# Regional Planning 

Massachusetts Workforce Skills Cabinet 2017

strategymatters

## What are we asking you to do?



## New State-Regional Structure


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

Regional Planning Team


## Why is this important?



## What are we asking you to do?

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

## 1. Define regions and form regional working teams

## 3. Form

 consensus on priority regional sectors and occupations2. Interpret
data, identify
regional
challenges
and

opportunities | 4. Define |
| :---: |
| strategies |
| and action |
| steps to |
| address |
| priority |
| regional |
| sectors and |
| occupations |

5. WSC input, further adjustment and refinement of strategies and action steps as needed

Regional Labor Market Blueprints Dec 2017
strategies and action steps to address priona sectors and occupations

## Blueprint Components

## ANALYSIS*

$\checkmark$ Regional Industry Trends in Employment
$\checkmark$ Demand Trends for Occupations
(Across Industries)

- Weighted Demand
- Current Openings (HWOL)
- Short/Long Term Projects
- Star Ranked Occupations
$\checkmark$ "Talent" Gap
- Available workforce for priority occupations (Ull claimants, graduates of Voc Tech, certificates, degrees)
- Which occupations show the biggest gaps?
$\checkmark$ Career Pathway Opportunities


## STRATEGIES

$\checkmark$ Priority Industries/Occupations:

- Consensus from Team on top 3-5 occupational pathways that need more workforce capacity
- Asset map of existing credential pathways
$\checkmark$ 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
$\checkmark$ 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?

## Pioneer Valley Region Data Package <br> Massachusetts Regional Planning Initiative 2017


strategymalters

## 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 and Data Overview

- 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

Pioneer Valley unemployment trends are generally aligned to MA trends, although regional rates tend to be higher than the State by approximately by . $5-.75 \%$.


[^0]
## Labor Market Overview: Labor Force

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

Employed v. Unemployed Count in Labor Force


[^1]
## Median Wage

Pioneer Valley Region median wages are higher than neighbors to the west (Berkshire) but lower than neighbors to the east (Central).


[^2]
## Educational Attainment: Employment v. Population

The majority of Pioneer Valley-based occupations across industries require a high school diploma or less. However, educational attainment alone does not imply a skill match.

## 2017 Projected Employment by

Educational Requirement


## Where Do We Want to Go? Preliminary Conversations on Criteria

What criteria should we use as a region to set shared priorities for future investment?

How about jobs that:

- Make up a large part of our economy
- With career pathways to higher wage jobs?
- That have low barriers to entry but also good pay?
- Employers find hard to fill?
-What else?


## Industry and Occupation Preview

- Goal: a preliminary understanding of where we are
- Two lenses on labor force:
- 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 <br> activities, 2 digit NAICS |
| :--- | :--- |
| Industry Group | More detailed production-oriented combinations of <br> establishments with similar customers and services, 4 digit <br> NAICS |
| Total Employment | Total number of workers |

## I.A.1: Pioneer Valley Region Sector Makeup

by total employment


Management: 3863
Arts: 6404
Real Estate: 3231
Utilities: 2200
Transportation: 2376
Agriculture: 1492

## I.A.2: Pioneer Valley Region Sector Makeup

by total wages


## I.B.1: Manufacturing Industry Groups



| Largest Employers by 12- |  |
| :---: | :---: |
| month Job Postings |  | Employer $^{|c|}$ Postings.

