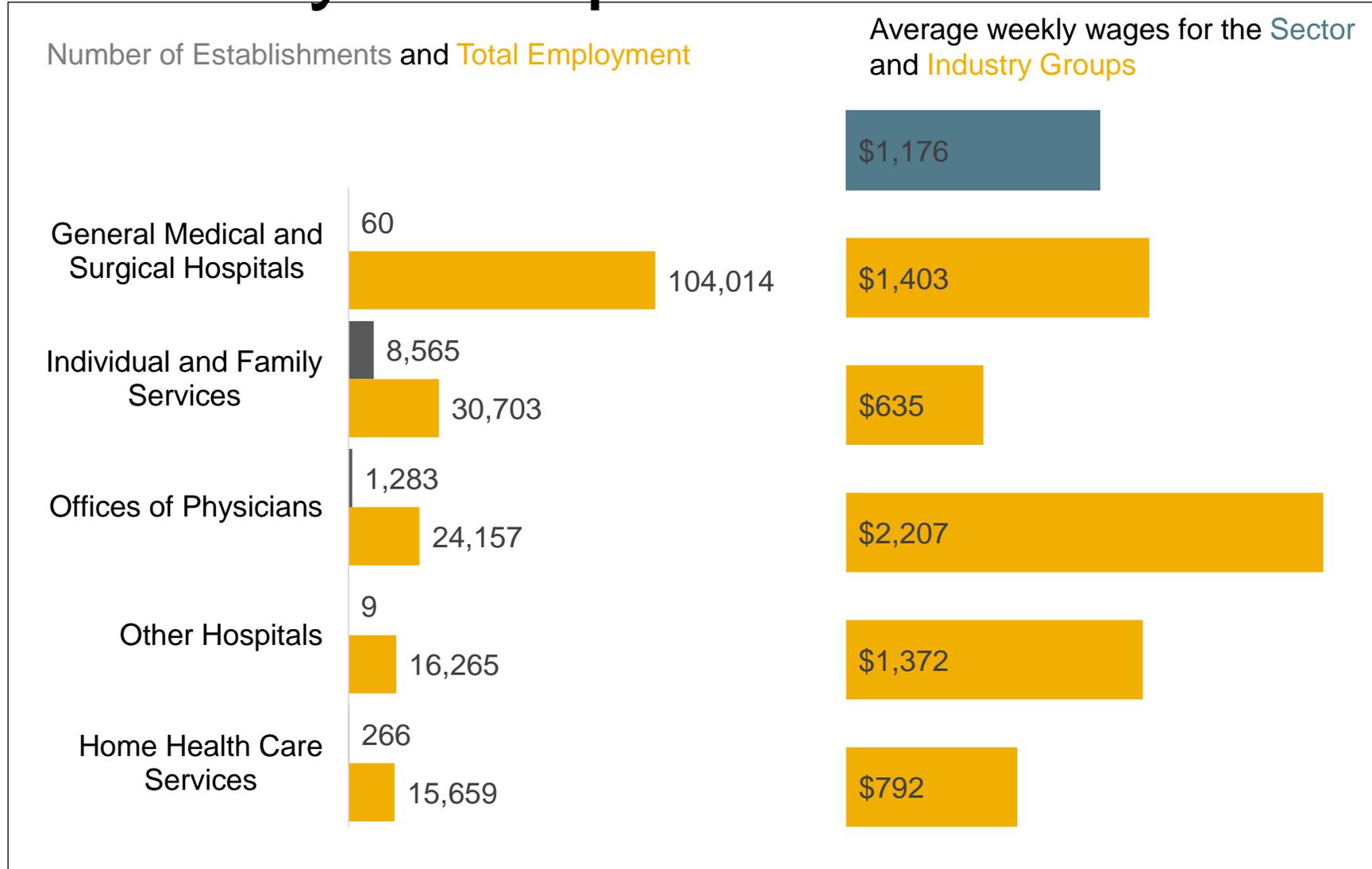
# I.A.2: Greater Boston Region Sector Makeup

by total wages



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

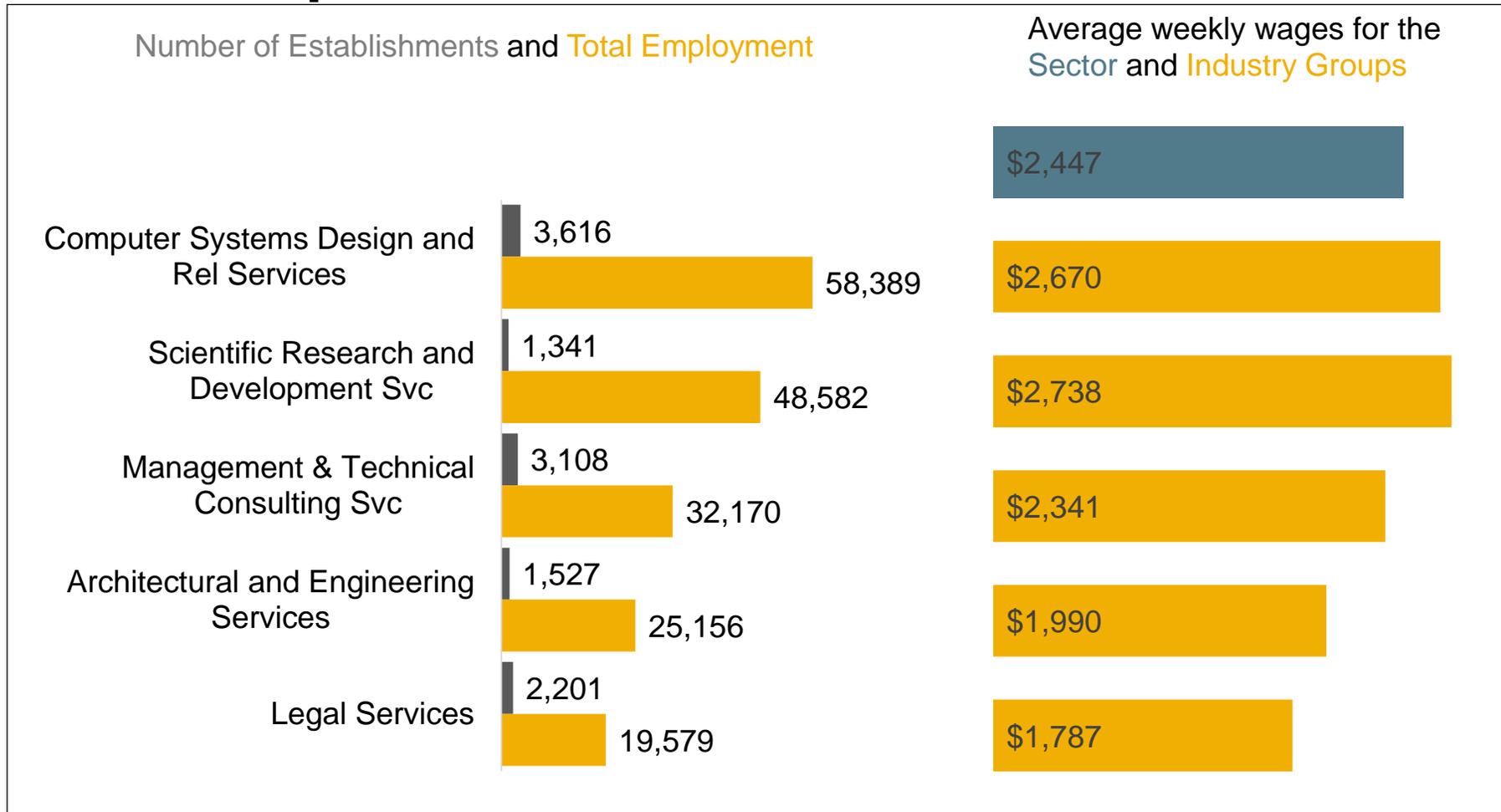
# I.B.1: Health Care and Social Assistance Industry Groups



