Southeastern Massachusetts Labor Market Blueprint

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Section I: Introduction

Where are we now?
Regional Context
Vision, Mission.
INTRODUCTION
The process of creating a regional plan.

In April 2017, The Baker-Polito Administration launched a new regional planning initiative aimed at addressing the skills gap by bringing together regional teams of educators, workforce, and economic development professionals to create regional blueprints for growth strategies in every region of the Commonwealth. The initiative is led by the Governor’s Workforce Skills Cabinet, which works to align state and local programs, policies, and resources to fuel job growth and address employer demand for talent.

Seven regional teams across the Berkshire, Pioneer Valley, Central, Northeast, Greater Boston, Cape, and Southeast regions are currently devising local strategies for regional labor market blueprints used to inform policy-making and investments targeted at strengthening the Massachusetts economy.

The following represents the Southeast Region Labor Market Blueprint.

Regional Planning Team.

The Southeast Regional Planning team represents a broad spectrum of organizations spanning a large geographic region encompassing four Workforce Development Areas in the southeastern portion of Massachusetts including Bristol, Brockton Area, Greater New Bedford and South Shore. The region is comprised of 56 communities including six Gateway cities (Attleboro, Brockton, Fall River, New Bedford, Quincy and Taunton).

The team strove to ensure contributions from a large array of organizations and included robust representation from the three Skills Cabinet sectors of Workforce Development, Education and Economic Development. The four Workforce Boards acted as the coordinating bodies in the plan development process. Workforce Development representation also included senior management from the region’s seven career centers. Within the education sector, all three community colleges within the region were active participants in the planning process as were the two public four year Universities situated in the southeast. The region’s high schools, particularly our vocational technical high schools, were well represented with four Superintendents and other representatives participating throughout the process. Numerous Economic Development professionals represented actively contributed to the planning process as well. These included the MA Office of Business Development, a local Regional Economic Development Organization (REDO), Regional Planning Authorities, and area Chambers of Commerce.
Where are we now?

Regional Context

Stretching from southern portion of Norfolk County just south of Boston southward to the entirety of Plymouth and Bristol Counties, the southeastern region shares most of the Massachusetts border with Rhode Island to the west with the eastern border primarily a long stretch of coastline from Hull to Plymouth and Wareham to Westport. The Southeast region of Massachusetts includes 56 communities encompassing four Workforce Development Areas (Bristol, Brockton Area, Greater New Bedford and South Shore) with both common and divergent labor markets. The primary concentration of population is centered in six gateway cities located within the region.

As each region has at least one Gateway City within its borders, similar demands are made in English language acquisition (Foreign born: Brockton 28.3%, Fall River 19.4%, New Bedford 21.5% and Quincy 32.8%), building work ready skills (41% population 25+ have a HS diploma or less) and adapting to the change of available labor pools. Historically, the dense population made these communities ideal for factories and multi-unit residences to supply the workforce, however, these now 100 year+ facilities are posing challenges to the new industries and residents who are no longer focused on working and living in the same vicinity. From the foundation days of fishing & shoemaking, industries within the Gateway Cities face challenges on transition into new technology, regulations and transportation for their workforce.

Just as all the Workforce Boards have the commonality of urban Gateway Cities, within each region there are also pockets of suburbia, filled with small businesses driving the local economy that demands a different response in planning for the workforce. Many of these businesses have few opportunities for training and often have difficulty in filling both entry and mid-level jobs.
Vision, Mission.

Vision

Our vision is that southeastern MA will offer its residents a high quality of life with diverse education and career opportunities that contribute to business health and a strong regional economy.

We hope the following to be true in our region in 10 years:

• Growth of globally competitive employers within multiple industry clusters
• A workforce that meets the needs of area employers through education, training and lifelong learning
• Residents will have increased ability to achieve a sustainable wage in order to enjoy the amenities and quality of life available in the southeast region.

Mission

We will coordinate and align our efforts to contribute to the ongoing economic health and vibrancy of the region by preparing the workforce to meet the evolving skill set demands of area employers.

This effort will be supported by the following strategies:

• All partners will support demand driven education and training strategies across K-12, secondary and post-secondary education that directly address the workforce needs of the region’s priority and critical industries.
• Our education partners will work to expand education programming in each of the identified priority and critical industries to support increased capacity for area job seekers.
• All partners will focus efforts on aligning and expanding work readiness and career exploration activities with the education and workforce development systems in the region.
• Our partners will promote progression of the region’s workforce along career pathways with credentialing and lifelong learning strategies.
• Our workforce development and economic development partners will organize industry sector partnerships and collaborations to gain their input in strategic planning and foster their investment in incumbent worker training.
Section II: Critical Trends

Population
Demographics
Workforce Needs
Population

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

The Southeast region accounted for approximately 21% of the state’s residents at the end of the decade. Between 2000 and 2010, the population increased at a modest annual rate of 0.3%. However, there was little growth in the native born population over the decade. Instead, strong annual growth in the region’s immigrant population (2.2%) was the primary factor in the southeast’s total population increase. The region has seen increased diversity over the past decade, with growing Black, Asian and Hispanic populations. The population also became older as baby boomers approached retirement age. This resulted in all cohorts of residents age 45 and older growing during the decade, while nearly all the cohorts of those ages 44 and younger declined. (Commonwealth Corporation/New England Public Policy Center of the Federal Reserve Bank of Boston, Labor Market Trends in the Southeast Region)

Within the UMASS Donahue Institute Report, Long-Term Population Projections for Massachusetts Regions and Municipalities, it is estimated that the southeast should expect to see continued population growth over the next decade but at a slower rate in the future. The UMASS Donahue Institute model estimates that the region will add another 39,490 residents between 2010 and 2020. By 2035, it is estimated that the southeast region will approach 1.19 million persons. The report indicates that continued modest growth will be driven by in-migration of persons in their thirties and international migration. It is anticipated these two factors will counter population loss through domestic out-migration. It is relevant to note that domestic out-migration is strongly concentrated among the college-age population reflecting a long term struggle to retain college graduates within the region.

The report also projects that the population will continue to age in the southeast. Significantly, it is estimated that 24% of the region’s population will be over the age of 65 by 2035, compared to 14% in 2010. This age shift absent significant growth of the overall population has potentially significant labor supply implications in the region. Ultimately, as region’s population ages, the share of the working-age and young people is declining.

The trends of a limited growth in the region’s labor force are even more ominous when one considers the fact that southeastern MA employers face a net loss of approximately 135,000 employees who leave the region for work. More specifically, 332,134 individuals are living and employed in the southeast. While 152,536 individuals are employed in the region while living outside, a far more significant number (288,940) who live in the southeast are employed outside the region. This results in a net loss of approximately 135,000 employees who leave the region for work.
Demographics

Critical trends in regional demographics that will impact the workforce.

Examining raw population numbers is only a first overall step in analyzing the changing nature of the workforce and its preparedness in meeting the evolving needs in our region’s economy. In determining the best strategies for ensuring that local job seekers have the skills necessary to secure employment in growth industries, it is necessary to review the regional demographics of our workforce in greater detail.

The skills sets and education levels of the region’s population will always be a primary consideration in workforce development, education and economic development strategies to meet the workforce needs of area employers. As the local economy has evolved, the strongest growth occupations with high wages and career ladder opportunities are increasingly those with higher skill set requirements. The majority of southeast MA-based employment (62%) currently requires a high school diploma or less but again this is not indicative of priority and growth industries. Of the 165 occupations that achieved a four or five STAR ranking* in the Southeast region, 113 or 72% required at least an Associate Degree. This translated as well to priority industry sectors with 2/3 of health care and almost ¾ of professional, scientific and technical services requiring at least some post secondary education.

