





Pioneer Valley Labor Market Blueprint

A Regional Planning Initiative of the Massachusetts Workforce Skills Cabinet

INTRODUCTION

Across Massachusetts, economic growth is constrained by a labor shortage while jobseekers are looking for work. Bridging the gap between the skills and experience of individuals and the needs of the employers seeking to hire is critical for the continued economic expansion of the Commonwealth.

In response to this reality, Governor Charles Baker convened the Workforce Skills Cabinet in order to align the Executive Offices of Education, Labor and Workforce Development, and Housing and Economic Development toward a comprehensive economic growth agenda. The Cabinet was charged with creating and implementing a strategy to ensure that individuals can develop and continuously improve their skills and knowledge to meet the varying hiring needs of employers in the Commonwealth.

Working under the tenets of the Workforce Innovation and Opportunity Act (WIOA), the Cabinet implemented a statewide regional planning process that resulted in the creation of the **Pioneer Valley Labor Market Blueprint**. The Blueprint will guide the work of regional partners to address talent gaps and needs by focusing on the following:

- Coordinate and leverage a variety of localized efforts
- Improve connectedness between employers
- Develop new State level strategies and/or align existing state-level resources

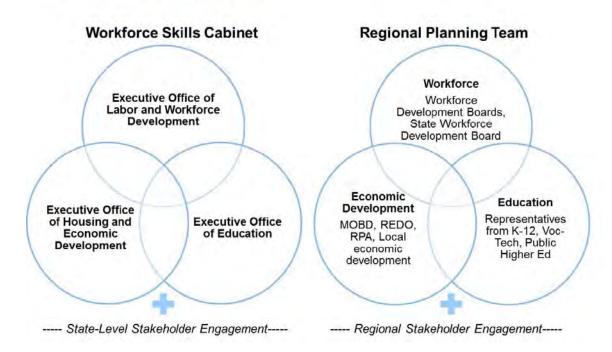
The **Pioneer Valley Labor Market Blueprint** uses data and evidenced-based research to drive and support collective decision-making going forward. The Blueprint identifies goals and strategies to be accomplished between 2018-2022, and articulates shared commitments by the regional core partners to ensure effective execution, communication, and measurement of the anticipated outcomes and deliverables.

The Pioneer Valley region is strong and its future looks very promising. The regional partnership that has evolved from this process is committed to implementing coordinated, sustainable, and bold actions that will drive regional economic expansion, increase job opportunities, and strengthen businesses, communities, and families.

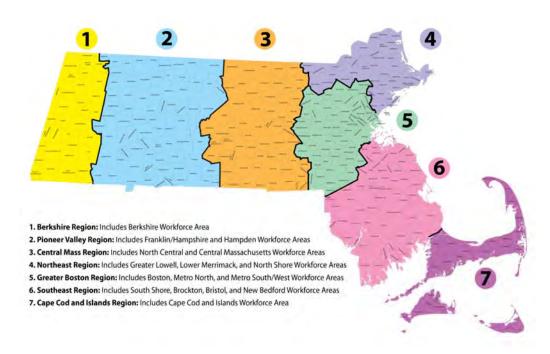
After you finish reading the Blueprint, please share any thoughts and ideas that will assist the regional partnership in the work ahead. Over the next several months, we may be contacting you to request your active engagement in implementing the Blueprints goals and strategies.

WIOA Regional Planning

New State-Regional Structure



Region #2: Pioneer Valley







Dear Friends.

It is our pleasure to welcome you to the Pioneer Valley Labor Market Blueprint. The Blueprint presents a way forward to begin an intentional and coordinated regional approach to addressing the talent gap that exists in priority industries and priority occupational groupings in the region.

Our Blueprint embodies the basic principles of our enabling federal legislation, the Workforce Innovation and Opportunity Act (WIOA), and continues our aggressive and thoughtful agenda to ensure that all our residents are prepared to access career pathways that lead to economic selfsufficiency, and that our regional companies have the skilled workforce they need to grow their business, create wealth opportunities for their companies and employees, strengthen the regional economy, and enhance the quality of life and social fabric of our communities.

The Blueprint is grounded in our commitment to use regional labor market data to create innovative workforce development practices and programs, and accelerate job creation by developing career pathways for all Franklin, Hampshire and Hampden County residents.

Our regional economic development partners, business and industry associates, One Stop Career Center Operators, training and educational providers, and community serving organizations are committed to working with us in finding the best way forward. This work will require our continued commitment and engagement, leveraging of shared resources, and willingness to be innovative.

We invite you to read the Pioneer Valley Labor Market Blueprint and join us in the implementation work ahead.

Thank you.

Patricia Crosby, Executive Director

Franklin Hampshire Regional Employment Board

David M. Cruise, President & CEO Regional Employment Board of Hampden County, Inc.

Executive Summary

Process

The two Regional Employment Boards of Franklin and Hampshire Counties and Hampden County, along with the assistance of Camoin Associates and Hodge Economic Consulting, facilitated the convening of the Pioneer Valley Regional Planning Team to formulate the Pioneer Valley Labor Market Blueprint. The Pioneer Valley Regional Planning Team also engaged businesses through a series of facilitated focus groups which aimed to gather information related to business and workforce challenges. Industry and occupation data was also gathered and analyzed by the Team to get a clear understanding of the regional economy. The outcome of the data analysis and meetings included the determination of priority industries and occupations, goals and strategies, and mutually reinforcing activities for Workforce Development, Education, and Economic Development partners.

The following are key aspects of the Regional Blueprint, developed by the Pioneer Valley Regional Planning Team:

Vision Statement

Joint Vision Statement among Education, Workforce Development, and Economic Development partners: Workforce development, economic development, education, and human services collaborate effectively and proactively to drive regional economic expansion, increase job opportunities, and strengthen businesses, communities, and families.

Mission Statements

Education: Regional education partners will collaborate with workforce and economic development partners to align educational programming with the needs of the area economy.

Workforce Development: Regional workforce partners will create an effective, evidence-based regional workforce system that partners with businesses, educational institutions, community based organizations, and governmental agencies to meet current and future needs of employers and workers by training and matching skills to quality, in-demand jobs.

Economic Development: Regional economic development partners will work with a network of local and regional stakeholders to actively engage with workforce and education partners to:

- Align economic plans with workforce and education to understand and address current and future workforce needs of business and industry sectors for economic growth, and
- Participate in programs and initiatives to educate and train jobseekers to obtain meaningful employment and careers within the region.

Joint Mission Statement among Education, Workforce Development, and Economic Development partners:

Workforce development, economic development, and education in the Pioneer Valley Region function as a strategic, integrated and evidenced-based system that effectively responds to current and future employer demand, and creates high quality and sustainable employment opportunities and career pathways for job seekers and workers that result in a skilled workforce and regional economic expansion.

Priority Industries

The top three industries the Pioneer Valley Regional Planning Team considers as being the most important to the region's economic success are as follows:



Health Care and Social Assistance

This industry was chosen as a priority in part due to the presence of several major acute care hospitals, a substantial number of long-term care and assisted living facilities, and a growing number of other community-based health care and social assistance facilities within the region.



Education Services

This industry was chosen as a priority was chosen in part due to the presence of significant number of secondary and post-secondary institutions including the UMass flagship campus. State data also indicated Educational Services as second most in-demand priority regional industry. Regional data at K-12 was especially supportive in critical needs fields at all levels.



Advanced Manufacturing

This industry was chosen as a priority was chosen in part due to the presence of significant number of subject matter experts in an integrated manufacturing ecosystem and supply chain.

Priority Occupations

Each of the chosen Priority occupation groups fall within the three priority industries, as previously specified.

Healthcare and Social Assistance Occupational Groups, specifically:

- Social & Human Service Assistants
- Direct Care Workers such as Registered Nurses, Nursing and Medical Assistants, Personal Care Aides
- Technical/Clinical Workers such as Dental Hygienists, Pharmacy Technicians, LPNs/LVNs, Medical Records/Health IT, Physician Assistants, Occupational and Physical Therapists

Educational Services Occupational Groups, specifically:

- Educators including all levels, and all fields, including vocational-technical, STEM, and trades educators
- Teachers' Assistants

Advanced Manufacturing Occupational Groups, specifically:

- Supervisors
- Production Workers such as CNC Operators, Machinists
- Inspectors, Testers, Quality Control Workers

Cross-Industry Occupations, specifically:

- IT-related
- Professional Services
- Back-Office Administrative Support and Logistical Supports

The following represents our high-level goals through 2022:



The following pages and attachments provides the full text of the Pioneer Valley Blueprint and with detailed goals and strategies as Attachment E.

Introduction Describe the process of creating a regional plan.

Regional Planning Team. Describe the different **partner organizations** brought together to be a part of the **Regional Planning Team** (K-12 District, Vocational Technical School, Community College, State University, Workforce Development Board, Massachusetts Office of Business Development (MOBD), Regional Economic Development Organization (REDO), Regional Planning Authority (RPA), and others).

The Pioneer Valley Regional Planning Team was formed by the Massachusetts Workforce Skills Cabinet (WSC) Secretariats. The Secretary's named the individual representatives of the Regional Planning Core Team who are listed in the table below. Other regional stakeholders were added to ensure equitable participation from the two individual workforce regions (Hampden and Franklin/Hampshire Counties) that were combined for the Regional Planning process. The Regional Planning Team members represent:

- Education: K-12, Vocational Technical, Two and four year colleges/universities levels
- Economic Development: The regions' MOBD, RPA and REDO, as well as the City of Springfield's Planning and Economic Development Department and Franklin and Hampshire economic development planning entities.
- Workforce Development: the region's two Workforce Development Boards, their One-Stop Career Center Operators, and representatives in the region who are members of the State's Workforce Development Board
- Private sector

Pursuant to the federal Workforce Innovation and Opportunity Act (WIOA) and the State and WSC policy for WIOA Regional Planning, the designated Workforce Boards acted as the lead conveners in organizing the development of the Regional Labor Market Blueprint for the Pioneer Valley Regional Planning Team.

_	Pioneer Valley Regional Planning Team							
Last Name	First Name	Organization						
1. Abramowitz	Christine	Regional Employment Board of Hampden County, Inc.						
2. Anderson	Teri	Franklin Hampshire One-Stop Career Center						
3. Atwood	Jessica	Franklin Regional Council of Governments						
4. Berwald	Joanne	Mestek, Inc. / State Workforce Board						
5. Boronski	Debra	Mass. Office of Business Development						
6. Brennan	Tim	Pioneer Valley Planning Commission						
7. Brown	Jennifer	United Personnel Services, Tricia Canavan rep.						
8. Buoniconti	Michael	Mohawk Public Schools						
9. Canavan	Tricia	United Personnel Services/State Workforce Board						
10. Connor	Brian	City of Springfield, Economic Development						
11. Cook	Dr. John B.	Springfield Technical Community College						
12. Crosby	Patricia	Franklin Hampshire Regional Employment Board						
13. Cruise	David	Regional Employment Board of Hampden County, Inc.						
14. Czaporowski	Stefan	Westfield Public Schools						
15. Dunlavy	Linda	Franklin Regional Council of Governments						
16. Gadaire	Dave	CareerPoint One-Stop Career Center						
17. Hagopian	Eric	The du Mont Company/Hassey Savage/State Workforce Board						
18. Knapik	Michael	Office of the Governor						
19. Lynn	Kevin	FutureWorks One-Stop Career Center						

20. Martin	Larry	Regional Employment Board of Hampden County, Inc.
21. McKenzie	Anne S.	Hadley Public Schools
22. Peeters	Cindy	Smith Interconnect aka MilliTech, host of sessions
23. Plummer	Shayvonne	City of Springfield, Economic Development, Brian Connor rep.
24. Pura	Robert	Greenfield Community College
25. Seaver	Catherine	Greenfield Community College, Robert Pura rep.
26. Sharp	William	Freedom Credit Union (F/HREB Board Chair)
27. Stiles	Alyce	Greenfield Community College, Robert Pura rep.
28. Sullivan	Richard	Economic Development Council of Western Mass
29. Torrecilha	Dr. Ramon S.	Westfield State University
30. Wagner	Joseph	MA Representative / State Workforce Board

Regional Planning Process. Describe your region's process to develop Labor Market Blueprint.

