



January, 2018



Introduction

The federal Workforce Innovation and Opportunity Act (WIOA) was signed into law on July 22, 2014, and is the first legislative reform of the public workforce system in fifteen years. WIOA supersedes the Workforce Investment Act of 1998 and retains and amends the Adult Education and Family Literacy Act, the Wagner-Peyser Act, and the Rehabilitation Act of 1973, and establishes the publicly-funded national network of Federal, State, regional, and local agencies and organizations that provide a range of employment, education, training, and related services and supports to help all jobseekers secure good jobs while providing businesses with the skilled workers they need to compete in the global economy.

Among other requirements, WIOA calls for local regions to develop strategies and shared service models among the federally-funded partners, including;

- **The Adult Program (Title I of WIOA)**, as part of the Department of Career Services (DCS), Executive Office of Labor and Workforce Development (EOLWD);
- **The Dislocated Worker Program (Title I)**, as part of the Department of Career Services (DCS), EOLWD;
- **Trade Adjustment Assistance for Workers Programs** (Activities authorized under chapter 2 of Title II of the Trade Act of 1974 (19 U.S.C. 2271 et seq.)), as part of DCS, EOLWD;
- **Jobs for Veterans State Grants Program** (Programs authorized under 38, U.S.C. 4100 et. seq.) as part of DCS, EOLWD;
- **The Wagner—Peyser Act Program** (Wagner—Peyser Act, as amended by Title III), as part of DCS, EOLWD; and
- **The Youth Program (Title I)**, as part of the Department of Career Services (DCS), EOLWD;
- **The Adult Education and Family Literacy Act Program** (Title II), as part of Adult Community Learning Services (ACLS), Department of Elementary and Secondary Education (DESE) Executive Office of Education (EOE);
- **The Vocational Rehabilitation Program** (Title I of the Rehabilitation Act of 1973, as amended by Title IV), as part of the Massachusetts Rehabilitation Commission (MRC) and Massachusetts Commission for the Blind (MCB), Executive Office of Health and Human Services (EOHHS).
- **Federal—state unemployment compensation program**, as part of the Department of Unemployment Assistance (DUA), EOLWD;
- **Temporary Assistance for Needy Families Program** (42 U.S.C. 601 et seq.) as part of Department of Transitional Assistance (DTA), EOHHS;
- **Employment and Training Programs under the Supplemental Nutrition Assistance Program**, (Programs authorized under section 6(d)(4) of the Food and Nutrition Act of 2008 (7 U.S.C.2015(d)(4))), as part of DTA, EOHHS and

- **Senior Community Service Employment Program** (Programs authorized under title V of the Older Americans Act of 1965 (42 U.S.C. 3056 et seq.)), as part of the Executive Office of Elder Affairs (EOEA).

To accomplish this, local Workforce Development Boards have convened their local partner representatives to establish a Memorandum of Understanding (MOU) detailing service referrals and delivery, data sharing procedures, Career-Center operations, and career pathway supports.

As part of WIOA, the Governor of each State is required to submit a Unified or Combined State Plan to the U.S. Secretary of Labor that outlines a four-year workforce development strategy for the State's workforce development system. As detailed in the Commonwealth's WIOA State Plan, the Baker Administration has launched several initiatives to better coordinate the broadly defined workforce system with the needs of business as well as focus on expanding the impact on job outcomes for individuals with barriers to employment. One of these initiatives is the Workforce Skills Cabinet, which was created to align the resources of the Executive Office of Labor and Workforce Development, the Executive Office of Education and the Executive Office of Housing and Development – the State agencies that administer the major federal and state programs for job seekers and employers.

Through the Workforce Skills Cabinet, the Commonwealth has established a regional planning process to align the priorities of each region for the agencies within the Workforce Skills Cabinet's three secretariats. In this way, the Commonwealth is utilizing the required WIOA Regional Planning process to create this new, integrated regional planning process across the economic, education and workforce Secretariats.

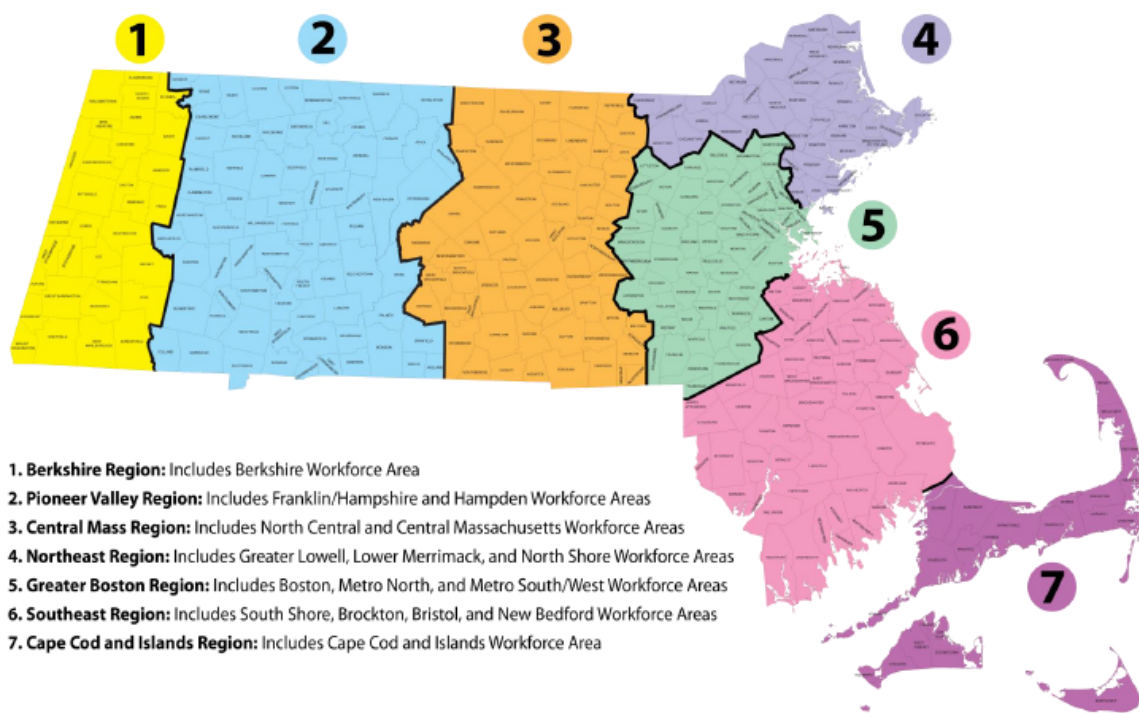
On a regional basis, this process seeks to scale up regional workforce development models that provide workers with the skills employers demand. The process is designed to ensure that regional employers, educators, and workforce training officials are coordinated in a way that creates strong talent pipelines for in-demand jobs.

The purpose of the regional planning under the Workforce Skills Cabinet and WIOA is to use the same regional boundaries between economic development, workforce, education and key partners. Each region has therefore been asked to identify business demand for skills, create regional strategies, and align existing resources to this process. The goal is to ensure that regional employers, educators, and workforce training officials are coordinated in a way that creates strong talent pipelines, for both middle-skilled and highly skilled jobs. The regional planning will support the development of cross-secretariat partnerships formed to support sector initiatives/career pathway initiatives that includes education and training, credential attainment, work-based learning (OJTs or apprenticeships), etc.

Local Workforce Development Boards (working as multi-region partners) were tasked with convening regional leaders in partnership with education and economic development partners to coordinate strategic workforce priorities, activities, and performance metrics (see attachment 1: Regional Planning Context Diagram).

The Workforce Skills Cabinet combined the Commonwealth's 16 workforce development regions into seven Workforce Skills Cabinet Planning regions:

Regional Structure – Workforce Skills Cabinet Planning Regions



Specifically, the goals of each region were to:

- Identify the growing industries and occupations to be prioritized by system partners that will assist in the economic growth of the region.
- Develop a joint set of action steps to address skills gaps within these industries/occupations.
- Align and drive programming and service delivery across the three secretariats to meet the needs of the priority industries/occupations.
- Help more residents gain the credentials, education and job skills needed for successful careers within high-demand career pipelines.

The following individuals were invited to be a part of the regional planning process¹:

Individual Name	Individual Title	Organization Name
Joshua Froimson	Manager, Business Excellence	AbbVie Pharmaceuticals
Janet Pierce	Executive Director	Central MA Regional Planning Commission
Lauren Morano	Program Manager	Central MA Workforce Investment Board
Jeffrey Turgeon	Executive Director	Central MA Workforce Investment Board
Jeannie Hebert	President and CEO	Central Regional EDA Partnership
Mary Jo Bohart	Director, Economic Development	City of Fitchburg
Maribel Cruz	Economic Development Coordinator	City of Gardner
Lisa Marrone	Economic Development Coordinator	City of Leominster
Sue Mailman	President	Coghlin Electrical Contractors
Ashley Armstrong	Contract Manager, Employment Services Program	Department of Transitional Assistance
Joyce Clemence	Director, Southbridge Office	Department of Transitional Assistance
Andre Ravenelle	Superintendent	Fitchburg Public Schools
Peter Milano	Senior Director, Business Development	Mass. Office of Business Development
Glenn Eaton	Executive Director	Montachusett Regional Planning Commission

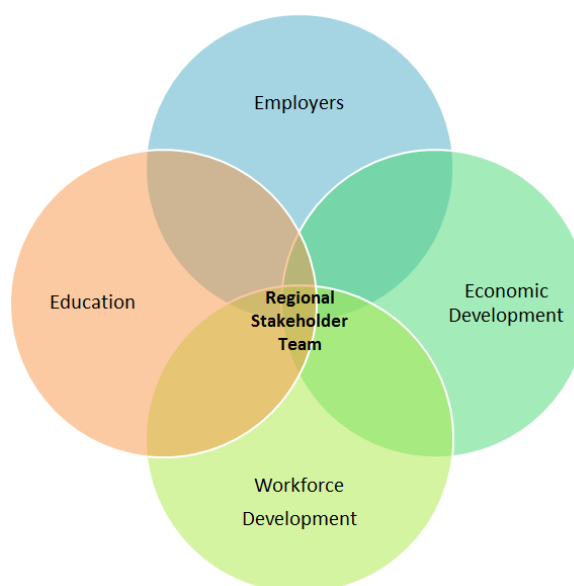
¹ Participation among invited members varied throughout the planning process

Sheila Harrity	Superintendent	Montachusett Regional Vocational School
Rachel Frick Cardelle	Interim Vice President, Lifelong Learning and Workforce Development	Mount Wachusett Community College
Joseph Stiso	Vice President for Planning, Development and Institutional Research	Mount Wachusett Community College
Veronica Guay	Assistant Dean	Mount Wachusett Community College
Roy Nascimento	President and CEO	North Central MA Chamber of Commerce
Penny Doolittle	Deputy Director	North Central MA Workforce Investment Board
Tim Sappington	Executive Director	North Central MA Workforce Investment Board
Paul Morano	Project Manager	City of Worcester, Executive Office of Economic Development
Gail Carberry	President	Quinsigamond Community College
Robin Hooper	Community Life Senior Manager	The Community Builders, Inc.
Jil Wonoski	Marketing Consultant	Tri-State Truck Center
Tim Murray	President and CEO	Worcester Chamber of Commerce
Kelsey Lamoureux	Director	Worcester Jobs Fund
Karen Pelletier	Director of Higher Ed-Business Partnership	Worcester Regional Chamber of Commerce

Russ Pottle	Dean, School of Humanities and Social Sciences	Worcester State University
Linda Larrivee	Dean, School of Education, Health and Natural Sciences	Worcester State University
Kyle Brenner	Principal	Worcester Technical High School
Carlene Campanale	Deputy Director	Workforce Central Career Center

Description of the Regional Planning process:

As noted previously, the Central MA region consists of the Central MA and North Central MA Workforce Development Areas. The two local workforce development boards, the Central MA Workforce Investment Board (CMWIB) and the North Central MA Workforce Investment Board (NCMWIB), have fully embraced the concept of collaborative regional workforce planning and have assembled a strong and diverse team of stakeholder representatives from private industry, education, workforce development, and economic development. The region has conducted three full team planning sessions since the start of the planning process (April, July, October) and during these sessions the stakeholders have reviewed regional population demographics, labor market information, and the additional data necessary to confirm industry priorities and supply gaps in our region, including the results of a survey conducted specifically for use in the planning process (see attachment 2: Business Survey). This survey was sent to over 550 of the region's businesses by the two Workforce Development Boards, and on their behalf by the regions' three One-Stop Career Center and local Chamber of Commerce partners. Seventy-three businesses responded to the survey, yielding detailed information regarding their priorities, challenges, and needs. These results were analyzed and discussed at the third regional planning session.

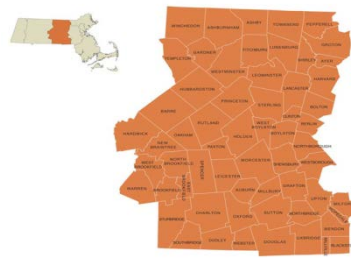


The planning team also established a Regional Planning Core Team, consisting of representatives of the two workforce development boards, education (Mount Wachusett Community College), and economic development (City of Worcester). This core team has met several times over the same period to assist the full team with refining the population and labor market data used to make final decisions about priority industry sectors, priority occupations within those sectors, educational opportunities and economic development issues. During this time we have also completed the administrative tasks associated with the planning process, including development of the project budget and scope of work, as well as our core team Memorandum of Understanding outlining our project staffing and work plan.

The core team developed a mid-point presentation indicating preliminary planning outcomes and initial outlines of strategies and goals. This presentation was delivered publicly on October 25th, allowing regional stakeholders and interested members of the public an opportunity to view and share their feedback with the core team. Following this, the core team also developed a summary planning presentation that was shared with a statewide group of workforce peers and staff from the three Secretariats in mid-November and, following further refinement, the presentation was shared with the three Secretariats themselves and selected staff on December 11, 2017. Feedback from all of these sessions has been used to guide the development and refinement of this document.

Description of the current state of our region:

The Central MA region consists of 61 communities, anchored by New England's second largest city, Worcester, as well the twin cities of Fitchburg and Leominster. The region borders three other regional labor markets: Pioneer Valley, Northeast, and Metro



South/West. The total population of the two regions is 821,808² with a labor force of 440,133. The region boasts of natural attractions such as Mount Wachusett, Lake Quinsigamond, and Purgatory Chasm, as well as historic sites dating back to the local Native American tribes and prominent locations from the French and Indian War, the American Revolution, and later, the Industrial Revolution.

Ashburnham	Gardner	Millville	Sterling
Ashby	Grafton	New Braintree	Sturbridge
Auburn	Groton	North Brookfield	Sutton
Ayer	Hardwick	Northborough	Templeton
Barre	Harvard	Northbridge	Townsend
Berlin	Holden	Oakham	Upton
Blackstone	Hopedale	Oxford	Uxbridge
Bolton	Hubbardston	Paxton	Warren
Boylston	Lancaster	Pepperell	Webster
Brookfield	Leicester	Princeton	West Boylston
Charlton	Leominster	Rutland	West Brookfield
Clinton	Lunenburg	Shirley	Westborough
Douglas	Mendon	Shrewsbury	Westminster
Dudley	Millford	Southbridge	Winchendon
East Brookfield	Millbury	Spencer	Worcester
Fitchburg			

From: Labor Market Trends in the Central Mass Region 2012 www.bostonfed.org/heppc

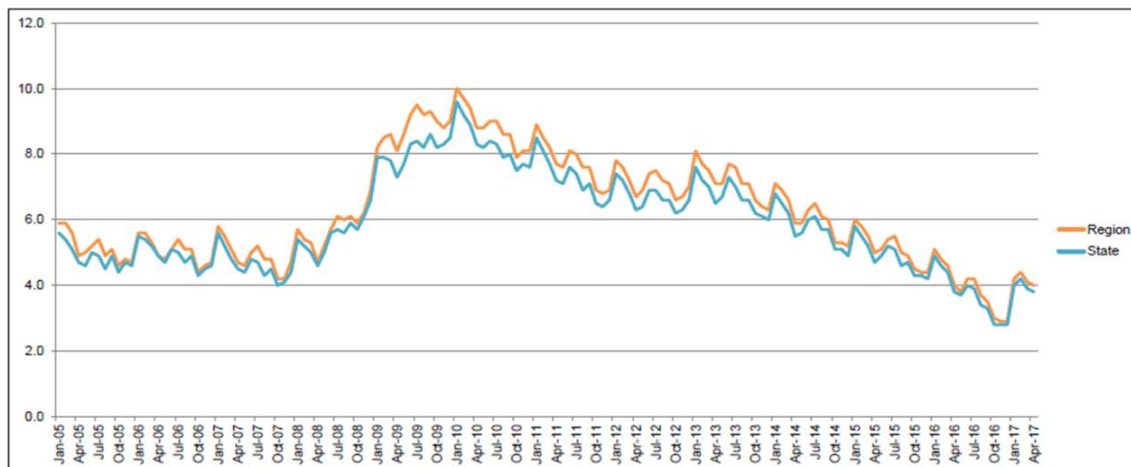
² 2010 US Census data

Our region also features prominently as a bellwether for the US economy, being built upon agriculture at the start of our nation and then moving during the industrial age to become a major force in development of machine-powered manufacturing through the start of the 20th century centered around the abundant water power of our rivers and streams. This rise of manufacturing, however, has given way to other industries over the past fifty years. Healthcare, retail, and human services have grown to take a larger role as manufacturing, especially traditional manufacturing, has faded. In the recent past, state and local officials have made a concerted effort to invest in the life-sciences industry and have had success in attracting bio-tech/bio-medical companies to the region and supporting the growth of new life-science firms.

In terms of employment rates, the Central MA region continues to mirror the state as a whole economically; our region's unemployment rate hovers around 4% -- a low rate by historical standards.

State and Regional Unemployment Rate

Central Mass unemployment rates tend to exceed those of the Commonwealth by .1 - .4%.