**Largest Employers by 12-month Job Postings**

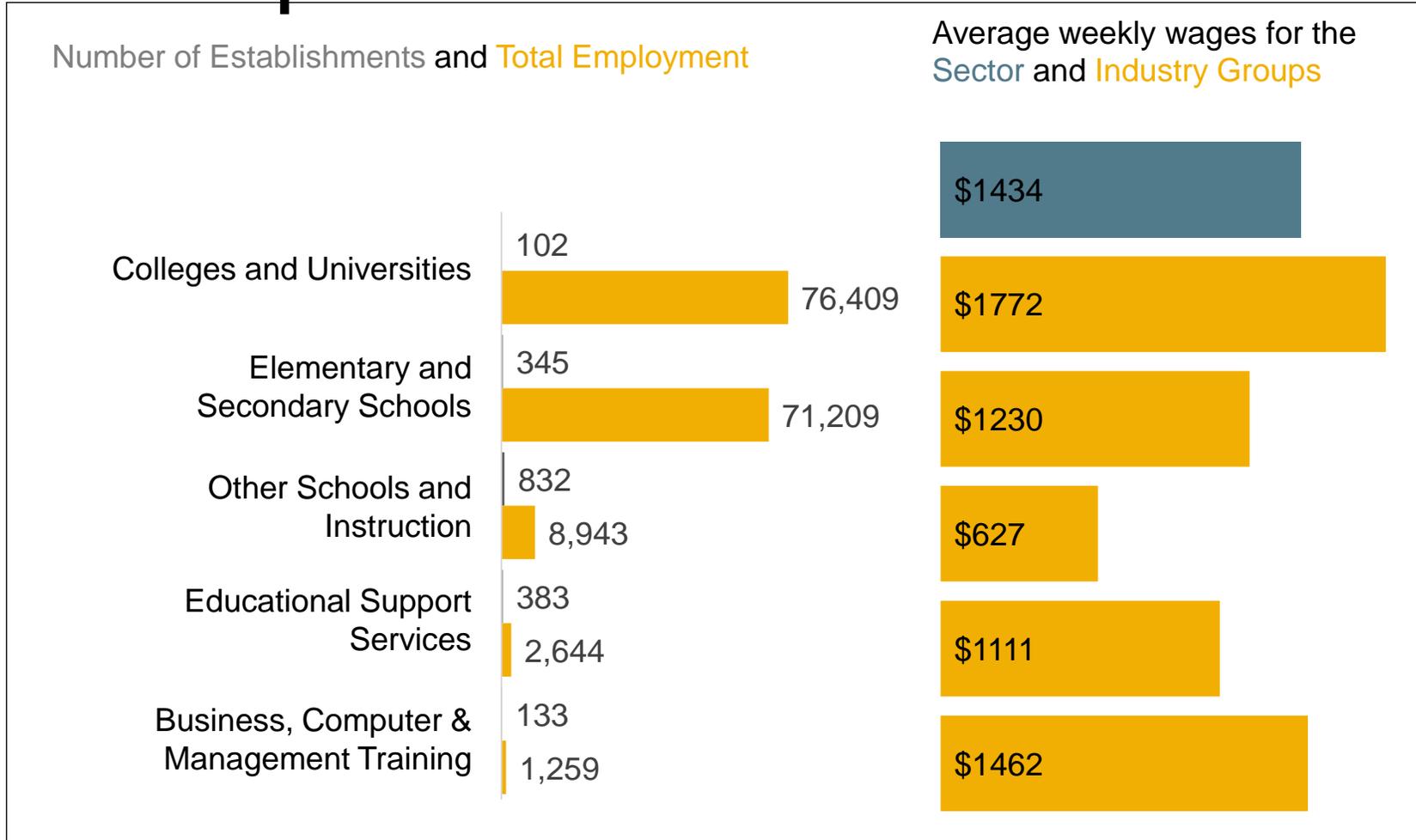
Employer	Postings
Harvard Medical School	1,640
Lahey Clinic, Inc	973
Beth Israel Medical Center	815
Kindred Healthcare	796
Cambridge Health Alliance	566

# I.B.2: Professional and Technical Industry Groups



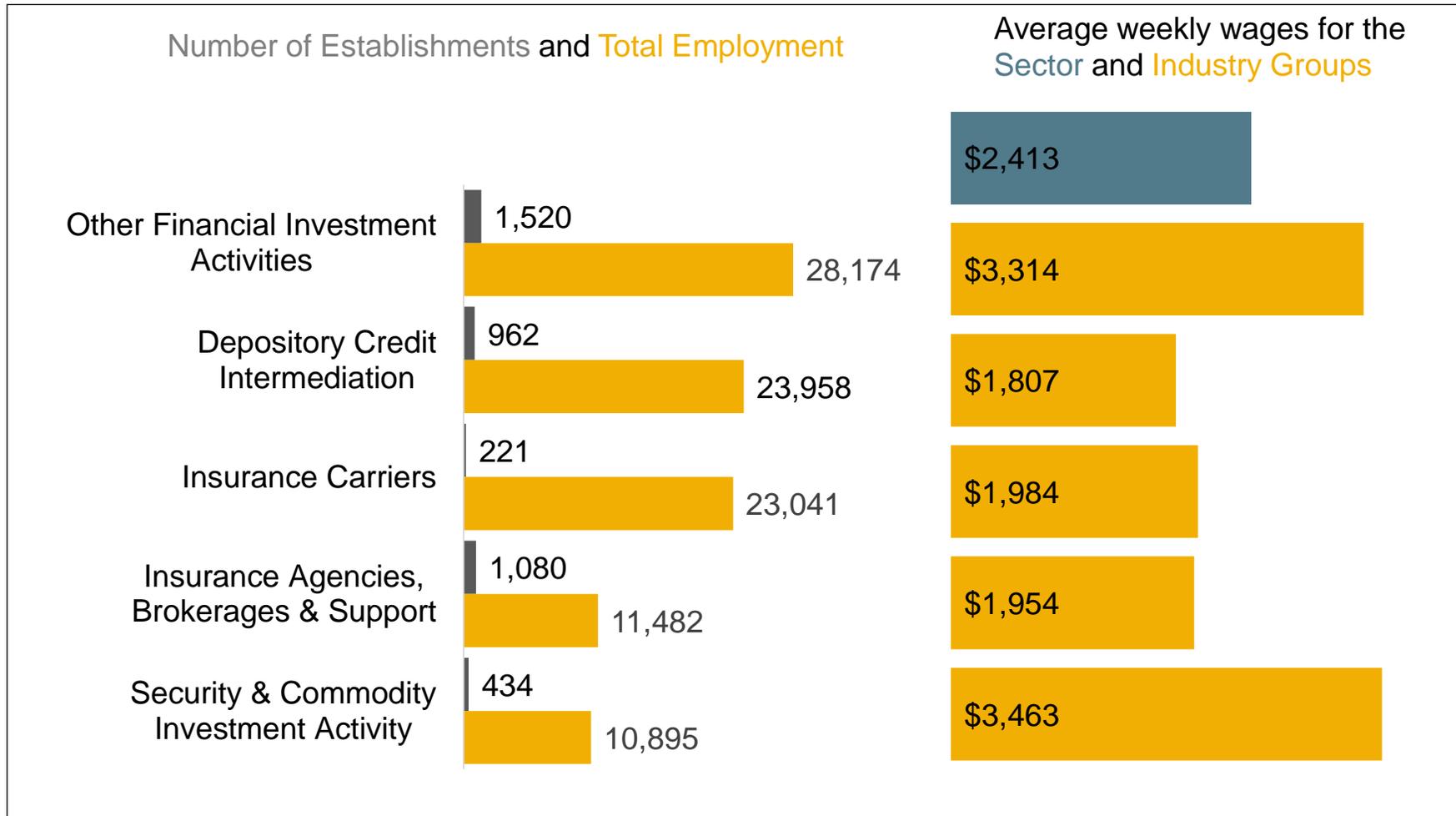
Largest Employers by 12-month Job Postings	
Employer	Postings
Harvard Clinical Research Institute	2,576
Tufts-New England Medical Center	1,289
Broad Institute	707
Biogen Idec	664
Pfizer	554