Following the formation of the Pioneer Valley Regional Planning Team by the WSC, we carried out the following activities:

- April 26, 2017 Kick-off Regional Planning Team meeting to review demand-side data.
- June 15, 2017 Second Regional Planning Team meeting to review supply-side data.
- Submitted required Work Plan with Regional Employment Board of Hampden County, as the designated fiscal agent, sub-contracting with the Franklin Hampshire Regional Employment Board.
- Carried out Request for Qualifications procurement process, formed Regional Planning Team Core
 Team to review submissions and selected Camoin Associates & Hodge Economic Consulting to
 consult on this work. Consulting contract officially signed on August 1, 2017.
- Began working with Greg Bunn at EOLWD on developing regional criteria for selecting priority industries and occupations.
- Constituted a Pioneer Valley Region Data Team to analyze data and information for preparation of Regional Market Blueprint. Team includes Consultants and Regional Employment Boards staff members and arranged for Greg Bunn to provide webinar-training to the Regional Market Blueprint Team on the data tool on September 5, 2017.
- With the assistance of the Employers Association of the Northeast, planned and held two Employer
 Focus Group Sessions with a total of 30 employers representing multiple industry sectors participating
 on the following dates:
 - August 24, 2017- Hampden County regional employers.
 - October 17, 2017- Franklin and Hampshire County regional employers.
- With assistance and facilitation from the Consulting Team, planned and scheduled the following team meetings:
 - September 28, 2017 Regional Planning Team Meeting. Focus: narrowing down Priority and Critical Industries and Occupations, crafting agreed upon labor and business challenges, and opportunities, and creating a shared vision.
 - October 27, 2017 Regional Planning Team Meeting. Focus: continued working on materials from September 28th meeting. Additionally, crafting mission statements for each partner, and a shared mission statement, as well as crafting initial goals and strategies.
 - November 17, 2017 Regional Planning Team Meeting. Focus: more on mission(s), goals and strategies, as well as beginning the creation of mutually reinforcing strategies and activities.
 - December 7, 2017 Franklin Hampshire Regional Employment Board, Board of Directors Presentation. Voted to proceed with regional planning process.
 - December 12, 2017 Regional Employment Board of Hampden County Board, Board of Directors Presentation. Voted to proceed with regional planning process.

Also presented at and received feedback from two State level meetings:

- November 16, 2017- Peer-to-peer Presentation
- December 11, 2017 Presentation to Workforce Skills Cabinet and their staffs

Business Engagement. Describe how the Team engaged business to develop the blueprint, including the number of businesses engaged, the industries businesses associate with, and the format of engagement the team employed.

The Pioneer Valley engaged businesses through a series of facilitated focus groups that gathered information related to workforce issues they are facing. The focus groups were held throughout the region and focused on different industry sectors. Four businesses are represented on the Planning team. We had 30 attendees at the two Employer Focus Group sessions that were held with the assistance of the Employers Association of the Northeast on August 24, 2017 for Hampden County regional employers and October 17th, 2017 for the Franklin and Hampshire regional employers. The industries represented manufacturing (12), health care (3), financial & business services (7), and remaining others from print media, human services, renewable energy, construction, auto sales and retail.

The Region has established local/regional industry-led partnerships which bring employers and workforce intermediaries together on a regular basis to focus on demand-supply needs in the region's priority and other critical industries. The Precision Manufacturing Regional Alliance Partnership, the Healthcare Workforce Partnership of Western Massachusetts, the Franklin Hampshire Manufacturing Skills Initiative, the Regional Clean Energy Workforce Partnership, Pioneer Valley Grows, and the Franklin Hampshire Elder Care Partnership are examples of industry led partnerships identifying and developing planned responses to industry needs and priorities. Several of the employers in these partnerships provided technical guidance during the development of the Blueprint and will be actively involved in the implementation phase of the Blueprint.

II. Where are we now?

Describe the current state of your region, including an analysis of industries, occupations, demographic shifts, and gaps between employer demand and employee supply.

Regional Context

Utilize the information provided through state data sets and additional local analysis to highlight the region's unique geography, communities, population growth/change, education demographics, workforce history, high-level industry trends, etc.

Describe critical trends in population change in the next decade that will have an impact on the workforce.

Since 2012, the Pioneer Valley has seen a 0.4% increase in the overall population, gaining just over 3,000 residents. This trend is projected to continue over the next five years, with a projected population increase of 0.3% representing an additional 2,000 residents. The age cohorts projected to see the largest increase in percentage of the total population are residents 70-74, and 75-79, projected to increase by 30%, and 35%, respectively (15,000 residents). This factor will affect the workforce because: 1) it indicates how the region's workforce is aging; and 2) this cohort will require particular services including, but not limited to, those related to the occupational groupings within the Healthcare and Social Assistance priority industry.

Over the next five years, the Pioneer Valley is projected to add nearly 1,500 people between the ages of 25-29. This will increase the labor and talent pool for regional employers, however, this low rate of growth does create concern in terms of the available workforce levels needed to support new economic growth. The population age cohorts that are projected to decline by over 15,000 residents within the next five years include people ages 45-49 (12%,), 50-54 (12%), and 55-59(8%); most likely due to out-migration *Source of data: EMSI 2017.4 class of worker*

Describe critical trends in regional demographics that will have an impact the workforce. Age, education, etc.

The Pioneer Valley currently has an estimated 150,000 millennials, age 20-34, which is marginally higher than the national average for an area of this size, primarily due to the large number of area colleges and universities. However, the Pioneer Valley also has an above average portion of the population who are at or near retirement age. The number of people in the region who are considered to be retiring soon, defined as people ages 65 and older, total over 114,000, which is just above the national average for a region this size being 107,000 people.

The population of the Pioneer Valley as a whole shows a lack of racial diversity, with over 71% of the population identifying as White, Non-Hispanic, followed by 14.8% of the population identifying as White, Hispanic, 5.9% identifying as Black, Non-Hispanic and the remaining comprised of other races. Over the next five years, the number of people identifying as White, Hispanic is projected to increase by 9%, adding nearly 10,000 residents. Additionally, the number of people identifying as Asian Non-Hispanic is projected to increase by 11%, adding nearly 2,500 residents in total. It's worth noting, however, that the larger urban areas of the region such as Springfield and Holyoke possess very large Hispanic populations.

Describe past and current high-level industry trends affecting workforce needs (i.e. growing, declining, emerging industries).

During the Great Recession (2008-2009), and in the beginning of the recovery in 2011, the three priority industries of Healthcare and Social Assistance (3%), Educational Services (13%) and Fabricated Metal Product Manufacturing (-7%) varied from negative to positive job growth. In addition, regional priority industries such as Accommodation and Food Services (3%) and Professional, Scientific and Technical Services also displayed flat or negative job growth. However, from 2011 to 2017 all three of the priority industries showed positive job growth with Healthcare and Social Assistance leading with an incredible 41% job growth, creating 20,839 jobs. Educational Services also had positive job growth at 9%. Fabricated Metal Product Manufacturing job growth increased by 13% with the creation of 821 new jobs. In addition, Accommodation and Food Services (7%) and Professional, Scientific and Technical Services (6%) increased creating 1,567 and 652 jobs respectively.

Describe critical trends in occupational employment history in the region (i.e. growing, declining, emerging occupations).

During the period starting with the economic recovery beginning in 2011 to 2017, significant job growth has occurred in occupations that require a bachelor's degree (+). Leading this growth are occupations in Healthcare and Social Assistance such as Community and Social Service Specialists (44%), Social Workers (42%), Therapists (18%) and Registered Nurses (12%). The demand for Educators also shows steady job growth averaging 5% to 10% for elementary, secondary and post-secondary educators in addition to teacher's assistants. High growth occupational trends at the sub-bachelor's level continue to be led by Healthcare and Social Assistance with Nursing, Psychiatric, and Home Health Aides (55%) and Healthcare Support jobs. Occupations such as Secretaries and Administrative Assistants (6%), Office Clerks, General (8%) and teachers' assistants (8%) show steady growth and create a significant number of entry- level job opportunities.

Based on anticipated industry growth in 2018 in Arts, Entertainment and Recreation, there will be a substantial number of occupational opportunities emerging in Casino Floor and Hotel Operations. In addition, support and service job opportunities will become available in Food and Beverage, Administration, Security, Entertainment, information Technology and Culinary. New opportunities will also emerge in manufacturing in 2018 with the opening of the CRRC Railway Car manufacturing and assembly facility in Springfield. Approximately 110-140 positions will be created for production floor, supervisory, engineering, support services and administrative occupations.

What are the top three challenges facing the region's business and industry over the next five years?

According to data, research, and engagement with employers, the top 3 challenges facing regional businesses are:

- 1. Attracting and retaining a sufficient number of skilled and/or educable employees at all levels.
- 2. Talent shortages, rising costs of doing business, and technological innovation are necessitating development and implementation of creative workforce development strategies.
- 3. Sustaining/expanding business growth will require more investment in systems critical to supporting the needs of workers, including transportation, housing, childcare, education, employment services, and job training.

What are the top three opportunities related to business and industry in your region over the next five years?

Based on our research and data analysis, the **top three opportunities related to business and industry** in our region are:

- 1. Incremental growth of Small and Medium Size Enterprises (SMEs) and emergence of new start-ups in selected regional industries should accelerate pace of regional job creation and economic development.
- 2. New large-scale employers with potential for regional job multiplier effects may positively impact job creation and supply chains, and create career pathways for both new pipeline and the existing incumbent workforce.
- 3. A burgeoning Agriculture and Sustainable Food Systems eco-system is creating jobs and new business development at a steady rate, providing opportunities to increase the region's strong concentration in this industry sector.

Industry Demand Analysis (NAICS)

Utilize your region's criteria and labor market data (i.e. data packages and excel tool) developed for the regional planning teams to explore the following questions in discussion and develop consensus for each section.

What top three industries are most important to the region's economic success and why?

The top three industries that we consider to be the most important to the region's economic success are the three we have chosen as Priority Industries:

- 1. Health Care and Social Assistance
- 2. Educational Services
- 3. Advanced Manufacturing

The Pioneer Valley Regional planning process produced detailed Regional Industry and separate Occupational Criteria that supported and augmented Criteria provided by the State to select and prioritize both Priority Industries and Occupational Groupings. (**See Attachment A for specific Criteria that supported the chosen priority industries**). The Team is very confident that these priority industries satisfy both the State and Regional Criteria and reflect the results of careful analysis of short term and long term economic and workforce trends through 2022.

What three industries currently face the most significant workforce development challenges? In coming up with our top three priority industries that most important to our region's success, we factored in that they also faced the most significant workforce development challenges and therefore they are the same three industries identified above.

Occupational Demand Analysis (SOC)

Utilize your region's criteria and labor market data (i.e. data packages and excel tool) developed for the regional planning teams to explore the following questions in discussion and develop consensus for each section.

What are the top occupations or occupational groups in which the region is facing the most significant employee shortages? Utilize the regional occupational list that ranks of 3, 4 and 5 star occupations for the region and determine those with significant shortages based upon the "supply" data for the region, input from business, organizations and other input.

The top occupational groups with the largest supply gaps are (See Attachment B for specific titles/data):

- Social/Human Service (-666 workers), Direct Care Workers (-1,802 jobs) including Registered Nurses (RNs) and others, and Technical/Clinical Workers (-1,373 workers) consisting of various occupations. Note: Registered Nurses are generally considered separate from Direct Care Workers as they require higher education but are grouped here with others for blueprint/career pathway mapping purposes.
- 2. Educators (Elementary to Post-Secondary, Educator Support) comprise the next largest supply gap at -1,265 workers.
- 3. Advanced Manufacturing is the final occupational grouping consisting of First-line Supervisors, Machinists, Computer Controlled Machine Operators (CNC) and Quality Control Workers with a total supply gap of -105 workers.

As noted above, the Pioneer Valley Regional planning process produced detailed Regional Industry and separate Occupational Criteria that supported and augmented Criteria provided by the State to select and prioritize both priority Industries and Occupational Groupings. (See Attachment A)

We also identified and documented the occupations/occupational groupings that are viewed by ONET as having a "Bright Outlook" (i.e., Bright Outlook occupations are expected to grow rapidly in the next several years, or will have large numbers of job openings), met the 3+ Star rating defined by the state, the numeric Supply Gap Numbers/Ratios and were characterized as having more openings that qualified workers or were high-skilled, employer-demand driven occupations/occupational groupings. (See Attachment B)

Which occupations offer a "career pathway" for workers to move to higher skills and wages, especially workers starting at entry-level? (Note 1 or 2 star occupations not included above that are entry-level yet important because of a career pathway or cluster.)

