

ABE/Workforce Development Action Plan Report

Contract #2017-31

Prepared: June 29, 2017
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National College Transition Network
World Education, Inc.

Overview

The City of Chelsea contracted with the National College Transition Network at World Education, Inc. (WEI), to study and report on local/regional adult education services and gaps in those services relative to local labor market needs, in order to provide recommendations for an action plan. Chelsea CONNECT, the intermediary managing the project, directed WEI to address the action plan recommendations to Chelsea CONNECT and the ABE/Workforce Development Advisory Group. This report provides a summary of the pathway research, makes recommendations for action, and compiles the primary supporting documents shared throughout the project.

The project commenced in September 2016 (although a pre-launch meeting with the Advisory Group was held in August) and ends with the submission of this report. Early into the project it became clear that the Advisory Group needed additional time to establish criteria, and to more fully consider additional labor market information. To accommodate this need, the original number of planned meetings increased from three to five.

Key Actions September 2016 – January 2017

- Developed a collaborative working group.
- Established a common understanding of career pathways through WEI's sharing of research on career pathway models.
- Analyzed information that the WEI team collected from Advisory Group members and home organizations to inform the selection of career pathway selection, target wage, and criteria for pathway selection.
- Selected three pathways for further investigation: Advanced Manufacturing, Construction and Property Management, and Healthcare.
- Agreed that the entry point of the chosen pathways is the first point on a career pathway and that the target wage for the first exit point would be \$17/hour - \$35,000 annual wage).

For more details about these actions, see the Interim Report located in the Supporting Documents section of this report.

Key Actions: February –June 2017

- Researched the three career pathways identified by the Advisory Group for priority.
- Presented information and analysis to the group.
- Analyzed information and identified recommendations for action.
- Conducted action planning session based on WEI's recommendations for action.

Recommendations for Action

World Education convened a meeting of the Advisory Group on June 1, 2017 to present initial recommendations for action and solicit feedback in an effort to make the Chelsea ABE/Workforce Development Action Plan realistic and achievable. An action plan template populated by WEI with the recommendations and the priority action steps for each recommendation guided the discussion. This framework may be found, with the additional information added at the June 1 meeting, in the Supporting Documents section of this report.

These recommendations are related to overall network development and building linkages to existing services in order to create the foundation necessary for developing an effective career pathway system.

RECOMMENDATION #1

Build network capacity and strengthen the foundation that is essential to build an effective career pathways system.

Rationale: ABE/Workforce Advisory members expressed interest in seeing the group continue beyond this project. A strong foundation and commitment to a shared mission is required to build and sustain an effective career pathway system.

RECOMMENDATION #2

Build stronger linkages to stakeholders (e.g. REB, training providers, employers, NAMC), to increase accessibility and opportunity for Chelsea residents.

Rationale: There are underutilized training resources in the region that could be accessible to Chelsea residents with improved linkages. Steps to leverage local/regional expertise and resources should be taken before any attempts to duplicate or develop similar local training.

RECOMMENDATION #3

Build individual program capacity

Rationale: Individual organizations and programs need to use the expertise tapped by the network to inform their curriculum and program design so that they are better equipped to help participants explore, prepare for, and access the opportunities, options, and career pathways.

Continuing to use the action plan template as a guide, it is now the work of the Advisory Group to flesh out the details and outline the activities, identify the leads, target dates, resources, opportunities, and constraints as they emerge, through an iterative process. Although the grant was managed by Chelsea CONNECT, the intermediary for the project, WEI recognizes that the grant for this project came from the City of Chelsea. Going forward, we hope that the City of Chelsea will support the Advisory Group members in implementing the plan.

Summary of the Pathways Research: Advanced Manufacturing, Construction and Maintenance, and Healthcare

World Education researched the three selected careers to identify the opportunities, challenges, and gaps in services for Chelsea residents, and to suggest how the Advisory Group might address them. WEI shared an initial summary of their research with the Advisory Group on March 27, 2017. WEI facilitated a meeting on June 1, 2017 to present initial recommendations and solicit the group’s input into the action steps. WEI integrated the group’s feedback into this final version of the pathway research and used it to shape the action plan recommendations.

WEI gleaned labor market data from the MA Executive Office of Labor and Workforce Development, the U.S. Department of Labor’s Bureau of Labor Statistics, Massachusetts Career Information Systems (MA CIS), and Occupational Employment and Wages Estimates Massachusetts, 2014. The skill analysis was conducted using occupational profiles found in O’NET; The Occupational Outlook Handbook; a variety of industry reports; interviews with key training providers in Boston, across Massachusetts, and in other parts of the country; scans of online job postings in the region; and reviews of the websites of large regionally-based companies in a given industry sector.