Source: Bureau of Labor Statistics, 2005-2017 Seasonally Unadjusted Data

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This low rate, however, masks some of the challenges our region's workforce faces. First, this low rate indicates that many residents in the region actively seeking work are able to find it – making the labor market for these workers more competitive and therefore harder for employers to find candidates without raising wages. But there are additional challenges associated with this data that are less obvious. This includes the fact that the official unemployment rate as announced by the United States Bureau of Labor Statistics (BLS), the “U-3” rate, only includes those who are in the labor force and actively looking for work within the previous four weeks. If a person is unemployed and was looking for work in the last year, but not in the past four weeks, the individual is considered a “discouraged worker” by the BLS, and not counted in the U-3 rate. If you were to broaden the U-3 measure to count these

discouraged workers (plus those working part time who wish full-time work) as the BLS does in its U-6 measure, the unemployment rate in Central MA climbs to 7.6%, fully double the statewide U-3 rate of 3.8%. Yet even this statistic, as broad as it is, only includes those who have looked for work in the past year. If you were to measure those who have given up looking for work for more than one year, the statistic no doubt climbs much higher still -- but it is difficult to measure since this population is not tracked by the BLS and has thus been largely made invisible in official statistics.. According to economists at ShadowStats.com, this rate nationally is far above the official 4.9% U-3 and 9.7% U-6 rates, standing in 2016 at an eye-popping 23%. It stands to reason that this tracks with our Central MA region as well since our aging workforce (discussed further in the following section) was hard hit in the great recession of 2008 – 2009 and many potentially productive members of our society have simply fallen off the radar of unemployment statistics altogether.

Put another way, the percentage of the civilian population that is working took a large hit following the great recession. Nationally, this ratio fell in 2008 from more than 63% before the crisis hit to below 59% -- indicating a massive exodus from the workforce. This ratio has yet to fully recover, slowly

climbing back up above 60% in 2017, but still lagging far below the previous level. Supporting employment for these long term discouraged workers will prove an ongoing challenge to the region but is also an



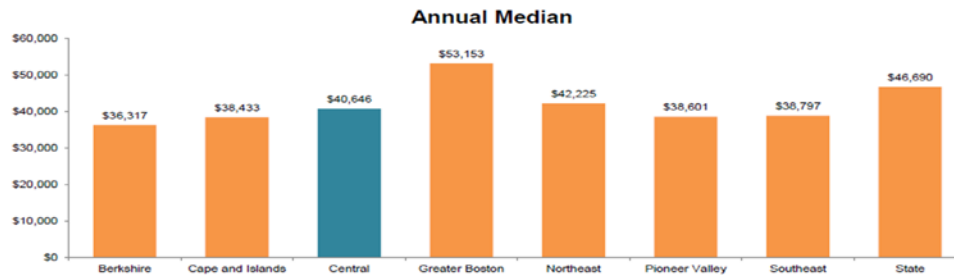
opportunity to address worker shortages.

Another challenge in the current state of our region is the ongoing high unemployment rate among our region's youth, especially youth of color. The state unemployment rate for young people 16 to 24 stood at 6.7%, far exceeding the overall annual average rate for the State (3.3%). The unemployment rate for young men stood even worse, at 7.8% and youth of color was worse still.

In terms of our region's economy and quality of life, the Central MA region's median wage ranks third among the State's seven planning regions.

Median Wage

Central Mass median wages are third to the Northeast and Greater Boston, and higher than its neighbor to the west (Pioneer Valley).



The Worcester Metropolitan Statistical Area (MSA) was ranked by *Area Development Magazine*, a publication covering corporate site selection and relocation, as 126th out of the 394 MSA's ranked nationally based on their performance in four key categories: "Prime Workforce," "Economic Strength," "Year-Over-Year Growth," and "Five-Year Growth." This ranks it 9th among the 15 New England MSA's. However, when looking at the rank by the Prime Workforce factor alone (considered by economic development experts as a critical criteria for corporate site selection and business growth), the Worcester MSA falls to 14th out of 15 in new England, and 284th nationally. Prime workforce indicators include the number of workers aged 18–44, their education level, total inward migration of these high-value workers into the community, and wages (over one-, three-, and five-year periods). Of particular note is the fact that Worcester's rank is 378th for the three-year inward migration of workers 25-44 with a Bachelor's Degree or above, and the low rate of growth for this population over the past three years. More optimistically, the Worcester MSA rank zooms up to 59th nationally (and 7th in New England) for Economic Strength, with key factors for ranking MSA's in this category including per capita real gross metropolitan product (GMP), manufacturing/goods-producing employment, employment net growth, and local area unemployment rate changes over one-, three-, and five-year periods. These rankings, therefore, should be taken with a grain of salt; for instance, having high growth in the percent of the prime-workforce with a bachelor's degree is far more difficult to achieve when you begin with a relatively high level.

And Worcester County, which includes most all of the planning region's communities, is ranked by the analysts at Niche.com for quality of life as 7th out of the Commonwealth's 13 counties (5th best for raising a family), and Worcester County is ranked 624th out of 2,774 counties nationally.

Critical trends in regional demographics that impact the workforce:

The planning team has identified two demographic trends in our region that appear to have a large impact on our workforce as we move forward. The first is our aging population which is already having an impact in several industries, including manufacturing and other “traditional” trades. Many of the older, more experienced workers are retiring and this is leaving gaps that are proving difficult for employers to fill as younger workers are not choosing to enter these fields in numbers sufficient to the need. For example, there are a significant number of maintenance mechanics and machine operator positions that will be available as the current

Changing demographics in the population will have far-reaching effects on the labor force, the economy, and employment over the 2016–26 decade. The overall labor force participation rate is projected to decline as older workers leave the labor force, constraining economic growth. The aging baby-boomer segment of the population will drive demand for healthcare services and related occupations.

*-- US BLS; Projections overview
and highlights, 2016–26*

workforce retires in the next 3-5 years. Without new candidates to replace these workers, the shortage will grow critical, jeopardizing the ability of these companies to meet customer demand, let alone growth opportunities they would need to forgo. Similarly, diesel technicians, construction workers, and other so-called “hard-trades” appear to be of less interest to many youth. Some have argued that youth are counseled from an early age that a college degree offers them a better career path, and thus look to go that route instead of a hands-on profession that is not aligned with the degree-track academic system. Beyond this, it would appear that many youth seek jobs that offer more social rewards, aka, a higher level of esteem, since society seems to devalue income derived from physical labor.

A corollary issue we are seeing with an aging workforce is that many older workers do not appear to be equipped with the appropriate skill set to work in a technology-rich workplace, such as advanced manufacturing. For instance, many older workers/job seekers are not familiar with Computer-Numeric Control (CNC) machining, which is becoming the norm within the manufacturing industry. CNC machining is an automated process and requires knowledge of software and programming. While we have already completed a large amount of CNC training in our region, we will need to do more in order to upskill our aging existing workers and prepare our younger workforce.

It is well understood that in order to foster strong economic growth in the future, the Central MA region needs to align the education of its labor force to meet the demands of the region's employers. The higher education institutions in the region can play a key role in influencing the future supply of workers with post-secondary degrees. This supply will be critical to help meet the demographic challenges posed by the aging workforce and the increasing demand for educated workers.

-- Labor Market Trends in Massachusetts
Regions: Central Mass; Boston Federal
Reserve

A further issue related to our aging population is the need it will bring for increased medical care and other social services as the population moves into the post-retirement stage of life. This demographic shift will significantly impact many of our region's larger industry sectors, such as healthcare and the level of staff necessary to care for our region's seniors.

The second critical trend we are seeing is growth of our immigrant and refugee populations. While these new Americans bring the potential to fill many supply gaps in our priority industries, they also often present with more potential barriers to employment. Some of the barriers we are already seeing include a lack of English language proficiency, limited education beyond high school (or credentials that do not transfer here from their

previous countries), and a lack of job-specific skills. It has been reported that the waiting list for our region for English for Speakers of Other Languages (ESOL) classes is greater than 1,000 candidates. These people's lives are largely on hold as their ability to work in living-wage jobs is significantly impaired by their lack of English fluency.

Describe past and current high-level industry trends impacting workforce needs:

There are numerous high level industry trends occurring in our region that are impacting workforce needs, such as the rise of technology and automation, changes to business operations and management practices, issues involving the "pay cap" for some industries, and employer responses to public policy changes.

Increase in technology and automation

Increasing technology has been a major driving trend in our region, like others throughout the Commonwealth and beyond. Technology has always impacted workforce in a variety of ways and continues to do so today. In the past, new technology such as the harnessing of electricity provided power to factories and freed them from the need to be near the rivers which drove the machinery. Gas motors forever changed the way we transport goods and materials – and changing the mix of workers needed to build and maintain the new automobiles and trucks, and the roads they ride on. Today, we see the rise of automated manufacturing, self-checkout kiosks in markets and gas stations, and now the growth of the "gig economy" made possible by

the use of real-time online platforms. This rise in technology has reduced the need for employees doing lower-level, repetitive functions, and so, teen employment has dropped as a result. The gig-economy allows people the freedom to pick and choose when and how they wish to offer their services, but the work comes with little or no benefits, job security, or growth potential – an Uber driver is pretty unlikely to advance up the company ranks. In Information Technology, project-based gig work may be well paying, but comes with the stress of not knowing what work may be available in the future, and workers are more and more competing with talent based overseas since production can be shared seamlessly over the world-wide web.

Automation in the manufacturing sector is creating greater efficiencies for manufacturers and yielding ever-higher productivity as companies are able to produce more goods with less workers, leading to layoffs in this industry. Unfortunately for employers, they are in a race with a generational shift as older workers begin to retire in greater numbers, overwhelming their ability to replace these aging workers with machines. And the jobs that remain in advanced manufacturing require ever more comfort with the use of computers to interface with the new machines on the shop floor. Our vocational-technical high schools are already attempting to address this need by adding programs in engineering, advanced manufacturing and robotics, but not at a high enough scale to prepare the number of workers necessary to replace the existing workforce preparing to retire.

Changes to business operations and management practices

Another high level industry trend that is affecting workforce development is the changing management structures that businesses utilize, such as the rise of outsourcing for much non-core business administrative and support services like human resources, payroll processing, marketing, custodial/janitorial services, etc. Businesses have also turned to the use of third-party temp firms to fill short term employment needs or for greater screening for identifying qualified candidates for “permanent” status as a company employee. Businesses have increasingly turned to these alternate organizational models in order to achieve greater efficiency, however, they have also had some unintended consequences, including a lowering of business reputations in the community-labor pool, and a decrease in the ability to promote from within as talented entry level support staff learn about the business and further advance their careers through company-sponsored education and professional development.

To Understand Rising Inequality, Consider the Janitors at Two Top Companies, Then and Now

By Neil Irwin

www.nytimes.com

ROCHESTER — Gail Evans and Marta Ramos have one thing in common: They have each cleaned offices for one of the most innovative, profitable and all-around successful companies in the United States.

For Ms. Evans, that meant being a janitor in Building 326 at Eastman Kodak's campus in Rochester in the early 1980s. For Ms. Ramos, that means cleaning at Apple's headquarters in Cupertino, Calif., in the present day.

In the 35 years between their jobs as janitors, corporations across America have flocked to a new management theory: Focus on core competence and outsource the rest. The approach has made companies more nimble and more productive, and delivered huge profits for shareholders. It has also fueled inequality and helps explain why many working-class Americans are struggling even in an ostensibly healthy economy.

The \$16.60 per hour Ms. Ramos earns as a janitor at Apple works out to about the same in inflation-adjusted terms as what Ms. Evans earned 35 years ago. But that's where the similarities end.

Ms. Evans was a full-time employee of Kodak. She received more than four weeks of paid vacation per year, reimbursement of some tuition costs to go to college part time, and a bonus payment every March. When the facility she cleaned was shut down, the company found another job for her: cutting film.

Ms. Ramos is an employee of a contractor that Apple uses to keep its facilities clean. She hasn't taken a vacation in years, because she can't afford the lost wages. Going back to school is similarly out of reach. There are certainly no bonuses, nor even a remote possibility of being transferred to some other role at Apple.

Yet the biggest difference between their two experiences is in the opportunities they created. A manager learned that Ms. Evans was taking computer classes while she was working as a janitor and asked her to teach some other employees how to use spreadsheet software to track inventory. When she eventually finished her college degree in 1987, she was promoted to a professional-track job in information technology.

Less than a decade later, Ms. Evans was chief technology officer of the whole company, and she has had a long career since as a senior executive at other top companies. Ms. Ramos sees the only advancement possibility as becoming a team leader keeping tabs on a few other janitors, which pays an extra 50 cents an hour.

They both spent a lot of time cleaning floors. The difference is, for Ms. Ramos, that work is also a ceiling.

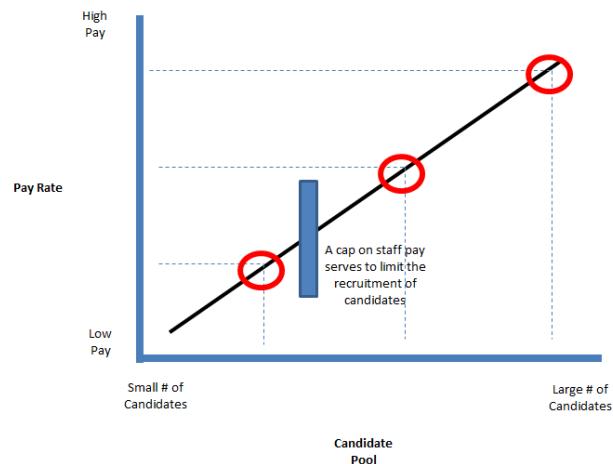
Pay-Squeeze

Another trend in our region is the trend whereby employers have been caught in a "pay squeeze" affecting their ability to pay workers more in times of greater employer demand; unfortunately, we are seeing across some of our priority industries such as manufacturing, health care and social assistance that salaries are not increasing at a rate keeping up with the demand (for instance, manufacturing saw a 2.95% increase in total wages over the past 10 year period and health care an increase of 4.99% total wages, both below the regional average for all industries of 7.82% and far lower than the increased hiring demand would anticipate). One possible reason for this is that while the Commonwealth has increased minimum wage over the past three years, the ability of the employers to pay their workers a higher wage relative to the minimum wage is being capped by the funding available on the revenue side. In health care,

this is largely a result of a public reimbursement system that caps the rate of funding and therefore leaves the revenue side flat while employers in other industries around them (including fast food and retail) have increased their pay due to the minimum wage mandate. This is also occurring in child development centers where staff pay rates are highly dependent on the public voucher supports available to the Centers for the moderate and low-income families they serve. Without

a raise in the voucher rates, paying staff more is a very difficult proposition. Similarly, local manufacturers have faced pressure from their customers to meet the prices of their competitors, many of which are in countries with much lower pay rates, such as China. This pay-cap issue therefore alters the natural labor-market and the increase in pay expected in order to entice more people to seek employment in that field – especially if the work requires an investment in a potential candidate’s time and money for training in order to be qualified for the job(s) available. This, in and of itself, has large implications for the public workforce system, as it suggests increased training alone may not be sufficient to meet the demand.

Pay Cap – Candidate Pool Model



Employer Responses to Public Policy

As noted previously, the Commonwealth’s increase in the minimum wage has fostered changes in the labor-market at the lower end of the pay scale. Employers in numerous sectors that pay at or slightly above minimum wage have had to adjust their budgets to accommodate the rise in hourly staff pay. For some, this has not appeared to have been a major burden as slight increases in product prices has offset the additional labor costs.

Another operational trend we’ve identified is that costs to employers for health insurance continue to climb and this trend is not anticipated to change any time soon. At the Federal level, the Affordable Care Act (ACA) appears to be slowly being dismantled and the actual coverage for services is declining. Our smallest employers often cannot afford to offer health insurance to their employees. Massachusetts law allows employers of less than 50 full-time equivalent positions to choose whether or not to offer health insurance. Since our region has many small companies – in fact the average number of employees per company is just below 38 -- workers in our region often have to purchase health insurance through the Massachusetts

Health Connector at their own cost. The rising cost of health care puts upward pressure on insurance premiums. In response, employers and health plans try to limit premium increases using strategies such as offering more high-deductible plans and increasing co-payments, co-insurance, and out-of-pocket maximums. These approaches represent a cost shift from insurers and employers to workers and further complicate the labor market as workers fear the loss of employer-sponsored health insurance and employers must decide how to meet the rising costs.

Describe critical trends in occupational employment history in the region:

Shifting of the region's Industry/Occupational Mix

As noted previously, the industrial base of the Central MA region has shifted the past several decades from a largely manufacturing focused economy to one that is more balanced between industry sectors, including healthcare, education, professional services, and retail. While this shift has meant less dependency upon a single industry sector, it has also meant the loss of many family-supporting wage jobs for those with limited formal education.

There continues to be a rising need for health care workers at most levels of clinical services and at a variety of health care providers, including community health centers and patient triage clinics, long term care facilities, and hospitals. According to the US Census Bureau's Longitudinal Employer-Household Dynamics – Quarterly Workforce Information Explorer platform, this equates to an increase over the past seven years of 13,500 employees in our region (60,266 to 73,576).

During this same timeframe, educational services (including teachers and teacher assistants) has grown nearly seven thousand employees (from 33,672 to 40,553), the food and accommodation sector has seen a growth of more than 2,100 employees (24,559 to 26,700), construction 2,300 employees (13,016 to 15,839), transportation and warehousing has grown more than 1,600 positions (9,526 to 11,212), while professional, scientific and technical services has grown from 14,386 to 15,209. Manufacturing has been rather flat overall with an additional 900 employees (35,396 to 36,302) but is expecting a large number of retirements in the next several years due to the average age of its existing workforce, and retail has fallen slightly from 38,337 to 38,200, yet remains one of the largest employment sectors in our region, especially for those with limited formal education or credentials.