# I.B.3: 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

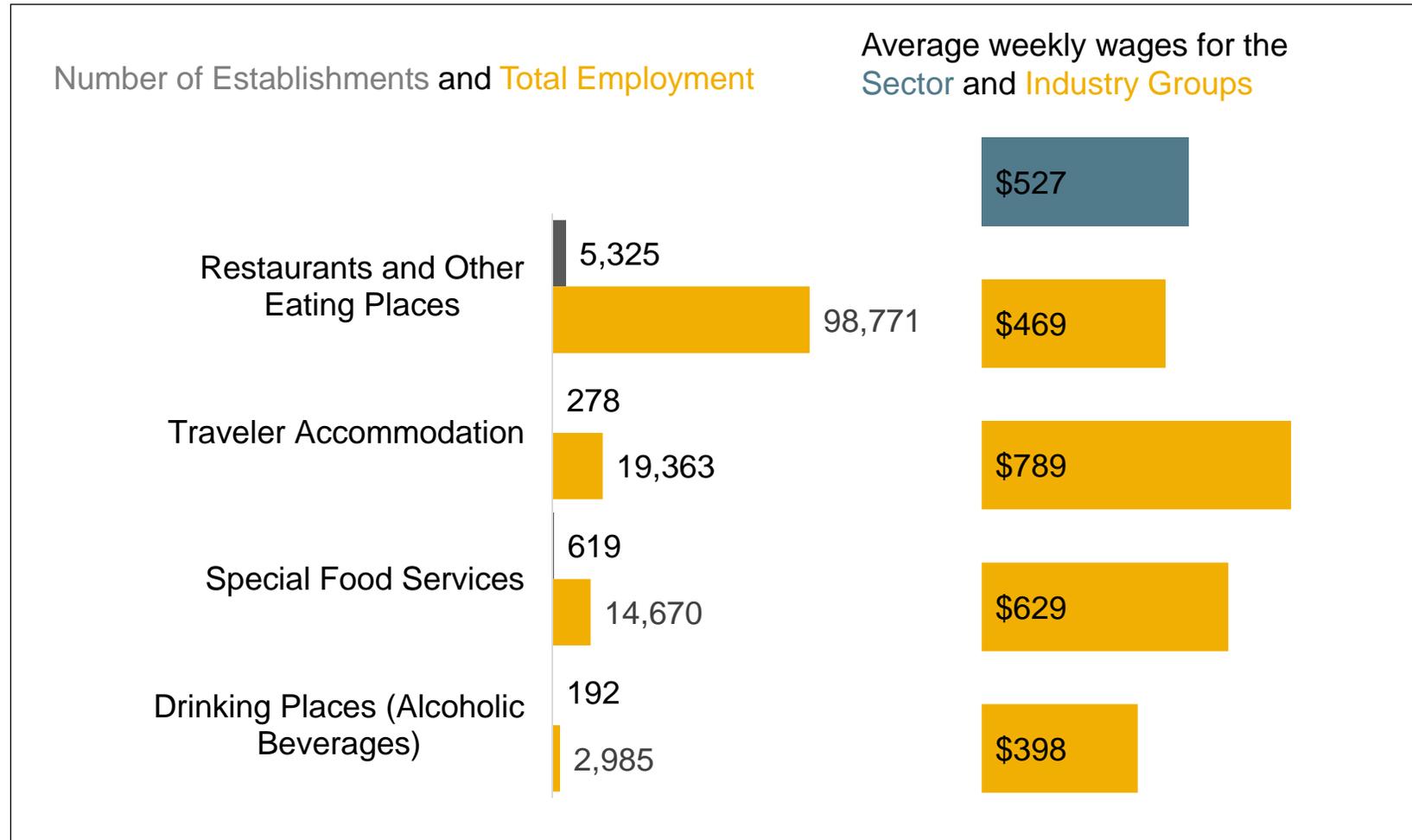
# I.B.4: Finance and Insurance Industry Groups



**Largest Employers by 12-month Job Postings**

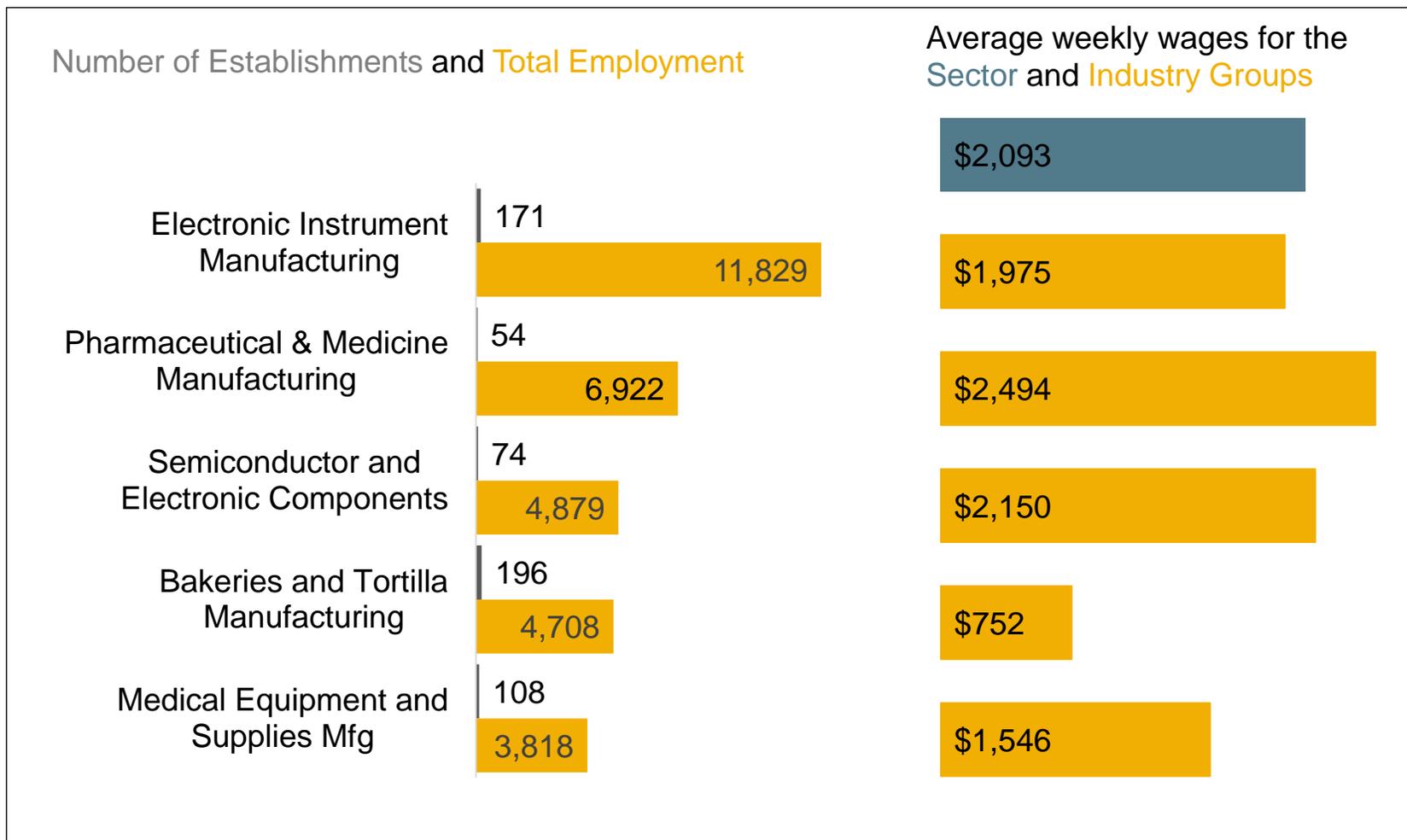
Employer	Postings
AthenaHealth	1,959
The Bank of New York Mellon Corp.	414
Citizens Bank	409
Manulife Financial Corporation	402
Liberty Mutual	324