Interviews with staff from the Metro North Regional Employment Board and other industry experts fleshed out details about the labor market, pathway training opportunities, and skill analysis that the labor market data did not capture. The section on training and education opportunities builds on the ABE and workforce training services inventory WEI developed for Bunker Hill Community College under a separate scope of work. Also, the WEI team leveraged their direct experience, and statewide and national networks to identify models and best practices for these pathways.

Advanced Manufacturing Pathway

Opportunities

- There are entry- and mid-level positions that don’t require more formal education than high school diploma.
- There are opportunities for advancement once within the industry.
- Labor market indicators—including job descriptions—show that there is still growth in the region.
- Northeast Advanced Manufacturing Consortium (NAMC) is an established consortium of training providers (including Bunker Hill CC), WIBs (including Metro North), career centers (including Career Source), and businesses working together on the talent pipeline, training opportunities, etc.
- NAMC has developed deep industry knowledge and broad regional employer partnerships.
- Advanced manufacturing is aligned with Metro North REB’s priorities.

Challenges and Gaps

- The level of reading, writing, and math skills required for the training (8-10 GLE) may still be out of reach for many without remediation (or integrated training and education approach).
- Employers require high school diploma or equivalent, so training providers must, too. Even if employers use HSE as a proxy for a skill level that can be attained without HSE, they haven't moved off of this requirement.
- NAMC has not developed a model for recruiting and bridging from ABE and the few bridging attempts in the North Shore haven't been successful for a variety of reasons.
- NAMC's rotating training model has strengths (gives time to build bridge) and challenges (have to wait for turn when it comes around locally).
- Lessons from programs that offered some bridges to manufacturing: tough sell, still a big reach, need more time for career exploration and engagement in a contextualized atmosphere.
- Lessons from Jane Adams Resource Corporation (JARC) is that the bridge program needs to be in a workplace simulated environment (machine shop) to give people a realistic sense of the work and generate excitement and interest in the hands-on work. Students don't gain enough exposure through contextualized ESOL and site visits. The latter describes the model North Shore CAP and other ABE career pathways programs tried with very limited success.
- In addition to building skills and bridges to manufacturing, additional career awareness campaigns are required to generate interest in manufacturing jobs. Consortia like NAMC and a similar one in Hampden County, Precision Manufacturing Regional Alliance Partnership, focus their educational and outreach campaigns on high school students, with minimal attention to adult learners. <http://www.rebhc.org/wp-content/uploads/2012/01/AMP-it-Up-FINAL-Report-March-21-2016.pdf>

Questions

- Where does food production and manufacturing in Chelsea fit into the landscape?
- The food manufacturing companies in Chelsea, like Kayem, don't come up in the scan of manufacturing positions that we've explored and there is no information about job openings and hiring on the websites (more in machining).
- What do we know about students working in these companies? Is there a pathway that can be developed from these jobs to higher paying jobs in advanced manufacturing?

LABOR MARKET INFORMATION

Massachusetts (2014 – 2024)	Median Hourly Wages*	Growth # openings/ year	Growth %	Postings using 02150 (25 miles)	Description
Team Assembler SOC:51-4031.00	\$14.00 MA \$14.00 MN	360 (2120 in MN currently)	-1%	80-100 manufacturing jobs, but difficult to accurately count for each position because regardless of which SOC used as filter, all come up in search.	Work as part of a team having responsibility for assembling an entire product or component of a product.
Computer Numerical Control (CNC) Operator SOC: 51-4011.00	\$20.80 MA \$23.40 MN	70 (190 in MN currently)	-5%		Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.
Electronic Equipment Assembler SOC: 51-2022.00	\$17.45 MA \$16.60 MN	70 (1,060 in MN currently)	-6%		Assemble or modify electrical or electronic equipment, such as computers, test equipment, telemetering systems, electric motors, and batteries.
Manufacturing Production Technician SOC: 17-3029.09	\$33.33 MA \$31.34 MN	20 (160 in MN currently)	-2%		Set up, test, and adjust manufacturing machinery or equipment, using any combination of electrical, electronic, mechanical, hydraulic, pneumatic, or computer technologies.
CNC Machine Programmer SOC = 51-4012.00	\$24.54 MA \$29.37 MN	20	-3%		Develop programs to control machining or processing of metal or plastic parts by automatic machine tools, equipment, or systems.

*Median wages are usually a good proxy for wages of workers in the position for a few years.
None of these positions show up under most job openings in Metro North WDA. The industry projections in MN WDA vary depending on the type of manufacturing.