The Franklin Hampshire Regional Employment Board and the Regional Employment Board of Hampden County believe that **all** the priority occupational groupings set forth in the Blueprint offer career pathway opportunities for workers to move to higher skills and wages, especially workers starting at an entry-level. Two of our key Goals and Strategies in the Blueprint are as follows:

- By the end of 2018, we plan to *DESIGN* clear educational/career pathway programs at all levels within the priority industries.
- By the end of 2020, we plan to IMPLEMENT educational/career programs that increase the supply
 of trained workers and present clear pathways for credential attainment, quality career mobility, and
 wage advancement in specific occupational groupings in priority industries.

The Franklin Hampshire Regional Employment Board as well as the Regional Employment Board of Hampden County (REBs) do not believe that the current regional pathway programs are aligned or coordinated sufficiently to present career pathways that provide clarity and consistency to employers, job seekers, and incumbent workers at all levels. We believe that we have work to do before we can indicate

clear and specific pathways. In addition, pathway development and implementation, particularly at the 1 and 2 star occupational levels, will require a sustainable funding strategy that will ensure for continuity of progression over time. This discussion will be a part of our work during the 2018-2020 timeframe.

Workforce Supply

Using the regional planning data tool and packages, review information on existing unemployed workers, graduates coming from educational pipelines and other data on workforce supply.

What are the top three broad labor supply challenges facing the region over the next five years based on the existing workforce in the region?

According to data, research, and engagement, we understand the top 3 labor supply challenges are:

- 1. Regional workforce participation rate of 62.0% being impacted by flat population growth, aging population, and too many adults who feel disconnected from job opportunities. Additionally, labor supply increases being driven by new immigrants which may be negatively impacted by federal policies and limited public resources and supports for education and training.
- 2. Parts of the region have a relatively low share of the population with a bachelor's degree contributing to a 10% difference region-wide as compared to the State (30.7% vs. 40.5%), impacting the long-term growth potential of knowledge economy sectors like healthcare, professional and scientific services, and finance.
- 3. Increased workplace emphasis on employability readiness skills and flexibility to adapt to changing business conditions and work requirements necessitating re-alignment and expansion of education and workforce preparation programs, and health and social services to support workforce development and retention.

What are the top three labor supply opportunities facing the region over the next five years based on the existing workforce in the region?

- The Pioneer Valley's high concentration of public and private higher education institutions, and high
 and diverse student enrollment is an opportunity to increase the region's workforce talent supply
 through college graduate retention initiatives such as internships that lead to career-aligned
 employment.
- 2. The region's high quality of life, affordable housing costs, and proximity to a rich diversity of cultural, outdoor recreation, and entertainment destinations Valley-wide, are an opportunity to attract and retain a skilled/talented workforce.
- 3. The priority occupational groupings for both new labor market entrants and incumbent employees are supported by regional educational programs that offer, or have potential for, clear pathways for career mobility and wage advancement within a 3-5-year time period.

Based upon UI Claimant population, what is the region's largest supply of unemployed workers by job type?

The largest supply of workers is within the following SOC Occupations Source: EOLWD- UI Claimant Characteristics Report- Hampden and Franklin/Hampshire Counties Aggregated- Week Ending October 14, 2017:

- Office and Administrative Support (699),
- Production (533)
- Management (506)
- Personal and Care Service (487)
- Transportation and Material Moving (404)

What are the characteristics of unemployed and under employed workers in the region?

Typical characteristics of the regions' unemployed and under employed workers include limited educational attainment beyond a high school diploma, the need for post-secondary training to address skills gaps, wages that have not kept up with inflationary life cycle needs, a competitive benefits package and lack of

formal work experience. In addition to these work related characteristics, language barriers, transportation, the ability to work a non-traditional shift, and family responsibilities are often obstacles that are associated with the regions' unemployed and under employed individuals.

Describe the universe of the region's existing pipelines of new workers (credentials) across public and private secondary and post-secondary institutions. (Highest and lowest number of new graduates by credential/CIP? How does retention of graduates in your region influence supply?)

In addition to the numerous secondary institutions, including seven vocational-technical schools, there are multiple colleges and trade schools in the Pioneer Valley including but not limited to the University of Massachusetts-Amherst, Westfield State University, American International College, Western New England University, Elms College, Springfield Technical Community College, Holyoke Community College, Greenfield Community College, Amherst College, Smith College, Springfield College, Bay Path University, and Mount Holyoke College. In 2016, there were over 21,000 college and technical school graduates in the Pioneer Valley. The largest number of graduates come from "Psychology, General", Liberal Arts and Sciences/Liberal Studies, and "Business Administration and Management, General." *Source of data: EMSI 2017.4 class of worker*

The universe of existing pipelines of new workers that can provide credentials for the Pioneer Valley at the post-secondary level consists of the five-college consortium located in Hampshire County, the seven Metro Springfield universities and colleges, and the region's three community colleges. At the secondary level, there are six vocational schools and one comprehensive high school that provide training credentials.

Healthcare and Social Assistance

Registered Nurses require a bachelor's degree with the majority of RN's coming from American International College, Baypath University, Elms College, Westfield State University and UMass-Amherst. Associate degree RN's continue to find employment in a wide variety of Healthcare organizations, but perusing a BSN is being strongly recommend as a pre-requisite to access to a greater variety of career pathway development employment opportunities, in particular in acute care service provider settings. The other four occupations of Social and Human Service Assistants, Nursing Assistants, Medical Assistants and Personal Care Aides normally come through vocational schools and degree and one year certificate programs coming through the three community colleges.

Educational Services

With the exception of teacher assistants, the Educators (all levels) occupational group are provided new pipeline workers through the regional universities and colleges at the bachelors and graduate level. Leaders in graduating educators are American International College, Springfield College, Westfield State University and the University of Massachusetts-Amherst.

Manufacturing

For the key priority occupational groupings in Fabricated Metal Product Manufacturing, credentialing training programs for the majority of new pipeline workers are conducted at the vocational schools. Springfield Technical Community College is the only regional community college with degree, certificate, and non-certificate technical training programs in advanced manufacturing. The other two community colleges have collaborative partnerships with local vocational schools. Greenfield Community College is building a sequence of Engineering Technology credit courses designed to provide next steps to a certificate or degree for non-credit training graduates and incumbent workers.

Retention challenges are most common through the four-year colleges and universities with typically 50% of graduates returning to their home states or countries (or home to other regions in Massachusetts). The planning Team has identified retaining 4 year college graduates as a key strategy to be addressed during the implementation stage in the 2018-2020 Blueprint time frame.

III. Where do we want to go?

Describe the collectively developed criteria, industry and occupational priorities, vision, mission, and goals for your region.

Criteria for Priority Industries/Occupations

The regional kick-off meetings with the WSC suggested a number of foundational criteria to prioritize industries and occupations, including existing job openings, jobs with low barriers to entry, jobs that lead to career pathways, and occupations with high demand (current openings, short/long term projections), and self-sustaining wages.

STATE CRITERIA

- High employer demand
- High demand and high wage (4-5 Star Occupations)
- Talent Gaps (Ratio of Supply to Demand)
- Career Pathways

REGIONAL CRITERIA

What additional criteria are important to your Regional Planning Team?

- Mostly in line with State Criteria but more specifically and geographically defined:
- ➤ Industry Criteria: 1. Total and Average Wages; 2. Employment Share; 3. Annual Openings (over time); 4. Industry Ecosystem (critical mass; existing partnerships); 5. Career Pathways that exist or need developing
- Occupation Grouping Criteria: 1. Employment Share; Growth (2. Overall; 3. BA-level, 4. Sub-BA Level; 5. Sub-Regional); 6. Career Pathways that exist or need developing

Please see **Attachment A** for more detailed information regarding both Industry and Occupation Criteria and **Attachment C** for PowerPoint slide that summarizes these selections.

Priority Industries and Occupations

Using your regional context and mutually agreed upon regional criteria, list your priority regional industries and occupations or occupational groups.

List your 2-3 priority industries by 2-digit NAICS. Where you choose to prioritize an industry that does not fit neatly into a 2-digit NAICS code (i.e. creative economy), note where it would best fit (i.e. Arts and Recreation) and describe the portion of the 2-digit industry you are prioritizing. For each selection, write a brief justification of your choice.

- 1. Healthcare and Social Assistance (62)
 - This is the region's largest source of jobs and was chosen in part due to the presence of several major acute care hospitals, a substantial number of long-term care and assisted living facilities, and a growing number of other community-based health care and social assistance facilities.
- 2. Educational Services (61)
 - This was chosen in part due to the presence of a significant number of secondary and postsecondary institutions including the UMass flagship campus. State data also indicated Educational Services as second most in-demand priority regional industry. Regional data at K-12 was especially supportive in critical needs fields at all levels.
- 3. Advanced Manufacturing (31-33)
 - This was chosen in part due to the presence of significant number of SMEs in an integrated manufacturing eco-system and supply chain.

All three priority industries met the state and regional criteria outlined above and described in more detail in *Attachments A and C.* (Note: While IT (Software/Communication Services, etc.) was not a chosen Priority Industry sector, we will look to benchmark our region against others in the state as we implement our Blueprint strategies. Priority cross-industry occupations do include those that are IT-related.)

List 3 to 5 priority occupations or occupational groups by SOC code (4-8 digit, as necessary). Include a short description justifying the choices

SEE ATTACHMENTS A, B and C for criteria justification and various SOC codes.

- 1. Healthcare and Social Assistance Occupational Groups, specifically:
 - Social & Human Service Assistants
 - Direct Care Workers (RNs, Nursing and Medical Assistants, Personal Care Aides)
 - Technical/Clinical Workers (Dental Hygienists, Pharmacy Technicians, LPNs/LVNs, Medical Records/Health IT, Physician Assistants, Occupational and Physical Therapists)
- 2. Educational Services Occupational Groups, specifically:
 - Educators (all levels, and all fields, including vocational-technical, STEM, and trades educators)
 - Teachers' Assistants
- 3. Advanced Manufacturing Occupational Groups, specifically:
 - Supervisors
 - Production Workers (Including CNC Operators, Machinists)
 - Inspectors, Testers, Quality Control Workers
- 4. Cross-Industry Occupations such as those that are IT-related, Professional Services, Back-Office Administrative Support and Logistical Supports.

The Pioneer Valley Regional planning process produced detailed Regional Industry and separate occupational criteria that supported and augmented criteria provided by the State to select and prioritize both priority Industries and Occupational Groupings. Again, we also identified and documented the occupations/occupational groupings that are viewed by ONET as having a "Bright Outlook" (e.g. Bright Outlook occupations are expected to grow rapidly in the next several years, or will have large numbers of job openings), met the 3+ Star rating defined by the state, the numeric Supply Gap Ratios and were characterized as having more openings that qualified workers or were high-skilled, employer-demand driven occupations/occupational groupings. **Please see Attachments B and C.**

Industries and Occupations – Critical but not Prioritized. (*OPTIONAL*) If the team would like to describe industries and occupations that are notable in your region but not prioritized during this regional prioritization process, please list them here with a description of what makes the industry/occupation significant.

Other critical industries and occupation groupings (which include some of the same cross-industry occupations referenced in #4 above) are:

- 1. Finance and Insurance (due to the presence of MassMutual and several other businesses in this industry)
- 2. Professional, Scientific, and Technical Services (most notably the Information Technology sector)
- 3. Accommodation and Food Services, in conjunction with Arts, Recreation, and Entertainment
 - Including occupations such as: Gaming-related emerging occupations; Food Preparation & Serving; Outdoor Recreation; Culture and Arts
- 4. Agriculture & Sustainable Food Systems
 - Including occupations such as: Growing; Value-Added Manufacturing Processing;
 Distribution; Serving and Selling; Managing Food Waste; Animal Care; Farm/Nursery Management; Entrepreneurship

Assets

For each of the selected **priority industries and occupations (purple section)**, articulate existing assets and gaps in capacity.