# I.B.5: 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

# I.B.6: 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

# II. Occupations

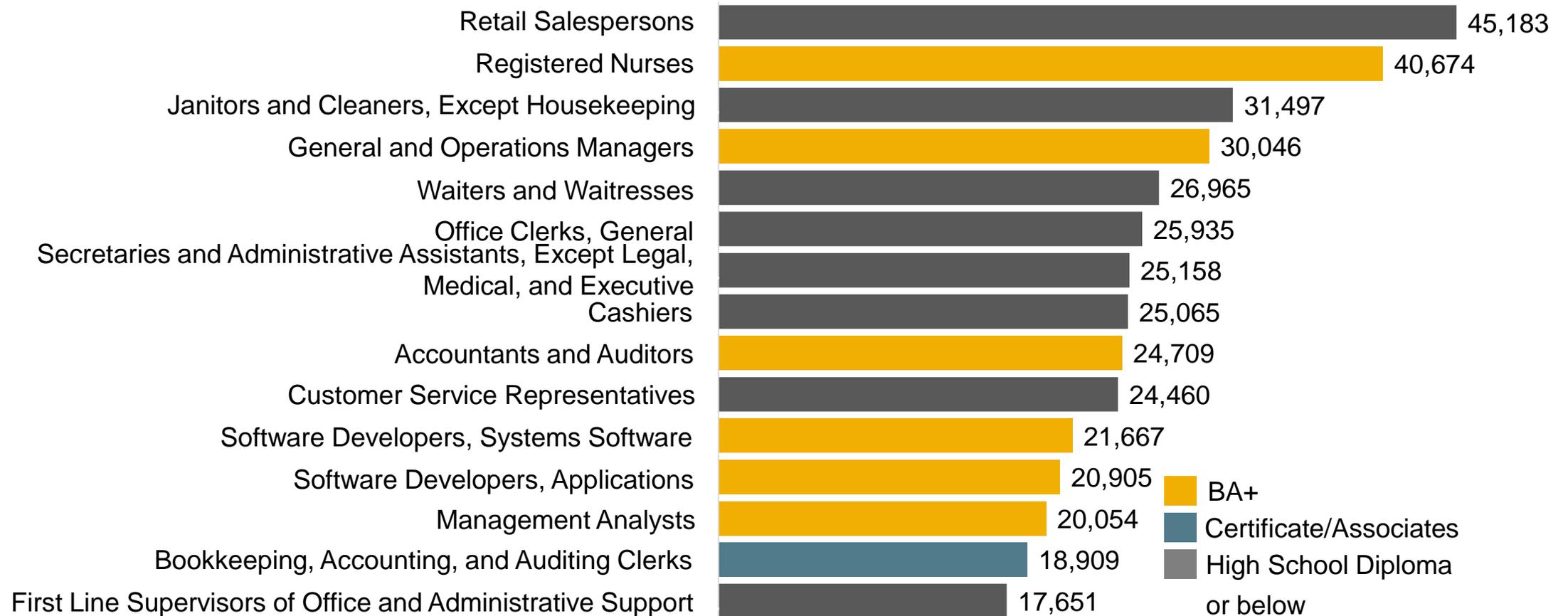
What work are people doing, and what work do employers need people to do?