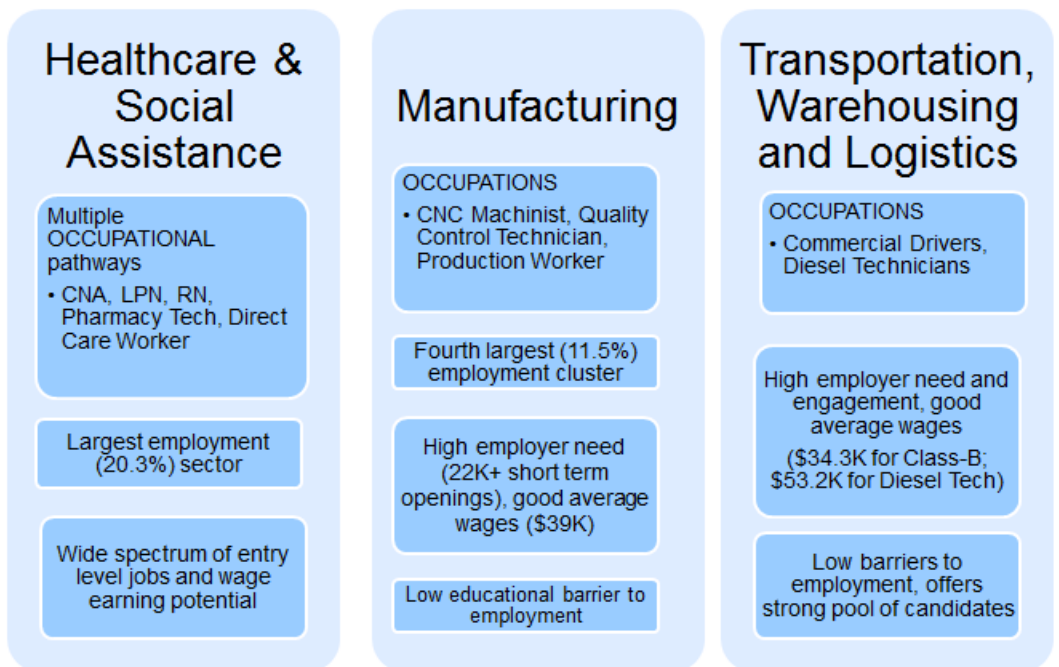
One sector we are seeing a significant rise in is the life sciences sector. Fortunately, with four public institutions of higher education in our region offering training/education to prepare people for careers at various levels of this growing sector, we are well positioned to take advantage of this opportunity.

Top three challenges facing the region's businesses and industry over the next five years:

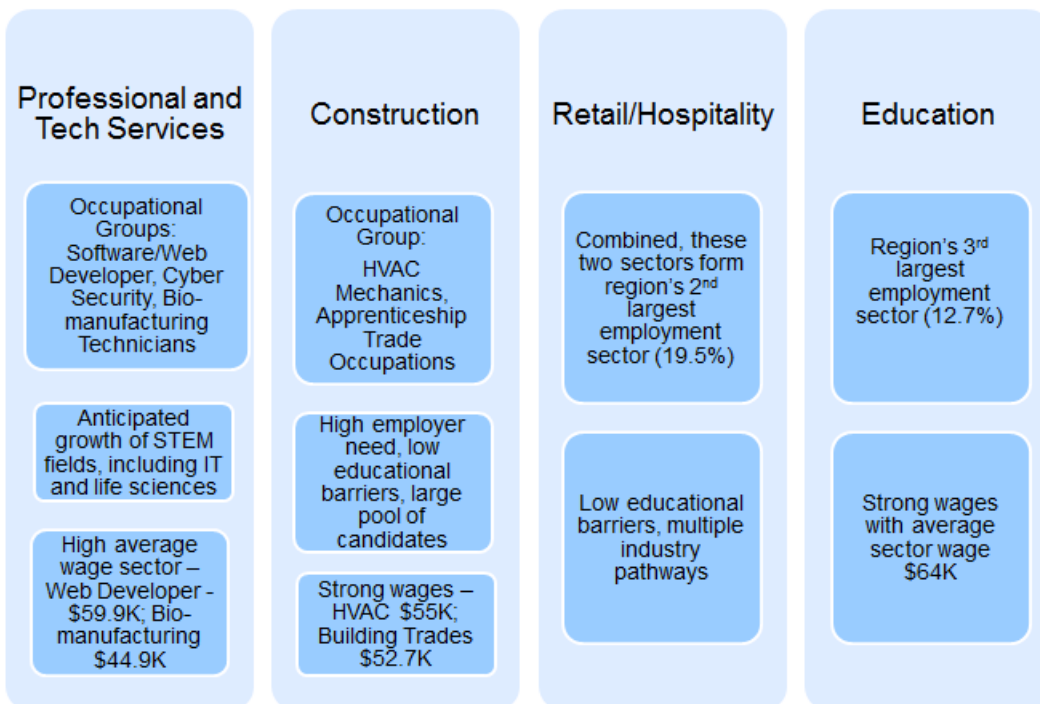
A survey of local businesses helped planners identify the top challenges facing employers regionally. Overwhelmingly, employers identified finding and retaining talent as their top challenge, followed by controlling costs, and expanding markets. Within the challenge of finding and retaining talent, the most significant factors involved included the aging of our workforce, lack of work-readiness/social-emotional skills, and barriers to employment such as English language competency, unreliable transportation, criminal background concerns, and substance abuse.

Top three industries are most important to the region's economic success:

Based upon the State criteria and regional criteria set by the planning team (see section III below) the following three industries were deemed priority industries for the region:



Additionally, the following industries were identified as critical industries for our region:



Industries currently facing the most significant workforce development challenges:

The planning team has identified Healthcare & Social Assistance, Manufacturing, and Transportation, Warehousing, and Logistics as facing the most significant workforce development challenges, followed by the critical industries identified above, Professional and Technical Services, Construction, Retail/Hospitality, and Education.

The top occupations or occupational groups in which the region is facing the most significant employee shortages:

The top occupational groups in which the region is facing the most significant employee shortages are:

- Occupational Group 1: Health Occupations
 - Certified Nursing Assistant, LPN, RN, Pharmacy Tech and Direct Care Worker
 - › *High employer need (61,000+ short term openings) and engagement, low educational barrier for some career pathway entries, strong wages for higher level occupations (\$82,000 RN average)*

- Occupational Group 2: Manufacturing Occupations
 - CNC Machinist, Quality Control Technician, Production Worker
 - › *High employer need (22,000+ short term openings) and engagement, good average wages - especially with experience (\$39,900 sector average), fairly low educational barrier*
- Occupation Group 3: Transportation, Warehousing and Logistics Occupations
 - Commercial Drivers; Diesel Technicians
 - › *High employer need and engagement, good wages (\$34,300 average for Class-B; \$53,200 for Diesel Tech), low educational barrier, strong pool of candidates*
- Occupational Group 4: Professional and Technical Occupations
 - Software/Web Developer, Cyber Security, Bio-manufacturing Technicians
 - › *High anticipated growth, strong wages (Web Developers - \$59,900 average wage; Bio-manufacturing - \$44,900)*
- Occupational Group 5: Construction Occupations
 - HVAC Mechanics, Apprenticeship Trade Occupations
 - › *High employer need, strong wages (HVAC - \$55,500; Building Trades - \$52,700), low educational barrier, large pool of candidates*

Occupations offering a “career pathway” for workers to move to higher skills and wages, especially workers starting at entry-level:

We are fortunate in our region that we have several occupations that offer a career pathway for workers that are supported by a strong network of career development and educational institutions. It is our goal to strengthen articulation agreements between regional partners to ensure students seeking to enter or advance in their careers will have access to education and training linked together to scaffold their success. As a regional strategy we are also supporting the development of a strong apprenticeship system to allow workers to advance their careers through paid hands-on work and formal education. Apprenticeships and associated pre-apprentice training has been established in the building trades, manufacturing, commercial drivers, diesel technicians, and pharmacy technicians.

We have created regional career pathway charts developed to assist students, parents, guidance counselors, job seekers, and others about the variety of jobs in a given industry and the education/work experience necessary to advance from one level of employment to the next. (See attachment 3: Regional Career Pathway Charts)

The most significant broad labor supply challenges and opportunities facing the region over the next 5 years based on existing regional workforce:

The most significant broad labor challenges facing the region over the next five years are:

- *Aging workforce*
- *Lack of employment readiness & social/emotional skills*
- *Increase in share of workforce needing English skills*
- *Limited transportation*

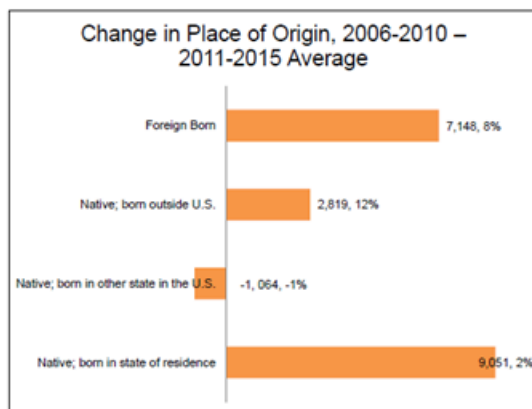
Aging workforce

Based on our recent employer survey, the most significant challenge facing our businesses is finding and retaining talent. Employers report the loss of older workers as they retire is creating larger supply gaps within our priority industries and this is bolstered by the data of our region's workforce (25.5%) is aged 55 or older. The added challenge is that these workers are often the most experienced so when they retire, it is difficult to replace them with workers with the same level of knowledge and skill set.

Lack of employment readiness & social/emotional skills

Employers also report that they often see job candidates and new hires that do not have the necessary "soft-skills" needed for performance in the workplace. These skills include time management, communication, social-emotional awareness, and teamwork. Complicating this challenge is the fact that these skills are hard to measure and also difficult to teach in a classroom setting.

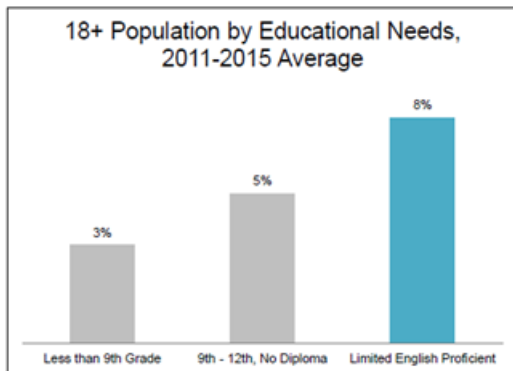
Increase in share of workforce needing English skills



Lastly, the regional demographic trends indicate that the region's population growth has been fueled by net inflow of New Americans (immigrants, refugees).

Over the past decade, the share of foreign born residents has grown by 8%, and the percent of residents in the region of Hispanic ethnicity has grown by 14%.

This inflow of New Americans includes a significant portion that have limited English communication skills. Regionally, it is reported that 8% of residents have limited English proficiency. In order to overcome their barriers to employment, this population typically requires remedial services in English Speakers of Other Languages (ESOL) and/or Adult Basic



Education (ABE) classes. Depending upon their past work experience, they may also need occupational training prior to being hired. A small percentage of our immigrant/refugee population may arrive highly skilled but non-credentialed here in the U.S. They may also be faced with a language barrier and/or a need for an additional certification or credential before being hired. Unfortunately, the current wait list for enrollment into ESOL classes is more than

1,000 and funding for additional classes is limited. Further expanding this trend is the recent arrival of more than 600 evacuees from Puerto Rico now living in the Central MA region. At this time, many have not declared their intention to stay, but given their limited English proficiency, additional ESOL resources will be necessary.

Limited Transportation

The Central MA area contains a few cities, numerous towns, and also rural communities. This variety affords residents opportunities to experience the rich diversity of these various communities; however, it makes transportation a challenge for those without a dependable vehicle. Public transportation is available throughout much of the region through fixed bus routes from the Montachusett Regional Transit Authority which serves 21 communities in the northern part of our region and the Worcester Regional Transit Authority which serves 35 communities. Connection to the MBTA commuter rail service is offered in Fitchburg, Leominster, and Worcester, and paratransit service is also available throughout most of the region. Unfortunately, given the limited amount of fixed route service outside of Worcester and Fitchburg, utilizing public transportation for employment outside these cities is often not a viable option for job seekers/employees.

The top 3 broad labor supply opportunities facing the region over the next 5 years based on the existing workforce in the region:

The top broad labor supply opportunities facing the region over the next 5 years based on our existing workforce in the region includes integration of New Americans into the workforce, incumbent staff development, and expanding the labor pool to non-traditional workers.

Integration of New Americans into the workforce

As noted previously, the growth of our region's workforce has been fueled by the influx of people born outside the United States settling in our region. This includes immigrants, refugees, and other foreign-born residents legally able to work in the US. The definition could also be expanded to include evacuees from Hurricane Maria arriving from Puerto Rico (who, while US citizens, still face many of the same barriers to employment as New Americans, including assimilation into a new culture, learning a new language, and overcoming the dispossession of property).

Incumbent staff development

The second opportunity is utilize existing staff to increase their skills and abilities. This requires employer commitment to employee mentoring, training and development. Some of the ways businesses might develop their employees could include:

- Skills training, either in-house or through outside training centers
- Opportunities for promotion and/or career development
- Coaching and mentoring
- Offering tuition reimbursement
- Encouraging pursuit of continuing education
- Development of a formal Registered Apprenticeship to promote a set career advancement pathway for staff

Employees report feeling valued when they see that the company is investing in them. This growth and development help employees expand their knowledge, skills and abilities and apply the competencies they have gained to new situations. This translates into positive gains for the organization by enhancing organizational effectiveness, improving work quality and helping business to attract and retain top talent.

Expansion of the traditional labor pool

A third opportunity exists in expanding the existing labor pool through skill preparation, training, and work support for non-traditional workers in various industries. This includes increased hiring of people with a disability in manufacturing, expanded career opportunities for people with criminal backgrounds/ex-prisoners, and older workers seeking a second career.

UI Claimant population and the region's largest supply of unemployed workers by job type:

A review of the UI Claimant reports for the month of December, 2017 indicates that there were 7,801 claimants for the region and the average weekly wage claim was \$974.99. Of these claimants, 5.8% were between ages 20-24, 23% ages 25-34, 21% were ages 35-44, 22.8% were ages 45-54, and 20.1% were ages 55-64.

In terms of occupational backgrounds:

- 1,059 had Management backgrounds
- 1,026 had Construction and Extraction backgrounds
- 914 had Office and Administrative Support backgrounds
- 704 had Building and Grounds Maintenance backgrounds
- 518 had Production backgrounds

Characteristics of unemployed and underemployed workers in the region:

The four prominent characteristics of the unemployed and underemployed workers in our region that the regional planning team identified are:

- Older workers & long-term unemployed
- Lower formal education level
- Lack of English proficiency
- Geographic location/transportation

Many of our older workers continue to struggle with finding full-time employment and a significant portion of them are long-term unemployed. Their biggest challenge is that they come with years of experience and often at a fairly high salary. They find themselves trapped by employer stereotypes such as not sticking around long (flight risk) and costing too much in terms of salary, health insurance and retirement. Businesses often do not want to take a chance on these older workers. Another issue facing the long-term unemployed workers is discrimination based on the duration of their unemployment. They are often faced with an uphill battle when competing for employment with currently-working younger job applicants. We need to work with our business partners to more clearly understand that hiring should be based on one's ability to do the job, not his or her age or current employment status.

Education level is another characteristic of our unemployed and underemployed workers. For some workers, they only have a high school diploma or GED and the employer requires a college degree. Many are raising families and don't have the resources and/or time to step away from the work world and return to school. Working with our education partners, we need to continue to come up with alternative ways to help these workers get the education or

training they need. Possibilities include tuition reimbursement from the employer, evening or weekend classes, and online education.

As noted previously, there exists a very high need in our region for ESOL classes. One of the biggest barriers to employment right now is the lack of English proficiency in our job seekers combined with the fact that our local, publicly-funded ESOL programs have extensive waiting lists. One way for us to address this issue is to educate our business partners and encourage them to apply for a Workforce Training grant to provide ESOL training for their workers.

Description of the region’s existing pipelines of new workers (credentials) across public and private secondary and post-secondary institutions:

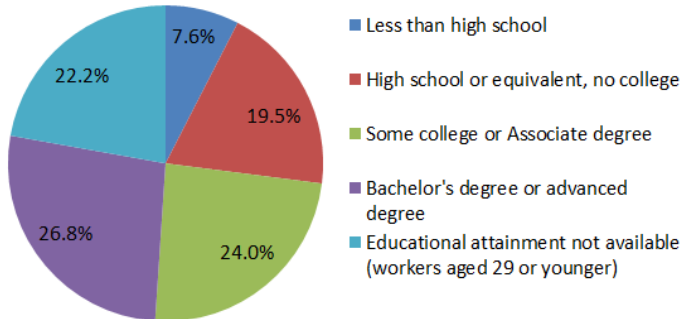
There are a large number of educational institutions and training entities in Central MA. These includes three public universities; the University of Massachusetts Medical School in Worcester, Fitchburg State University, and Worcester State University, two community colleges; Quinsigamond Community College and Mount Wachusett Community College, several private four-year colleges (Nichols, Holy Cross, Assumption, Anna Maria, Cummings School of Veterinary Medicine at Tufts University, Massachusetts College of

Maximizing Our Educational Resources

Our region is fortunate to have three state universities. Of these, Worcester State University and Fitchburg State Universities were fairly recently awarded university status. Unfortunately, because of the statutory language set at the time, WSU and FSU can only grant doctoral degrees via collaboration with a doctoral granting institution. This creates a barrier to program development. For example, the WSU Occupational Therapy (OT) program is facing this challenge as the Accreditation Council for Occupational Therapy Education (ACOTE) recently mandated that the entry-level degree for occupational therapists must transition from a master’s-level to a clinical doctoral-level (OTD) by July 2027. Once the new ACOTE mandate takes effect in 2027, only programs accredited at the clinical doctoral level will be able to maintain or receive accreditation. This ACOTE mandate puts the OT program at WSU, one of only two such programs at public state universities in MA, in an untenable situation because it cannot confer clinical doctoral degrees. The inability to confer this degree would cause this program to close and leave the private institutions as the only option for OT education. In other words, if WSU’s OT Program cannot transition to an entry-level clinical doctoral program, Central Massachusetts will have no options for affordable and accessible OT education.