This data becomes important within the context of the educational attainment rates among the region’s population. Within the Southeast, Bristol and Plymouth County data (2011-2015 ACS gathered from American Factfinder) reveals educational attainment rates that are most often at the lower end of the Commonwealth’s regions. The regional differences in high school graduation are relatively modest. Within Bristol and Plymouth Counties the percentage of age 25-64 population with at least a high school diploma or equivalency is 87% and 94% respectively. As we move to post-secondary education, the differences between the southeast and the remainder of the state become more pronounced. In fact, Bristol County has the lowest percentage of adults with some post-secondary education (57%) while Plymouth County (66%) falls within the middle of the state range of 57-78%. Finally, the percentage of Bristol County adults with a bachelor’s degree is only 28% with Plymouth County at 37%. This puts the majority of the southeast region at the low end of the range (27-56%) of MA Counties. In looking at the combined southeastern data, 41% of individuals 25 or older have a high school diploma or less, 27% have some post-secondary or an Associate Degree while 27% hold a Bachelors or higher (American Community Survey 5 Year Averages 2011-2015). In examining job seekers served at the seven Career Centers in the region, the numbers are lower still with 35% holding a high school diploma or equivalent, 15% with some college, 9% with an associate’s degree and 16% with a bachelor’s degree (EOLWD–Career Center One Stop Career Center Access Reports Q3 FY’17).

In addition to education levels, it is also important to note that a significant portion of residents require language or basic skill remediation in order to access specialized occupational training or post-secondary education. An examination of 2011-2015 averages reveals that 8% of the 18 and over population in the southeast are Limited English Proficient. That would translate to more than 85,000 individuals within the region.

* High Demand and High Wage
translate to more than 85,000 individuals within the region. Similarly, 10% of the 18+ population, representing more than 106,000 individuals lack a high school diploma with approximately half of these at less than a 9th grade level in basic skills attainment. The obvious implication to this data is a clear need for integrated Adult Basic Education strategies with contextualized curriculum, increased intensity (more hours per week) and potentially integrated ABE/Occupational training programs.

There is an obvious correlation between education levels and earning ability and this is confirmed by area wage data. In the southeast, the median wage is $38,797 (Occupational Employment Statistics Wages, 2015) which is approximately 17% below the state median wage of $46,690 and 27% below Greater Boston ($53,153) which borders the region to the north.

It is also useful to examine the demographics of the region’s population within the context of priority regional industries. The implication of an aging population and shrinking workforce has already been noted above. In examining more practically how this might affect priority industries, it is important to note that the oldest workforce is within the manufacturing sector with 34% of its employees over the age of 55. In comparison, Professional and Technical Services, Construction and Health Care, only 21-27% of the workforce is over the age of 55. Accommodation and Food Service represents the youngest workforce in the region though many of the positions part-time, entry-level and low wage.

With regard to race, Health care is the most racially diverse industry, with 18% non-white employees and Construction the least racially diverse industry at 7% non-white. Health care is the most racially diverse industry, with 18% non-white employees and Construction the least racially diverse industry (7% non-white). All priority industries currently have a relatively low percentage of Hispanic employees. Professional, Scientific and Technical Services and Construction represent the lowest percentage with 5% and 4% Hispanic employees respectively. Manufacturing and Accommodation and Food Services were at 8% and 9% respectively.

With regard to education levels in priority industries, Construction (45% HS or less), Accommodation and Food Service (48% HS or less) and Manufacturing (43% HS or less) offer the most opportunities for individuals with a high school diploma or less. Conversely, individuals within 2/3 of Health Care positions and almost ¾ of Professional, Scientific and Technical Services have at least some post-secondary education. (Source for industry specific demographics: US Census Longitudinal Employer-Household Dynamics)
Workforce Needs

Current and past level industry trends affecting workforce needs

In examining industry trends within the southeast region, it becomes clear that recent changes mirror longer term trends that have been seen in this region over an extended period of time. The following represents employment share over the past seven years including percentage growth and decline. Some analysis of shorter term trends is included in the narrative below.

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Southeast Workforce 2009</th>
<th>Percentage of Workforce</th>
<th>Southeast Workforce 2016</th>
<th>Percentage of Workforce</th>
<th>Percent Growth / Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care and Social Assistance</td>
<td>86,517</td>
<td>17.1%</td>
<td>104,514</td>
<td>18.8%</td>
<td>+20.8%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>76,267</td>
<td>15.1%</td>
<td>77,441</td>
<td>13.9%</td>
<td>+ 1.5%</td>
</tr>
<tr>
<td>Accommodation and Food Service</td>
<td>44,246</td>
<td>8.8%</td>
<td>52,889</td>
<td>9.5%</td>
<td>+19.5%</td>
</tr>
<tr>
<td>Educational Services</td>
<td>47,411</td>
<td>9.4%</td>
<td>48,769</td>
<td>8.8%</td>
<td>+ 2.7%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>41,944</td>
<td>8.3%</td>
<td>40,450</td>
<td>7.3%</td>
<td>- 3.6%</td>
</tr>
<tr>
<td>Construction</td>
<td>24,054</td>
<td>4.8%</td>
<td>35,858</td>
<td>6.5%</td>
<td>+49.1%</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>30,460</td>
<td>6.0%</td>
<td>30,986</td>
<td>5.6%</td>
<td>+ 1.7%</td>
</tr>
<tr>
<td>Administrative and Waste Services</td>
<td>21,606</td>
<td>4.3%</td>
<td>27,179</td>
<td>4.9%</td>
<td>+ 2.9%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>23,647</td>
<td>4.7%</td>
<td>23,905</td>
<td>4.3%</td>
<td>+ 1.1%</td>
</tr>
<tr>
<td>Other Services</td>
<td>25,484</td>
<td>5.0%</td>
<td>20,736</td>
<td>3.7%</td>
<td>-18.6%</td>
</tr>
<tr>
<td>Public Administration</td>
<td>18,795</td>
<td>3.7%</td>
<td>20,431</td>
<td>3.7%</td>
<td>+ 8.7%</td>
</tr>
<tr>
<td>Professional &amp; Technical Services</td>
<td>18,853</td>
<td>3.7%</td>
<td>20,333</td>
<td>3.7%</td>
<td>+ 7.9%</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>14,624</td>
<td>2.9%</td>
<td>17,870</td>
<td>3.2%</td>
<td>+22.2%</td>
</tr>
<tr>
<td>Arts</td>
<td>6,954</td>
<td>1.4%</td>
<td>10,163</td>
<td>1.8%</td>
<td>+46.1%</td>
</tr>
<tr>
<td>Management</td>
<td>9,685</td>
<td>1.9%</td>
<td>9,478</td>
<td>1.7%</td>
<td>- 0.2%</td>
</tr>
<tr>
<td>Information</td>
<td>9,525</td>
<td>1.9%</td>
<td>9,173</td>
<td>1.7%</td>
<td>- 0.2%</td>
</tr>
<tr>
<td>Utilities</td>
<td>2,821</td>
<td>0.6%</td>
<td>3,070</td>
<td>0.6%</td>
<td>+ 0.1%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>2,115</td>
<td>0.4%</td>
<td>2,214</td>
<td>0.4%</td>
<td>+ 0.1%</td>
</tr>
</tbody>
</table>

DUA/BLS Quarterly Census of Employment and Wages

The most significant growth in raw numbers has been in Health Care and Social Assistance industry cluster. It by far represents the largest industry cluster within the region with nearly 19% of workers employed in the industry and nearly 18,000 new jobs added to health care occupations over the past seven years. This represents roughly 35% of total job growth in the southeast over this same period. Health care is included as a priority in each of the four Workforce Board’s plans supported by the fact that career opportunities and wage potential are stronger in health care than in other growth industry clusters. Indeed, there are positions within the health care sector that exceed average annual wages in the southeast. Still, while some of the growth occupations in this industry sector may be accessed with short term training, more advanced training and
A second industry trend that remains consistent is a decline in both raw numbers and employment share in manufacturing. However this decline has slowed considerably with a 3.6% loss in total employment with approximately 1,500 jobs lost between 2009-2016. This is far short of the more dramatic employment loss of 16.2% during 2007-2009 in the midst of a recessionary economy. Despite these declines, the southeast still maintains a relatively high percentage of manufacturing jobs with its 7.3% share representing fifth largest in the region as well as exceeding the MA share of approximately 6%. Although manufacturing jobs have declined in recent years, almost 50% of the manufacturing jobs in the Commonwealth are in southeastern MA. It is important to note that the larger reductions and layoffs in manufacturing 10 or more years ago were related to positions that were lower skilled and did not afford the affected workers with significant transferable skills to other industries. However, the current face of manufacturing occupations shows a need for higher skills sets. This comes with opportunity as wages in demand occupations such as CNC machinists and welders have increased even in recent months as evidenced by roughly 15-20% increase in entry level wages over the past two years for individuals placed out of Workforce Board coordinated specialized manufacturing training programs.