## I.B.4: Healthcare Industry Groups



| Largest Employers by <br> month Job Postings |  |
| :--- | ---: |
| Employer | Postings |
| Baystate Health | 422 |
| Kindred Healthcare | 364 |
| Cooley Dickinson <br> Healthcare <br> Corporation | 339 |
| Genesis <br> HealthCare | 169 |
| Center For Human <br> Development, Inc. | 87 |

[^3]
## I.B.6: Education Services Industry Groups

Number of Establishments and Total Employment


Average weekly wages for the Sector and Industry Groups

## $\$ 1,009$

$\$ 919$
$\$ 443$

```
$1,032
```

\$637

| Largest Employers by 12- <br> month Job Postings |  |
| :---: | :---: |
| Employer | Postings |
| Smith College | 163 |
| Greenfield <br> Community <br> College | 129 |
| Bay Path <br> University | 96 |
| Hampshire College | 82 |

## I.B.2: Agriculture Industry Groups



| Largest Employers by 12- <br> month Job Postings |  |
| :---: | :---: |
| Employer | Postings |
| River Valley Market | 7 |
| VCA Antech Inc | 5 |
| Atkins Farms | 5 |
| Cumberland Farms | 3 |
| Savage Farms | 3 |

## I.B.5: Retail Trade Industry Groups



Average weekly wages for the Sector and Industry Groups


[^4]
## 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

Occupation

Number of workers currently in a specific industry or sector across all employers
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



## 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) <br> for a particular occupation, based on surveyed employers |
| :--- | :--- |
| Weighted Employer Demand | Short term openings from replacement and growth (2017), long <br> term openings from replacement and growth (2024), and <br> advertised online postings, averaged |
|  | Note: there are many different ways to measure "employer <br> demand." The WSC team acknowledges that none are perfect, <br> and thus an average of three different measures seeks to find <br> 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 Requiring a 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 Title Insurance Sales Agents | STARS <br> 4 | Associated Industry Finance and Insurance | Median Wages $\$ 68,277$ |
| :---: | :---: | :---: | :---: |
| Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 5 | Wholesale Trade | \$62,440 |
| FirstLine Supervisors of Office and Administrative Support Workers | 4 | Wholesale Trade | \$54,102 |
| Billing and Posting Clerks | 4 | Health Care and Social Assistance | \$37,755 |
| Customer Service Representatives | 4 | Finance and Insurance | \$34,330 |
| Production, Planning, and Expediting Clerks | 4 | Manufacturing | \$51,692 |
| Medical Secretaries | 4 | Health Care and Social Assistance | \$39,010 |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 4 | Educational Services | \$37,526 |
| FirstLine Supervisors of Construction Trades and Extraction Workers | 4 | Public Administration | \$65,601 |
| Carpenters | 4 | Construction | \$49,187 |
| Construction Laborers | 4 | Construction | \$44,891 |
| Operating Engineers and Other Construction Equipment Operators | 4 | Construction | \$60,936 |
| Electricians | 4 | Construction | \$57,449 |

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

| Occupation Title | Demand STARS | Associated Industry | Annual Median Wages |
| :---: | :---: | :---: | :---: |
| Web Developers | 4 | Professional and Technical Services | \$62,615 |
| Computer User Support Specialists | 4 | Professional and Technical Services | \$49,603 |
| Paralegals and Legal Assistants | 4 | Professional and Technical Services | \$47,326 |
| Respiratory Therapists | 4 | Health Care and Social Assistance | \$64,781 |
| Medical and Clinical Laboratory Technicians | 4 | Health Care and Social Assistance | \$43,266 |
| Dental Hygienists | 4 | Health Care and Social Assistance | \$78,982 |
| Cardiovascular Technologists and Technicians | 4 | Health Care and Social Assistance | \$55,706 |
| Diagnostic Medical Sonographers | 4 | Health Care and Social Assistance | \$73,912 |
| Radiologic Technologists | 4 | Health Care and Social Assistance | \$58,344 |
| Surgical Technologists | 4 | Health Care and Social Assistance | \$48,947 |
| Licensed Practical and Licensed Vocational Nurses | 4 | Health Care and Social Assistance | \$48,166 |
| Medical Records and Health Information Technicians | 4 | Health Care and Social Assistance | \$39,845 |
| Physical Therapist Assistants | 4 | Health Care and Social Assistance | \$56,780 |