Pharmacy, Becker, Clark, and Worcester Polytechnic Institute), as well the Grafton and Shriver Job Corps Centers, and five vocational schools, which offer both day and evening programs; Montachusett Regional Vocational Technical High School, Worcester Technical High School, Bay Path Regional Vocational High School, Blackstone Valley Vocational High School, and the Leominster High School Center For Technical Education Innovation (additionally, the Assabet Valley Vocational High School is located on the edge of our region, providing programming to day and evening students residing in our region). We also have numerous Career Technical Education (CTE) providers including the Worcester Community Action Council, the Fieldstone School, Training Resources of America, the South Middlesex Opportunity Council, Worcester Public Schools Night Life and Adult Basic Education Center.

Central MA Region Workers by Educational Attainment



Although our region boasts many education and training providers – for instance the Worcester metropolitan statistical area (MSA) graduated 2,232 college students in 2015 with degrees in business, management, finance, accounting, computer science, engineering, and legal services, the fact remains that far too many of our region’s residents are not able to reach the first rung of the career ladder and are in need of additional education.

III. WHERE DO WE WANT TO GO?

Criteria for Priority Industries and Occupations:

The regional planning team adopted the State criteria for selection of priority industries and occupations:

- High Employer Demand
- High Demand and High Wage (4-5 Star Occupations)
- Talent Gaps
- Career Pathways

The regional planning team also developed additional criteria it felt were important to help us identify industries and occupations that might best fit with higher need job seekers to ensure they are not overlooked in this process:

- Strong Employer engagement (employers willing to become actively engaged in working with workforce system stakeholders)
- Low barriers to employment (employment opportunities that do not by their nature exclude residents with barriers to employment, such as those that exclusively seek bachelor’s degrees or above)

- Alignment with high need job-seeker populations (employment opportunities that may be available to job seekers currently ready for employment or those with the ability to gain readiness with short term education, training and support)

Priority industries by 2-digit NAICS code:

The 3 priority industries that the regional planning team selected are:

- Healthcare and Social Assistance (NAICS Code 62)
- Manufacturing (NAICS Codes 31-33)
- Transportation, Warehousing and Logistics (NAICS Code 54)

We selected these 3 industries as priorities in our region primarily due to a high need for workers in these areas and the fact that they offer defined career pathways. The healthcare and social assistance industry in our region is in constant need of trained workers. While the entry level jobs such as CNA, PCA, HHA and direct care workers often suffer from lower pay due to low public reimbursement rates, with additional education and/or training, there are opportunities to move into higher-level positions. Our region is also desperate for the qualified human services staff necessary to fight the opioid crisis, such as Addiction Counselors, whose impact then helps others qualify to enter the workforce.

The largest education priority currently is for child development center teachers. Most centers now require at least 50% of their staff to have a minimum of an associate's degree. However, due to public voucher reimbursement rates, the starting salaries can be low. There is also a great need for Special Education Instructors and Applied Behavioral Analysis Specialists. These programs do require an advanced degree but starting salaries are generally between \$30,000 and \$40,000 per year. There are also numerous career pathways available for education jobs but most, if not all, will require further education.

For manufacturing, entry level jobs in demand include production workers such as assemblers and machine operators. Wages in manufacturing are slowly starting to rise but have been held down due to the increase in foreign competition. In manufacturing, there are plenty of career pathways available to entry-level workers. In order to move up the ladder, most of these positions will require some additional training such as a certificate or credential and a few may require an associate's degree. It is because of the opportunities to advance that manufacturing is a priority industry in our region.

Regional priority occupations or occupational groups by SOC code:

The four priority occupations the regional planning team identified are:

- Certified Nursing Assistant (CNA): SOC Code 31-1014.00
- CNC Machinist: SOC Code 51-4011.00
- CDL-A Truck Drivers: SOC Code 53-3032.00
- HVAC Technicians: SOC Code 49-9021.01

These 4 occupations are identified as priorities because of the severe shortages of trained workers available. CNA's are in extremely high demand. We identified this occupation due to the many opportunities available and because there are several high-quality training programs in our region that provide potential CNA workers with the certification required to do the job. We have also learned from our DTA partners that many of their adult and Title 1 clients are interested in the healthcare field so CNA is a good fit for many of these job seekers.

CNC machinists continue to be in demand throughout the manufacturing industry. As our manufacturers automate more and more of their production lines, they require trained operators to program and run the CNC machines. This is also a priority occupation where we are fortunate to have several strong training programs in our region that offer a certificate for CNC machining. There is a supply challenge due to many machinists who do not have training in the new technology thereby rendering much of their previous experience obsolete. Again, with the training support from our partners, we can re-train these workers to become CNC machinists.

The CDL-A truck driver and HVAC technician occupations offer in-demand employment opportunities with a strong salary. The starting salary for either occupation is typically somewhere between \$19.00 and \$23.00 per hour. Often a job seeker will receive a job offer before he/she has even completed the training. The need for these occupations is so great that employers will often make an offer to a candidate based on anticipated successful completion of the requisite training. An experienced CDL-A truck driver or HVAC technician can earn significantly more.

Credential Asset Mapping Tool:

Please see attachment 4 for the credential asset mapping charts created to support the blueprint.

Non-credential Asset and Gap Analysis:

There are several existing assets in our region that we can use to meet employer demand for skilled workers. The number one complaint from businesses is that workers are lacking soft skills. We are fortunate that many education and training programs offer classes that address aspects of workplace readiness, including the Bounce program offered at the Workforce Central Career Centers. Bounce is a week-long training workshop that helps job seekers gain confidence, learn how to utilize goal setting techniques and increase their employability skills. It also offers practical tools for combining seamless technical and literacy skills. Going forward, we are planning an expansion of the Bounce program to reach more job seekers. Another tool utilized within the region to help train soft skills is the Signal Success program from the Commonwealth Corporation. This comprehensive curriculum helps young people develop essential soft skills for future success. Additionally, we are looking at developing a standardized soft skills training program that could be made available to all regional partners, including high schools, post-secondary schools, and adult training programs.

The most essential assets in our region are our ESOL and ABE programs. With the influx of New Americans and workers who never finished high school, we are seeing an increased demand for these services. Adult basic education classes help workers strengthen their academic skills and/or complete their GED. Even with the most basic of entry level jobs, it is nearly impossible to earn a decent wage without a high school diploma. The ABE program is a great way to get these job seekers the basic education they need to be successful. Because of the wait lists that currently exist in our region for ABE programs, we are also seeking to expand the use of the Career Readiness Initiative/ACT Work Keys resource to local training and community partners. This web-based assessment and learning management system can provide a scalable, cost-efficient tool for multiple venues across our region.

ESOL is our most in-demand program in the region. We have extensive waiting lists at all of our career centers and also at partner agencies who offer ESOL training. A large part of increasing demand for ESOL services is due to businesses telling us that it is difficult for them to hire workers who cannot understand or speak English. The language barrier creates additional concerns with giving direction, basic communication skills, supervision and safety. We are continually looking for ways to increase capacity for ESOL services in our region. This will allow us to help more job seekers enter the workplace and, in turn, increase economic development throughout our region.

Vision, Mission, Goals

The regional planning team established the following vision statement for our efforts:

The residents of Central MA have the skills needed to live prosperous, productive lives which support a strong regional economy.

Mission Statement:

Our mission as a collaboration of Central MA workforce stakeholders is to create a responsive and connected workforce system that prepares residents throughout their lives for living wage career opportunities by meeting the labor demand needs of our local businesses.

To support this mission, we as partners collectively agree to take ownership for actively engaging with our partners to integrate our services and develop programming that aligns with our region's workforce needs.

The regional goals that the planning team has established are:

Goal 1: Align and coordinate regional Education, Workforce Development, and Economic Development systems.

- Convene Partnership leaders twice annually to review progress and regional labor market information, and to adjust programming and planning as necessary
- Interconnect existing workforce structures and membership between the partner systems to ensure real-time communication and programmatic alignment
 - Workforce Development Boards, Youth Councils, and Adult/Career Center subcommittees
 - Mass BizWorks regional team
 - Central and North Central WIOA Partner oversight groups
 - School industry advisory committees
- Collect business service performance and outcome data from all stakeholders to create a comprehensive regional “dashboard” report for public audience to highlight the value we collectively bring to businesses, including the development of qualified labor for the region's employers

Goal 2: Provide industry with a training system responsive to workforce needs

- Create a real-time regional Mass BizWorks “response-team” to serve as the connection between businesses in need and system partners (see attachment 5 - Regional Demand-Driven Programming Development)
- Integrate business need feedback into regional Youth Council, Career Center, and partner program development processes
- Implement MA EOLWD Recruitment Solutions Initiative (RSI) referral process at all of the region’s MassHire Career Centers

Goal 3: Improve the foundational and work readiness/soft skills of our region’s labor force

- Increase exposure to soft skills in high schools, colleges, training programs and career centers through the creation and expanded access to career readiness training materials
- Increase career awareness activities in the region’s high schools
- Build stronger foundational computer skills for residents (both youth and adults)

Goal 4: Close the skills gap for priority industries and occupations

- Establish regional baseline measures for priority industries/ occupation goals and set target goals, including:
 - Decrease vacancy rate
 - Increase the number of CTE program placements
 - Improve the supply/demand ratio
 - Increase the business utilization percentage rate
 - Improve career center/WIOA Partner performance (number of businesses served, job orders, job referrals, and hiring)
- Expand Career Technical Education (CTE), both day and evening, for priority industries/occupations
- Increase exposure in secondary education to high priority industries
- Expand incumbent worker career advancement and Registered Apprenticeships for priority industries

- Increase contextualized ABE and ESOL programming that trains for high priority industries
- Expand articulation agreements between education and training institutions for priority industries/occupations

Goal Achievement Timeline

By 2018, we will:

- Formalize the regional blueprint Partnership Leadership group and begin holding bi-annual meetings
- Create and develop ESOL support and integration with needed training
- Develop a work-readiness framework for education and training programs
- Establish a regional Mass BizWorks team and a peer-to-peer platform
- Design, develop and implement a soft skills training program at our Career Centers
- Share blueprint with school districts and training providers within the region
- Plan for expanded CTE programming for priority industries/occupations
- Implement RSI operationally at all regional MassHire Career Centers
- Review baseline measures and establish target goals for key metrics

By 2020, we will:

- Expand IT coding and cybersecurity learning into our K-12 school districts
- Expand CTE programming in priority industries and occupations
- Expand career awareness activities for high school students in the region for priority industries/occupations
- Create/increase articulation agreements between education and training providers for all priority industries/occupations
- Create a regional business services dashboard

By 2022, we will:

- Offer ESOL classes contextualized for all priority industries/occupations
- Establish new CTE programs that are Pell Grant eligible for all priority industries/occupations
- Meet target goals for business services for employers in the priority industries/occupations

IV. HOW DO WE GET THERE?

The regional planning team has identified several strategies to achieve our goals. These include:

- Sharing accountability through a partner leadership team and a public outcomes dashboard report to measure our progress
- Creation of articulation agreements between educational and training institutions
- Expanding contextualized ABE and ESOL programming for priority industries/occupations
- Alignment of CTE programs with industry needs and expansion of off-hours programming at our Vocational Technical high schools and other training facilities
- Creation of apprenticeships across priority industries
- Expansion of a regional Mass BizWorks peer-to-peer team and real-time online platform to support their work
- Utilizing and inter-weaving existing structures and frameworks to support our work

Continuous Communication

We plan to meet with our entire regional planning group twice per year. This will help us identify changes in industry trends and be able to make changes in our course direction, if needed. We will continue to have regular communication with our core team through quarterly meetings to assess progress and needs. We will also use our regional workforce development board meetings and the previously noted existing regional committees and workgroups (including WIOA partner groups, the Mass BizWorks regional team, and school industry advisory committees) to share information and drive new programming.

Shared Measurement Systems

In order to ensure that we, as a region, are consistently making progress toward a shared vision, we will utilize updated data from the State and from our partner sources. Some of the data that we will look at will include:

- Enrollment, graduation, and employment by education/training program
- Employer vacancy rate by industry
- Supply/demand ratio
- Increase the business utilization percentage rate
- Improve career center/WIOA Partner performance (number of businesses served, job orders, job referrals, and hiring)

Other Shared Strategies

Our two workforce development areas have a strong history of partnership and shared service delivery. This includes our previous work on the implementation of a multi-million dollar federal grant to promote Science, technology, Engineering, and Math (STEM) through our career centers and the creation of a virtual STEM Career Center (STEMPower). This project earned the Workforce Solutions Group Partnership of the Year Award in 2009. Other projects we currently collaborate on or share programs between our two regions that may be utilized in support of this blueprint include:

- STEM K-16 pipeline membership
- YouthWorks Summer and Year-Round employment
- WIOA Youth
- School to Career Connecting Activities
- National Emergency Grant and Trade Adjustment Act grants

Mutually Reinforcing Activities

Our partners have pledged to offer significant support for accomplishing the goals of this regional blueprint. These include:

Education:

- Create/expand CTE programs for priority industries/occupations (high school, afterschool & evening, college); including Pell-eligible programs
 - It is anticipated that MWCC, QCC, WSU, and FSU alone will create 20+ new training programs in the priority industries/occupations between now and 2022, including fast-track (boot camp) style programs and competency-based programs.
 - MWCC has identified up to 14 new programs that may be launched aligned with priority industries/occupations.
 - QCC will also develop a bridge program designed as a pathway from ESL to a career technical certificate and/or Associates Degree.
 - WSU: will be re-launching its Center for Industry and Enterprise to foster closer connectivity with priority industries/occupations
- Workforce Development:
 - Utilize demand-driven approach at region's MassHire Career Centers – increase referrals to job openings and training in priority industries/occupations
 - Increase soft-skills training for career center customers

- Prioritize the priority industries/occupation for WIOA Youth, YouthWorks subsidized youth employment placements, and other youth career development programs
- Increase services to businesses in priority industries/occupations, including referrals to Workforce Training Fund and other resources
- Economic Development:
 - Increase the number of business referrals from ED to workforce in priority industries/occupations
 - Align business services/support data between ED and workforce systems – establish data sharing platform

Concluding Remarks

“Workforce Boards are in the investment business; we invest in “human capital,” and the benefit is down the road. It is high risk, and there are many ways to do it wrong.”

-- Paul Harrington

“It's tough to make **predictions**, especially about the **future**.” – Yogi Berra

It is obviously difficult to predict future employer needs. Nonetheless, it is imperative that our systems align around a shared vision and set of priorities to work from. While taking a demand-driven approach is by its nature reactive, planning is inherently proactive, and the balance between these two concepts is what this blueprint represents. We intend to create a framework between our three systems (education, workforce, and economic development) that is at once responsive and agile, while also walking firmly in a set direction.

In order to achieve that balance, and success there are a number of additional considerations. These include:

- State Support will be critical. Support from the Commonwealth will be necessary to gather the necessary data to measure our progress toward meeting our impact goals and for steering our systems forward.
- The importance of available funding cannot be overstated; goals are difficult to predict without a clear understanding of resource availability - achieving growth would not be realistic if potential budget cuts materialize.

Therefore, given the unpredictability of public resources, we need to look for additional sources of support, including potential support from business partners.

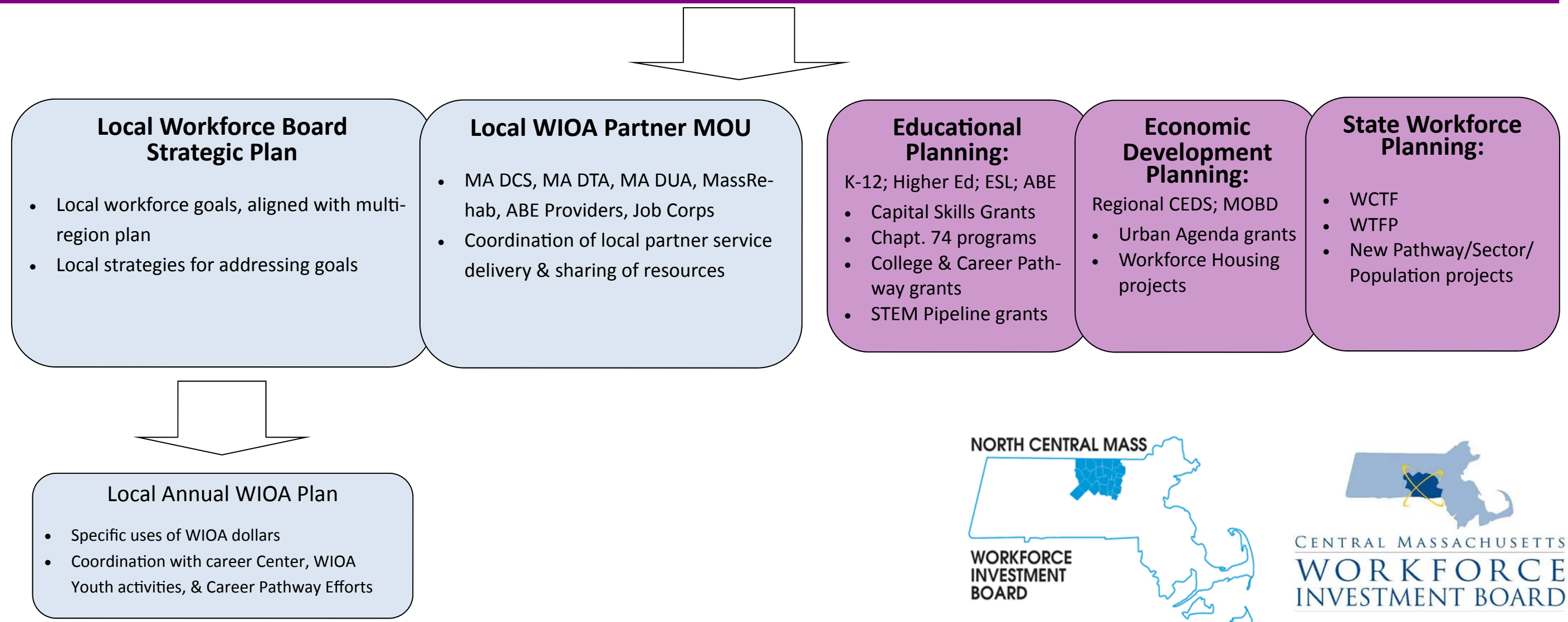
- Major obstacles to job seeker success are beyond our direct control (such as transportation, immigration policy, employer policies, and job seeker work preferences). It is difficult address the many barriers that confront workforce development efforts, and strong partnerships beyond our three systems will also play an important role.