# II.A: Occupations by Share of Employment

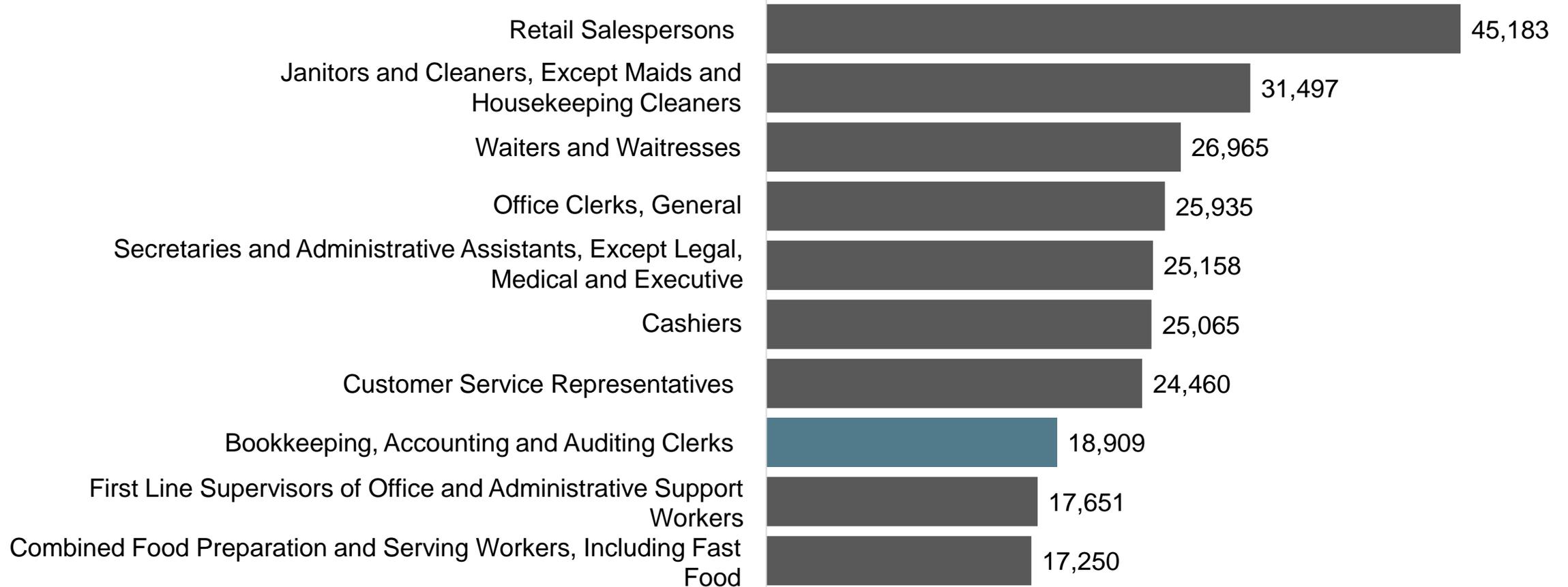
# Terminology

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

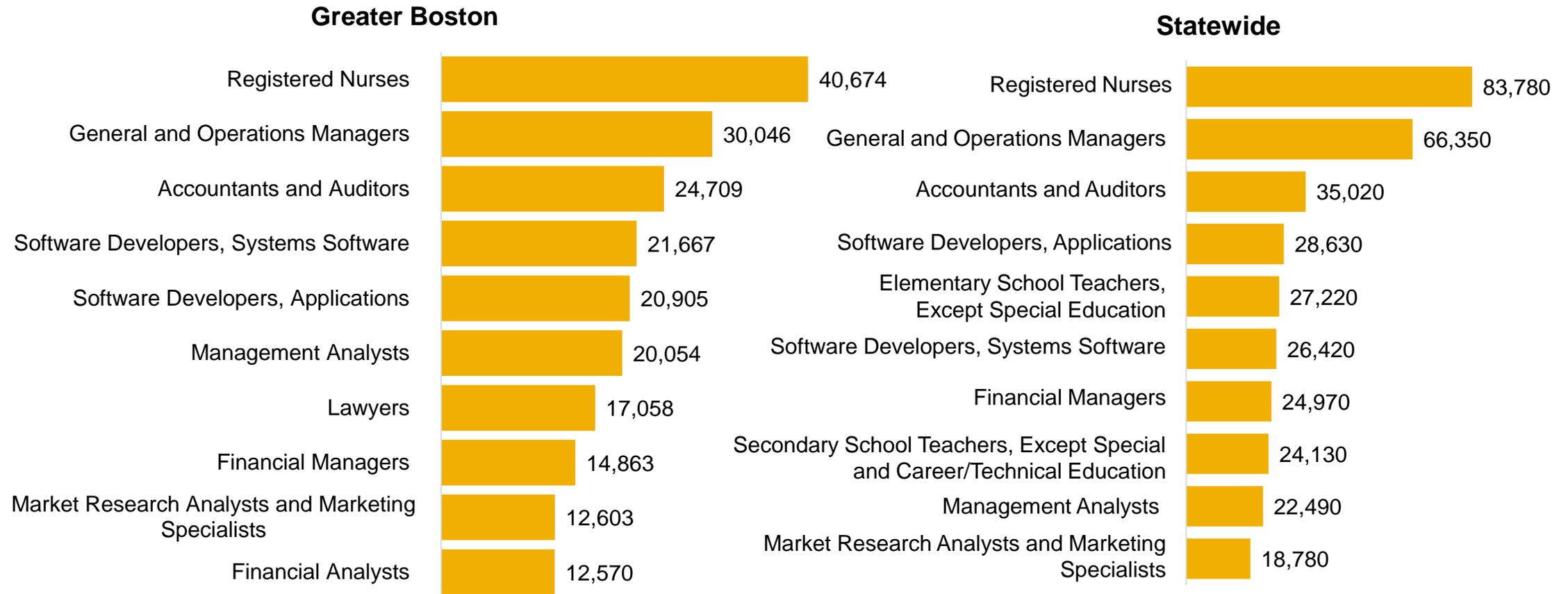
# II.A.1: Top 15 Occupations by Share of Employment, 2015



# II.A.2: Top 10 Occupations by Employment Share, 2015 Sub-BA todo



# II.A.3: Top 10 Occupation by Employment Share, 2015, BA+



# II.B: Occupations by Indexed Employer Demand

# Terminology

Employment Projections

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

Indexed 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.*

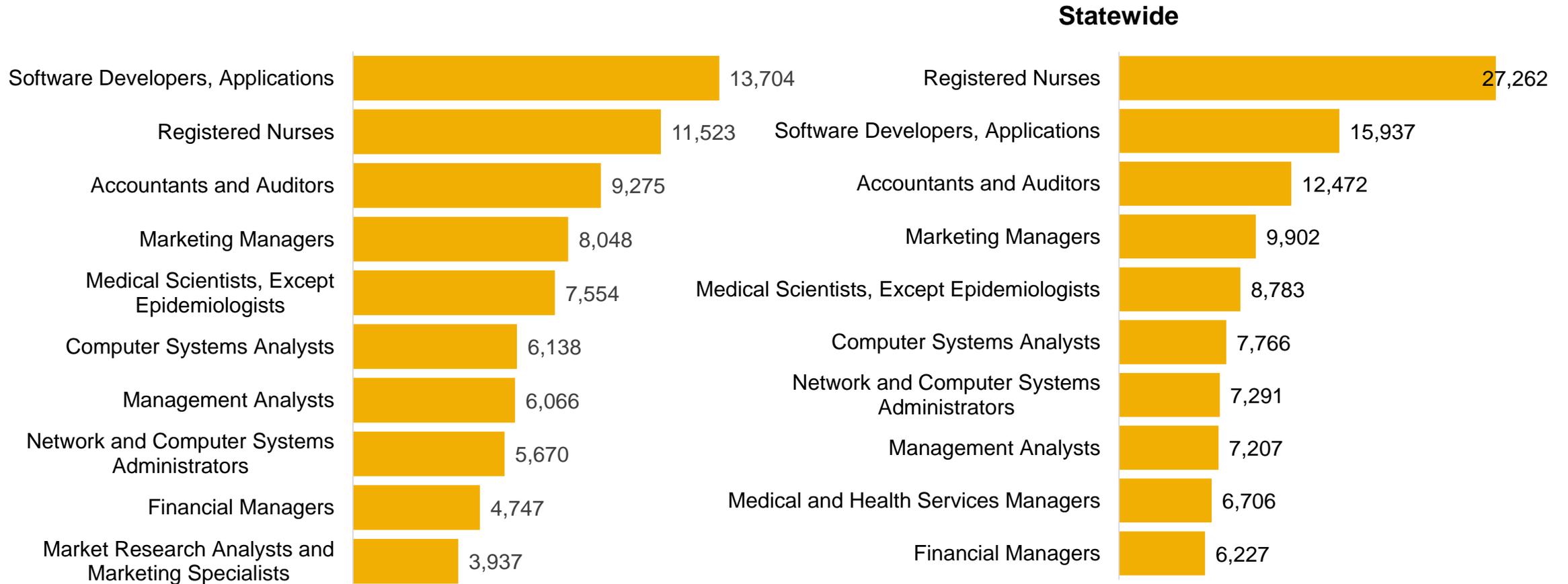
# II.C.1 Top 15 Occupations by Indexed Employer Demand, All Education Levels



# II.C.2: Top 15 Occupations by Indexed Employer Demand, Sub-BA



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



# II.C Occupations by Demand Star Ranking

# 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.*

# II.B.1: 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

# II.B.2: Selected 4- and 5-Star Occupations Requiring an Associates/Certificate

<b>Occupation Title</b>	<b>Associated Industry</b>	<b>Wages Annual Median</b>
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

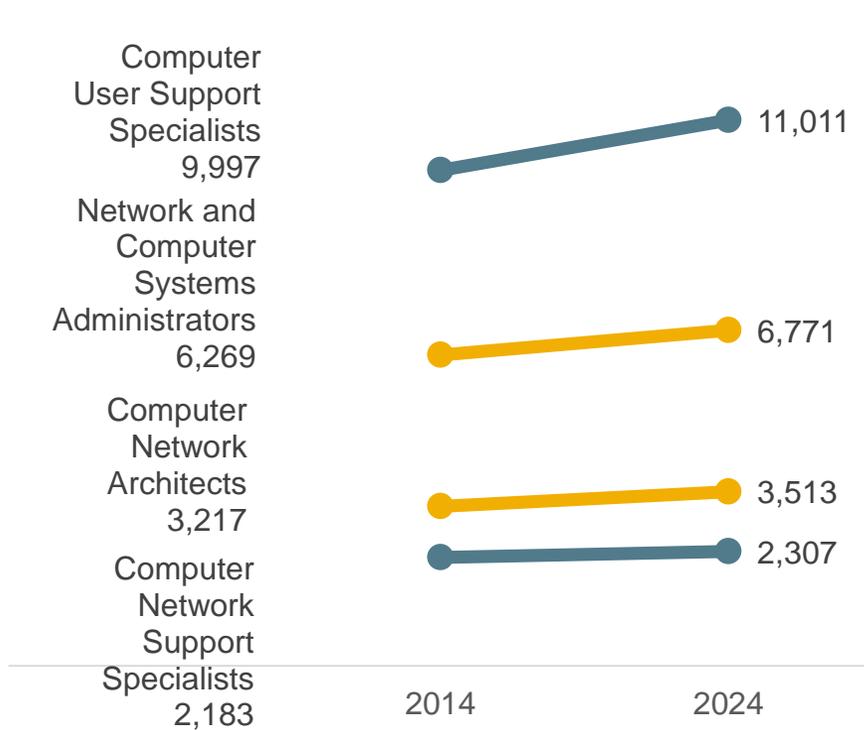
# II.B.2: Selected 5-Star Occupations Requiring a BA+

<b>Occupation Title</b>	<b>Associated Industry</b>	<b>Annual Median Wages</b>
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