Manufacturing Production Jobs in Massachusetts
MSAs (Metropolitan Statistical Areas)

- **Southeastern MA MSA**: 48.8%
- **Non-Southeastern MA MSA**: 51.2%

**Professional & Technical Services**

- Industry maintaining a steady growth rate of nearly **22.9%**

**Construction**

- Industry maintaining a steady growth rate of nearly **8%**
When isolating the most recent three years, other industry trends to note include the Professional and Technical Services industry maintaining a steady growth rate of nearly 8% and an increase in the growth in Construction (22.9%). The construction industry growth has benefited from major transportation, commercial and residential projects throughout the region in recent years. While the Finance and Insurance Industry has seen more modest growth, average weekly wages in this sector have increased a substantial 12.45% from 2013-2016.

Growth in other industries such as Accommodation and Food Services are worthy of note and can be integrated into planning through areas such as youth employment and career readiness. However, with wages that are somewhat lower than the average and career ladder opportunities not as closely tied to credentials, specific training and degree programs—this and similarly situated industries do not rise to the level of being characterized as a priority or critical industry.
Section III: Priority Industries and Occupations

Criteria
Health Care
Professional, Scientific & Technical Services
Finance & Insurance
Critical Industries
Priority Industries and Occupations

Criteria

Southeastern MA is home to a diversity of industry sectors, providing numerous employment opportunities and career pathways for individuals of all ages and abilities. Although there are a variety of occupations in demand throughout the region, further analysis of the data collection within the context of specific criteria clearly identifies three priority industries and the higher demand occupations within them. Utilizing data analysis in conjunction with state and regional criteria clearly identifies that health care, professional scientific & technical, and finance & insurance services are priority industries within southeastern MA. In addition to these priority industry sectors, it is important to note that manufacturing, construction and emerging industries such as those associated with the Blue Economy are also considered Critical Industries with a variety of in-demand occupations as well.

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

Additional criteria are important to the Regional Planning Team

- Supportive employers
- Support industry resilience in the region
- Aligned with regional priorities
Priority Industries and Occupations
Our priority industries by 2-digit NAICS

Priority Industry 1
Health Care and Social Assistance – NAICS Code 62
Our prioritization in this industry centers on Nursing and Residential Care Facilities (NAICS Code 623), Offices of Physicians, Dentists and Other Health Care Practitioners (NAICS codes 6211, 6212 and 6313 respectively) and Medical and Diagnostic Laboratories (NAICS code 6215). Each of these categories represent numerous clinical and health care support positions that are in demand in our region.

Current Conditions: Health care is clearly one of the most important industries to the region’s economic success. As noted above, Health care by far represents the largest industry cluster within the region with nearly 19% of workers employed in the industry and nearly 18,000 new jobs added to health care occupations over the past seven years. This represents roughly 35% of total job growth in the southeast over this same period. The industry has the largest share of total wages paid by a large margin with $1,223,033 in wages paid representing 17.7% of the regional total. From 2013-2016, the Health Care industry also saw the most significant increase (10.3%) in the number of establishments with a total of 11,127 separate employers now in the region. That represents nearly 26% of all establishments in the southeast. Multiple occupations within this industry are among the fastest growing jobs in the southeast. For example, Registered Nurse represents the top occupation by indexed employer demand and is projected to grow steadily by double digit percentages in all areas of the region. As well, Nursing Assistants, Home Health Aides, Physical Therapists, Occupational Therapists, Personal Care Aides, and Phlebotomists are only a partial list of Health care occupations that are projected to show long term growth of greater than 10%, in some cases approaching 35% in parts of the southeast region. (Department of Unemployment Assistance – Long Term Occupational Projections 2014-2024.) Population trends will only add to the demand for Health Care services as it is estimated that 24% of the region’s population will be over the age of 65 by 2035, compared to 14% in 2010.

In terms of career development, the industry is marked by strong career pathway opportunities with accessible entry points. Strong employer engagement within this industry is evident with sector partnerships in place within the region with workforce development and education participation already in place.

Challenges: As one of the most rapidly growing sectors of the economy, the Health care industry also faces significant workforce development challenges. From a labor force standpoint, multiple important occupations within this industry face supply gaps resulting in labor shortages. Supply gap analysis shows most positions with low ratio of qualified individuals per opening (0.1 to 0.9 per opening) with occupations such as Nursing, Physical Therapy Assistant, Licensed Practical Nurse, Medical Records and Health Information Technicians, Dental Hygienists, Nursing Assistants and Radiologic Technicians showing long term supply gaps in the southeast. The struggle in developing a talent pipeline for this industry is affected by limited training and education capacity in the region for certain for occupations. For example, there is only one Associates Degree program in Radiologic Technology in the southeast region and the
limited number of slots in Registered Nurse degree programs impacted by lack of teaching capacity and clinical sites are well documented. All this is occurring against the backdrop of ongoing changes in the health care industry and the unquestioned trend for increased demand for services forcing providers to move toward redesigned primary care models and away from acute hospital utilization.

An initial review of projected occupational growth in each of the four southeastern workforce development areas reveals a concentration of health care occupations among the fastest growing jobs. This includes occupations at the both the entry and advanced levels. **The following is a representative listing of health care occupations with significant long-term growth projections.**

<table>
<thead>
<tr>
<th>Title</th>
<th>Long Term Projected Growth</th>
<th>Average Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Health Aides</td>
<td>31.6%</td>
<td>$ 27,675</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>28.7%</td>
<td>$102,041</td>
</tr>
<tr>
<td>Occupational Therapy Assistants</td>
<td>27.8%</td>
<td>$ 59,160</td>
</tr>
<tr>
<td>Physical Therapy Assistants</td>
<td>27.7%</td>
<td>$ 58,469</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>24.1%</td>
<td>$ 82,397</td>
</tr>
<tr>
<td>Personal Care Aides</td>
<td>19.5%</td>
<td>$ 27,236</td>
</tr>
</tbody>
</table>

### Health care Occupation Shortages

In examining the STAR demand ratings and analyzing supply gap analysis combined with input from partners and employers, occupational shortages are evident within the region’s priority industry clusters. Within the health care industry, supply gap analysis reveals that a low ratio of qualified individuals per opening:

#### Sub-BA Health Care occupations

<table>
<thead>
<tr>
<th>Title</th>
<th>Number of Individuals Per Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Therapy Assistant</td>
<td>0.4 qualified individuals</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>0.5 qualified individuals</td>
</tr>
<tr>
<td>Medical Records and Health Information Technicians</td>
<td>0.65 qualified individuals</td>
</tr>
<tr>
<td>Dental Hygienists</td>
<td>0.7 qualified individuals</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>0.85 qualified individuals</td>
</tr>
<tr>
<td>Radiologic Technicians</td>
<td>0.9 qualified individuals</td>
</tr>
</tbody>
</table>

In addition, there are several BA level health care occupations that face a significant supply gap including Registered Nurses (most severe supply gap at less than 0.01 individual per opening) and Medical and Health Service Managers.