The CMWIB and NCMWIB wish to thank the many public and private partners involved in the creation of this blueprint. Their time and expertise helped drive the planning process forward and on track. We look forward to working closely with these partners and beyond as we implement the strategies outlines in this blueprint to achieve our collective goals.

Workforce Skills Cabinet—Regional Workforce Blueprint Plan

Goals

1. Build shared understanding of the planning region's labor market supply and demand conditions
2. Build shared understanding of anticipated changes and challenges in the region's ability to meet labor market needs
3. Build consensus around priority sectors and occupations, ensuring the process gives full consideration to wages and career pathways within priority sectors and occupations
4. Create shared understanding of the outcomes each region wants to achieve in relation to priority sectors and occupations
5. Identify existing assets and regional collaborations to be leveraged
6. Identify role and understand strengths/capacity of each regional planning group sector to achieve outcomes.
7. Develop consensus around a clear strategy and work plan to achieve agreed-upon regional outcomes



Workforce Skills Cabinet Central MA Blueprint Business Survey Results

Central MA

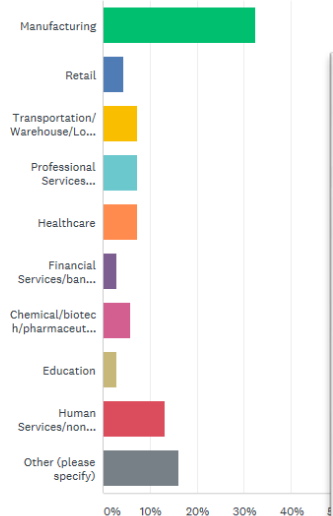
Oct. 18, 2017

Survey Results

Electronic survey sent out via email to 400+ employers through the CMWIB, NCMWIB, and partners (including MassMEP and career center business customers), 70+ responses

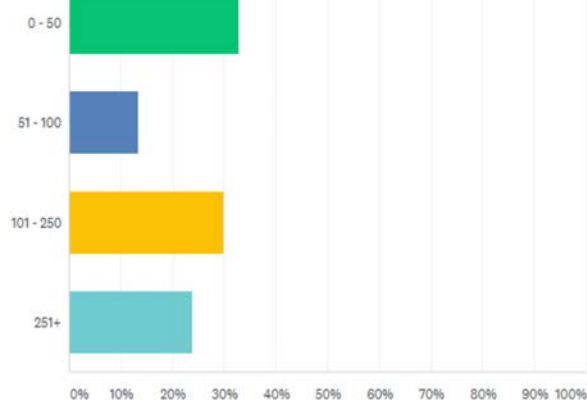
What Industry is your business/organization?

Answered: 68 Skipped: 0



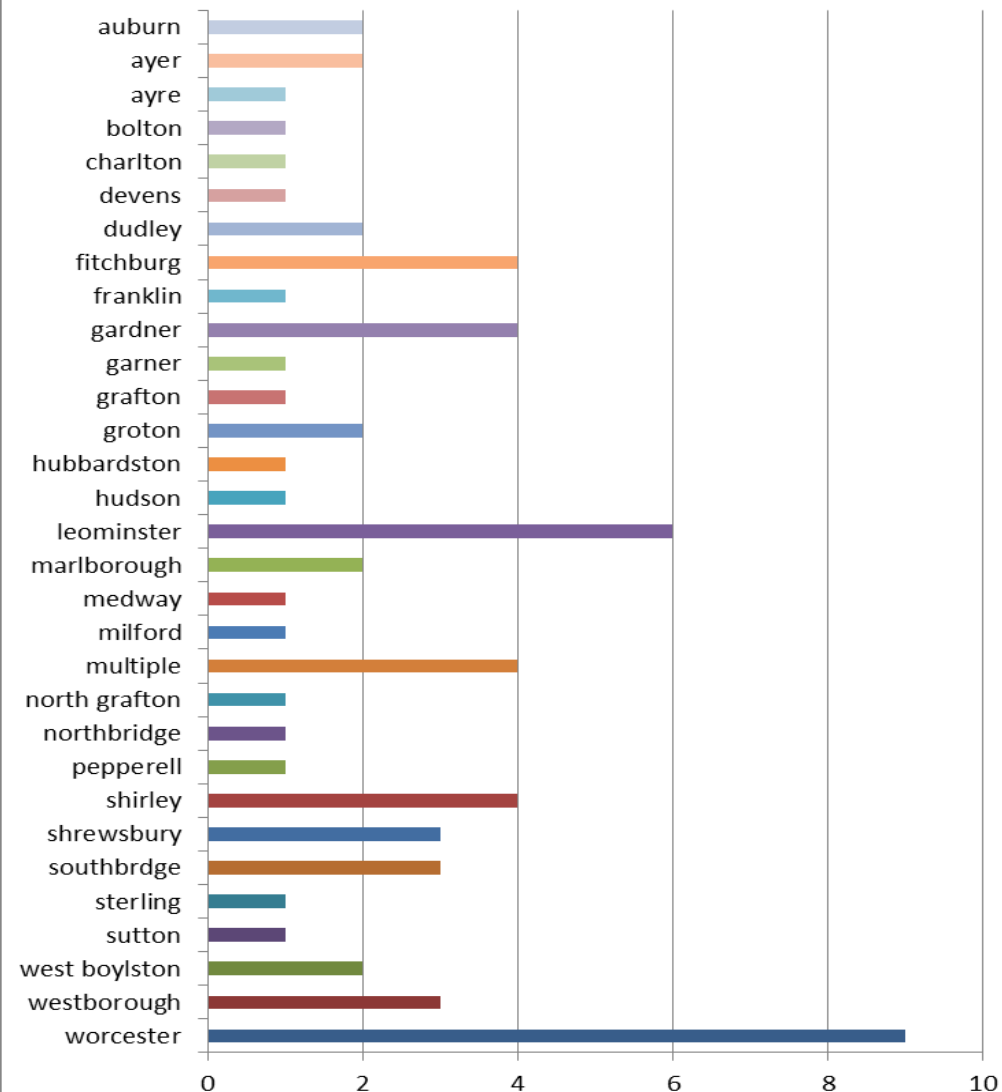
How many employees do you have?

Answered: 67 Skipped: 1

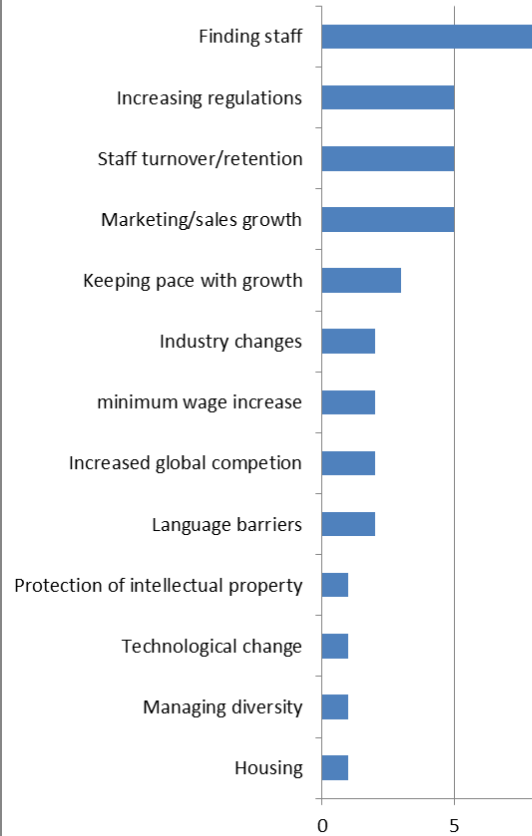


Other includes:
construction, hospitality,
fabrication, environmental,
security, B2B services

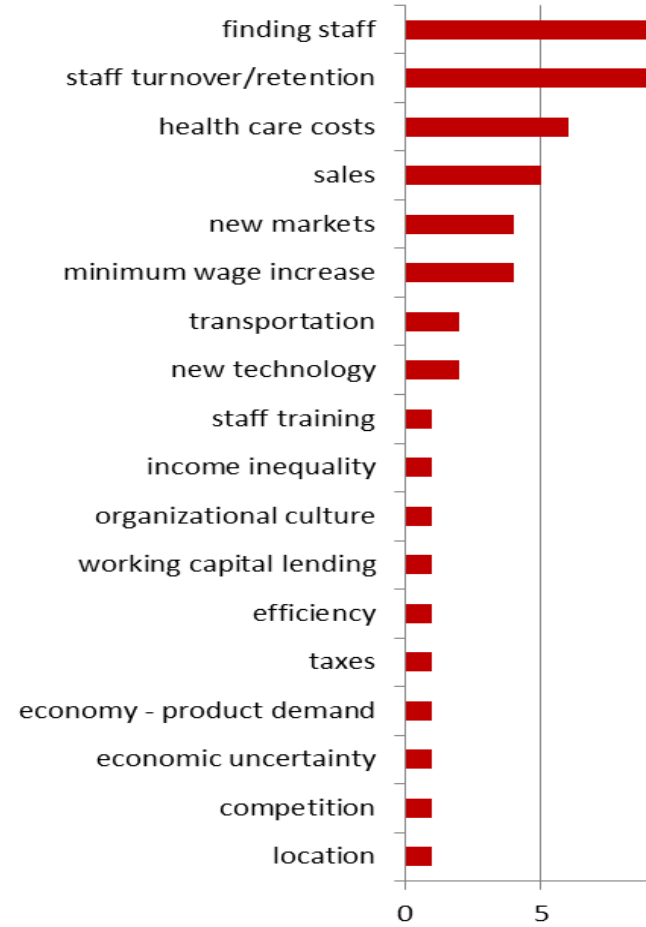
Respondents by Location



Top Challenges



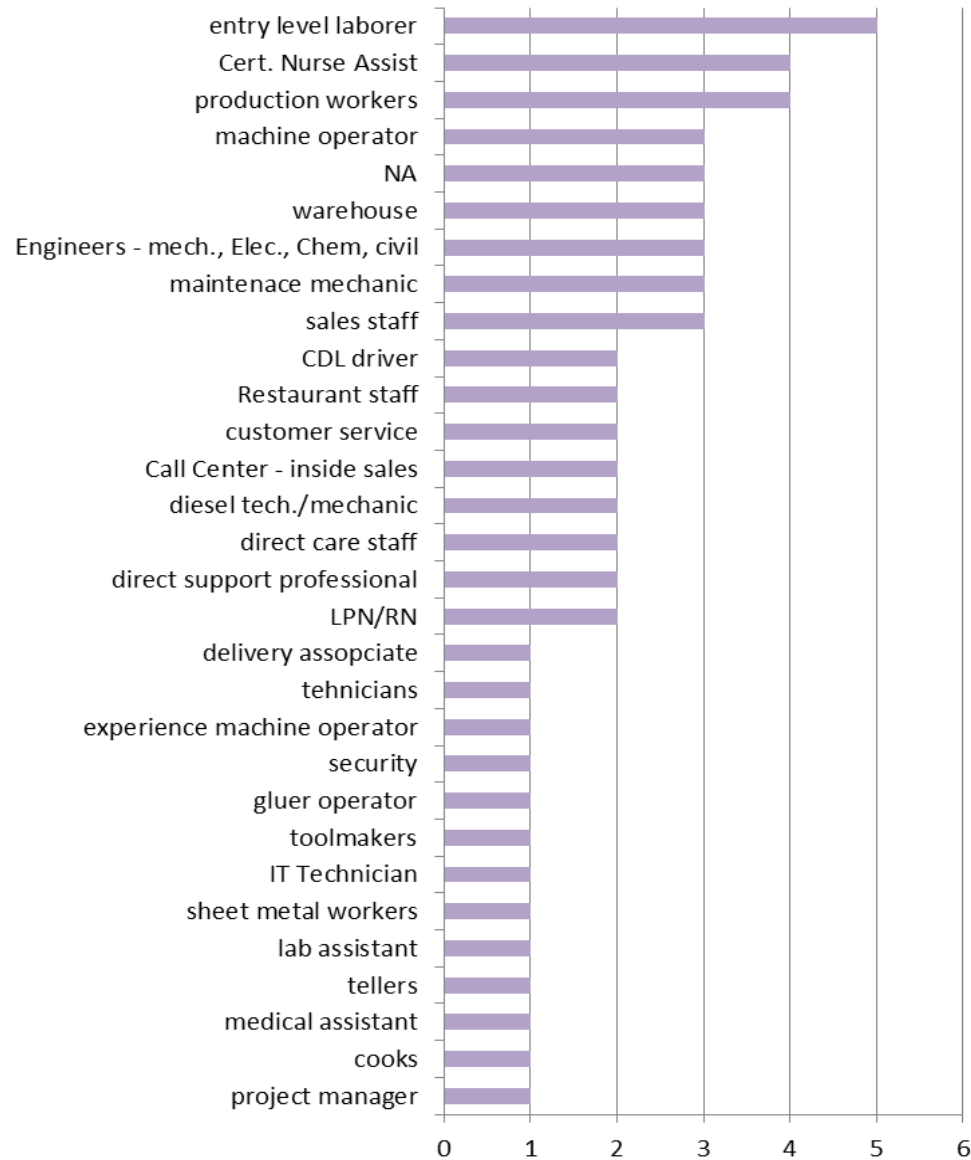
Second Challenge



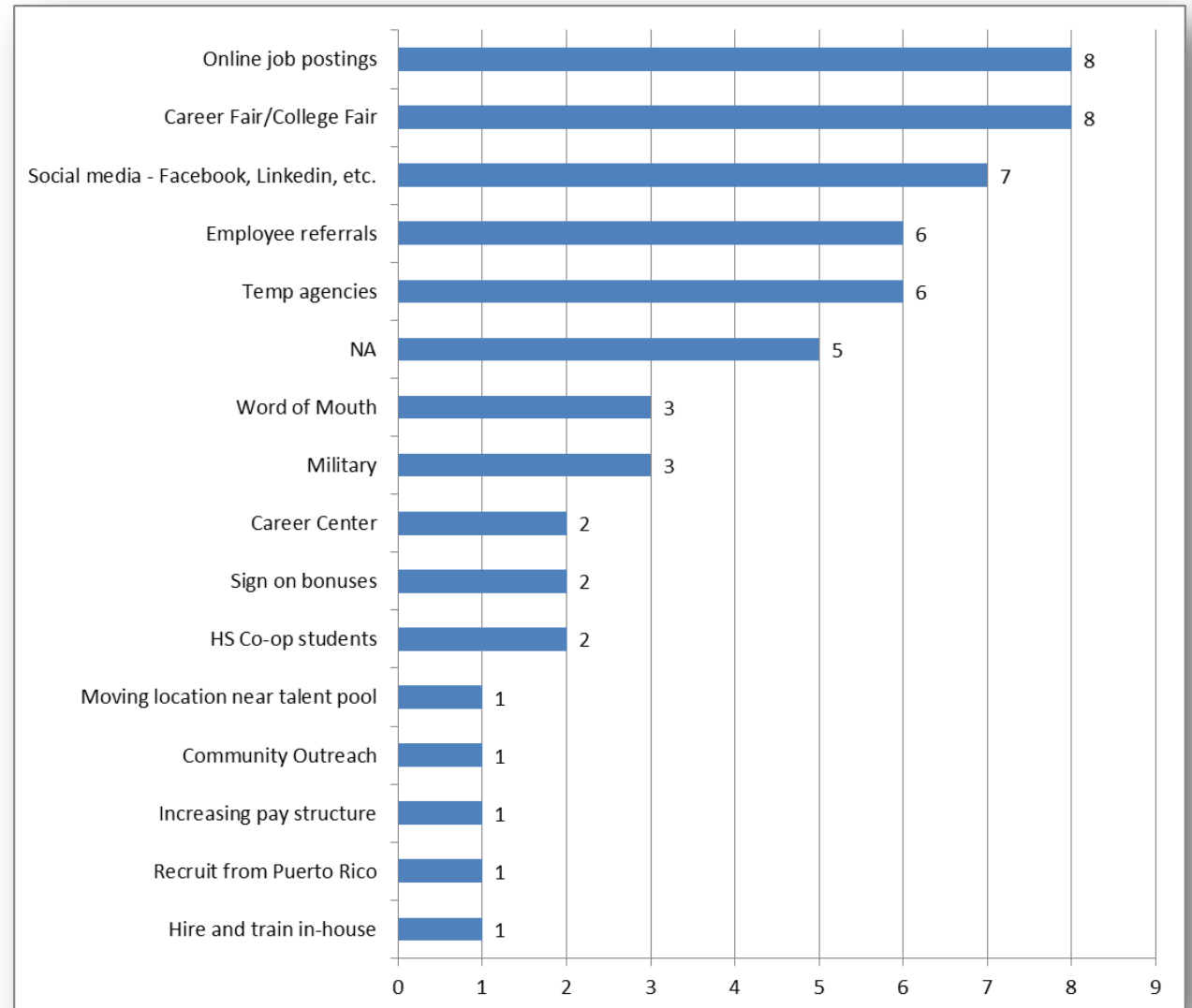
Third Challenge



Which of your occupations (if any) are facing significant employee/candidate shortages?



If you have a challenge filling vacancies, what strategies have you successfully employed?