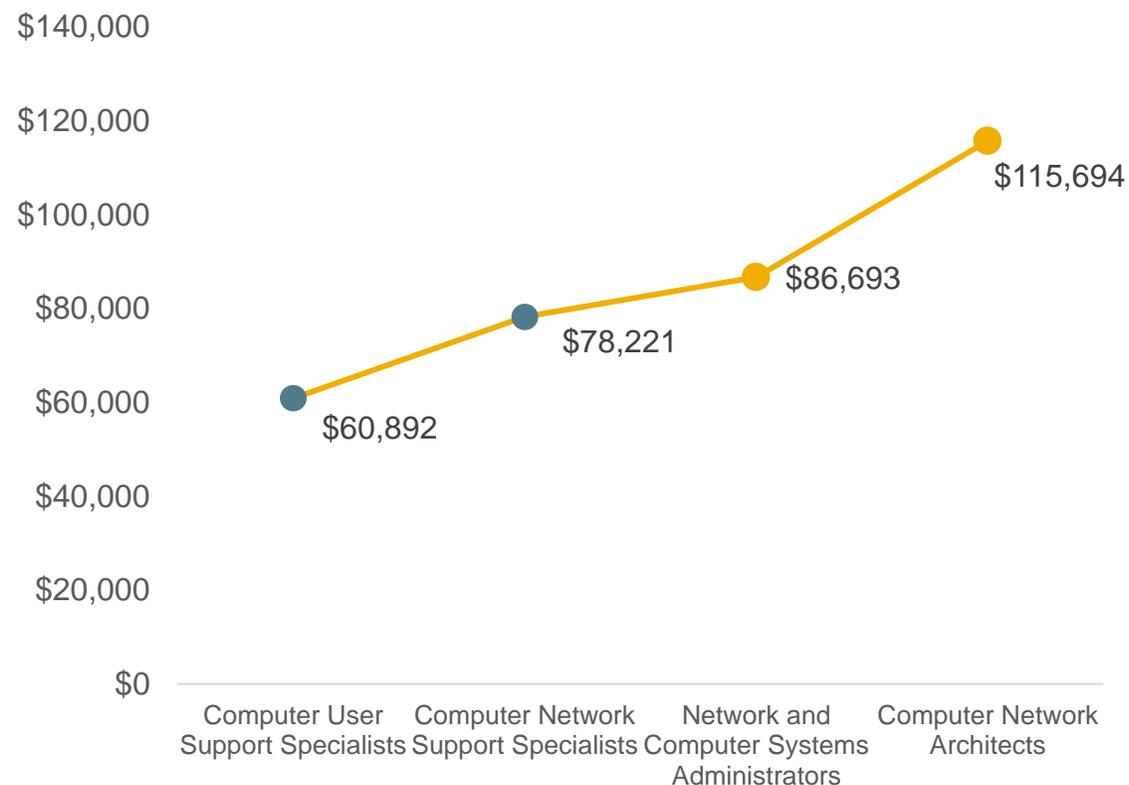
# II.D: Career Pathways

# II.E.1: IT Career Pathway

**Projected Employment**

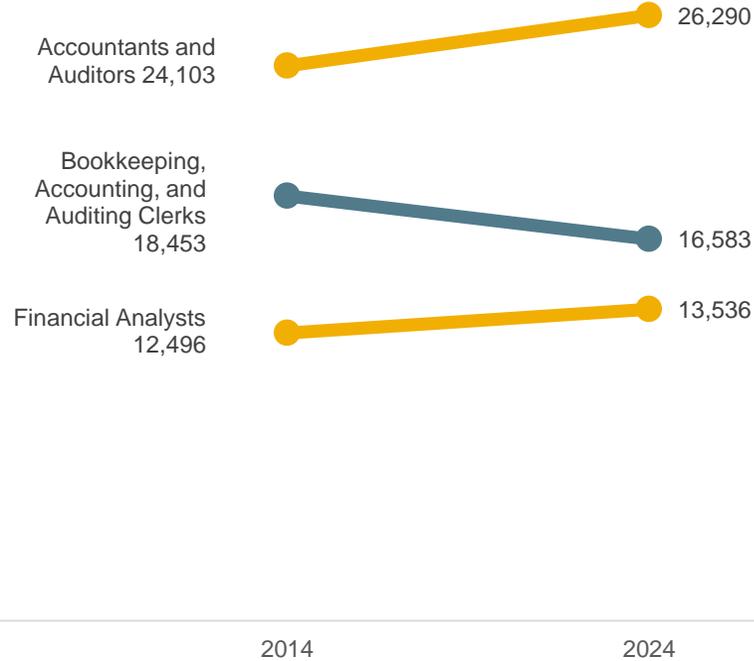


**Median Annual Wage**

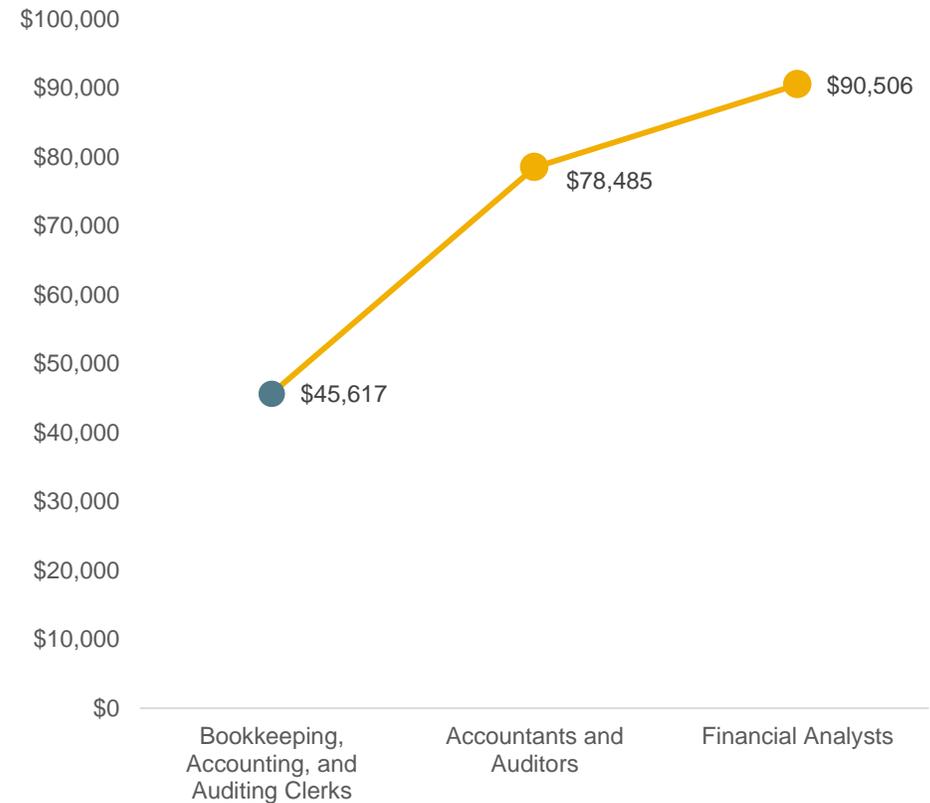


# II.E.2: Accounting Career Pathway

### Projected Employment



### Median Annual Wages



# II.E.3: Nursing Career Pathway

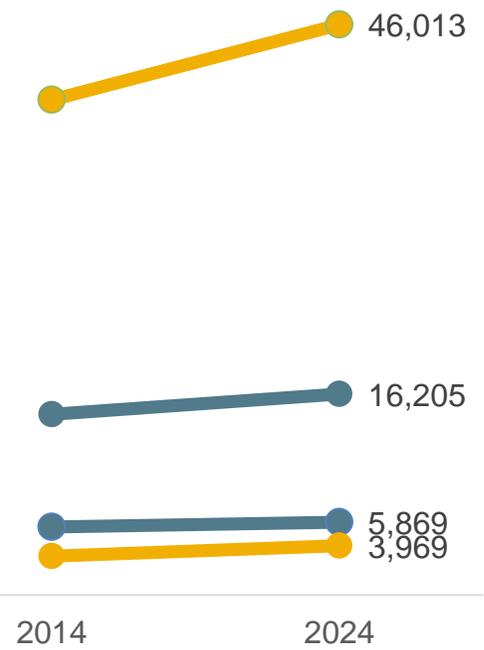
**Projected Employment**

Registered Nurses  
39,940

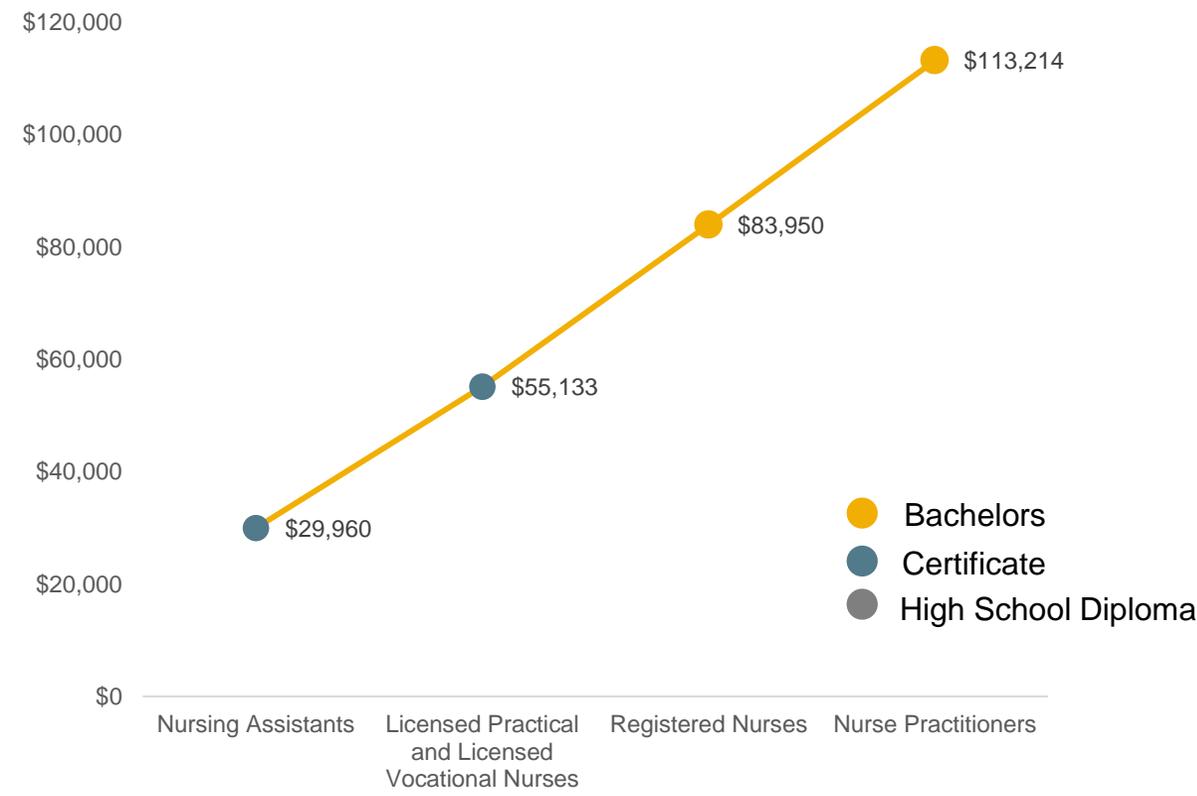
Nursing Assistants  
14,564

Licensed Practical and  
Licensed Vocational  
Nurses  
5,497