A significant number of health care occupations are also represented among four and five STAR occupations. In most cases, the five star occupations in health care require a bachelor’s degree. These include Medical and Health Service Managers, Nurse Practitioners, Occupational Therapists, Physical Therapists, Registered Nurses, Medical and Clinical Laboratory Technologists. While these occupations are not easily accessible due to experience and degree requirements, they do represent an important part of career ladder development in this industry. Other occupations within the health care industry that require
less than a bachelors degree, facing shortages and classified as a four or five star occupation include Dental Assistants, Dental Hygienists, Medical Assistants, Occupational Therapy Assistants, Physical Therapy Assistants, Radiologic Technologists, Respiratory Therapists, and Surgical Technologists. Each of these has accessible entry points with strong career ladder opportunities.

Career ladder entry points in southeast priority industries can be accessed in positions that are entry-level and in some cases require no formal credential. While offering a wage that may be at or below the region’s median, these occupations offer an entry points to viable career ladder opportunities. The Health Care industry features numerous career ladder opportunities below the 4 and 5 STAR Demand ratings.

For example, Nursing Assistant/Patient Care Aides offers a strong career ladder in the Southeast with opportunities for substantial increased wages over time.

<table>
<thead>
<tr>
<th>Position</th>
<th>Education Requirement</th>
<th>Median Wage in Southeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Assistant</td>
<td>Non-Degree Certification</td>
<td>$ 28,263</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>Post-Secondary Non-Degree</td>
<td>$ 54,209</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>Associate’s/Bachelor’s Degree</td>
<td>$ 77,476</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>Master’s Degree</td>
<td>$102,041</td>
</tr>
</tbody>
</table>

**Priority Occupations in Health Care**

The Health Care Industry provides numerous occupations and career pathway opportunities, however the following are considered the highest demand positions among the health care providers in the region.

**Priority occupations or occupational groups by SOC code (4-8 digit)**

**Health Care Practitioners and Technical Occupations (SOC 29)**

**Dental Hygienists/Assistants (SOC 29-2021)**

- Demand STARS* - 4.
  - Annual median wage ($84,601) significantly above regional median wage.
  - Existing supply gap in the region with approximately 0.7 qualified employees per opening.
  - Accessible entry point with less than a bachelors degree required for entry level employment.

**Radiologic Technologists (SOC 29-2034)**

- Demand STARS - 4.
  - Annual median wage ($70,650) significantly above regional median wage.
  - Career ladder leads to Physical Therapist - second highest indexed employer demand** in Southeast for occupations requiring a BA.
  - Existing supply gap in the region with approximately 0.9 qualified employees per opening.

From 2013-2016, the **HEALTH CARE INDUSTRY** also saw the most significant increase (10.3%) in the number of establishments with a total of 11,127 separate employers now in the region.
Health Care Support Occupations (SOC 31)

Nursing Assistants (SOC 31-1014)
- Demand STARS - 3.
- Annual median wage - $28,263 but higher with specializations.
- Existing supply gap in the region with approximately 0.9 qualified employees per opening.
- Accessible entry points with short-term, widely available training in the region.
- Strong career ladder opportunities in the Health Care sector.
- Increase specializations desired by employers has resulted in increased entry level wages.

Physical Therapy Assistants (SOC 31-2021)
- Demand STARS - 4.
- Annual median wage - $58,469 (34% above regional median wage).
- Notable supply gap in the region with approximately 0.4 qualified employees per opening.
- Career ladder opportunities: Physical Therapist is a 5 Demand STAR occupation in the Southeast with high wages and a significant supply gap.

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

**Indexed Employer Demand: Short term openings from replacement and growth (2017), long term openings from replacement and growth (2024), and online postings, averaged.
**PRIORITY INDUSTRY 2**
**Professional, Scientific and Technical Services** - NAICS Code 54

**Current Conditions:** Professional and Technical Services offers a range of high level services and with few exceptions employers within this sector engage in activities that require high levels of expertise, advanced training and degree attainment. This has translated into strong growth prospects and high wages, and has shown a steady growth rate of 8% from 2013-2016. As well, wages in this industry have increased 8.67% over the same period representing the fourth highest average weekly wage in the southeastern region ($1,505). The industry also has the third highest number of establishments in the region (3,748). In addition, many of the occupations within this sector, particularly in computer/IT occupations cut across multiple industry clusters. In most of these cases, the jobs are high demand (4 and 5 Demand STARS) rating and show strong projected growth. Examples include Computer Systems Analysts (16.4% projected long term growth) and Computer User Support Specialist (11.1% projected long term growth). It is also significant to note that attracting industry within this sector is a regional economic development priority supported by both the workforce development and education sectors. To illustrate the point with one example, the Southeastern Regional Planning and Economic Development District’s (SRPEDD) Comprehensive Economic Development Strategy, Life Sciences already make up a majority of employment within the knowledge and technology sectors-intensive industry clusters throughout the region. The same report cites efforts throughout the region to attract bio-tech companies to the area, further noting the MA Biotechnology Council ranks several area communities as “BioReady”. These efforts have been replicated in the region for different occupational clusters in an ongoing effort to attract knowledge based occupations that offer high wages and career ladder opportunities.

From 2013-2016, the Professional and Technical Services sector has seen an 8.7% increase in the number of establishments, a 7.9% increase in employment and an impressive 8.67% increase in average wage. The occupations within this industry are among the highest average weekly wages within the region ($1,505 per week). Significant supply gaps (0.15 to 0.7 qualified workers for each position) are evident in multiple Professional and Technical Service occupations including Computer User Support Specialists, Network and Computer Systems Administrators, Computer Systems Analysts and Database Administrators. The industry also aligns with STEM initiatives occurring among education and workforce development partners.

**Challenges:** The Professional and Technical Services industry faces an ongoing struggle to develop a talent pipeline and retain skilled workers. As noted above, labor supply gaps are evident in multiple targeted occupations within this industry. Part of this results from the rapid changes in technology that result in shifting and new skill sets necessary for workers to perform their jobs. However, it also evident that previously cited demographic data around educational attainment within the region reveals a challenge to identify job seekers who require the requisite skills to the highest demand positions. This also poses a challenge for training and degree programs in the area to change based on industry skill set requirements.
**Sub-BA Professional and Technical Service occupations**

Web Developers (0.15 qualified individuals per opening)
Computer User Support Specialists (0.45 qualified individuals per opening)

Within BA occupations, Software Developers, Network and Computer Systems Administrators, Computer Systems Analysts, Database Administrators and Computer and Information Systems Managers all range from 0.15 to 0.7 qualified individuals per opening. It is also evident that these occupations cut across industry sectors with shortages having a ripple effect among many area employers in different fields.

As with health care occupations, many of the occupations are four and five-star occupations. In fact, the BA occupations cited above are all five STAR occupations. The Sub-BA Computer User Support Specialist and Web Developer are four star occupations.

Computer User Support Specialists offer opportunities to move into significantly higher wage positions in the Professional and Technical Services/IT Industry.

<table>
<thead>
<tr>
<th>Position</th>
<th>Education Requirement</th>
<th>Median Wage in Southeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer User Support Specialist</td>
<td>Some College, No Degree</td>
<td>$55,342</td>
</tr>
<tr>
<td>Computer Network Support Specialist</td>
<td>Associates Degree</td>
<td>$94,261</td>
</tr>
<tr>
<td>Computer Systems Analyst</td>
<td>Bachelors Degree</td>
<td>$89,388</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td>Bachelors Degree</td>
<td>$100,002</td>
</tr>
<tr>
<td>Computer Information Systems Manager</td>
<td>Bachelors/Masters Degree</td>
<td>$127,032</td>
</tr>
</tbody>
</table>

**Priority occupations or occupational groups by SOC code (4-8 digit)**

Our prioritization in this industry centers on Computer Systems Design and Related Services (NAICS Code 5415). This industry encompasses a wide range of occupational categories that are supported by STEM education. However, computer related services were of particular interest as the occupations included in this category typically cut across multiple industry clusters including other prioritized and critical industries.