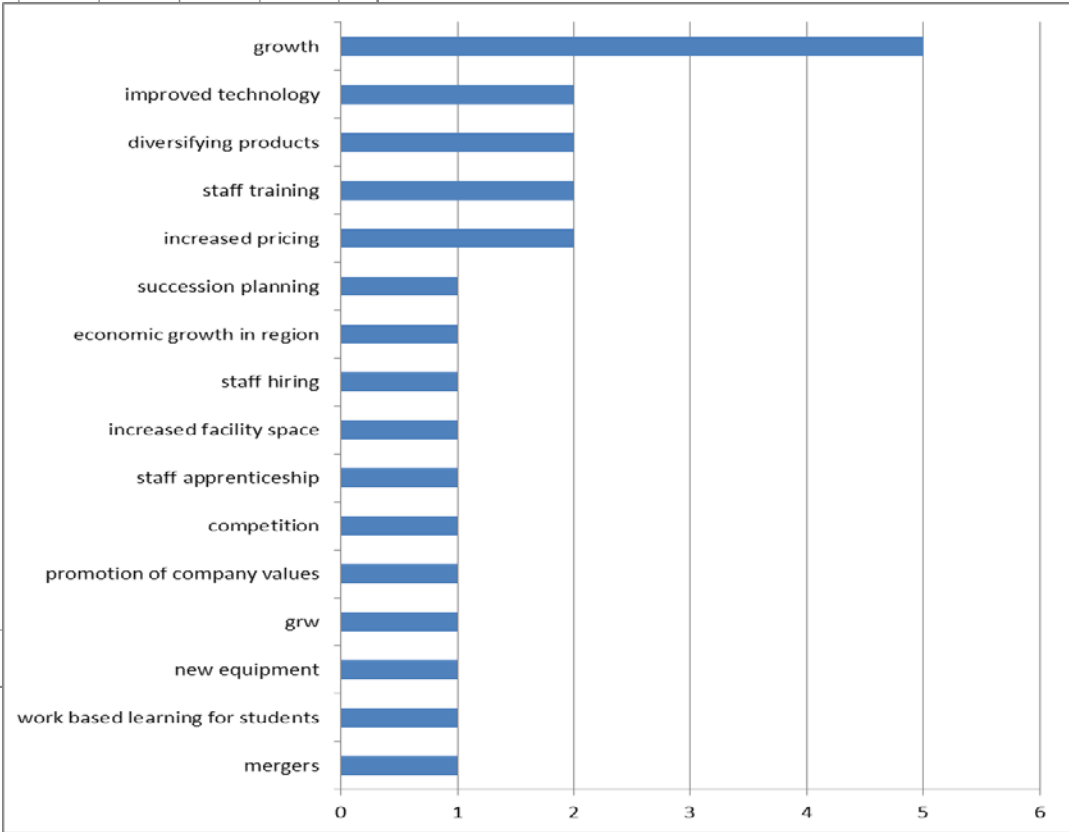
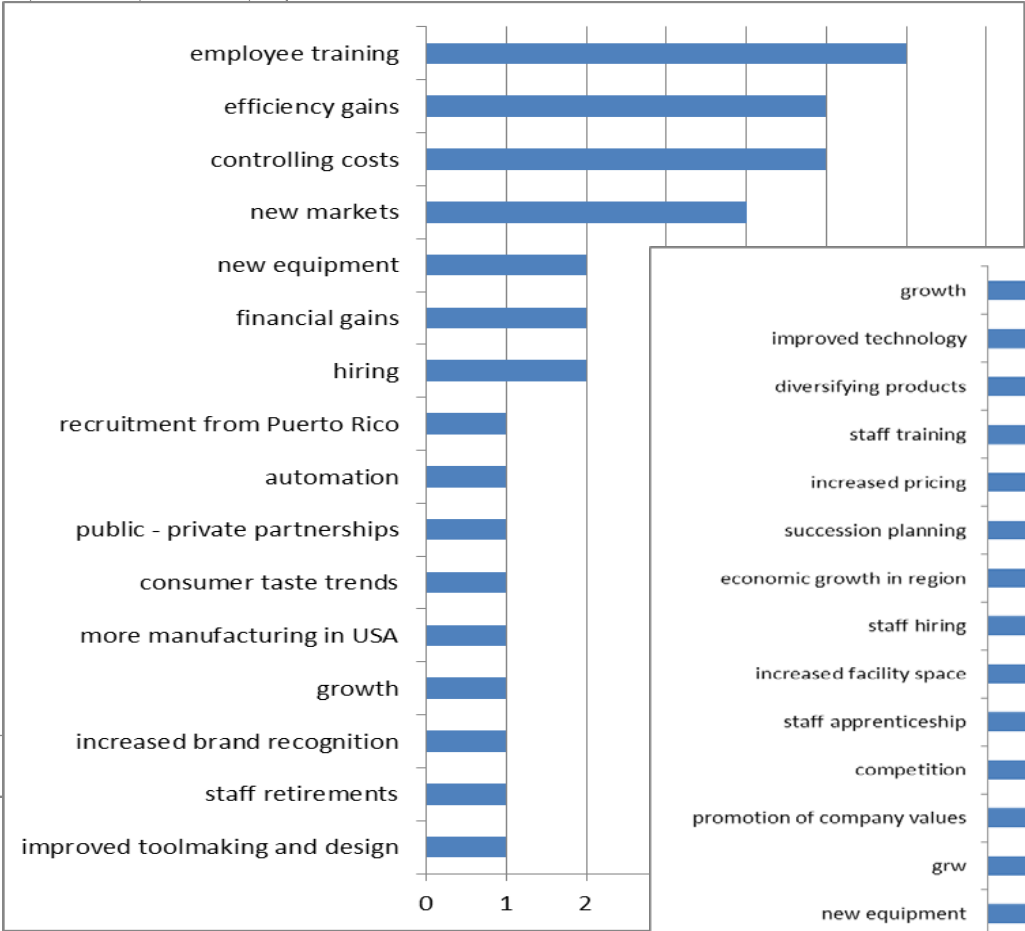


What partnerships or strategies have you pursued that were not ultimately successful?

Why?

- Job Boards and print ads - too many applicants without the required skills (several replies)
- Staffing firms - don't produce enough quality candidates
- WIB/Career Center job fair --The resumes collection were almost completely irrelevant to the positions we had.
- Recruiting via Veterans Inc. No resumes are generally submitted for our openings.
- Career Centers - it appears that clientele is entry level; not enough qualified candidates
- job fairs are a valiant effort but generally a waste of time. it's too broad of a selection not focused a cattle call.
- Agencies, Internet, Job Fairs - Lack of people that want to work
- Paper ads have not resulted in hires
- Tried state program to offer CDL to unemployed, participants did not want to do physical labor involved in waste collections
- There isn't a pipeline of skilled workers. Available labor does not have the skills and motivation to learn new skills.
- Mass MEP-graduates at lower level than our needs
- Sign on Bonus, employee referral bonus - no significant impact on recruitment
- longer probationary period - they still can't show up to work every day
- Working with some community organizations - may not have provided job coaching as promised or candidates were not qualified.
- hoping hire veterans or released prisoners
- Partnering with multiple staffing agencies - causes confusion for supervisors
- Ziprecruiter - low quality candidates

What are the top three opportunities for your business/organization over the next 5 years?



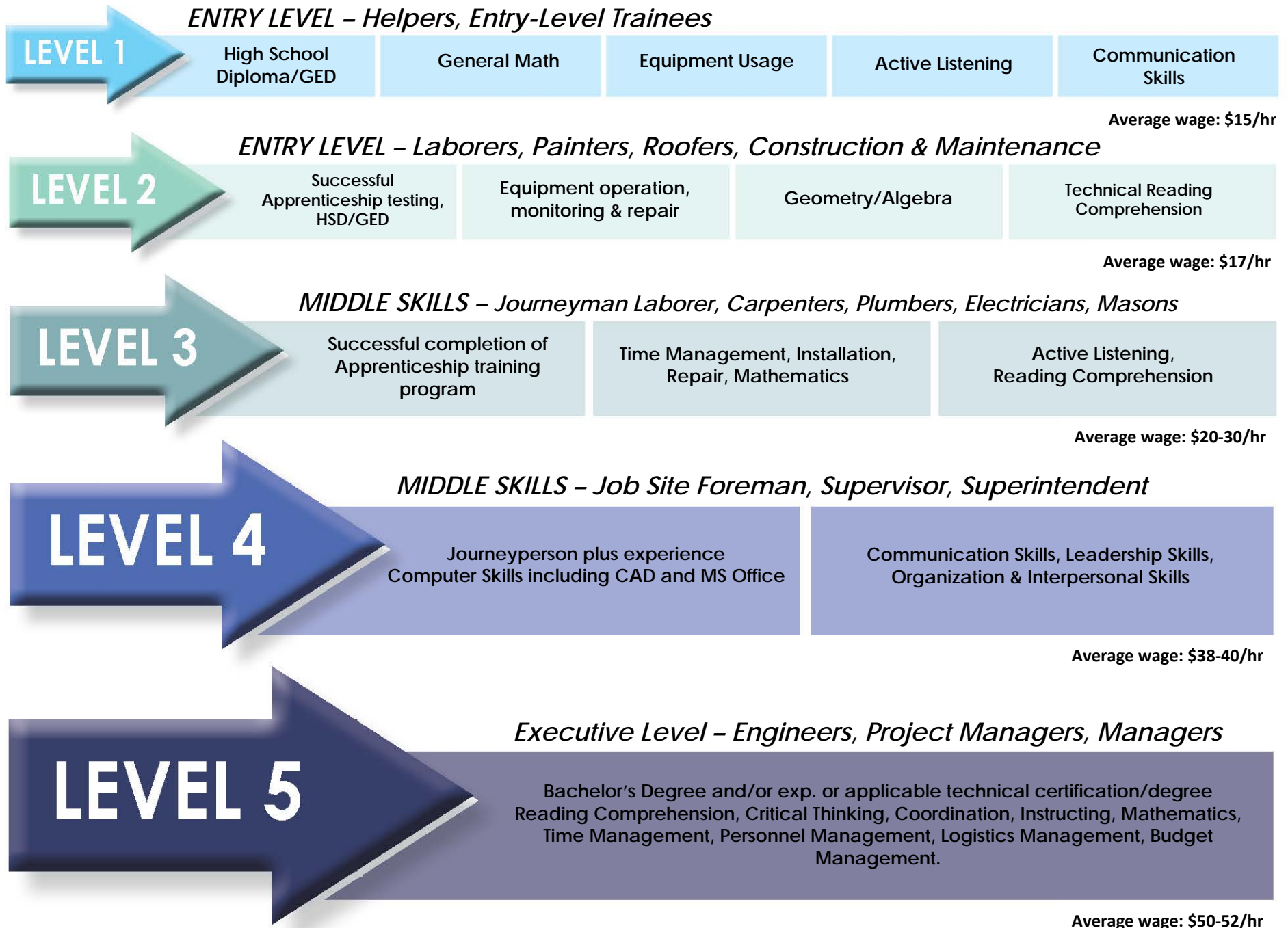
Challenges facing our businesses

According to our data, research, and engagement with employers, we understand that the top 3 challenges facing regional businesses are...

- 1. Finding & retaining talent*
 - 2. Meeting regulations (including min. wage, healthcare)*
 - 3. Finding new customers/markets*
- Also: Increased competition, facility space, and changing technology*

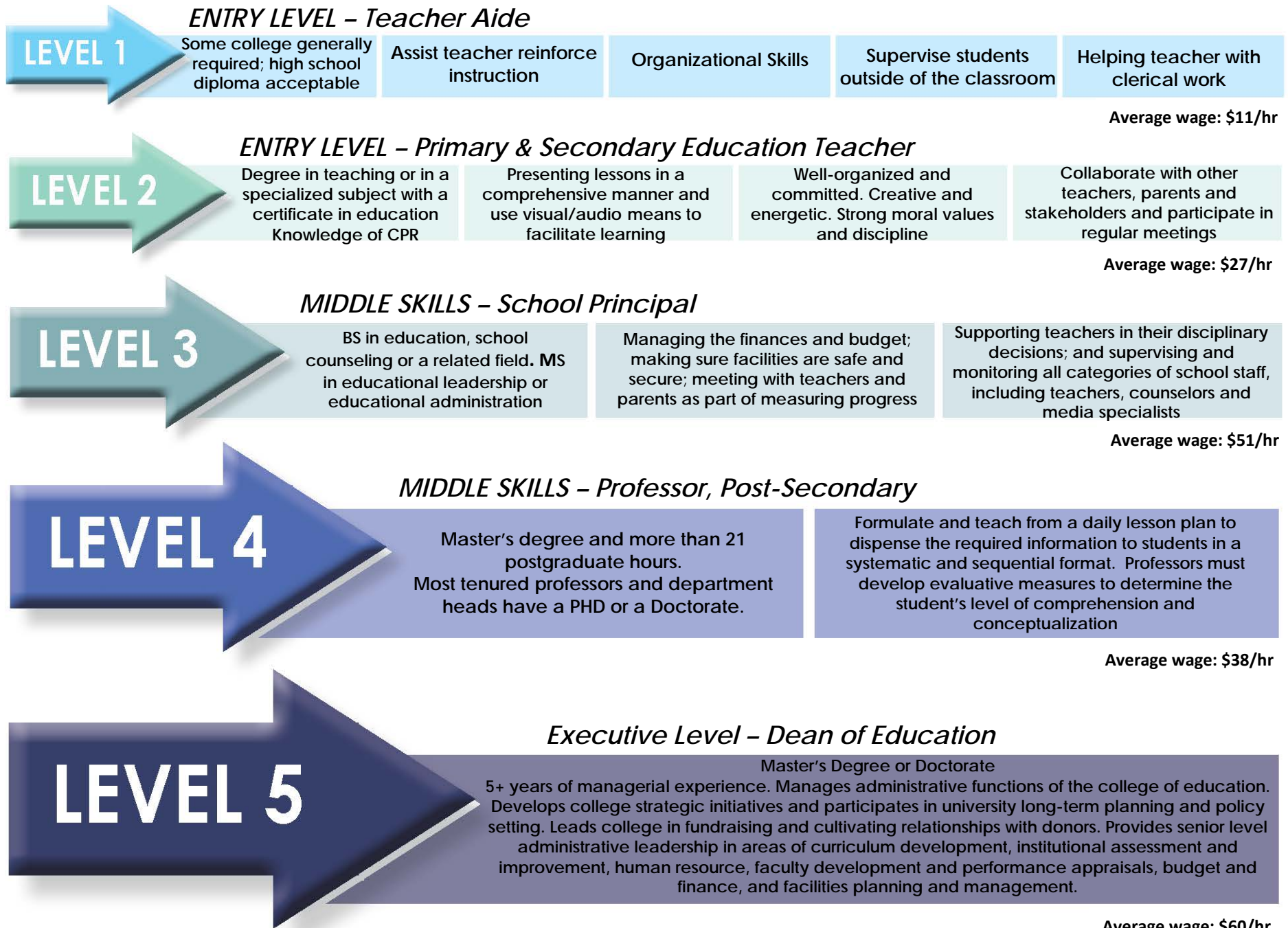
Talent concerns: finding skilled workers (mixed technical occupations, “soft skills,” and English language proficiency), wage/salary expectations, and transportation.

Construction



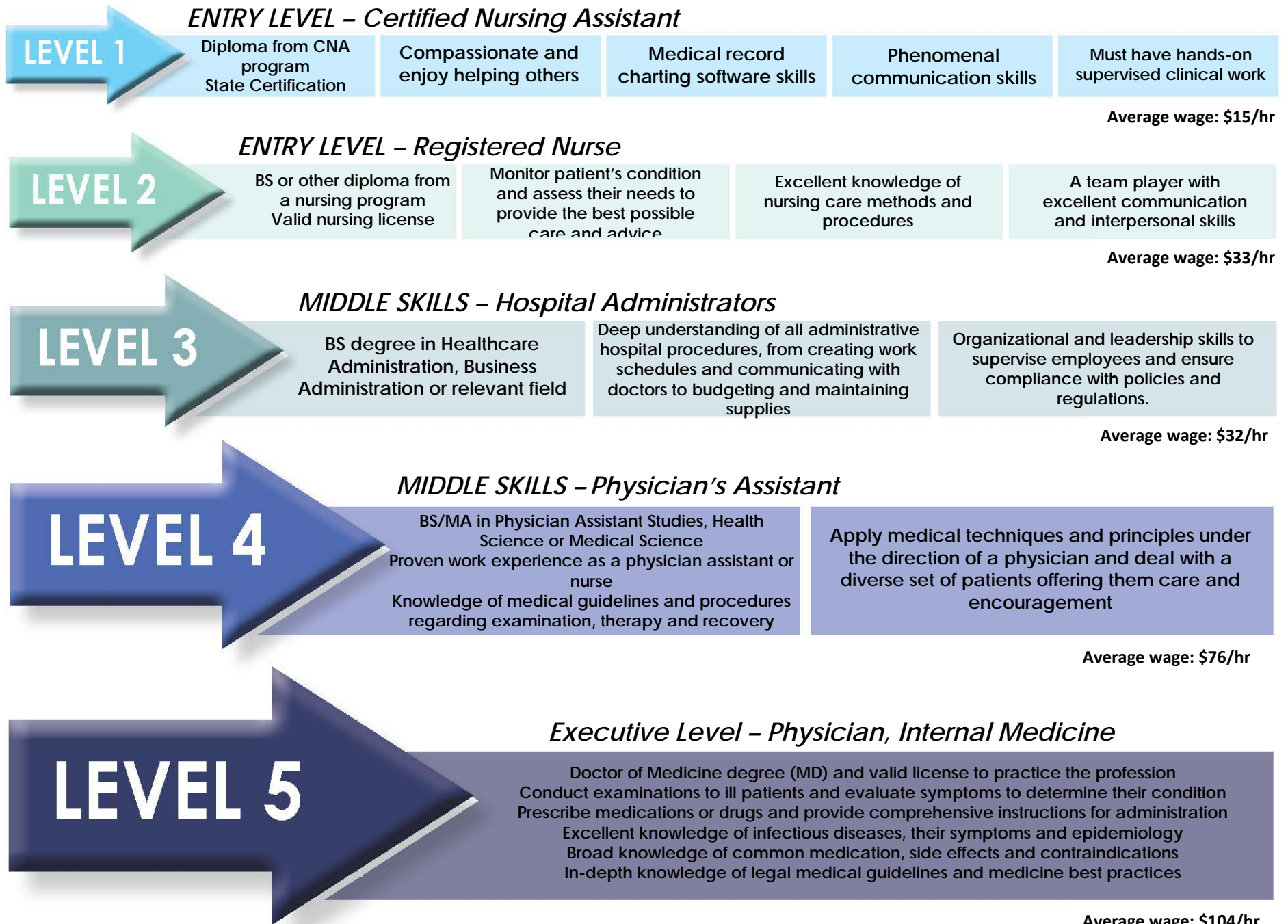
Note: All salary data taken from Salary.com for Worcester, MA area.