Credential Asset Mapping Tool. For priority industries and occupations that require credentials, use the Credential Asset Mapping Tool to demonstrate assets and gaps for each priority industry and occupation. See *Attachment D* Asset Maps for the publicly-funded institutions in the region. Many other private schools also exist.

Non-Credential Asset and Gap Analysis. For priority industries and occupations that **do not** require a credential, describe what existing assets in the region can meet the employer demand, and where systemic gaps prevent meeting employer demand.

Technology-enabled advanced manufacturing is a critical industry sector in the Pioneer Valley Region. The Precision Manufacturing Regional Alliance Project (PMRAP) is an existing regional partnership organized to support the growth and competitiveness of advanced manufacturing in the Pioneer Valley Region of Massachusetts. PMRAP represents a broad regional partnership comprised of advanced manufacturing companies, led by the Western Massachusetts Chapter of the National Tooling and Machining Association (WMNTMA), educational/training institutions, economic development agencies, and interested community stakeholders. It has created a training infrastructure funded from both public and private funding sources and focused on the delivery of workforce development training programs for new entry-level employees in two of the Blueprint priority occupational groupings within the Manufacturing industry: 1. Production Workers and 2. Inspectors/Testers

The REB has awarded successful graduates a Locally Recognized Certificate of Completion approved and signed by the Western Massachusetts Chapter of the National Tooling and Machining Association. The Certificate is recognized by the regions advanced manufacturing companies as an entry-level stackable credential of value and relevancy in the regional labor market.

In the Upper Pioneer Valley, the Franklin Hampshire Manufacturing Skills Initiative, a partnership of 12-14 leadership employers, the FHREB, Greenfield Community College (GCC), and Franklin County Technical School, with the increasing participation of Smith Vocational and Agricultural High School (Smith), has been training and graduating 28-35 students a year since 2012, successfully placing an average of 84% in manufacturing employment throughout the Pioneer Valley. It has created a training infrastructure in the Franklin Hampshire Region funded from both public and private funding sources, focused on the delivery of workforce development training programs for new entry-level employees in Blueprint priority occupational groupings within the Manufacturing industry. Both Smith and GCC are also increasing education/training options for incumbent as well as prospective adult workers, with Smith offering courses in such areas as Solidworks, and GCC beginning to build a pathway of for-credit courses toward an Engineering Technology Certificate (EGT) option.

Ongoing through the end of 2022, regional advanced manufacturing companies will need to work closely with their workforce and educational partners to ensure that technical skills in operational areas such as artificial intelligence, robotics, and analytics that impact manufacturing processes in their supply chain are embedded into the training programs for both new pipeline and in particular incumbent workers. As noted elsewhere we will work to further align these existing structures to ensure maximum leveraging of the Pioneer Valley assets to support the manufacturing industry.

The Healthcare Workforce Partnership of Western Massachusetts is an industry led and financed initiative of the REB in the Health Care and Social Assistance priority industry. The Partnership has an Allied Health Work Group (AH) that is comprised of the major educational institutions and health care service providers in the region.

The primary focus of the AH is to focus on programs and services for Direct Care Workers which is a regional priority occupational grouping in the Health Care and Social Assistance priority industry. Collaborative programming, sharing of space and resources, alignment of pathways curriculum to industry standards is conducted on a regular basis.

This work is complemented in the Upper Pioneer Valley region by the work of the Franklin Hampshire Elder Care Collaborative and related Franklin Hampshire healthcare employer advisory groups, who have and continue to develop recruitment, training, and placement initiatives with a particular focus on the needs of long-term care and small hospital employers, including the state-recognized Franklin Hampshire Extended Care Partnership. The REBs are currently part of a regional review team that is working closely with state-wide home care associations in studying supply and demand issues and credentialing requirements in the following two sub-occupations within the priority occupational grouping of Direct Care Workers: 1. Community Health Workers and 2. Home Health Aides

Vision, Mission, Goals.

Using your articulated priority industries, occupations, and existing assets, articulate your broader vision, mission, and goals.

Vision. State 2-5 things that you hope will be true in your region 10 years through the lens of education, workforce development, and economic development to address the priority industries and occupations identified in the Blueprint. <u>Our agreed upon Vision Statement is as follows:</u>

Workforce development, economic development, education, and human services collaborate effectively and proactively to drive regional economic expansion, increase job opportunities, and strengthen businesses, communities, and families.

Mission. State what each set of core partners has agreed to do in order to achieve your vision. What will educational partners do? What will economic development partners do? What will workforce development partners do?

Education:

Regional education partners will collaborate with workforce and economic development partners to align educational programming with the needs of the area economy.

Workforce:

Regional workforce partners will create an effective, evidence-based regional workforce system that partners with businesses, educational institutions, community based organizations, and governmental agencies to meet current and future needs of employers and workers by training and matching skills to quality, in-demand jobs.

Economic Development:

Regional economic development partners will work with a network of local and regional stakeholders to actively engage with workforce and education partners to:

- Align economic plans with workforce and education to understand and address current and future workforce needs of business and industry sectors for economic growth, and
- Participate in programs and initiatives to educate and train jobseekers to obtain meaningful employment and careers within the region.

<u>Combined Mission:</u> Workforce development, economic development, and education in the Pioneer Valley Region function as a strategic, integrated and evidenced-based system that effectively responds to current and future employer demand, and creates high quality and sustainable employment opportunities and career pathways for job seekers and workers that result in a skilled workforce and regional economic expansion.

Goals. Describe your *shared* goals for 2018, 2020, and 2022. Note that goals listed here should be those that need participation of players from multiple entities and across two or three of the systems for accomplishment.

By 2018, we will...

- Align workforce development, education, and economic development activities to ensure successful implementation of Blueprint Strategies.
- Identify and align partner and stakeholder assets and resources to support implementation of Blueprint Strategies.
- Adopt a coordinated process to collect, analyze, and disseminate demand-side data on current and future vacancies and skills needs in priority and other critical industries and occupational groupings to better match jobseekers with employer's demands and requirements.
- Create and formalize a more coordinated and sustainable process to improve business engagement in implementing Blueprint Strategies.
- Provide job seekers with increased and consistent access to detailed information about priority and other critical occupational groupings, and the availability of career pathway educational programs.
- Develop an integrated communication and information-sharing plan that keeps partners, employers, and stakeholders informed on Blueprint implementation progress/resets, goals, and outcomes.
- 7. DESIGN educational/career pathway programs in specific priority industries.
- 8. Classify regional secondary leveleducation career pathway programming being conducted at both the technical and comprehensive high schools.

By 2020, we will...

- 1. Implement educational/ career programs that increase the supply of trained workers and present clear pathways for credential attainment, quality career mobility, and wage advancement in specific occupational groupings in priority industries.
- 2. Increase the availability of quality jobs in priority occupations for job seekers at the sub-Bachelor's degree level, and improve upon the 10% gap in the region's Bachelor's degree level population as compared to the statewide average.
- 3. Increase the number of high quality jobs in priority occupational groupings that pay median wages that meet or exceed regional averages and offer competitive employee benefit packages.
- 4. Increase employment share in sub-regional industries characterized by small and medium size enterprises (SMEs) and start-ups.

Numerical goals/targets for #2, 3 and 4 to be determined during the Blueprint implementation phase.

By 2022, we will...

- Improve the Supply Gap Ratio in priority and indemand occupational groupings by increasing the number of employees working in our prioritized regional industries.
- Increase number of high quality jobs for job seekers and incumbent workers in occupations that have an Employment Share ≥ statewide averages for those occupations.
- 3. Increase the number of high quality jobs in priority occupational groupings, and other critical regional industries, that pay median wages that meet or exceed regional averages and offer competitive employee benefit packages.
- 4. Improve the Pioneer Valley Regions annual average labor force participation rate of 62.0% to approximate the State's annual average labor force participation rate of 65.5%, adjusted over time.

Numerical goals/targets for #1, 2 and 3 to be determined during the Blueprint implementation phase.

Please see Attachment E: Goals and Strategies for more detailed information.

IV. How do we get there?

Describe the strategies you will jointly employ to align the work of multiple systems around your shared vision, mission, and goals.

Shared Strategies

While each system may make changes in individual programming to align with the region's priorities, all systems will need to commit to shared changes in the following areas, stated below. Describe how your region will work collaboratively in the following two areas.

Continuous Communication. How often and in what way will you meet to review progress towards shared goals and make course corrections?

The Workforce Skills Cabinet designated lead Regional Planning workforce development, economic development, and education entities, managed by the two regional workforce boards, will meet formally on two (2) occasions in 2018, and three times annually thereafter, to review the alignment and implementation of shared Goals contained in the Pioneer Valley Labor Market Blueprint. The Workforce Development Boards will convene and facilitate the meeting and will prepare an annual Summary Report on the progress of the implementation of the Blueprint's Strategies, including a preview of planned activities and strategy alignments moving forward with specific timetables and action steps.

In 2018, selected employers from each of the three (3) identified Priority Industries, and other identified indemand industrieswill meet twice to provide overarching guidance and direction on demand-side issues and projections that will inform the attainment of shared goals. In 2019, employers and core planning team members will meet jointly, and onan annual basis to assess progress, suggest necessary realignment, and guide tactical implementation moving forward with specific timetables and action steps.

Shared Measurement Systems. What data and measurement systems will you rely on to support shared understanding of how well you are meeting your goals and making progress towards a shared vision?

The Regional Planning Data Group, developed during the regional planning process leading to the development of the Blueprint, will meet three times in 2018 to formalize a system and process to use the "Regional Organizations Advanced Data Sharing" (ROADS) database currently shared by the regional workforce and economic development partners to identify, collect, analyze and share specific process and outcome data that will document progress on goals attainment and implementation of our shared vision. The work of the Data Group will be facilitated by the Workforce Devolvement Boards, with technical support and resources provided by the ROADS partners.

ROADS was launched as a collaborative initiative in 2014 by the Pioneer Valley Planning Commission, the Economic Development Council of Western MA, the Regional Employment Board of Hampden County and later joined by the Franklin Regional Council of Governments.

Other Shared Strategies. What other shared strategies will the region adopt to ensure progress towards the common agenda?

Our shared strategies will continue to be shaped and improved through our partners engaging in the following mutually reinforcing activities.

Please see Attachment E: Goals and Strategies for more detailed information.

Mutually Reinforcing Activities

To ensure that the work each partner is doing is supportive of the common agenda, describe the specific activities regional partners have committed to doing.

Education. Describe the changes in programming, recruitment, retention and placement strategies, assessment, tracking, or other strategies specific educational partners have committed to in order to meet shared regional goals.

Framing Statement - The educational institutions in the Pioneer Valley Region have significant impact in promoting both economic growth and educating the future workforce. The educational institutions are the primary source of education for Pioneer Valley residents, are suppliers of trained employees to the priority and other industries in the Region, are buyers of goods and services, employ significant numbers of employees, and are a major wealth creator in the Region.

Mutually Reinforcing Activities	Committing Parties
Use the Blueprint to inform educational programming, refine or design	Educational
curriculum, identify student services and supports to ensure that a higher	Institutions
number of students persist along the Pre-K-16+ educational continuum, and	
graduate with either a degree, stackable credentials, or recognized	
certificates in high demand fields of study with labor market value.	
Provide a broad array of educational programming, supports and services to	Educational
immigrants and non-traditional student populations.	Institutions
Build workforce readiness and employability skills development into	Educational
educational/ training programming.	Institutions, FHREB,
	REBHC
Collaborate with workforce development, economic development, and	Educational
employers to further recommend and assist in the development of increased	Institutions, FHREB,
paid internship opportunities at the high school and college levels that support	REBHC, EDC
graduate retention in the Pioneer Valley.	
Connect college students to career opportunities in priority occupational	Educational
groupings by increasing the number of regional employers that participate in	Institutions, FHREB,
on-campus recruitment programs and events.	REBHC, EDC

Workforce Development. Describe the changes in programming, employer relations, recruitment, retention and placement strategies tracking, or other strategies specific workforce development partners have committed to in order to meet shared regional goals.

Framing Statement - The Workforce Development Boards in the Pioneer Valley Region create strategic alliances with the economic development and educational institutions in the region to plan, coordinate and oversee the use of public and private investment in workforce development initiatives that respond to gaps between employer needs and in-demand occupations articulated and documented in the Pioneer Valley Labor Market Blueprint.