Within the Professional and Technical Services sector, shortages are evident in several occupations. Revisiting the supply gap analysis shows in particular shortages in computer support/IT positions.

**Computer and Mathematical Occupations (SOC 15)**

**Computer User Support Specialist (SOC 15-1151)**
- Demand STARS - 4
- Annual median wage - $55,342 (30% above regional median wage)
- Offers career ladder opportunities to multiple 5 Demand STARS occupations in the region.
- Offers skill sets that are transferable to multiple industry sectors throughout the region.
**Current Conditions:** Financial services is an important industry in the southeast region, particularly in its northern tier, having impact on all other sectors through capital and finance provision. According to a study by Mass Insight, banks and other financial institutions account for $36 billion, or 9 percent of the state’s total economic output. The Industry represents almost 7% of the southeast region’s total wage output. In addition, wages in this industry are showing the highest growth rates with over 4% per year (12.45% total) from 2013-2015.

The Finance and Insurance industry shows a steady growth rate at 4.5% and represents the highest average wage increase in any industry from 2013-2016 (12.45%) resulting in an income level 33% above the regional average. Accessible entry points within this industry offer individuals with less than a bachelors degree the opportunity for strong earning potential.

**Challenges:** The financial services sector is an industry that in recent years has faced dramatic changes in its operations and it appears that such trends will continue. Technology has been integrated into consumers’ lives at a rapid pace. This has had significant residual effects in the financial service industry with demand for services growing but fewer people visiting banks. Online portals and self-service kiosks are examples of technologies that have streamlined services and changed the face of the labor force. Still, the industry shows steady employment growth and importantly, significant wage growth (12.45% from 2013-2016). On a talent development level, financial institutions often used the entry level teller position as the most common access point to career ladder progression but this has lessened somewhat as the industry has adopted a “Universal Banker” model. Representing many skill sets required by a Customer Service Representative, the Universal Banker provides customer service across a wide range of traditional financial services such as basic transactions, new accounts, and loan applications. In 2015, the Bank Administration Institute named increased implementation of universal bankers as one of the most anticipated trends in retail banking. A significant challenge to the industry is that these and similarly situated positions require significant cross training. In addition, there is a lack of training and education programs in the region that are specific to entry level positions in financial services. Feedback from local employers reveals customer service, problem solving, work readiness skills, interpersonal skills, teamwork, financial literacy and writing skills as core competencies to succeed in the industry. Additional workforce challenges articulated by local employers include a need for a more diverse and multi-lingual workforce, the need to attract younger workers and the desire to “home grow” employees through such mechanisms as internships.

One occupation worthy of mention that fell within the financial services cluster analysis was Customer Service Representatives. This represents a four-star occupation that provides an entry level access point to career ladders within not only the financial services industry but also among nearly every industry sector in the southeast. It represents the highest number of projected jobs (both short
and long term) of any four-star occupation in the southeast (10,222 positions in 2017), is among the occupations with the largest number of active job orders in the southeast, and is also ranked as the fourth highest occupation by indexed employer demand (Sub-BA). Finally, nearly all employer feedback we have received includes a need to identify individuals with strong customer service skills.

Customer Service Representatives and Tellers are common entry points into the Financial Service Industry with opportunities to secure positions with wages significantly higher than regional median wage. In fact, multiple Presidents of area financial institutions began their career in the industry as a teller.

<table>
<thead>
<tr>
<th>Position</th>
<th>Education Requirement</th>
<th>Median Wage in Southeast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tellers</td>
<td>HS Diploma or Equivalent</td>
<td>$29,239</td>
</tr>
<tr>
<td>Customer Service Rep</td>
<td>HS Diploma or Equivalent</td>
<td>$37,086</td>
</tr>
<tr>
<td>Loan Interviewers/Clerks</td>
<td>HS Diploma or Equivalent</td>
<td>$42,396</td>
</tr>
<tr>
<td>Loan Officers</td>
<td>Associates/Bachelors</td>
<td>$76,419</td>
</tr>
<tr>
<td>Financial Analyst</td>
<td>Bachelor's Degree</td>
<td>$91,594</td>
</tr>
<tr>
<td>Financial Managers</td>
<td>Bachelor's Degree</td>
<td>$92,770</td>
</tr>
<tr>
<td>Financial Services Sales Agents</td>
<td>Bachelor's Degree</td>
<td>$102,666</td>
</tr>
</tbody>
</table>

Our prioritization in this industry centers on Credit Intermediation and Related Activities (NAICS code 522). This would encompass areas that are seeing evolving career ladders and occupations that are changing within the financial service sector. Particularly in the areas of commercial banking services, credit, sales, customer service positions and financial investment activities.
Priority occupations or occupational groups by SOC code (4-8 digit)

Office and Administrative Support Occupations (SOC 42)

Customer Service Representatives (SOC 43-4051)

- Demand STARS - 4

- High indexed demand: fourth highest sub-BA occupation by indexed employer demand in the southeast

- Requires skill sets that cut across industries (i.e. Financial Services)

- Accessible entry points with strong career ladder and wage growth potential ($74,880 average annual wage with advancement in Financial Services).

- Customer service almost universally cited by employers in the region as a critical skill set often in short supply. Majority of Workforce Training Fund Program applications from employers include customer services training components.

Critical Industries and Occupations

I. Manufacturing

We would add a special note highlighting the importance of manufacturing in the region. It represents 7% of the total workforce in the southeast and pays nearly 10% of the regions total wages. It’s easily accessible on-ramps to entry level positions and strong intersection with the local workforce development system warrants its definition as a critical industry cluster in the southeast. This effort is aided by a strong commitment by local manufacturers to invest in their workforce, promote their industry and dedicate time and resources to the sector.

If there were an additional priority cluster, manufacturing would be included in that category. Indeed, each of the four Workforce Boards has placed emphasis on manufacturing within their respective strategic plans. Through work with area manufacturers, it is evident that there are significant employment opportunities with career ladder possibilities for area job seekers but also major workforce challenges facing the industry.

While there is not an overall growth rate in multiple manufacturing occupations, such a basic statistical analysis would not tell the complete story of future demand within the industry. More specifically, the manufacturing sector is marked by an aging labor pool in the southeast with 34% of the workforce over the age of 55. As a result, the industry faces large scale attrition over the next 5-10 years exacerbated by the fact that the region has a limited training pipeline to develop the future workforce in this industry. While training opportunities exist through partnerships among Workforce Boards, vocational technical high schools and community colleges and some credentialing is present (i.e. MACWIC), the programs are not as formalized as in other industry clusters and in many cases lack regular sustainable funding with programming often grant driven. As well, manufacturing is regularly perceived as a declining industry and most of the region’s youth and their parents do not identify it as a viable career path.
However, this industry features highly accessible entry points with strong entry level wages for positions that can be obtained without advanced degrees (73% of the region’s manufacturing workforce have less than a Bachelor Degree). Occupations such as CNC Machinists and welders can be accessed through relatively short term training programs and feature strong entry level wages ($18-$20 per hour). CNC Machinists occupation shows an impressive 18.6% long term projected growth.