REQUIREMENTS

Occupation	Education and Training	Certifications	Relevant Industry Associations
Team Assembler	Usually requires a HSE (JZ 2).	Most of the job descriptions don't indicate more than HSE, and ability to read and write English.	<ul style="list-style-type: none"> • Northeast Advanced Manufacturing Consortium (NAMC) • Mass Manufacturing Extension Partnership (Mass MEP) • National Institute for Metalworking Skills (NIMS) offers a host of sequential credentials. • IPC – Association Connecting Electronics Industries • Manufacturing Skills Standards Council (MSSC) • American Society for Quality (ASQ-Certified Quality Inspector)
Computer Numerical Control (CNC) Operator	May require vocational training, on-the-job experience, or an associate's degree (JZ 3).	Most of the job descriptions don't indicate more than HSE, but do look for years of experience and ability to read and write English.	
		CNC Milling 1 certification may offer an advantage to those without experience.	
Electronic Equipment Assembler	Usually requires a HSE (JZ 2).	Most of the job descriptions don't indicate more than HSE, but do look for years of experience and ability to read and write English.	
		Some preference for IPC soldering certifications.	
Manufacturing Production Technician	May require vocational training, on-the-job experience, or an associate's degree (JZ 3). Computer skills. Depending on industry, may require drug screening.	Certified Production Technician is a related credential, but rarely required in job postings.	

CNC Machine Programmer	May require vocational training, on-the-job experience, or an associate's degree (JZ 3).	Series of NIMS certificates are related, but rarely included in the job postings.	
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Skills: All of the positions posted specified the importance of reading and communicating in English. The CNC and Manufacturing Production Technicians also specify computer literacy, math skills, proficiency with types of manufacturing software (e.g., SAP), and familiarity with various manufacturing standards and practices (e.g., Lean, Good, etc.).

These positions are all on the production side of manufacturing because that's the pathway the REB has outlined. Another side of the pathway not included here is the transportation, logistics, and distribution, which also features entry-level positions. Additionally, quality control positions were not included in the original MN REB schema, but will be a focus of the new TechHire Grant.

TRAINING PROGRAMS

Northeast Advanced Manufacturing Consortium (NAMC) <http://www.namcnetwork.com/>
Robin Dion, Metro North REB is the Consortium Manager, rdion@mnreb.org

NAMC is a collaboration among manufacturing companies, WDBs, career centers, community colleges, and vocational/technical high schools created in 2012 to define and implement the Commonwealth's advanced manufacturing strategy within the Northeast MA.

- NAMC runs 19-week training programs sponsored by various community colleges and vocational/tech schools in the region.
- The first five weeks are held at the participating college, the second 14 weeks are held at the participating vocational technical HS.
- The course prepares graduates for entry level employment at precision machining or electronic assembly companies in the region.
- Eligible applicants must score at least an 8th Grade Level Equivalent (GLE) in reading and math, but those closer to 10th GLE are more successful.
- English proficiency is necessary for training and employment (they haven't piloted any sort of contextualized English support directly through the consortium).
- To date 160 individuals have been trained under the consortium.
- Over 80% of individuals have been placed in employment.
- Piloting new Quality Technician Training (6 weeks, 120 hours) in June, 2017.
- Over 80 companies have hired graduates.
- 200 total companies are participating in some way.

NAMC has expanded the number of training partners to now include Bunker Hill Community College, Somerville and Medford Vocational High Schools who launched a training cycle in January 2017. BHCC teaches the foundational skills component and vocational component at Somerville High School.

NAMC employer partners tend to be concentrated north of Chelsea, but the consortium is working on identifying and engaging companies that are in the Chelsea and Bunker Hill area and more accessible by public transportation.

Career Source piloted the use of Career Ready 101 to remediate math skills for applicants who fell below the required math level. All but two of the recruits met the baseline skills requirements. Trainees will be done in June and Metro North REB is working on identifying employers accessible by public transportation.

The New TechHire Grant will focus on youth and young adults, ages 17 to 29 with barriers to employment, as well as veterans and individuals with disabilities, limited English proficiency, criminal records, and long-term unemployment. BHCC will be a training provider for future cohorts, offering

the 6-week, 120-hour program ending in a Certified Quality Inspector credential. Free to those who qualify. Schedule to be determined.

LARE Training Institute

<http://www.americantraininginc.com/groups/lare-institute/>

The Andover campus offers training and certificates in electronic assembly and soldering inspection.