Education



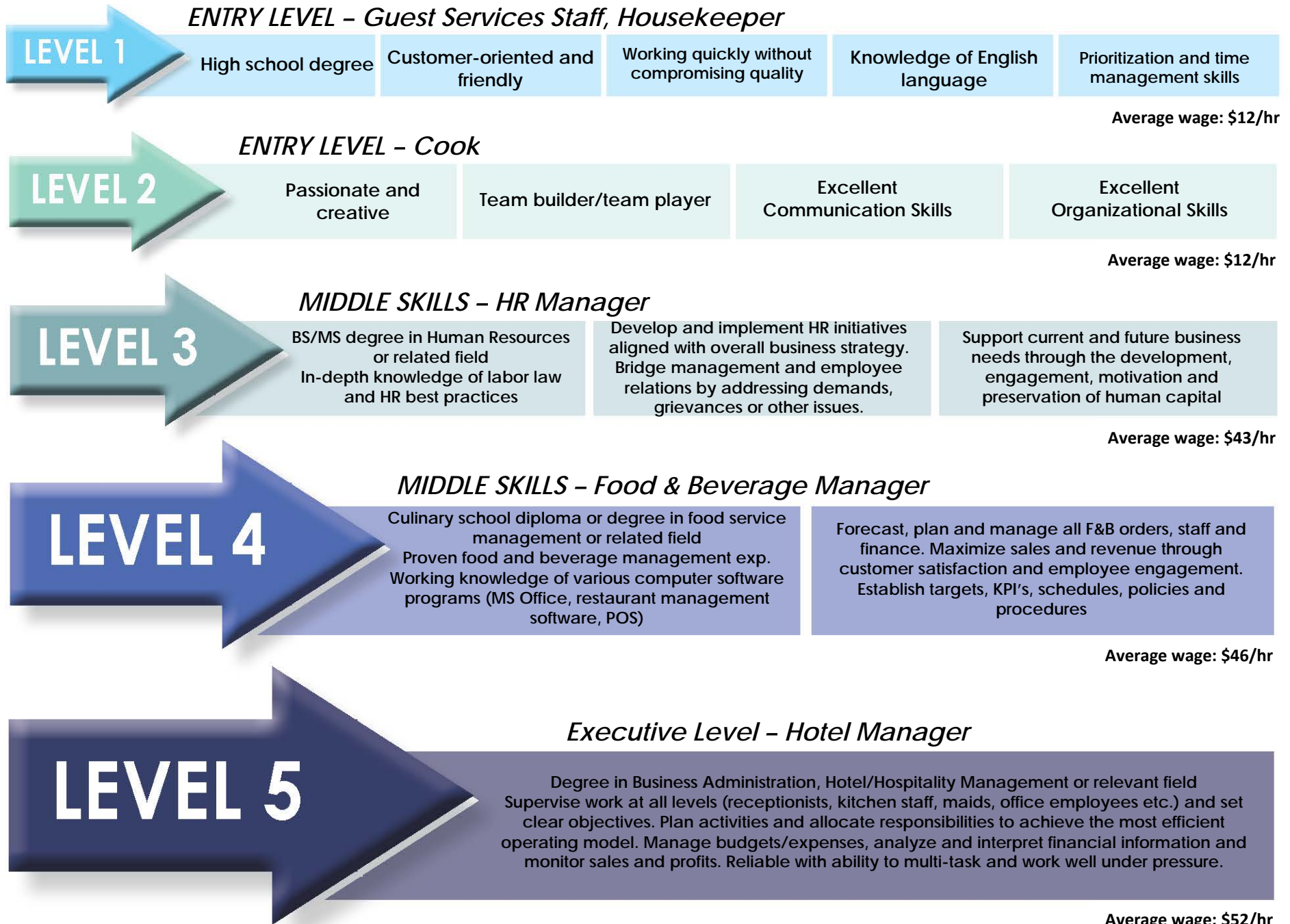
Note: All salary data taken from Salary.com for Worcester, MA area.

Healthcare



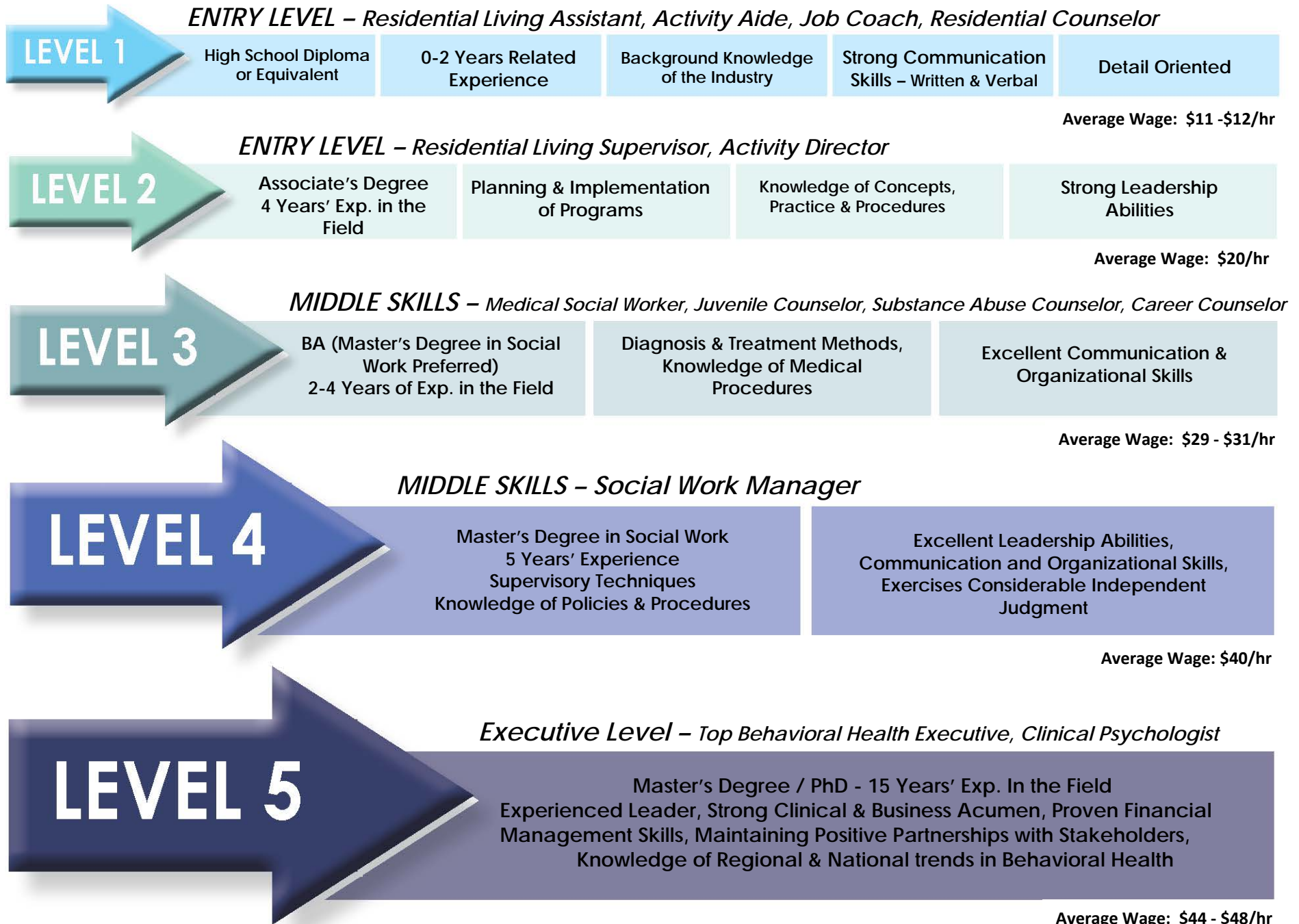
Note: All salary data taken from Salary.com for Worcester, MA area.

Hospitality

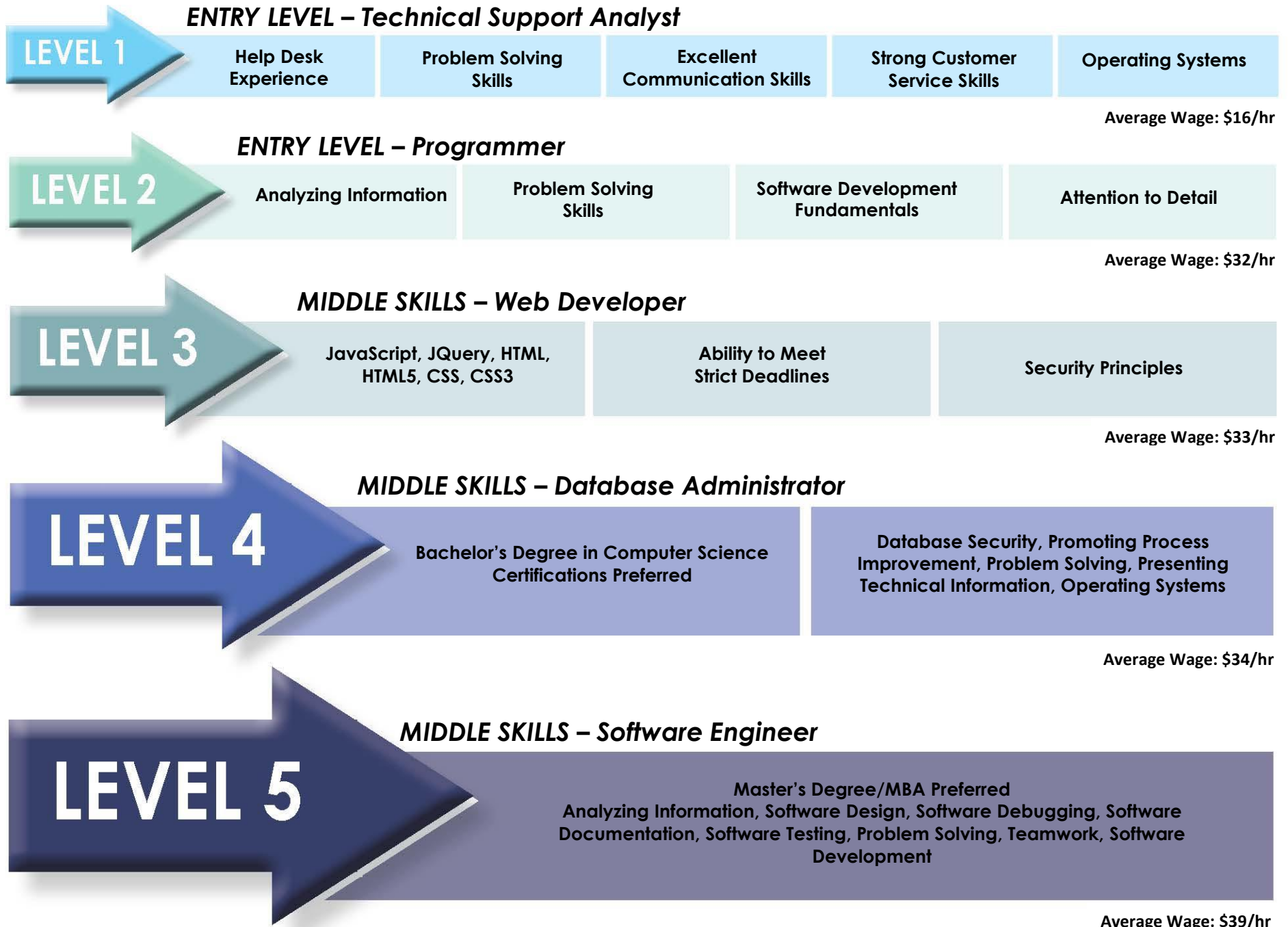


Note: All salary data taken from Salary.com for Worcester, MA area.

Human Services

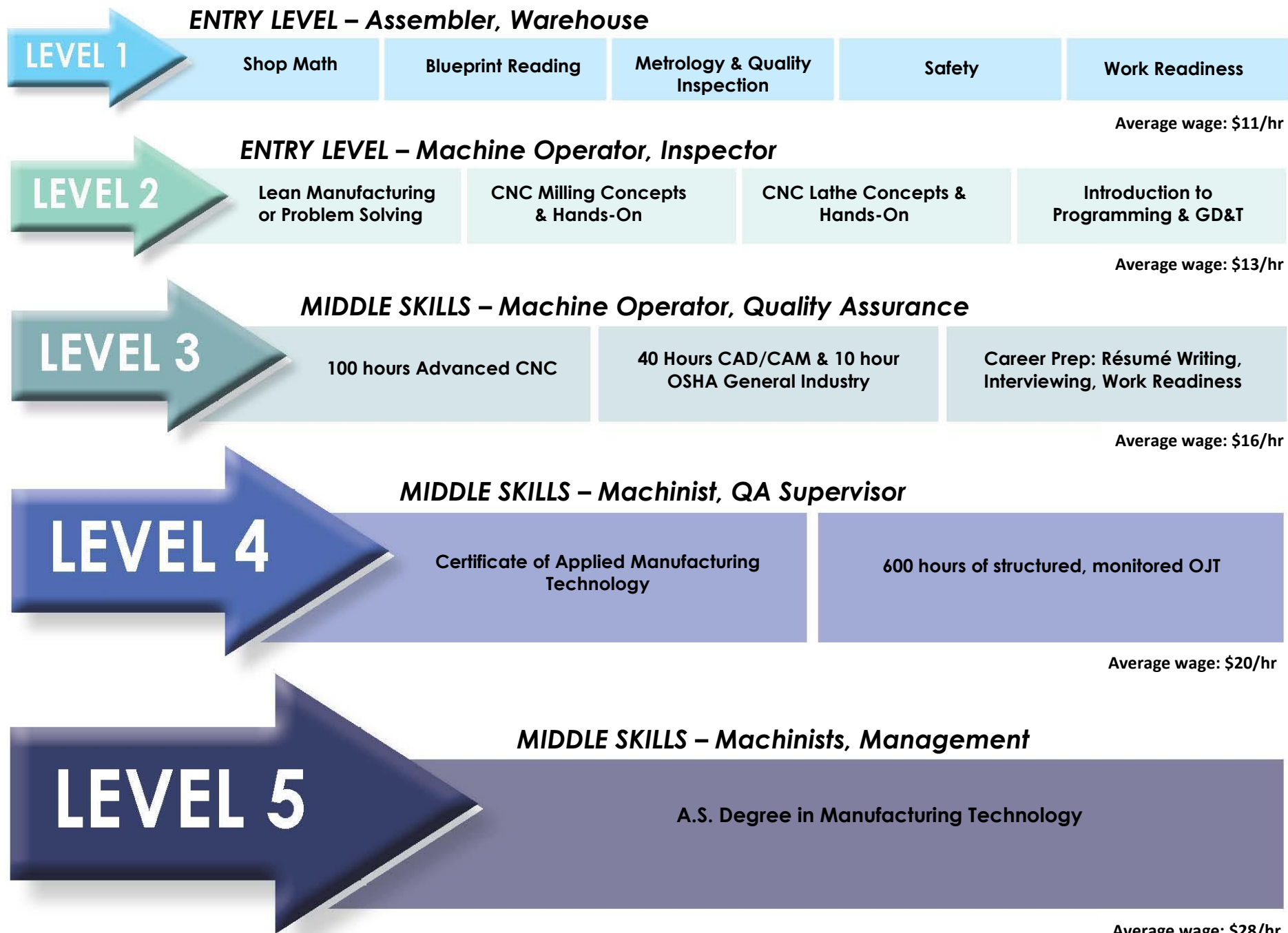


Information Technology



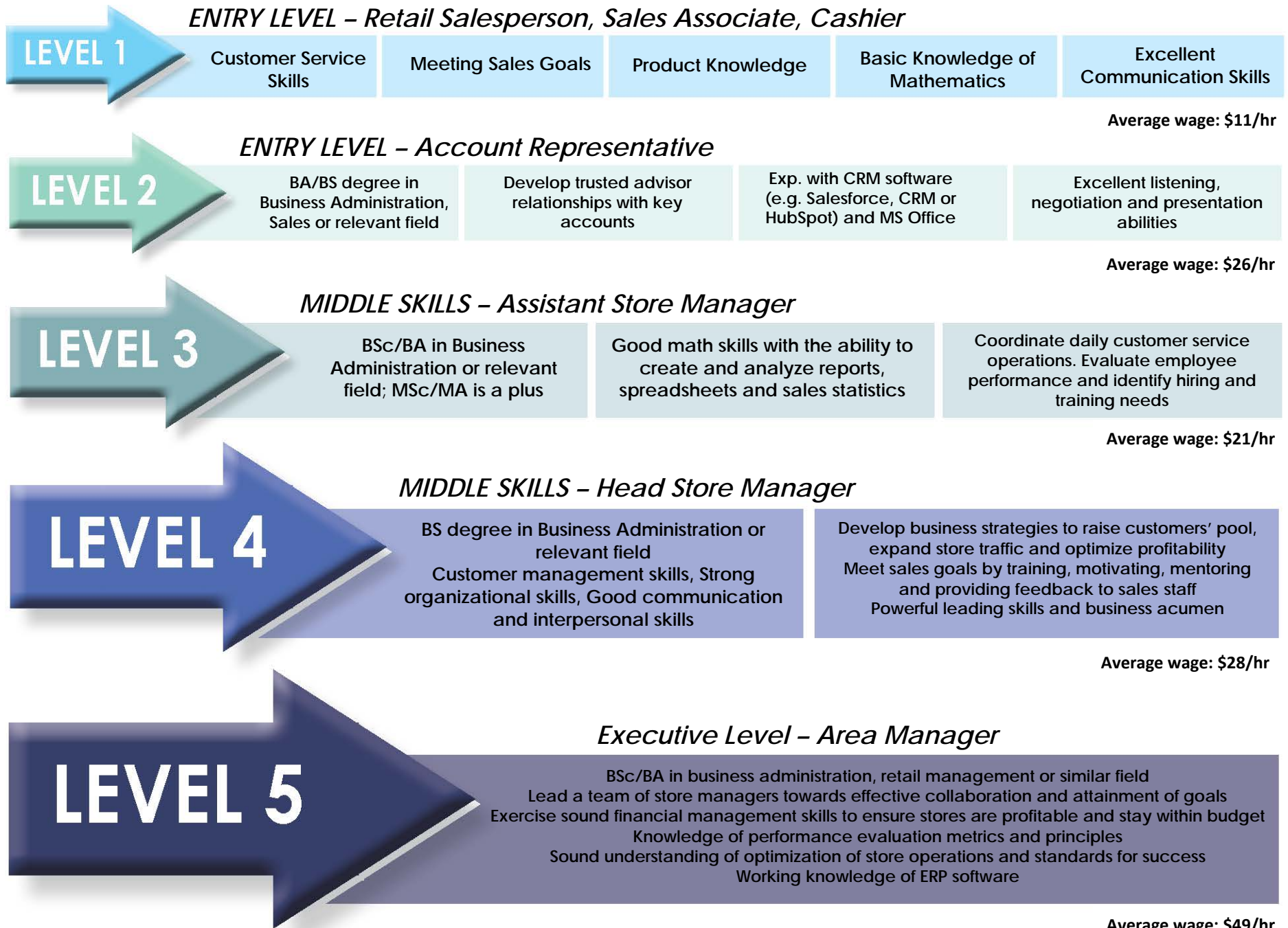
Note: All salary data taken from Salary.com for Worcester, MA area.