Challenges: Within the manufacturing sector, multiple labor supply gaps exist and are likely to increase in the near and longer term. The manufacturing sector is marked by an aging labor pool in the southeast with 34% of the workforce over the age of 55. As a result, the industry faces large scale attrition over the next 5-10 which has been confirmed through feedback from the region’s manufacturers, particularly among members of the Southeast MA Advanced Manufacturing Consortium. This issue is compounded by the fact that the region has a limited training pipeline to develop the future workforce in this industry. The region’s vocational technical high schools provide valuable programs and a supply of graduates who enter the manufacturing field, but this number does not meet the demand or level for skilled employees in this industry. While additional training opportunities for adults exist through partnerships among workforce boards, vocational technical high schools and community colleges and some credentialing is present (i.e. MACWIC), the programs are not as formalized as in other industry clusters and in many cases, lack systemic funding. Another contributing factor in the limited talent pipeline is the perception among area youth that manufacturing is a declining industry that does not offer strong career ladder opportunities or good wages.

II. Construction
The construction industry offers a highly accessible career path for individuals without a college degree with opportunities for career advancement through the expansion of apprenticeships. The region offers strong educational capacity for this industry through workforce development partnerships with the region’s vocational technical high schools. Construction also aligns with regional economic development priorities. For example, major transportation projects have resulted in increased hiring activity in the southeast. There are a large number of potential candidates for employment in this industry through the region’s Career Centers. The industry also features a strong average weekly wage ($1,315) in comparison to the regional average ($961)

III. Emerging Industries
The Southeast Team will closely evaluate emerging industries over time to determine if additional attention is warranted. For example, the “Blue Economy” has become a regional priority in the southern part of the region. While not a stand-alone priority industry, it includes construction, production and technology jobs that will likely see growth in this region. Emerging industries such as these will have a strong need to intersect with workforce development, economic development and education to meet their workforce needs.
Section IV:
Challenges and Opportunities

Business and Industry
Workforce Supply
Credentials
Business and Industry

As previously noted southeastern MA has a rich diversity of industry sectors and occupations that fuel a vibrant and growing regional economy within the Commonwealth. Although the region has a great deal to celebrate, it is critical that the region remains cognizant of the challenges and opportunities that impact the current and future growth of area businesses. Sustaining the regional economy requires access to a quality workforce with the skill sets required to meet the demands of an ever-changing economy and the associated occupations. A collaborative effort among industry leaders, educational institutions, community organizations and regional leaders is essential if the region is to maintain a strong pipeline of trained workers. This section highlights the opportunities and challenges associated with the regional business and workforce, and provides a brief analysis of the demographics and skill credential of the current workforce.

The top three challenges facing the region’s business and industry over the next five years

1. The ability of employers to find workers with the right skills sets is a clear challenge. Employer expansion in some priority/critical industry clusters is clearly being hindered by an inability to find qualified/credentialed workers.

2. Many jobs seekers and employees lack work readiness skills. Workforce Development and Education partners have initiatives around this issue but they are not always coordinated.

3. Workforce training and development: Investing in the training and development of entry-level employees, particularly with small businesses, can be challenging due to limited resources, time issues, and lack of knowledge regarding assistance available through workforce development, education and economic development entities.
A number of additional industry concerns (transportation, regulation, energy costs) are not easily addressed by our partnership. Transportation is clearly a significant issue resulting in the labor pool for employers diminished due to job seekers unable to access employment and training throughout the southeast region. As a result, employers have shown a willingness to work with partners to identify creative solutions to transportation issues. As well, potential expansion of commuter rail in the southeast offers a potential opportunity for increase access to education, training and employment opportunities.

**The top three opportunities related to business and industry in the region over the next five years**

1. Regional coordination of work readiness skills activities is strongly desired by all partners with movement toward workforce development and education program alignment along with needs identification through economic development entities.

2. The southeast region has many supportive employers seeing growth with desire to invest in their workforce. This is evident through employer engagement in existing sector partnerships in the southeast and significant incumbent worker training occurring in the region.

3. The wide regional scope (four workforce development areas stretching from Quincy and areas south of Boston down to the South Coast) results in sub-regional variations but new growth opportunities. There is a significant opportunity through broader regional coordination to address the needs of emerging industries within the diverse areas of the southeast region.

**Workforce Supply**

**The top three broad labor supply challenges facing the region over the next five years based on the existing workforce in the region**

1. The Southeast region loses more workers to outside of the region then the amount of employees that it gains. (152,536 employed in the region but living outside while 288,940 living in the region but employed outside. In addition, slow projected population growth through 2025 combined with an aging population will likely contribute to a labor supply shortage, particularly in high skill, high demand jobs. Out-migration is strongly concentrated among the college-age population.

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Slow projected population growth through 2025 combined with an aging population will likely contribute to a **LABOR SUPPLY SHORTAGE**, particularly in high skill, high demand jobs.
2. The talent gap in the region continues to result in employers finding it difficult to find workers with the right skills. Within the southeast region, \( \frac{2}{3} \) of health care and almost \( \frac{3}{4} \) of professional, scientific and technical services require at least some post secondary education. 41% of residents have a high school diploma or less.

3. A significant number of residents require language or basic skills remediation. 8% of 18+ population have limited English proficiency and 10% lack a high school diploma. Percentages are considerably higher in the six Gateway cities within the region. In order to access occupations with career ladders, many individuals require language and basic skills remediation prior to entering training programs in priority industries.

**The top three labor supply opportunities facing the region over the next five years based on the existing workforce in the region**

1. The region boasts numerous education institutions with ability to adapt, revise and develop programming to address the labor market needs of the region. If coordinated among all three skills cabinet sectors, there are opportunities to develop customized, demand driven programs that incorporate ABE/Education upgrade in tandem with occupational training components.

2. While the southeast is not at the state average of individuals with college degrees, the percentage of the workforce with a Bachelors Degree or higher has increased over the past decade. As well, growth in full-time enrollment at two and four year institutions in the southeast has occurred at a faster rate than Massachusetts as a whole over the past ten years. Two of the largest three certificates awarded by major field of study are in Health Sciences and Engineering and Computer Services.

3. Relatively low cost of living in the southeast will contribute to projected immigration of persons in their thirties, and with these young families, a fairly steady number of births.
Unemployed and Underemployed

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

The following represents total unemployed and under employed job seekers served at the seven career centers in the Southeast Region (Q3 FY’17).

Education Levels

<table>
<thead>
<tr>
<th>Area</th>
<th>Less than High School</th>
<th>HS or Equiv</th>
<th>Some College</th>
<th>Associate Degree</th>
<th>Bachelors Degree</th>
<th>Advanced Degree</th>
<th>Info Not Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>13%</td>
<td>35%</td>
<td>15%</td>
<td>9%</td>
<td>16%</td>
<td>6%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Ethnicity:

<table>
<thead>
<tr>
<th>Area</th>
<th>White</th>
<th>African American</th>
<th>Hispanic or Latino</th>
<th>Native American</th>
<th>Alaskan Native</th>
<th>Asian</th>
<th>Hawaiian Nat.</th>
<th>Pacific Islander</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>65%</td>
<td>17%</td>
<td>12%</td>
<td>1.3%</td>
<td>3%</td>
<td>0.3%</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Gender and Age:

<table>
<thead>
<tr>
<th>Area</th>
<th>Female</th>
<th>18 and Under</th>
<th>19-21</th>
<th>22-45</th>
<th>46-54</th>
<th>55 or Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td>47%</td>
<td>4%</td>
<td>4%</td>
<td>50%</td>
<td>20%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: MA Department of Career Services - One Stop Career Center Access Reports (OSSCAR)

Pipelines of New Workers

The universe of the region’s existing pipelines of new workers (Credentials) across public and private secondary and post-secondary institutions.

The southeast region includes numerous institutions that provide credentials within our priority critical industry clusters. These include two four year universities, three private four year colleges, three community college and seven vocational technical high schools. In addition, multiple secondary schools provide Chapter 74 Career and Technical Education programs. Finally, there are multiple licensed private proprietary schools that offer short term occupational training throughout the region.