Mutually Reinforcing Activities	Committing Parties
Develop and implement more coordinated regional programs and services to	FHREB, REBHC,
respond to the demands of employers, job seekers, and incumbent employees.	OSCCs
Collaborate on the use of federal and state funding to provide maximum impact	FHREB, REBHC
for both employers and job seekers, and seek additional alternative investment	
from varied funding sources.	
Work more closely with the regional and municipal economic development	FHREB, REBHC,
entities to implement an integrated system for gathering and reporting	EDC, PVPC, MOBD,
workforce supply and demand needs and skills requirements to better match	FRCOG, OSCCs
jobseekers with employers resulting in a reduction in the skills gap ratio in	
priority occupations in the region.	

Work with economic development, educational institutions, and employers to further recommend and assist in the development of increased paid internship opportunities at the high school and college levels that support graduate retention in the Pioneer Valley.	FHREB, REBHC, EDC, OSCCs, Educational Institutions, Employer Partners
Align the One-Stop Career Center Business Services Teams' work plans with the regional plan.	OSCCs, FHREB, REBHC
Work with employers and training providers to develop creative recruitment, training, and retention solutions to meet industry staffing needs and mitigate job seeker barriers to employment.	OSCCs, FHREB, REBHC
Embed in future Workforce Boards' Strategic Plans the joint Strategic Priorities and Objectives that are consistent with the Goals and Strategies of the Pioneer Valley Labor Market Blueprint.	FHREB, REBHC
Collaborate on collecting and using real time regional labor market data to identify new and emerging industries, codify future employer demand and skills requirements.	FHREB, REBHC, OSCCs, EDC, PVPC, MOBD, FRCOG
Identify high quality and sustainable employment opportunities and career pathway programs for job seekers and workers in the Pioneer Valley.	FHREB, REBHC, OSCCs, Employer Partners

Economic Development. Describe the changes in economic development strategy that economic development partners have committed to in order to meet shared regional goals.

Framing Statement - The regional and municipal economic development entities outreach to businesses in the region and create a system of communication and coordination around business outreach and engagement. Economic development partners transition Blueprint data into actionable ideas and actions, and use broad networks of employers and local and regional stakeholders to support and transform the work of the workforce development organizations and educational institutions.

Mutually Reinforcing Activities	Committing Parties
Regional and municipal economic development partners will transition	EDC, MOBD, PVPC,
appropriate Blueprint data into actionable ideas within their purviews (business	FRCOG
development, regional economic development, regional economic planning, and	
local economic development).	
Actively engage with workforce development and education partners to address	EDC, FRCOG,
current and future workforce needs of business and industry sectors, participate	PVPC
in the design and development of education and training pathway programs that	
prepare jobseekers to obtain, and retain career employment within the region.	
Work with the workforce development boards to develop tools and processes to	EDC, MOBD,
create a system of communication and coordination around business outreach	FRCOG, PVPC,
and engagement.	REBHC, FHREB,
	OSCCs
Work with educational institutions, workforce development entities and	EDC, FRCOG,
employers to further recommend and assist in the development of increased	FHREB,REBHC,
paid internship opportunities at the high school and college levels that may	Educational
serve to support graduate retention in the Pioneer Valley.	Institutions

Include the workforce development and educational partners in new business attraction development and/or the expansion of existing businesses to ensure a coordinated response to talent attraction, development and retention.	EDC, FRCOG, MOBD
Collaborate on collecting real time regional labor market data to identify new and emerging industries, and codify future employer demand and skills requirements.	EDC, FRCOG, MOBD, PVPC
Identify and pursue public funding for local and regional capital and infrastructure needs necessary to support and expand priority sectors, including traditional infrastructure such as roads, bridges, broadband and wastewater expansion and less traditional infrastructure like maker's spaces, business development centers and business ecosystems.	EDC, FRCOG, MOBD, PVPC
Frame and market the region's value and its assets to attract employers, entrepreneurs and a new generation of workforce.	EDC, FRCOG, MOBD, PVPC
Continue to convene and expand discussions with stakeholders from economic development, workforce, education and private industry to better understand and address regional economic needs and expand economic opportunity.	EDC, FRCOG, MOBD, PVPC

V. Conclusion Describe any closing remarks, next steps, or considerations.

Regional Planning Process Conclusions

The Pioneer Valley Region partnership that has evolved from the regional planning process is committed to implementing coordinated, sustainable, and bold actions that will drive regional economic expansion, increase career opportunities for all workers, and strengthen businesses, communities, and families.

The Pioneer Valley Region has committed cross border partners in each of the priority industries, and the partners have long standing relationships and a history of collaboration and achieving focused outcomes.

The regional partners are committed to developing an integrated communication and information-sharing plan, and formalizing a process that will keep core partners, employers, one stop career centers, and stakeholders informed on Blueprint implementation progress/resets, goals, and outcomes.

The regional economic development partners are committed to transitioning Blueprint data into actionable ideas and actions, and using broad networks of employers and local and regional stakeholders to support and transform the work of the workforce development organizations and educational institutions.

The educational institutions in the Pioneer Valley Region are the primary source of education for Pioneer Valley residents, AND have significant impact in preparing the future workforce of trained employees for the priority and other critical industries in the Region. They are also in and of themselves important economic and employment engines in our region.

Considerations Moving Forward

The regional partners recognize that measuring Blueprint outcomes will require developing strong evaluation metrics, accepting sub-regional differences that may impact region-wide solutions, and remaining sufficiently agile to shifting supply-demand strategies and priorities should (or WHEN) the economic landscape changes.

Leveraging existing regional assets and resources and identifying leveraged investment on the private side will be critical to sustaining any initiative that brings to scale an intervention that mitigates the Supply Gap Ratio in targeted occupational groupings within priority and other critical industries.

Implementing and sustaining educational/career programs that increase the supply of trained workers and present clear pathways for credential attainment, quality career mobility, and wage advancement in

specific occupational groupings in both priority and other critical industries will require partner asset leveraging, infrastructure alignment, and identification of new funding sources.

Increasing employee retention in occupational groupings that offer competitive wages and employee benefit packages will require coordinating established networks of social service agencies and community-based organizations that can provide support services in the areas of transportation, childcare, health and social services, and housing. As such, the addition of team members from these other sectors, starting with transportation, so that future Blueprint modifications can include more substantive goals and strategies related to those supports, will be considered during the implementation phase.

Expediting the Massachusetts Department of Higher Education academic program approval process for public 2 and 4-year institutions will allow the institutions to more effectively align educational programming to respond to evolving business workforce needs and demands across all industries.

Increasing State investment in targeted financial aid to working class families and underserved populations will make college and career pathway programs across all industries more accessible and affordable, will support Blueprint employee retention strategies, and increase regional labor market participation rates.

List of Attachments:

- A. Criteria for Industry and Occupation/Occupational Grouping Prioritization
- B. Supply Data for Priority, Critical and Emerging Industries, Occupations and Occupational Groupings
- **C. PowerPoint Slide Summarizing these Choices** (as presented to the Workforce Skills Cabinet, December 11, 2017)
- **D. Completed Asset Maps** (Based on data supplied to date and regionally augmented; which will be supplemented by future updates)
- E. Goals and Strategies: 2018, 2020, 2022
- F. Assurances and Required Signatures

Attachment A - Criteria for Industry and Occupation/Occupational Grouping Prioritization



WIOA Regional Planning

Pioneer Valley Region

Criteria for Industry and Occupation/Occupational Grouping Prioritization

Section I- Pioneer Valley Region Priority Industries

Top Three Priority Industry Sectors

- 1. Health Care and Social Assistance
- 2. Educational Services
- 3. Manufacturing

Other Critical Industry Sectors

- 1. Finance and Insurance
- 2. Professional, Scientific, and Technical Services
- 3. Accommodation and Food Services
- 4. Agriculture and Sustainable Food Systems

Attachment A - Criteria for Industry and Occupation/Occupational Grouping Prioritization

Section II - Criteria for Priority Industry and Occupation/Occupational Grouping Selection

Each Industry should meet at least three of the five Criteria

Industry Selection Criteria

1. Total and Average Wages

The industry is economically critical to multiple geographical areas within the Pioneer Valley Region and has quality occupations with high Total and Average Wages.

2. Employment Share

The industry has significant employment share within the Region and projections indicate that the industry is expected to grow in line with or faster than the overall economy.

3. Annual Openings

The industry's projected Annual Openings over the next 5-10 years is positive, including new openings and/or replacement demand for occupations.

4. Strong Industry Eco-System

The industry has an existing or emerging critical mass of employers including anchor companies, headquartered companies, small and medium size enterprises (SMEs) and start-ups. Additionally, industry partnerships currently exist between and among employers, employees, and support providers to grow the industry.

5. Career Pathways

The industry has high demand, and contains high quality jobs, as described by 4 and 5 Star occupations, with median wages that meet or exceed regional averages and competitive employee benefits, and provide, or could benefit from, career pathways for advancement.

Each Occupation/Occupational Grouping should meet at least three of the six Criteria

Occupation/Occupational Grouping Selection Criteria

1. Employment Share

The occupations exist in a cross- section of various sized companies located in multiple geographical areas within the Pioneer Valley Region and have Employment Share ≥ statewide averages for that occupation.

2. Occupation Growth

The occupations have positive, projected annual growth over the next 5-10 years.

3. Occupation Growth: BA Level

The prority occupations at the Bachelor's degree level are high qualiy with positive future growth trajectory, median wages that meet or exceed regional averages, and regional four-year education institutions have program majors in the related disicplines.

4. Occupation Growth: Sub BA Level

The occupations at the sub- Bachelor's degree level are high quality jobs with median wages that meet or exceed regional averages and competitive employee benefits benefits, positive future growth trajectory, and career pathway programs that currently exist, or are capable of being designed, at the regions two-and four-year educational institutions.

5. Occupation Growth: Sub-Regional Occupations

There are occupations with emerging growth patterns within selective sub-regional industries characterized by small and medium size enterprises (SMEs) and start-ups, with existing economic and employment partnerships.

6. Career Pathways

The priority occupations have regional educational programs that present clear pathways for career mobility and wage advancement within a 3-5 year time period.