Manufacturing (MACWIC* Model)



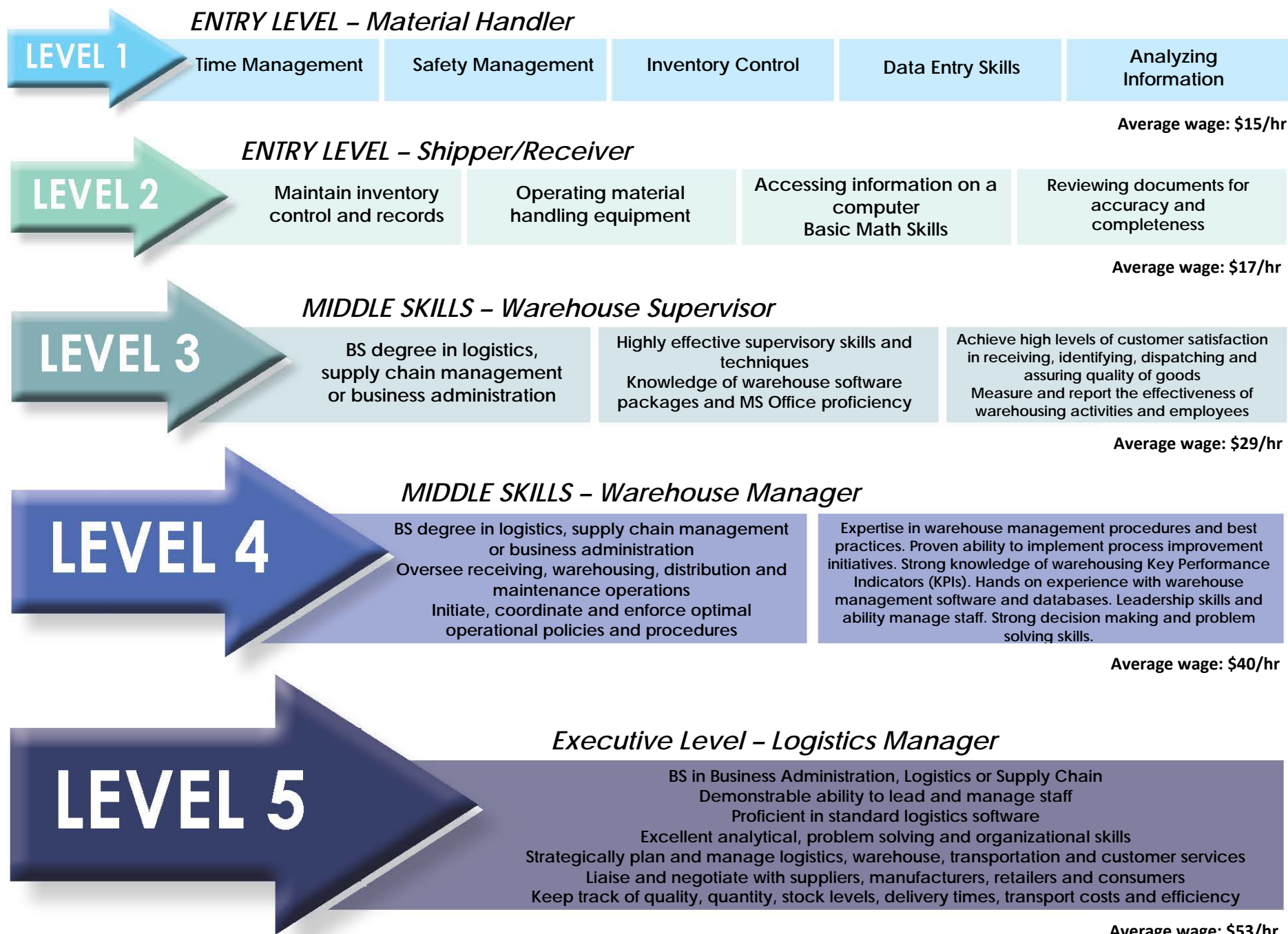
Note: All salary data taken from Salary.com for Worcester, MA area. *Information courtesy of the Manufacturing Advancement Center Workforce Innovation Collaborative

Retail



Note: All salary data taken from Salary.com for Worcester, MA area.

Transportation, Distribution & Logistics



Note: All salary data taken from Salary.com for Worcester, MA area.

Attachment 4: Credential Asset Mapping Tool

Complete one credential asset map for each priority occupation that requires a credential.

Occupation	<i>List the occupation the credential is for, including the SOC code.</i>	RN
Type of Credential & Title of Credential	<i>List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)</i>	BA Degree Plus License (NCLEX) National Council Licensure Examination
Credential Provider	<i>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.</i>	Anna Maria College - 12 Fitchburg State University – 61 MCPHS University – 207 Mount Wachusett Community College – 79 Quinsigamond Community College – 107 University of Massachusetts Medical School Worcester – 44 Worcester State University – 43
Integrated/ Accelerated	<i>Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?</i>	Basic learners could matriculate by starting as an Certified Nurses Aid, or Home Health Aids then move on to a pathway to an LPN (License Practical Nurse)
Online/ Classroom/ Work-based	<i>Describe education environment and instructional methods.</i>	Classroom and practical experience
Pell-eligible?	<i>Is the program Pell-eligible?</i>	yes
Fee?	<i>What are the fees?</i>	State College tuition rates
Employer-validated?	<i>Do local employers validate the credential? If so, describe.</i>	Yes RN's are in high demand in our region and most medical institutions require RN's to have their Bachelor's degree
Stackable?	<i>Is the credential stackable with other certificates? If so, describe.</i>	RN's are at the top of the stack
Portable?	<i>Are the credentials portable to other states/ industries? If so, describe.</i>	Yes RN's are recognized nationally
Credit/ Non-Credit?	<i>Are they credit or non-credit?</i>	These are credit programs

Gaps?	<i>Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?</i>	There is a current shortage and that shortage is projected to grow.
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Credential Asset Mapping Tool

Complete one credential asset map for each priority occupation that requires a credential.

Occupation	<i>List the occupation the credential is for, including the SOC code.</i>	Pharmacy Technician, 31-9095
Type of Credential & Title of Credential	<i>List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)</i>	Award of less than 1 academic year, Degree, Certification
Credential Provider	<i>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.</i>	Anna Maria College – 0 Monty Tech evening – 15 Quinsigamond Community College – 9
Integrated/ Accelerated	<i>Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?</i>	Yes, students participate in an externship
Online/ Classroom/ Work-based	<i>Describe education environment and instructional methods.</i>	This program may be completed 50% or more online through QCC
Pell-eligible?	<i>Is the program Pell-eligible?</i>	Degree programs are Pell eligible
Fee?	<i>What are the fees?</i>	QCC - \$400
Employer-validated?	<i>Do local employers validate the credential? If so, describe.</i>	Yes, credential is recognized by local employers
Stackable?	<i>Is the credential stackable with other certificates? If so, describe.</i>	A Pharmacy Technician can go on to become a Lead Technician or Pharmacist
Portable?	<i>Are the credentials portable to other states/ industries? If so, describe.</i>	Once an individual is nationally certified, they can work in any state in the US
Credit/ Non-Credit?	<i>Are they credit or non-credit?</i>	Credit
Gaps?	<i>Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?</i>	

Credential Asset Mapping Tool

Complete one credential asset map for each priority occupation that requires a credential.

Occupation	<i>List the occupation the credential is for, including the SOC code.</i>	Licensed Practical Nurse, 29-2061
Type of Credential & Title of Credential	<i>List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)</i>	Award of at least 1 but less than 2 academic years; National Council Licensure Examination (NCLEX) and graduation from a board certified nursing program
Credential Provider	<i>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.</i>	Assabet Valley Regional Technical School – 34 Blackstone Valley Voc. Regional School – 23 Mount Wachusett Community College – 41 Southern Worcester County Reg. Voc. School District (Bay Path) – 21 Quinsigamond Community College – 56 Monty Tech Regional High School and Worcester Regional Vocational High School
Integrated/ Accelerated	<i>Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?</i>	LPN's are required to have work experience. Basic learners would matriculate through Certified Nurses Aid or Home Health Aid programs
Online/ Classroom/ Work-based	<i>Describe education environment and instructional methods.</i>	Classroom instruction plus practical experience on site in a Healthcare facility
Pell-eligible?	<i>Is the program Pell-eligible?</i>	Degree programs are Pell eligible
Fee?	<i>What are the fees?</i>	Fee's vary; on average \$212 per credit hour at MWCC
Employer-validated?	<i>Do local employers validate the credential? If so, describe.</i>	Yes LPN is a nationally recognized credential
Stackable?	<i>Is the credential stackable with other certificates? If so, describe.</i>	Yes LPN's can earn a Bachelor's Degree and become BSN's and RN's
Portable?	<i>Are the credentials portable to other states/ industries? If so, describe.</i>	Yes this is a nationally recognized credential
Credit/ Non-Credit?	<i>Are they credit or non-credit?</i>	credit

Gaps?	<i>Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?</i>	LPN's are in demand and there are shortages, improved marketing strategies could have an impact.
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Credential Asset Mapping Tool

Complete one credential asset map for each priority occupation that requires a credential.

Occupation	<i>List the occupation the credential is for, including the SOC code.</i>	Registered Nurse, 29-1141
Type of Credential & Title of Credential	<i>List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)</i>	Associate's degree, Bachelor's degree, Master's degree
Credential Provider	<i>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.</i>	Anna Maria College - 12 Fitchburg State University – 61 MCPHS University – 207 Mount Wachusett Community College – 79 Quinsigamond Community College – 107 University of Massachusetts Medical School Worcester – 44 Worcester State University – 43
Integrated/ Accelerated	<i>Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?</i>	
Online/ Classroom/ Work-based	<i>Describe education environment and instructional methods.</i>	
Pell-eligible?	<i>Is the program Pell-eligible?</i>	Degree programs are Pell eligible
Fee?	<i>What are the fees?</i>	
Employer-validated?	<i>Do local employers validate the credential? If so, describe.</i>	Yes, credential is recognized by local employers
Stackable?	<i>Is the credential stackable with other certificates? If so, describe.</i>	
Portable?	<i>Are the credentials portable to other states/ industries? If so, describe.</i>	
Credit/ Non-Credit?	<i>Are they credit or non-credit?</i>	

Gaps?	<i>Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?</i>	
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Credential Asset Mapping Tool

Complete one credential asset map for each priority occupation that requires a credential.

Occupation	<i>List the occupation the credential is for, including the SOC code.</i>	Heavy and Tractor-Trailer Truck Drivers - 53-3032.00
Type of Credential & Title of Credential	<i>List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)</i>	Commercial Driver's License (CDL) Class A
Credential Provider	<i>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.</i>	Worcester Jobs Fund (WJF): 2 individuals
Integrated/ Accelerated	<i>Is the training integrated with work experience and/or accelerated for adult learners? If no, how do basic learners matriculate?</i>	Yes
Online/ Classroom/ Work-based	<i>Describe education environment and instructional methods.</i>	Training consist of classroom occupational training and hands-on over the road driving administered by a licensed and accredited training provider. Participants are prepared to take the written exam for the learners permit (required in order to get a license) and the CDL Class A road test through the MA Registry of Motor Vehicles. Participants must also pass vision test as a part of the learner's permit and a Department of Transportation physical for the road test. This permit is a pre-requisite to obtaining CDL Class A. Additional work-readiness training and placement services are provided.
Pell-eligible?	<i>Is the program Pell-eligible?</i>	No
Fee?	<i>What are the fees?</i>	\$30 for the permit test, \$35 for the road test and \$30 for the CDL endorsement, renewable every 5 years. A required background check will also cost \$86.50. An approximate training cost which includes all fees, books/supplies and classroom/road training is \$4,000 per participant. The Worcester Jobs Fund provides training and funding for the permit and road test free to eligible qualified applicants.
Employer-validated?	<i>Do local employers validate the credential? If so, describe.</i>	Through the RMV employers are able to validate and confirmed the permit and license credentials.

Stackable?	<i>Is the credential stackable with other certificates? If so, describe.</i>	Yes. Individuals can obtain additional endorsements on their license such as air breaks, hazmat, pig (attached forklift), tankers and doubles/triples (pulling 2 or 3 trailers).
Portable?	<i>Are the credentials portable to other states/ industries? If so, describe.</i>	A CDL A is similar to other driver's licenses and allows the driver to operate in other states (21 years or older) as long as the license is valid.
Credit/ Non-Credit?	<i>Are they credit or non-credit?</i>	Non-credit
Gaps?	<i>Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?</i>	Although formalized training is not required to obtain a permit and take the road test, the costs and required equipment (tractor-trailer) associated with testing mandate individuals invest in some form of training. Presently there are no CDL training providers permanently established in the Central MA region. The nearest schools are in Chicopee and Avon, MA (more than 55 miles away from Worcester). Since there is a clear skills gap between job seekers and employers in our region that will continue to grow if mechanisms are not put in place such as an established training center for CDL Class A.

Credential Asset Mapping Tool

Complete one credential asset map for each priority occupation that requires a credential.

Occupation	<i>List the occupation the credential is for, including the SOC code.</i>	Bus Drivers, Transit and Intercity - 53-3021.00/ Bus Drivers, School or Special Client - 53-3022.00/Light Truck or Delivery Services Drivers - 53-3033.00
Type of Credential & Title of Credential	<i>List the type of credential (e.g. Certificate, Degree, Certification, License, or Apprenticeship Certification)</i>	Commercial Driver's License (CDL) Class B
Credential Provider	<i>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.</i>	Worcester Jobs Fund (WJF): 15 individuals
Integrated/ Accelerated	<i>Is the training integrated with work experience and/or accelerated for adult learners? If no, how to basic learners matriculate?</i>	Yes
Online/ Classroom/ Work-based	<i>Describe education environment and instructional methods.</i>	Training consist of classroom occupational training and hands-on over the road driving administered by a licensed and accredited training provider. Participants are prepared to take the written exam for the learners permit (required in order to get a license) and the CDL Class B road test through the MA Registry of Motor Vehicles. Participants must also pass vision test as a part of the learner's permit and a Department of Transportation physical for the road test. This permit is a pre-requisite to obtaining CDL Class B. Additional work-readiness training and placement services are provided.
Pell-eligible?	<i>Is the program Pell-eligible?</i>	No
Fee?	<i>What are the fees?</i>	\$30 for the permit test, \$35 for the road test and \$30 for the CDL endorsement, renewable every 5 years. A required background check will also cost \$86.50. Approximate training costs which includes all fees and training is \$4,000 per participant. The Worcester Jobs Fund provides training and funding for the permit and road test free to eligible qualified applicants.
Employer-validated?	<i>Do local employers validate the credential? If so, describe.</i>	Through the RMV employers are able to validate and confirmed the permit and license credentials.

Stackable?	<i>Is the credential stackable with other certificates? If so, describe.</i>	Yes. Individuals can obtain additional endorsements on their license such as passenger and school buses.
Portable?	<i>Are the credentials portable to other states/ industries? If so, describe.</i>	A CDL Class B is similar to other driver's licenses and allows the driver to operate in other states (21 years or older) as long as the license is valid.
Credit/ Non-Credit?	<i>Are they credit or non-credit?</i>	Non-credit
Gaps?	<i>Are there gaps in the pipeline for this occupation that require new strategies in the blueprint?</i>	Although formalized training is not required to obtain a permit and take the road test, the costs and required equipment (vehicle) associated with testing mandate individuals invest in some form of training. Presently there are no CDL training providers permanently established in the Central MA region. The nearest schools are in Chicopee and Avon, MA (more than 55 miles away from Worcester). Since there is a clear skills gap between job seekers and employers in our region that will continue to grow if mechanisms are not put in place such as an established training center for CDL Class B.

Attachment 5: Central MA Demand-Driven Program Development