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

| Occupation | Demand STARS | Associated Industry | Median Annual Wages |
| :---: | :---: | :---: | :---: |
| Human Resources Managers | 4 | Professional and Technical Services | \$86,281 |
| Construction Managers | 4 | Construction | \$87,651 |
| Education Administrators, Preschool and Childcare Center/Program | 4 | Educational Services | \$54,357 |
| Education Administrators, Elementary and Secondary School | 5 | Health Care and Social Assistance | \$89,837 |
| Education Administrators, Postsecondary | 5 | Educational Services | \$74,636 |
| Architectural and Engineering Managers | 4 | Professional and Technical Services | \$126,094 |
| Medical and Health Services Managers | 5 | Health Care and Social Assistance | \$93,572 |
| Social and Community Service Managers | 4 | Health Care and Social Assistance | \$51,071 |
| Purchasing Agents, Except Wholesale, Retail, and Farm Products | 4 | Manufacturing | \$59,634 |
| Compliance Officers | 4 | Public Administration | \$67,519 |
| Cost Estimators | 4 | Construction | \$62,112 |
| Human Resources Specialists | 4 | Administrative and Waste Services | \$59,673 |

# II.D: Career Pathways 

## II.E.1: Retail Career Pathway

Projected Employment
$\left.\begin{array}{rrr}\begin{array}{r}\text { Retail } \\ \text { Salesperso } \\ \text { ns } 9,908\end{array} & & \text { 10,363 }\end{array}\right) \$ 120,000$

Median Annual Wages

## Retail Salespersons FirstLine

Supervisors of Retail
Sales Workers

## II.E.1: Teaching Career Pathway

Projected Employment
Teacher
Assistants
3,869
Elementary
School
Teachers,
Except
Special
Education
3,408

|  | Annual Median Salary |
| :--- | :---: |
| $\$ 80,000$ |  |
| $\$ 70,000$ |  |
| $\$ 60,000$ |  |
| $\$ 50,000$ |  |
| $\$ 40,000$ |  |
| $\$ 30,000$ |  |
| $\$ 20,000$ |  |
| $\$ 10,000$ | Teacher Assistants |
| $\$ 0$ | Elementary School Teachers, Except |
| Special Education |  |

## II.E.2: Manufacturing Career Pathway

$\left.\begin{array}{ccc}\text { Projected Employment } \\ \text { Team } \\ \text { Assemblers } \\ 2,399 \\ \text { FirstLine } \\ \text { Supervisors } \\ \text { of Production } \\ \text { and } \\ \text { Operating } \\ \text { Workers } \\ 1,572 \\ \text { Machinists } \\ 1,172\end{array}\right) \quad 2,380$

[^5]
## II.E.3: Nursing Career Pathway

Projected Employment

| Registered |  |  |
| :---: | :---: | :---: |
| Nurses 8,208 |  |  |
| 7,473 |  |  |
| Nursing |  |  |
| Assistants |  |  |
| 4,180 |  |  |
| Personal |  | - 4,493 |
| Care Aides 4,491 |  |  |
| 3,867 |  |  |
| Licensed |  |  |
| Practical |  |  |
| and |  | - 1,529 |
| Licensed |  |  |
| Vocational |  |  |
| Nurses |  |  |
| 1,462 | 2014 | 2024 |

Median Annual Wages


## 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.


[^0]:    Massachusetts Department of Unemployment Assistance; U.S. Department of Labor, Bureau of Labor Statistics, February 2016 - February 2017

[^1]:    Massachusetts Department of Unemployment Assistance; U.S. Department of Labor, Bureau of Labor Statistics, February 2016 - February 2017

[^2]:    Occupational Employment Statistics Wages, 2015

[^3]:    DUA/BLS Quarterly Census of Employment and Wages,
    QTR 3 2016; Conference Board Help Wanted OnLine

[^4]:    DUA/BLS Quarterly Census of Employment and Wages, QTR 3 2016; Conference Board Help Wanted OnLine

[^5]:    Massachusetts Industry-Occupation Employment Matrix, 2014-2024, DUA/BLS Quarterly Census of Employment