Nurse Practitioners  
3,137

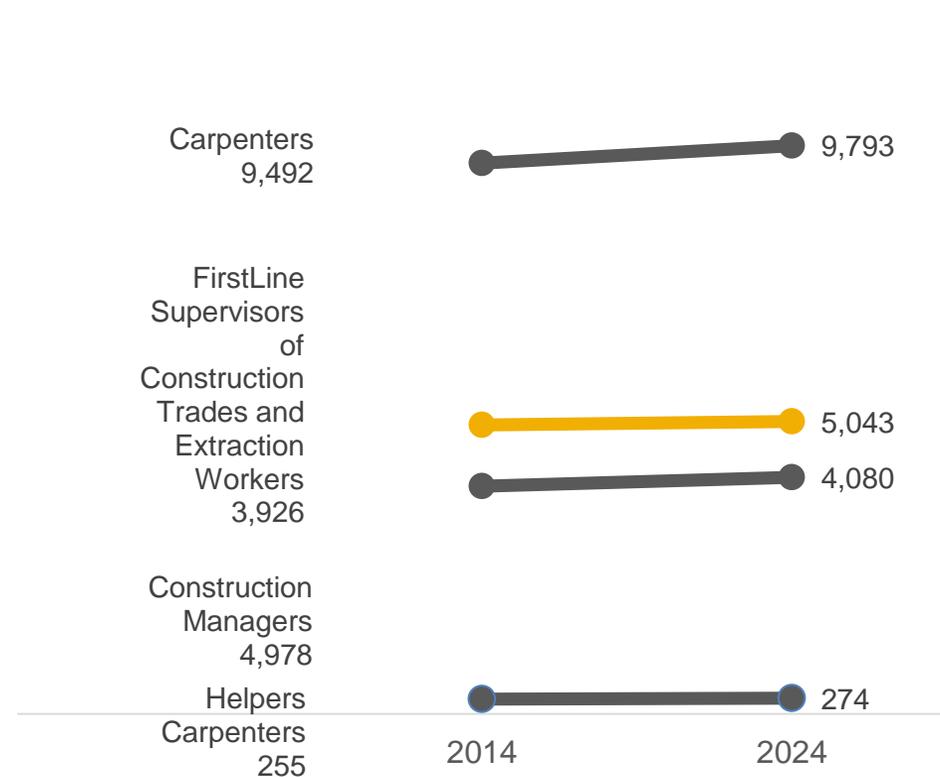


**Median Annual wages**

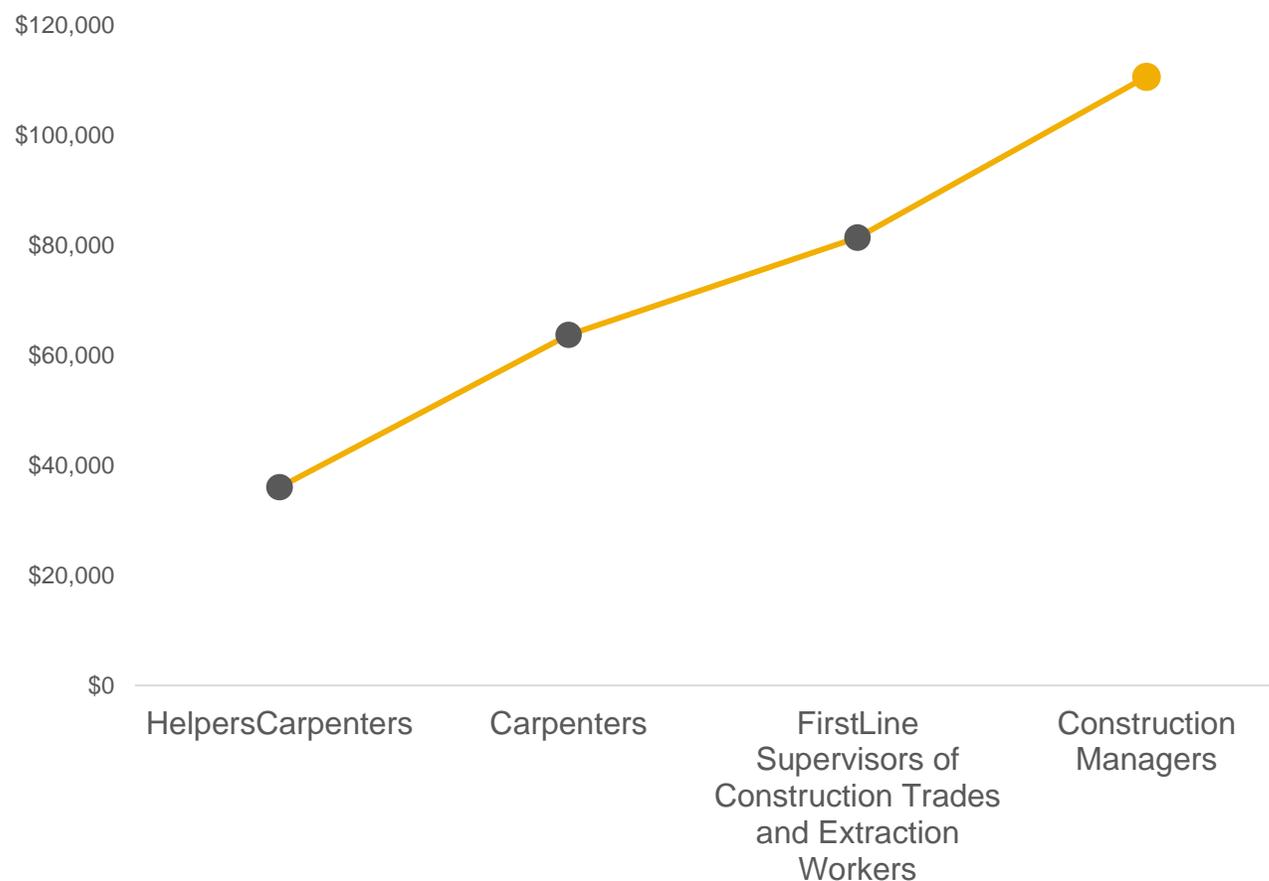


# II.D.4: Construction Career Pathway

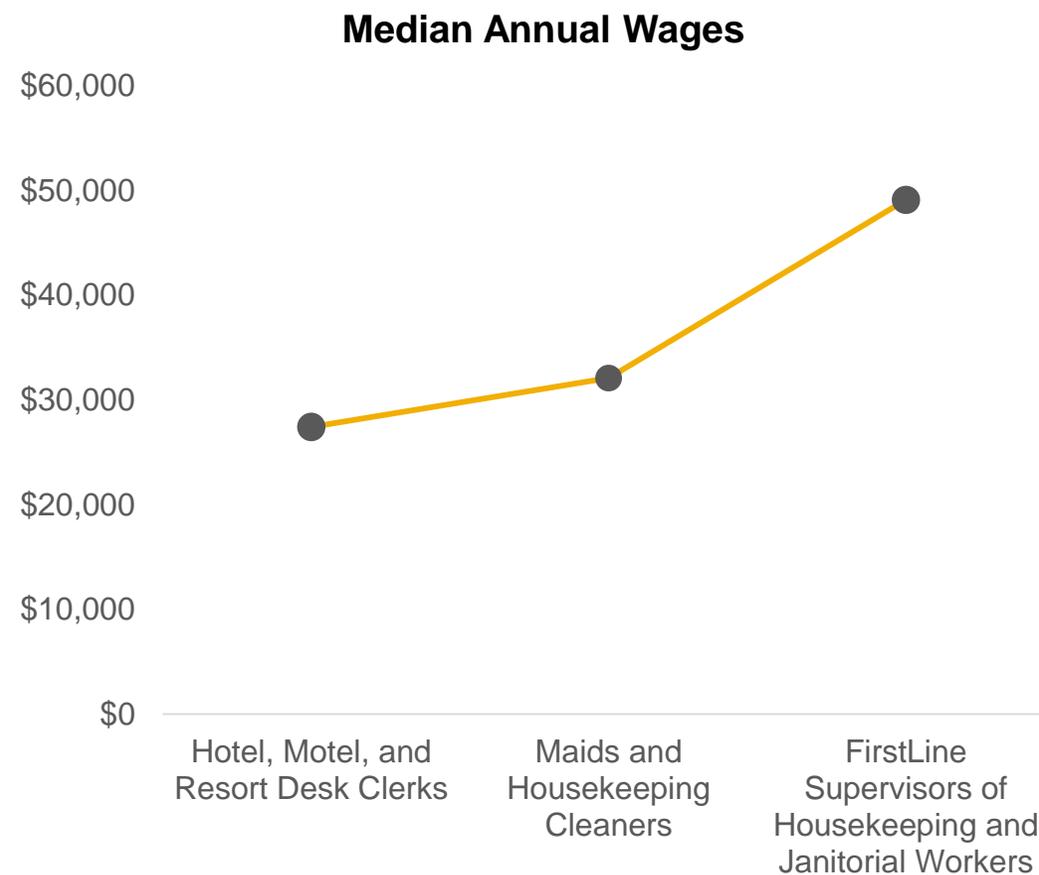
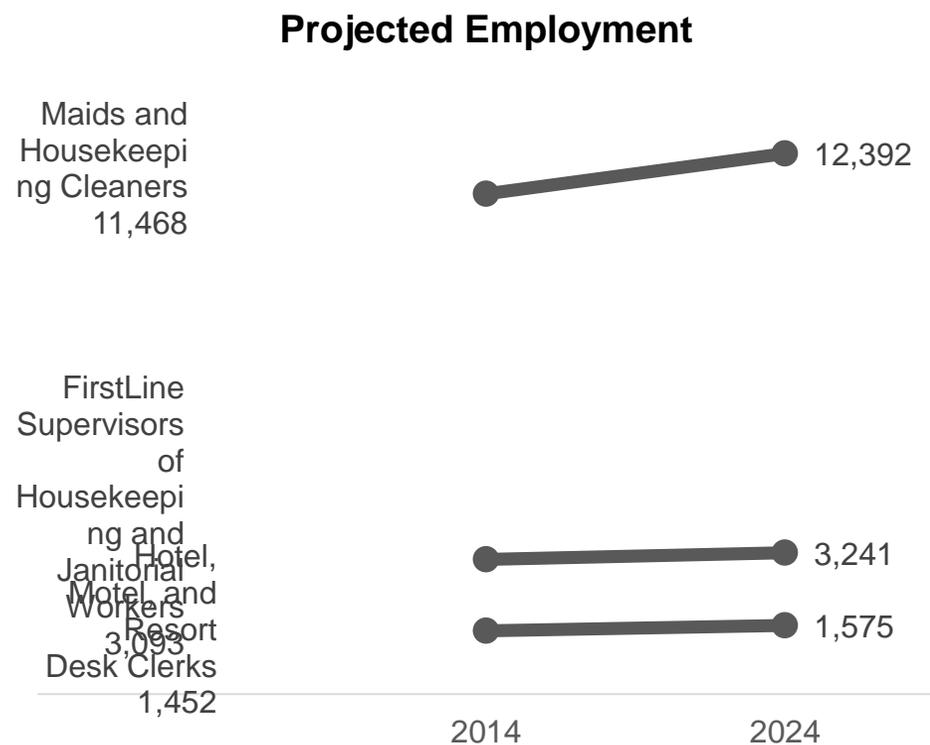
Projected Employment



Median Annual Wages



# II.D.5: Hotel Career Pathway



# Where Do We Want to Go?

## Regional Goals

- 1) What criteria should we use to set priorities?
- 2) What does the employer demand data that we have available today tell us about industries and occupations in my region?
- 3) Given the information we have available, what industries or occupations could we preliminarily prioritize as a team?
- 4) What other information do we need in order to finalize these decisions?

Please discuss in small groups as directed and prepare to report your answers.

# Next Steps

## *Region*

- Workforce Boards role

## *State*

- Support supply data for regions
- Webinar to introduce data tool
- Send blueprint template for comments
- Share full list of team members

# Closing and Next Steps

What is your take-away from today?

Please complete the feedback forms and leave them at the door before you go.