				soc	ONET		Supply	New Demand				Wages Annual	
Industry (NAICS)	Occupational Classifications	Occupational Grouping/Clusters	Occupation Title	SOC	Bright Outlook?	STARS	(Short Term)	Measure	Supply Gap	Supply Gap Ratio	Education Level	Median	Characterization of Occupational Nee
ealthcare & Social	Assistance (62)												
	Services	Social & Human Services Workers	Social and Human Service Assistants	211093	Yes	3	205	871	-666	0.24	High school diploma or equivalent	\$ 29,922	More Openings Than Qualified
	Technical	Clinical & Technical	Registered Nurses	291141	Yes	5	149	3054	-2905	0.05	Bachelor's degree	\$ 73,310	More Openings Than Qualified
	Healthcare Practioners and Technical		Dental Hygienists	292021	Yes	4	16	37	-21	0.43	ū	\$ 78,982	More Openings Than Qualified
	Technical	Clinical & Technical	Pharmacy Technicians Licensed Practical and Licensed	292052	Yes	3	24	150	-126	0.16	High school diploma or equivalent	\$ 30,081	More Openings Than Qualified
dustry Sector(62)	Healthcare Practioners and Technical Healthcare Practioners and		Vocational Nurses Medical Records and Health	292061	Yes	4	299	575	-276	0.52	Postsecondary nondegree award Postsecondary		More Openings Than Qualified
17-2024 Growth 19.4% ISI Oct 2017	Healthcare Practioners and Technical		Information Technicians	292071	Yes	4	93	133	-40	0.70	nondegree award	\$ 39,845	More Openings Than Qualified
	Healthcare Practioners and Technical		Physician Assistants	291071	Yes	5	5	211	-206	0.02	Master's Degree	\$ 97,142	More Openings Than Qualified
	Healthcare Practioners and Technical Healthcare Practioners and	Clinical & Technical	Occupational Therapists	291122	Yes	4	16	173	-157	0.09	Master's Degree	\$ 75,707	More Openings Than Qualified
	Technical	Clinical & Technical	Physical Therapists	291123	Yes	5	5	552	-547	0.01	Doctoral or professional degree Postsecondary	\$ 82,700	More Openings Than Qualified
	Healthcare Support	Direct Care Workers	Nursing Assistants	311014	Yes	3	524	468	56	1.12	nondegree award Postsecondary	\$ 28,580	Industry Expansion driving increased openings
	Healthcare Support	Direct Care Workers	Medical Assistants	319092	Yes	4	389	392	-3	0.99	nondegree award No formal educational	\$ 35,558	More Openings Than Qualified UI Unique Claimant Data Requires
		Direct Care Workers	Personal Care Aides	399021	Yes	3	1310	260	1050	5.04	credential	\$ 26,607	Verification; High turnover
lucational Services	• •												
	Education, Training & Library	Educators (all levels)	Elementary School Teachers, Except Special Education	252021	Yes	5	225	352	-127	0.64	Bachelor's degree	\$ 67,301	More Openings Than Qualified
	Education, Training & Library	Educators (all levels)	Middle School Teachers, Except Special & Career/Technical Education	252022	Yes	5	218	258	-40	0.84	Bachelor's degree	\$ 66,882	More Openings Than Qualified
	Education, Training & Library	Educators (all levels)	Engineering Teachers, Postsecondary	251032		4	3	27	-24	0.11	Doctoral or professional degree	\$ 115,160	More Openings Than Qualified
	Education, Training & Library	Educators (all levels)	Health Specialties Teachers, Postsecondary	251071	Yes	5	32	148	-116	0.22	Doctoral or professional degree	\$ 102,950	More Openings Than Qualified
bsector-Educational	Education, Training & Library	Educators (all levels)	Nursing Instructors and Teachers, Postsecondary	251072	Yes	4	3	35	-32	0.09	Doctoral or professional degree	\$ 71,180	More Openings Than Qualified
rvices (611)	Education, Training & Library	Educators (all levels)	Vocational Education Teachers, Postsecondary	251194		4	47	273	-226	0.17	Doctoral or professional degree	\$ 50,170	More Openings Than Qualified
117-2024 Growth 3.5% NSI Oct 2017	Education, Training & Library	Educators (all levels)	Special Education Teachers, Kindergarten and Elementary School	252052		4	32	142	-110	0.23	Doctoral or professional degree	\$ 64,886	More Openings Than Qualified
	Education, Training & Library	Educators (all levels)	Special Education Teachers, Middle School	252053		4	19	80	-61	0.24	Doctoral or professional degree	\$ 66,227	More Openings Than Qualified
	Education, Training & Library	Educators (all levels)	Special Education Teachers, Secondary School	252054		4	18	114	-96	0.16	Doctoral or professional degree	\$ 57,356	More Openings Than Qualified
	Education, Training & Library	Educators (all levels)	Preschool Teachers, Except Special Education	252011		3	183	292	-109	0.63	Associates degree	\$ 27,788	More Openings Than Qualified
	Education Training &	Educator Support	Teacher Assistants	259041	Yes	3	94	419	-325	0.22	Some college, no degree	\$ 29,880	More Openings Than Qualified
anufacturing (31-3	· · · · · · · · · · · · · · · · · · ·												
	Production Operations	Advanced Manufacturing/ Supervisors	FirstLine Supervisors of Production and Operating Workers	511011		4	212	414	-202	0.51	High school diploma or equivalent	\$ 59,857	More Openings Than Qualified
bsector-Fabricated etal Product		Advanced Manufacturing/ Production Workers	Machinists Machinists	514041	Yes	4	229	183	46	1.25	High school diploma or equivalent	\$ 44,299	High Skills, Employer Demand Driver
anufacturing (332) 17-2024 Growth 1.8%	Production Operations	Advanced Manufacturing/ Production Workers	Computer-Controlled Machine Tool Operators, Metal and Plastic	514011	Yes	4	155	92	63	1.68	High school diploma or equivalent	\$ 44,625	High Skills, Employer Demand Driver
ASI Oct 2017		Advanced Manufacturing/	Inspectors, Testers, Sorters, Samplers,		-						High school diploma or		

Pioneer Valley - Supporting & Regional Priority Industries and Occupations												
			soc	ONET Bright		Supply (Short	New Demand				Wages Annu	al
Industry (NAICS)	Occupational Classifications			Outlook?	STARS	Term)	Measure	Supply Gap	Supply Gap Ratio	Education Level	Median	Characterization of Occupational Needs
Professional, Technic	cal & Scientific Services Office and Administrative	_` '								115-basha al-Ralama		
Industry Sector (54) 2017-2024 Growth 4.1% EMSI	Support	First-Line Supervisors of Office & Administrative Support Workers (4.2)	431011	Yes	4	112	504	-392	0.22	High school diploma or equivalent		More Openings Than Qualified
	Office and Administrative Support	Bookkeeping, Accounting, and Auditing Clerks	433031	Yes	3	146	367	-221	0.40	Some college, no degree	\$ 39,7	49 More Openings Than Qualified
	Office and Administrative Support	Tellers	433071	Yes	3	64	190	-126	0.34	High school diploma or equivalent	\$ 29,0	84 More Openings Than Qualified
	Office and Administrative Support	Customer Service Representatives	434051	Yes	4	533	673	-140	0.79	High school diploma or equivalent	\$ 34,3	30 More Openings Than Qualified
	Office and Administrative Support	Office Clerks, General	439061	Yes	3	238	300	-62	0.79	High school diploma or equivalent	\$ 30,2	75 More Openings Than Qualified
	Computer & Mathematical	Computer User Support Technicians (0.5)	151151	Yes	4	127	390	-263	0.33	Some college, no degree	\$ 49,6	03 More Openings Than Qualified
	Computer & Mathematical	Web Developers	151134	Yes	4	17	133	-116	0.13	Associates degree	\$ 62,6	15 More Openings Than Qualified
Accommodations &												
	Food Preparation and Serving	FirstLine Supervisors of Food Preparation and Serving Workers	351012	Yes	4	169	477	-308	0.35	High school diploma or equivalent	\$ 33,9	60 More Openings Than Qualified
	Food Preparation and Serving	Cooks, Restaurant	352014	Yes	3	168	238	-70	0.71	No formal educational credential	\$ 22,5	66 More Openings Than Qualified
Industry Sector (72) 2017-2024 Growth - 0.3% EMSI	Food Preparation and Serving	Bartenders	353011	Yes	3	87	120	-33	0.73	No formal educational credential	\$ 19,5	50 More Openings Than Qualified
	Food Preparation and Serving	Combined Food Preparation and Serving Workers, Including Fast Food	353021	Yes	3	243	494	-251	0.49	No formal educational credential	\$ 19,7	01 only UI Claimant data available
	Food Preparation and Serving	Waiters and Waitresses	353031	Yes	3	169	318	-149	0.53	No formal educational credential	\$ 19,4	55 only UI Claimant data available
Agriculture & Sustainable Food Systems (81)												
Industry Sub-Sectors (TBD)	Farm, Fishing & Forestry	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	452092	Yes	3	90	51	35	1.76	No formal educational credential	\$ 21,5	01
	Healthcare Practioners and Technical	Veterinary Technologists and Technicians	292056	Yes	3	60	23	38	2.61	Associate's degree	\$ 40,3	00
	Transportation and Material Moving	Heavy and TractorTrailer Truck Drivers	533032	Yes	4	590	1702	-1112	0.35	Postsecondary nondegree award	\$ 43,8	79 More Openings Than Qualified
	Production Operations	Packaging and Filling Machine Operators and Tenders	519111	Yes	2	137	85	52	1.61	High school diploma or equivalent	\$ 25,2	74
	Production Operations	FirstLine Supervisors of Production and Operating Workers	511011		4	212	414	-202	0.51	High school diploma or equivalent	\$ 59,8	57 More Openings Than Qualified
	Production Operations	Food Batchmakers	513092		2	7	11	-4	0.64	High school diploma or equivalent	\$ 21,2	44 More Openings Than Qualified
	Food Preparation and Serving	Combined Food Preparation and Serving Workers, Including Fast Food	353021	Yes	3	243	494	-251	0.49	No formal educational credential	\$ 19,7	01 only UI Claimant data available
	Management	Farmers, Ranchers, and Other Agricultural Managers	119013	Yes	4	103	24	79	4.29	High school diploma or equivalent	\$ 48,9	20

Pioneer Valley - New and Emerging Industries and Occupations

Arts, Entertainment and Recreation (71) New and Emerging September 2018 - MGM Resorts

NAI

NAICS 721120	CASINO	HOTEL OPERATIONS			
	Shift Manager	Front Desk Manager			
	Pit Manager	Front Desk Representative			
2500 to 3000 jobs to be created	Floor Supervisor	ConciergeTraining Development Mana			
	Dealer				
	Poker Room Dealer	Front Services Supervisor Housekeeping Director Housekeeping Supervisor House person			
	Cage Cashier				
	Count Team Supervisor				
	 Count Team Attendant 				
	Slot Technician	 Housekeeping Director 			
	SECURITY / SURVEILLANCE	ENTERTAINMENT			
	Security Shift Manager	Ticket Office Supervisor			
	Security Training Manager	 Ticket Office Cashier 			
	 Security Assistance Manager 	 Bowling Technician 			
	 Lost and Found Clerk 	 Bowling Receptionist 			
	Security Officer	Technical Services Manager			
	- Locksmith	A/V Technicians			
	Director Surveillance	Entertainment Coordinator			

· Surveillance Technician

FOOD & BEVERAGE

- · Restaurant General Manager
- · Assistant Beverage Manager
- Sommelier · Food Server
- Bartender

Development Manager

· Cashier Ticket Office

· Entertainment Coordinator

- · Bartender Apprentice
- · Fountain Worker
- Banquet Manager · Banquet Supervisor
- · Banquet Server

INFORMATION TECHNOLOGY

- · Director Information Technology
- · Manager Technology Support
- · Technical Support Engineer
- · Application Support Analyst
- IT Security Analyst
- · Director Technical Svcs
- · Admin IT Security

GENERAL & ADMIN

- HR Business Partner
- · Talent Acquisition Specialist
- Financial Analyst
- Accountant
- Uniform Control Attendant
- Accounting Manager
- · Accounting Records Clerk
- · Communications Specialist
- · Graphic Designer
- · Social/Digital Specialist

CULINARY

· Executive Sous Chef

- · Executive Pastry Chef
- · Pastry Chef
- Baker
- · Restaurant Sous Chef
- Restaurant Cook
- Kitchen Steward
- · Pantry Worker
- · Head Butcher
- Butcher

High Demand Positions (Head Count 50+)

POSITION	ESTIMATED HIRES				
Utility Porter	145				
Cook	139				
Cocktail Server	96				
Kitchen Steward	75				
Cashier	71				
Server	61				
Bartender	56				
Fountain Worker	50				
Busser/Runner	57				

CRRC

Projected Year 1 Hires- 90 employees

Projected Year 2 Staffing- 120 employees

Projected Occupations

Manufacturing (31-33)

Mechanical Assemblers

Electrical Assemblers

Production Managers

Professional, Technical & Scientific Services (54)

Engineers

First-Line Supervisors of Office & **Administrative Support Workers** Bookkeeping, Accounting, and **Auditing Clerks**

Customer Service Representatives

Office Clerks, General

ATTACHMENT C – SUMMARY OF INDUSTRY/OCCUPATIONAL CHOICES (as presented to the MA Workforce Skills Cabinet, December 11, 2017)

Statewide Regional Industry Criteria 1. High A. Critical Industry		Regional Occupational Groupings Criteria 1) Employment	State a Industr (Select	y Industries and Regional y Criteria Met Min. Three) Care and Social	Regional Occupational Criteria Met (Select Min. Three) Social and Human Services 1),2),4),6)		
Employer Demand	with High Total and Average	Share ≥ Statewide Averages		sistance	Assistants	1,,2,,4,,0,	
2. High Demand and High Wages	Wages B. Significant Regional Employment Share and	2) Occupation Growth over Next 5-10 Years 3) Occupation	1-4	A-E	Direct Care Workers Technical/Clinical Workers	1),2),4),6)	
3. Talent Gaps	Industry Growth ≥ Overall	Growth: BA Level	Educati	ional Services	Educators –All Levels	1),2),3),6)	
4. Career Pathways	C. Positive Annual	4) Occupation Growth: Sub BA	1-4	A-E	Teacher Assistants	1),2),4),6)	
	Openings - 5-10 Years	Level 5) Occupation	Man	ufacturing	Supervisors	1),2),4)	
	D. Strong Industry Eco- System E. Career Pathways	Growth: Sub- Regional Occupations 6) Career Pathways	1-4	A,B,D,E	Production Workers Inspectors/Testers/ Quality Control	2),4),5),6)	