Bridgewater State University
Bristol Community College
Curry College
Eastern Nazarene College
Massasoit Community College
Stonehill College
Quincy College
University of Massachusetts at Dartmouth
Wheaton College
The primary source of the region’s existing pipelines of new workers is multiple post-secondary institutions within the region. These include Bridgewater State University, University of Massachusetts at Dartmouth, Stonehill College, Eastern Nazarene College, Curry College, Bristol Community College, Massasoit Community College, and Quincy College.

Through these public and private postsecondary institutions, the southeast experienced the following degree and certificate awards (top ten fields of study ranked by associate’s degree) in the 2015-2016 academic year.

<table>
<thead>
<tr>
<th>Fields of Study</th>
<th>Bachelors Degree</th>
<th>Associates Degrees</th>
<th>Certificates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts</td>
<td>85</td>
<td>844</td>
<td>0</td>
</tr>
<tr>
<td>Business Management and Marketing</td>
<td>1,121</td>
<td>467</td>
<td>42</td>
</tr>
<tr>
<td>Health Professions</td>
<td>510</td>
<td>436</td>
<td>297</td>
</tr>
<tr>
<td>Homeland Security</td>
<td>330</td>
<td>237</td>
<td>105</td>
</tr>
<tr>
<td>Multi/Interdisciplinary Studies</td>
<td>54</td>
<td>138</td>
<td>14</td>
</tr>
<tr>
<td>Education</td>
<td>523</td>
<td>99</td>
<td>9</td>
</tr>
<tr>
<td>Public Administration &amp; Social Services</td>
<td>95</td>
<td>91</td>
<td>20</td>
</tr>
<tr>
<td>Engineering</td>
<td>168</td>
<td>68</td>
<td>21</td>
</tr>
<tr>
<td>Computer and Information Sciences</td>
<td>86</td>
<td>67</td>
<td>10</td>
</tr>
<tr>
<td>Visual and Performing Arts</td>
<td>281</td>
<td>46</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: National Center for Education Statistics (NCES)

Within the health care industry cluster, there are multiple degree and certificate programs within our post-secondary institutions. For example, associate degree programs include Lab Technician, Nursing, Physical Therapy, Radiologic Technology, Occupational Therapy and Respiratory Care. Bachelor’s degree offerings include Medical Laboratory Science, Nursing, Health care Administration and Health Studies. Certificate programs are also offered including Medical Billing/Coding, Practical Nursing, Surgical Technology, Medical Assisting and Pharmacy Technician.

Multiple degree programs exist in professional and technical services particularly in computer/IT concentrations including bachelors degree programs in Computer Science and Information Technology. Associates degrees and certificate programs include Computer Networking, Computer Technology, Computer Science, Web/Mobile Developer and Computer Network Technician.

The financial services industry includes a large number of programs in general Business Management and Marketing degree and certificate offerings in the region. In addition, there are bachelor’s degree programs in Financial Management including one with a banking career concentration.

Another source of credentials within our priority industry clusters is the region’s vocational technical high schools. Within the health care industry, 222 credentials were awarded. In addition, 515 certificates were awarded in production occupations particularly within manufacturing occupations. Students also receive industry recognized credentials through these programs.
including Microsoft Office, Manufacturing Center Workforce Innovation Collaborative (MACWIC), National Incident Management System (NIMS), Certified Nursing Assistant, Infection Control Certification, BLS Care Provider, Cisco Certified Entry Networking Technician (CCENT), CompTIA certification and hours toward journeyman licensure in multiple construction occupations.

Within the southeast, the following are programs within our vocational schools that fall within priority and critical industry clusters: Dental Assisting, Health Assisting, Medical Assisting, Programming and Web Development, Business Technology, Information Support Services and Networking, Machine Tool Technology, Metal Fabrication and multiple building trades programs.

In comparing total credentials awarded to long term projected job growth in priority industries, retention of the area workforce within these industries. As noted above, it is likely that population trends in the region will continue to impact retention. More specifically, domestic out-migration is strongly concentrated among the college-age population reflecting a long term struggle to retain college graduates within the region. Certainly, this factor could have significant implications for the region’s labor supply in our priority industries.

Within the southeast, the following are programs within our vocational schools that fall within priority and critical industry clusters:

- Dental Assisting
- Health Assisting
- Medical Assisting
- Programming and Web Development
- Business Technology
- Information Support Services and Networking
- Machine Tool Technology
- Metal Fabrication
- Multiple building trades programs.

DOMESTIC OUT-MIGRATION is strongly concentrated among the college-age population reflecting a long term struggle to retain college graduates within the region.
Section V: Goals and Strategies

2018 through 2022

Shared Strategies

Mutually Reinforcing Activities
Goals and Strategies

2018 through 2022

By 2018, we will...

- Develop process for regional collaboration, contact lists, social media cross referral and shared resources.
- Organize regional business outreach teams (representatives from the WDB’s, chambers, planning councils, community colleges, regional economic agencies and career centers) to deliver presentations to employers to inform them of available resources.
- Survey existing data systems among all stakeholders to determine available data and collection processes for measurement and information sharing.
- Engage in analysis to determine and establish realistic and viable baseline measures for determining the return on investment for the goals and objectives of the partnership and design collection methods.
- Survey and determine alignment and delivery of existing job and career readiness activities amongst high schools, colleges and workforce board initiatives in the region.

By 2020, we will...

- Possess an internally sustained process for collecting & distributing common information amongst education, workforce & economic development partners.
- Possess marketing materials with a menu of services for employers and conduct 6-8 employer partner presentations on available resources for growth & stability.
- Completed information sharing processes in relation to compliance & regulations and produce a menu of data resources with links.
- Produce measurements at the end of each fiscal year and evaluate for modification.
- Increase the capacity of youth and adults receiving Career Ready Certification by implementing a Train the Trainer program to be available for high school, college and nonprofit agencies.
- Conduct 2 focus groups/year to obtain real time data from industry professionals. Have established CEO roundtables as a mechanism for discussion of sector issues and developed mechanism to share information with stakeholders.

Establish two new regional sector partnerships in critical partnerships in priority, critical and/or emerging industry that directly involves both leadership and human resource professionals.

Establish a Regional Steering Committee’s and achieving goals.

Engage in analysis to determine and establish current baseline measures in credentialed workforce and career ready youth and adults.

Map available ABE/ESOL course offerings within the region.
Continue the production of industry specific educational and training opportunities reports. Move from print to web-based distribution.

Secure grant resources to establish at least one regional specialized training program in a priority industry sector.

Establish a new apprenticeship model in at least one of the region’s prioritized industry clusters.

Develop contextualized curriculum for delivery of high demand occupational clusters.

Utilize an additional resources to increase intensive ABE programming.

Demonstrate synergy between economic, education and workforce development agencies that produces seamless services.

Develop a mechanism for education, economic and workforce development agencies to inform employers of services, increasing presentations by 10% each year. Increase employer contact level by 5% each year.

Become a leader in coordinating the collection and distribution of data resources available for business owners and investors.

Continue examination of goals (+/-) to maximize resources and leverage programmatic initiatives.

Have increased the number of Career Ready Certification classes offered in high schools, colleges and nonprofit agencies by 15% of baseline data. Increase the number of youth (K-12) and job seekers (Post-Secondary, Career Centers) who receive formal career readiness activities by 10%

Broker training opportunities to match discussion with CEO/HR directors to ensure demand driven instruction.

Increase the capacity of credentialed health care and IT trainings by 5% of baseline.

Move from web-based distribution to real-time mobile apps available for employers and industry experts. Increase utilization of web-based information by 5% per year.

Continue sustaining regional planning and implementation model.

Increase talent pipeline in occupations with supply gaps. Increase the number of “work ready” youth and adults with Career Ready Certification by 5%

Increase the capacity of non-English speaking employees by delivering 2-4 contextualized, in-demand trainings.

Increase the capacity of Adult Basic Education and ESOL trainings by 10% of baseline.