Attachment D – Completed Credential Asset Mapping Tool

Completed based on State-supplied Data and Regional Input To be updated during Implementation Phase

Occupation	List the occupation the credential is for, including the SOC code.	Social and Human Service Assistants SOC: 211093
Type of Credential & Title of Credential	List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)	Broad Occupational Grouping with Multiple Occupations. Most occupations are Associate Degree level, with some Bachelor's degree. Selected occupations at the Sub-Associate degree level. Varying certifications and/or licenses required.
Credential Provider	List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year.	Springfield Technical Community College Holyoke Community College Greenfield Community College Cambridge College Westfield State University American International College Elms College UMass- Amherst Springfield College
Integrated/ Accelerated	Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?	 Clinical integrated into program Apprenticeship MAY have Integrated RTI Training for Adult Learners Supported by Cohort Models
Online/ Classroom/ Work-based	Describe education environment and instructional methods.	 Classroom Hands-on Laboratory (On Site) Clinical/Practicum (Off Site) On-Line
Pell-eligible?	Is the program Pell-eligible?	YES Bachelor's Degree Associate Degree Certificate of Completion (College Credit)
Fee?	What are the fees?	 Fees Set by Board of Trustees Bachelor's Degree Associate Degree Certificate of Completion (One Year Program)
Employer- validated?	Do local employers validate the credential? If so, describe.	Employers Align and Validate Curriculum and Recognize the Credential (e.g. License, Certification)
Stackable?	Is the credential stackable with other certificates? If so, describe.	Credentials are Stackable with progression to Post-Bachelors suggested for select occupations
Portable?	Are the credentials portable to other states/ industries? If so, describe.	Credentials have Portability but Acceptance may vary by individual State licensure regulations and/or employer policies

Occupation	List the occupation the credential is for, including the SOC code.	Social and Human Service Assistants SOC: 211093
Credit/ Non- Credit?	Are they credit or non-credit?	Credit
Gaps?	Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?	Occupational Grouping necessitates ongoing research and analysis to reflect changing industry standards and requirements and state certification standards

Occupation	List the occupation the credential is for, including the SOC code.	Direct Care Worker (including RN for this purpose) SOCs: 399021, 291141, 311014, 319092
Type of Credential & Title of Credential	List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)	Broad Occupational Grouping with Multiple Occupations. Most occupations are Sub-Associate Degree level with varying certifications and/or licenses required.
Credential Provider	List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year.	Credit and Non-Credit Springfield Technical Community College {100} Holyoke Community College {100} Greenfield Community College {50} Non-Credit Workforce Development Boards {50} Secondary Technical Schools TBD} Credential, if required, validated by Certifying Authority and accepted by employers
Integrated/ Accelerated	Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?	 Clinical and/or Practicum integrated into program Apprenticeship has Integrated RTI Training may be Contextualized for Adult Learners
Online/ Classroom/ Work-based	Describe education environment and instructional methods.	 Classroom Hands-on Laboratory (On Site) Clinical/Practicum (Off Site) On-Line
Pell-eligible?	Is the program Pell-eligible?	YES Associate Degree Certificate of Completion (College Credit) NO College Non-Credit Workforce Development Boards
Fee?	What are the fees?	Fees Set by Board of Trustees Associate Degree Certificate of Completion (College Credit) College Non-credit Fees Contingent Upon Length of Program Workforce Development Boards
Employer- validated?	Do local employers validate the credential? If so, describe.	Employers Align and Validate Curriculum and Recognize the Credential (e.g. License, certification)

Occupation	List the occupation the credential is for, including the SOC code.	Direct Care Worker (including RN for this purpose) SOCs: 399021, 291141, 311014, 319092
Stackable?	Is the credential stackable with other certificates? If so, describe.	Credentials are Stackable - All May Not Transfer to College Credit
Portable?	Are the credentials portable to other states/ industries? If so, describe.	Credentials have Portability but Acceptance may vary by individual State licensure regulations and/or employer policies
Credit/ Non- Credit?	Are they credit or non-credit?	Credit and Non-Credit
Gaps?	Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?	Occupational Grouping necessitates significant on-going research and analysis to reflect changing industry standards and requirements and state certification standards

Credential Provider List the occupation the credential is for, including the SOC code. Technical, Clinical Workers
Type of Credential & Title of Credential Credential Title of Credential Credential Title of Credential Credential Credential Credential Credential Credential Credential Provider Credential Provider List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. Credential C
Type of Credential & Certificate, Degree, Certification, License, or Apprenticeship Certification) Credential Provider List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification) List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. List the type of credential (e.g. Multiple Occupations. Most occupations are Bachelor's degree and Associate Degree level, with selected occupations at the Master's and Sub-Associate degree level. Varying certifications and/or licenses required. Westfield State University American International College Elms College UMass- Amherst Springfield College Cambridge College
Credential & Title of CredentialCertificate, Degree, Certification, License, or Apprenticeship Certification)Multiple Occupations. Most occupations are Bachelor's degree and Associate Degree level, with selected occupations at the Master's and Sub-Associate degree level. Varying certifications and/or licenses required.Credential ProviderList all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year.Westfield State University American International College UMass- Amherst Springfield College Cambridge College
Title of Credential Credential Credential Credential Provider Credential Provider Credential Provider List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. List all training/education providers the Master's degree and Associate Degree level, with selected occupations at the Master's and Sub-Associate degree level. Varying certifications and/or licenses required. Westfield State University American International College Elms College UMass- Amherst Springfield College Cambridge College
Credential Credential Provider List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. Credential Credential Credential Provider List all training/education providers American International College Elms College UMass- Amherst Springfield College Cambridge College
the Master's and Sub-Associate degree level. Varying certifications and/or licenses required. Credential Provider List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. List all training/education providers Westfield State University American International College Elms College UMass- Amherst Springfield College Cambridge College
Credential Provider List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. Springfield College Cambridge College
Credential Provider List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. Westfield State University American International College Elms College UMass- Amherst Springfield College Cambridge College
Provider List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. List all training/education providers that provide this credential in your American International College Elms College UMass- Amherst Springfield College Cambridge College
Provider that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year. American International College UMass- Amherst Springfield College Cambridge College
average number of individuals receiving the credential per year. UMass- Amherst Springfield College Cambridge College
receiving the credential per year. Springfield College Cambridge College
Cambridge College
Springfield Lechnical Community College
, ,
Holyoke Community College Greenfield Community College
Integrated/ Is the training integrated with work Clinical integrated into program
Accelerated experience and/or accelerated for • Apprenticeship has Integrated RTI
adult learners? If no, how to basic Training for Adult Learners Supported
learners matriculate? by Cohort Models
Online/ Describe education environment 1. Classroom
Classroom/ and instructional methods. 2. Hands-on Laboratory (On Site)
Work-based 3. Clinical/Practicum (Off Site)
4. On-Line
Pell-eligible? Is the program Pell-eligible? YES Master's Degree Master's Degree
Bachelor's Degree
Associate Degree
Certificate of Completion (College Credit)
Fee? What are the fees? Fees Set by Board of Trustees
Master's Degree
Bachelor's Degree
Associate Degree
Certificate of Completion (One Year
Program)
Employer- Validated? Do local employers validate the credential? If so, describe. Employers Align and Validate Curriculum and Recognize the Credential (e.g.
validated? credential? If so, describe. and Recognize the Credential (e.g. License, Certification)
Stackable? Is the credential stackable with Credentials are Stackable with
other certificates? If so, describe. progression to Post- Bachelors suggested
for selected occupations

Occupation	List the occupation the credential is for, including the SOC code.	Technical, Clinical Workers SOC: 29-1141, 29-2021, 29-2052, 29-2061, 29-2071, 29-1071, 29-1122, 29-1123
Portable?	Are the credentials portable to other states/ industries? If so, describe.	Credentials have Portability but Acceptance may vary by individual State licensure regulations and/or employer policies
Credit/ Non- Credit?	Are they credit or non-credit?	Credit
Gaps?	Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?	Occupational Grouping necessitates significant on-going research and analysis to reflect changing industry standards and requirements and state certification standards

Occupation	List the occupation the credential is for, including the SOC code.	Educators (All Levels and Fields) SOCs: 252022, 251032, 251071-2, 251194, 252052-4, 252011
Type of Credential & Title of Credential	List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)	Bachelor's Degree (+) and State Educator Licensure
Credential Provider	List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year.	Westfield State University American International College Elms College UMass- Amherst Springfield College Cambridge College Mt. Holyoke College Smith College
Integrated/ Accelerated	Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?	 Practicum integrated into licensure preparation program Training Pathways for Adult Learners restricted and/or not available
Online/ Classroom/ Work-based	Describe education environment and instructional methods.	 Classroom Hands-on Laboratory (On Site) Clinical/Practicum (Off Site) On-Line
Pell-eligible?	Is the program Pell-eligible?	YES
Fee?	What are the fees?	Fees Set by Board of Trustees and or Governing Body of Educational Institution
Employer- validated?	Do local employers validate the credential? If so, describe.	Credential Validated by Certifying Authority and accepted by employers
Stackable?	Is the credential stackable with other certificates? If so, describe.	Credentials are Stackable
Portable?	Are the credentials portable to other states/ industries? If so, describe.	Credentials have Portability but Acceptance may vary by individual State licensure regulations and/or school district policies
Credit/ Non- Credit?	Are they credit or non-credit?	Credit
Gaps?	Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?	Massachusetts Tests for Educator Licensure (MTEL) impacting sustained employment in selected <u>fields</u> and requires broad research and review with MA DESE

Occupation	List the occupation the credential is for, including the SOC code.	Teacher Assistants SOC: 259041
Type of Credential & Title of Credential	List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)	Associate Degree HS Diploma + # of College Credits HS Diploma Certification MAY be required for selected
		positions in certain school districts
Credential Provider	List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year.	Westfield State University American International College Elms College Springfield College Cambridge College Mt. Holyoke College
Integrated/ Accelerated	Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?	 Practicum MAY be part of selected preparation programs. Training Modified and/or Contextualized for Adult Learners
Online/ Classroom/ Work-based	Describe education environment and instructional methods.	 Classroom On-Line
Pell-eligible?	Is the program Pell-eligible?	Contingent upon required coursework
Fee?	What are the fees?	TBD
Employer- validated?	Do local employers validate the credential? If so, describe.	Credential Validated by Issuing Authority and accepted by employers
Stackable?	Is the credential stackable with other certificates? If so, describe.	Credentials are Stackable
Portable?	Are the credentials portable to other states/ industries? If so, describe.	Credentials have Portability but <u>Acceptance</u> may vary by individual State and/or school district policies
Credit/ Non- Credit?	Are they credit or non-credit?	Credit
Gaps?	Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?	Occupational Grouping necessitates significant on-going research and analysis to reflect school district policies and regulations

Occupation	List the occupation the credential is for, including the SOC code.	Production Worker (CNC Operator, Machinist) SOC: 514011, 514041
Type of Credential & Title of Credential	List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)	 Associate Degree (College Credit) Certificate of Completion (College Credit) Locally Recognized Certificate Apprenticeship Certification
Credential Provider	List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year.	Springfield Technical Community College + TWO 1,2,3 {35} Greenfield Community College & FHREB (28) WDB (REBHC) 3,4 {30}
Integrated/ Accelerated	Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?	 Apprenticeship Has Integrated RTI Associate and Certificate of Completion MAY have Internship Component Training Modified and/or Contextualized for Adult Learners
Online/ Classroom/ Work-based	Describe education environment and instructional methods.	 Classroom Hands-on Laboratory On-Line
Pell-eligible?	Is the program Pell-eligible?	YES Associate Degree Certificate of Completion (College Credit) NO Locally Recognized Certificate Apprenticeship Certification
Fee?	What are the fees?	Fees Set by Board of Trustees Associate Degree Certificate of Completion (College Credit) Fees Contingent Upon Length of Program Locally Recognized Certificate Apprenticeship Certification
Employer- validated?	Do local employers validate the credential? If so, describe.	Employers Align and Validate Curriculum and Recognize the Credentials
Stackable?	Is the credential stackable with other certificates? If so, describe.	Credentials are Stackable- May Not Transfer to College Credit
	other certificates: If so, describe.	Transier to college credit