Increase the seat capacity of intensive and/or contextualized ABE programs by 20%.

By 2022, we will...

Increase the pipeline of credentialed health care and IT workers by 5%
**Shared Strategies**

Although there are numerous strategies that can be deployed to support the growth and development of southeastern MA through a skilled workforce, there remains select identified priorities requiring a collective initiative by all stakeholders involved. These shared strategies entail a multi-level approach through the active support and involvement of multiple partners with multiple disciplines. In addition to the shared strategies, the region has identified numerous mutually reinforcing activities that when undertaken in a collective, as well as independent manner, will help to sustain a growing economy and access to gainful employment opportunities.

**Continuous Communication.**

Our partners have collectively agreed to establish formal mechanisms to oversee the implementation of the strategies set forth in this plan. A Steering Committee, comprised of the four workforce board directors and representatives from education and economic development, will be responsible for overall strategic direction of the partnership and implementation of policies, projects and initiatives around all aspects of the plan. It will take the lead in establishing protocols and processes around sharing information of partnership. The committee will also oversee the progression of the regional partnership toward its short and long-term goals. The committee will meet quarterly and will be facilitated and coordinated by the workforce board directors.

**Areas of focus are:**

**Performance:** The Partnership will be charged with examining the possibilities and obstacles to the establishment of baseline performance measures, surveying existing data sources among the skills cabinet partners and the feasibility of data sharing, and reporting performance results to the partnership.

**Work readiness:** The Partnership will be charged with surveying the existing work readiness components existing among workforce development (i.e. Career Ready 101) and education (Connecting Activities, Vocational Schools, etc.), working to see areas of alignment, developing a universal work readiness curriculum and identifying potential state initiatives in this area.

**Resource Development:** The Partnership will regularly review funding opportunities from federal, state and private sources and identify those that could support implementation of our shared goals and objectives. These might include training capacity expansion in priority occupations/industries particularly where gaps exist, integrated occupational training and adult basic education programs or expansion of incumbent worker training opportunities.

**Education and Training:** The Partnership will engage in ongoing analysis of existing education and training programs in priority industries and occupations. It will address issues such as course capacity, demand driven curriculum, increased credentialing, stackable and transferable credits, etc.

**Employer Engagement:** A cross skills sector team will develop strategies to secure real time labor market data from area employers on a regular basis. Similarly, the team will collect data around evolving workforce needs of both large and small businesses in the region. It will also oversee the development of
cross skills cabinet business assistance teams to link area employers to the wide range of resources available from all stakeholders. This will also be the initial source of information sharing from economic development partners regarding regional priorities in attracting new businesses and fostering growth in emerging industries.

**Shared Measurement Systems.**

Throughout our planning process, team members agreed on the need for shared metrics among partners that ultimately tie directly to shared outcomes. Currently, information around goals is captured in different areas among all three skills cabinet sectors, and in some cases beyond. As noted in our 2018 goals, our partnership will survey the various data collection sources utilized currently to determine the potential sources to capture and measure progression toward the region’s planning goals. We will also examine the feasibility of customized measures and data collection sources generated through partnership activity. For example, increase activity among Regional Sector Partnerships may afford an opportunity to collect additional employer and labor market information. Finally, we recognize that state initiatives around information sharing may also impact our work in this area. One example is the Department of Career Services’ Workforce Connect initiative to share information and data among Career Center partners.

**Other Shared Strategies.**

Our partnership has agreed on initial strategies to impact the goals established in this blueprint. These will be further refined and likely expanded through the work of the partnership.

A clear consensus developed around implementing common/universal work readiness components at the region’s secondary, post-secondary and workforce development programs. At present, there are multiple work readiness activities occurring among multiple partners. For example, Career Ready 101 is being utilized at the local Career Centers, DESE funded Connecting Activities programming engages in ongoing work and career readiness activities, the region’s high schools and vocational technical high schools include work readiness programming into specific activities, and Commonwealth Corporation’s Signaling Success curriculum is utilized for at-risk youth. While there are some commonalities in these activities, there is not true alignment. As work readiness skills are identified almost universally by area employers as a critical need, our partnership will work to develop a universal/aligned work readiness component that links to a credential.

As a major business challenge centers around lack of resources for employers, particularly small businesses, to address workforce needs, our partnership will establish regional business outreach teams that include representatives from all three skills cabinet sectors. These teams will not only connect employers with available programs and resources, they will also secure employer feedback regarding ongoing workforce needs and business challenges.

To increase career awareness among area youth, the partnership will develop career ladder documents in each prioritized and critical industry cluster to be utilized in K-12 and at local Career Centers. In addition, all three skills cabinet sector partners will work together to more efficiently industry involvement in career awareness activities.
Resource development was a recurring and common theme in regional planning meetings. Our partnership will utilize existing resources and establish a resource development committee to access new grant opportunities to develop programming with direct input from business in priority/critical industries.

Our partnership is committed to working to expand training opportunities for credentialed occupations. To that end, we will seek to increase capacity of health care training programs within the region by 10% and increase the capacity of training programs in Computer/IT occupations by 10%.

The Southeast Regional Team will work closely with our post-secondary partners to increase the number of stackable and transferable credits from certificate to associates degree to bachelors degree programs within our priority industry sectors.

The partnership will seek to increase seat capacity for customized training programs at Vocational technical high schools by 10% between 2019 – 2022.

**Mutually Reinforcing Activities**

**Education**

- Curriculum development, refinements and development of training programs that tie directly to growth occupations and lead to credential attainment in priority industry clusters.

- Adapt and expand Adult Basic Education/Language Skills programming to align with career objectives of learners and the needs of priority/critical industries and occupations.

- Work toward expansion of stackable credits in priority industries that allow for increased degree attainment among the region’s population.

- Work with other partners to develop universal work readiness components with integration of this at all levels.

- Develop programming that aligns with partners’ career pathways work.
**Workforce Development**

- Maintain up to date knowledge of employer needs and demand through ongoing LMI analysis, convening industry sector partnerships, CEO roundtables, etc.

- Coordinate expansion of career awareness/exploration programming with education partners and Career Centers.

- Utilize existing and secure additional funding for job readiness activities across all partners.

- Coordinate alignment of work readiness activities across the partnership.

- Coordinate and lead cross skills cabinet business teams for employer outreach and assistance.

**Economic Development**

- Assist partnership in aligning activities with regional economic development priorities.

- Assist in maintaining up to date knowledge of employer needs in the area of workforce and other services (financial, space, etc.) that will result in an integrated employer service strategy.

- Connect new businesses and other employers to education and workforce development partners.

- Participate in cross sector business service teams.
The regional planning process undertaken in the development of this Labor Market Blueprint has revealed that each of the Skills Cabinet sectors (Workforce Development, Education, Economic Development) share many goals and objectives, and several common visions have emerged among the stakeholders within the region. There is clearly a variety of strong existing partnerships throughout southeastern MA, but clearly there is room to establish closer coordination among workforce development, economic development and education, as well as expand coordination beyond workforce area boundaries.

The size and diversity of southeastern MA results in significant regional economic and demographic variations, as well as connections to different labor markets (ie. Quincy to Boston), however there is clearly significant common need to make meaningful impacts through deeper partnerships and collaboration. Although it is evident that translating broader goals to specifics (ie. Common metrics) may be challenging, the region has the institutions, commitment and vision to define the needs and establish a comprehensive approach to meet the demands of a vibrant and diverse economy.

As our partnership looks at ways to leverage assets and existing resources, it is important to recognize that it will be a modest progression towards achieving the short and long-term goals. Southeastern MA is a historic, authentic and vibrant region, providing numerous amenities and resources that make it a great place to live, work and recreate. Through collective and collaborative efforts, our partnership is confident that the expansion of programming identified throughout this Blueprint will positively impact economic growth, and shape sustainable career pathway opportunities for the regions workforce and business community to benefit from.