Occupation	List the occupation the credential is for, including the SOC code.	Production Worker (CNC Operator, Machinist) SOC: 514011, 514041
Credit/ Non- Credit?	Are they credit or non-credit?	Associate Degree (College Credit) Certificate of Completion (College Credit) Locally Recognized Certificate (Non-Credit) Apprenticeship Certification (Non-Credit/Credit)
Gaps?	Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?	Occupational Grouping requires on-going alignment to reflect changing industry standards and requirements

Occupation	List the occupation the credential is for, including the SOC code.	Supervisors SOC: 113051, 511011 (Manufacturing-specific)
Type of Credential & Title of Credential	List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)	 Bachelor's Degree Associate Degree
Credential Provider	List all training/education providers that provide this credential in your region. For each provider, list the average number of individuals receiving the credential per year.	UMass Amherst Western New England University Springfield Technical Community College
Integrated/ Accelerated	Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?	 Bachelor's degree and Associate Degree MAY have Internship Component Training Pathways for Adult Learners restricted and/or not available
Online/ Classroom/ Work-based	Describe education environment and instructional methods.	 Classroom Hands-on Laboratory On-Line
Pell-eligible?	Is the program Pell-eligible?	YES Bachelor's Degree Associate Degree
Fee?	What are the fees?	Fees Set by Board of Trustees Bachelor's and Associate Degree
Employer- validated?	Do local employers validate the credential? If so, describe.	Employers Recognize the Credential
Stackable?	Is the credential stackable with other certificates? If so, describe.	Credentials are Stackable
Portable?	Are the credentials portable to other states/ industries? If so, describe.	Credentials have Portability and have Acceptance by states/employers
Credit/ Non- Credit?	Are they credit or non-credit?	Bachelor's and Associate Degree (College Credit)
Gaps?	Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?	Occupational Grouping necessitates ongoing research to reflect changing industry standards and requirements

		Plan Goals and Strategies
Year	Goals	Strategies
	Align workforce development, education, and economic development activities to ensure successful implementation of Blueprint Strategies.	 WSC designated Regional Planning workforce development, economic development, and education entities, managed by the two regional workforce boards, form the Regional Planning Team and meet on two (2) occasions (and three times annually thereafter) to review the alignment and implementation of Strategies contained in the Pioneer Valley Labor Market Blueprint. Invite other education (including Adult and Community Learning service providers) and economic development entities, not originally designated as representatives on the WSC Pioneer Valley Regional Team, to attend meetings of the Regional Planning Team. Align existing and future economic development plans with workforce development plans.
By End of 2018 All Industries, System- Building	Identify and align partner and stakeholder assets and resources to support implementation of Blueprint Strategies.	 Map existing assets and resources within workforce development, economic development, and education systems. Identify research being conducted in advanced technologies at UMass-Amherst with the potential to drive new innovation to regional priority industries and related new venture ecosystems that will inform the Blueprint implementation process. Engage Valley Venture Mentors and similar regional entities to ensure representation of new entrepreneurs and start-ups in the Blueprint implementation process.
	3. Adopt a coordinated process to collect, analyze, and disseminate demand-side data on current and future vacancies and skills needs in priority and other critical industries and occupational groupings to better match jobseekers with employer's demands and requirements.	Establish a Regional Planning Data Team that includes representation from the three core partners and meets quarterly to implement a process to collect and analyze regional and local labor market data. Provide updates on such data and any new emerging challenges and opportunities; share information with partners and end-users in easily accessible formats; and enhance coordination among partners.

Pioneer Valley Regional Plan Goals and Strategies			
Year	Goals	Strategies	
By End of 2018 All Industries, System- Building	3. Adopt a coordinated process to collect, analyze, and disseminate demand-side data on current and future vacancies and skills needs in priority and other critical industries and occupational groupings to better match jobseekers with employer's demands and requirements. (cont'd)	 Use regional labor market information to further refine occupational groupings within other critical regional industries. Conduct a trend analysis in construction/trades related industries to identify projected job growth and opportunities for pre-apprenticeship and registered apprenticeship programs. Work with the State to re-establish the annual business hiring survey and create an annual rotation to survey employers and conduct sector focus groups to identify key hiring and skills needs. 	
	4. Create and formalize a more coordinated and sustainable process to improve business engagement in implementing Blueprint Strategies.	 Regional employers from each of the three (3) Priority Industries, and other identified in-demand industries meet twice annually to provide guidance and direction to the Regional Planning Team. Identify through the asset mapping strategy above, the Pioneer Valley regional economic and workforce development organizations that regularly outreach to businesses and create a coordinated and streamlined approach to business outreach and engagement. 	
	5. Provide job seekers with increased and consistent access to detailed information about priority and other critical occupational groupings and the availability of career pathway educational programs.	 Develop on-going professional development opportunities for OSCC staff to develop knowledge of business needs and requirements and strategies to manage business relationships. Work with employers to obtain current job descriptions and information on wages and benefits for priority and other critical occupational groupings and develop method to make information easily available to job seekers. 	
	6. Develop an integrated communication and information-sharing <u>plan</u> that keeps partners, employers, and stakeholders informed on Blueprint implementation progress/resets, goals, and outcomes.	 Prepare an annual Pioneer Valley Blueprint Summary Report on Blueprint implementation processes and outcomes. Create a common Dashboard on core partners' web sites to display progress on implementation of the Blueprint goals and strategies. Determine the feasibility of conducting a Regional Workforce Summit on a biannual basis. 	

Pioneer Valley Regional Plan Goals and Strategies				
Year		Goals		Strategies
By End of 2018 Industry- Occupational Related	6.	Develop an integrated communication and information-sharing <u>plan</u> that keeps partners, employers, and stakeholders informed on Blueprint implementation progress/resets, goals, and outcomes. (cont'd)	S	Develop/participate in Communities of Practice with tatewide Regional Planning Teams working in similar riority industries and/or occupational groupings.
	7.	DESIGN educational/career pathway programs in specific priority industries.	• Proposed in the proposed in	dentify and categorize existing educational/career pathway rograms in prioritized and other in-demand industries cross the Pioneer Valley's unified workforce region. rovide technical support to educational institutions/training roviders in the use of Regional Planning data to identify ature education and training needs and gaps. Expand at least one existing educational/career pathway in the or more priority industries. Increase participation in educational/career pathway rograms for incumbent workers, ABE/Second language earners (especially new immigrants), and non-traditional workforce with barriers to employment. In the demand of the pathway programming.
	8.	Classify regional secondary level-education career pathway programming being conducted at both the technical and comprehensive high schools.	an ca	dentify current career pathway programs and activities that re preparing secondary level students for college and areers. Itilize new MA DESE Early College and Innovation athways program designation process to increase access to ollege and career programs and services for students in all econdary schools. Align regional core partner assets and resources to assist and apport development and implementation of career pathway rogramming consistent with Blueprint goals and strategies. Assist secondary schools in broadening and deepening usiness and employer relationships that will support quality eaching and student learning.

	Pioneer Valley Regional Plan Goals and Strategies		
Year	Goals	Strategies	
By End of 2020 Industry-Occupational Related	1. IMPLEMENT educational/career programs that increase the supply of trained workers and present clear pathways for credential attainment, quality career mobility, and wage advancement in specific occupational groupings in priority industries.	 Conduct two (2) new industry aligned pathway programs that will increase the supply of trained workers in selected priority occupational groupings. Identify existing resources to mitigate implementation gaps, and source new funding opportunities that will supplement or leverage investment from the WSC. Use regional labor market information to identify new and emerging industries with the capacity for development of new career pathways. Use regions One Stop Career Centers as hubs to identify and increase new labor market entrants including non-traditional populations with barriers to participation, and provide job search and placement services in priority occupational groupings. Assist secondary schools in expanding work-based learning programs, paid internships, and pre-apprenticeship programs that provide career awareness and clear educational and career pathway identification. Use WIOA Core Partners and established networks of social service agencies and community-based organizations to provide wrap around and support services in the areas of transportation, childcare, health and social services, and housing to support career pathway progression. 	
	 Increase the availability of quality jobs in priority occupations for job seekers at the sub-Bachelor's degree level, and improve upon 10% gap in the region's Bachelor's degree level population as compared to the statewide average. Increase the number of high quality jobs in 	Align existing training system delivery models and identify additional funding resources to increase the number of ESOL programs for immigrants, second language learners, and non-traditional workers with language barriers to labor market participation.	
	priority occupational groupings that pay median wages that meet or exceed regional averages and offer competitive employee benefit packages.	Develop a unified process to improve demand-driven job development and job matching programs and services at the regions One Stop Career Centers.	

Pioneer Valley Regional Plan Goals and Strategies			
Year	Goals	Strategies	
By End of 2020 Industry- Occupational Related	4. Increase employment share in sub-regional industries characterized by small and medium size enterprises (SMEs) and start-ups.	 Adopt standardized assessment tools such as Career Ready 101 to better identify job seeker strengths, motivation, and potential barriers to successful labor market participation Target WIOA training funds toward priority industries and occupational groupings. Coordinate initiatives across the Pioneer Valley's unified workforce region to build partnerships between SME's and start-ups in selective sub-regional industries and the educational institutions. Explore alternatives for improving and increasing public transportation access to employer sites. Build out internship programs in our educational institutions as a graduate retention strategy to increase the region's supply of workforce talent. 	

Numerical goals/targets for #2, 3 and 4 to be determined during the Blueprint implementation phase.

Pioneer Valley Regional Plan Goals and Strategies			
Year	Goals	Strategies	
	1. Improve the Supply Gap Ratio in priority and in-demand occupational groupings by increasing the number of employees working in our prioritized regional industries.	Broaden and deepen existing industry partnerships and	
By End of 2022	 Increase number of high quality jobs for job seekers and incumbent workers in occupations that have an Employment Share ≥ statewide averages for those occupations. 	 identify new occupational groupings with high quality within the priority industries across the Pioneer Valley's unified workforce system. Increase funding from public and private sources to increase 	
Industry- Occupational Related	3. Increase the number of high quality jobs in priority occupational groupings, and other critical regional industries, that pay median wages that meet or exceed regional averages and offer competitive employee benefit packages.	 programs and services for job seekers and incumbent employees across priority regional industries. Collaborate with employers to implement strategies and activities to improve workforce retention at all levels. Assess the impact of the delivery of wrap around and supportive services being provided to job seekers and 	
	4. Improve the Pioneer Valley Regions annual average labor force participation rate of 62.0% to approximate the State's annual average labor force participation rate of 65.5%, adjusted over time.	workers to support career pathway progression, and make necessary adjustments to services and/or delivery models.	

Numerical goals/targets for #1, 2 and 3 to be determined during the Blueprint implementation phase.

Pursuant to WIOA Sec. 106(c)(1) and (2) the undersigned submit and support the Regional Planning Blueprint and assure that the plan will be implemented as submitted, in order to meet the goals of the WSC's regional planning initiative.

Local Plan priorities and/or activities may change as a result of regional strategies developed through the regional planning process, and contained in the Regional Planning Blueprint. Local plans will be modified to reflect any such changes.

Man Mark	3-2-18
William F. Martin, Mayor, City of Greenfield, Chief Elected Official	Date
	3/1/18
David J. Narkewicz, Mayor, City of Northampton, Chief Elected Official	Date
, Tomerin J. Jamo	3/5/1892
Domenic Sarno, Mayor, City of Springfield, Chief Elected Official	Date
Shill	3/1/18
Shardool Parmar, Pioneer Valley Hotel Group & Interim FHREB Board Chair	Date
MAL AL	3/2/18
J. Jeffrey Sullivan, M&M Consulting & REBHC, Inc. Board Chair	Date
ale & (mil)	2/27/18
Patricia Crosby, FHREB Executive Director	Date
) Avel h bruise	3/6/2018
David M. Cruise, REBHC, Inc. President & CEO	Date