Northeast Metropolitan Regional Vocational High School

<http://www.neadulthood.com/courses/trade-preparation>

Based in Wakefield, the Community Education Department offers tuition based-courses on welding and welding certification test preparation. They offer classes in the evening.

North Shore Community College, Lynn Campus

<https://www.northshore.edu/academics/guided-pathways/pdf/mnc.pdf>

The 25-credit certificate in Advanced Manufacturing targets students with prior work or learning experiences through hands-on applications at a vocational/technical high school or related employment in a manufacturing/machining environment.

Center for Manufacturing Technology, Woburn

<http://www.customtrainingcenter.com/about.html>

The Center for Manufacturing Technology (CMT) is a full service training facility specializing in machine shop training. Students gain hands-on experience using milling, lathe, and grinding machines. A variety of certification courses are offered, such as Certified Machine Technician and NIMS certificates. Classes begin weekly offering diverse scheduling options.

CMT provides training for Middlesex Community College Manufacturing Technology Program

<https://www.middlesex.mass.edu/careertraining/manufacturing.aspx>

Prerequisites for Middlesex Program: A study of signed numbers and the order of operations, powers, laws of exponents, roots, linear equations, point plotting, graph of straight lines, and a brief introduction to plane geometry.

For example, General Machine Shop Practices (#C009) was funded through a state Manufacturing Training Grant in 2016. This is a comprehensive course consisting of 101 Classes taught in two hour interactive lessons. The classes are designed to introduce students to Precision Machining. The program covers: Math Fundamentals, Basics of Tolerance, Blueprint Reading, Shop Algebra, Structure of Metals, Fixture Design Basics, Mechanics of CNC, CNC Specs for Mill and Lathe, and Creating a Milling Program. The student will also gain hands-on experience, creating hand tools or locating devices, through participation in five school projects or practical "labs". Enrollment cycles are 40 weeks in length (5 days-per-week, 6 hours-per-day).

Prerequisites: Students must be at least eighteen years of age; have a High School Diploma, GED, or equivalent; and have some understanding of Math and basic Algebra. Students should possess a

strong mechanical aptitude, have good problem-solving abilities, and be able to work independently. Experience working with machinery is helpful.

Objectives: A CMT Certificate and up to four NIMS credentials are awarded upon successful completion.

LESSONS FROM BRIDGE TO MANUFACTURING PROGRAMS IN OTHER REGIONS

North Shore Community Action Program (NSCAP)

NSCAP partnered with North Shore WIB and Career Center on an Adult Career Pathways grant to build a pathway to manufacturing using an ESOL curriculum contextualized to exploring manufacturing careers. They adapted some of the Transformation Agenda modules on manufacturing. They also visited local companies such as Analogic and Millipore, but students didn't see workers like themselves there (Spanish and Portuguese speaking women).

Ultimately, students were not interested in manufacturing work. It's hard to break down the image of it as monotonous and dead-end at the entry level. The demands of shift work are also unattractive, especially for women. Most of the recruitment is through temp agencies (and temp-to-hire).

The curriculum added value, nonetheless, because the lessons on LEAN manufacturing, problem solving and continuous improvement were interesting and transferable to other occupations of interest.

More career awareness and outreach, aligned with and supported by the NAMC member companies as well as role models and champions from students' communities is needed to make the pathway attractive and viable.

Center for New Americans/CNA (Northampton)

CNA put together a bridge class to help English Language Learners prepare for GCC's grant-funded Foundational Manufacturing Course, which was a free four week evening program which meets 20 hours-per-week, to prepare students for entry level manufacturing positions or to enter GCC's Advanced Manufacturing Pipeline (AMP) CNC certificate program. Even the four week course was a bit of a reach for the CNA students, so GCC broke up the four week course into modules that were more spread out in topics such as OSHA, math for manufacturing, blueprints, and metrology. They also had Tooling U (online curriculum) accounts through GCC.

Most of the CNA students did not make it past OSHA or math modules. They were placed in jobs, primarily in warehouse (shipping and receiving) positions, but it's not clear that they couldn't have qualified for these entry level positions without the four week training. The AMP CNC training was out of the reach of most of the students, given the academic skill requirements to enter.

The requirements were SPL 5-6 (intermediate advanced English) and some interest in manufacturing. They didn't screen for math skills. If CNA were to run the bridge program again, they would make the screening and intake more rigorous. The Foundation instructors also recommend that the

manufacturing program be more hands-on, perhaps alternating weeks in the classroom and shop to help students engage and connect the academics to the work.

Employer and Industry Information

In the Northeast region, fabricated metal products and machinery comprise 41% of the companies, and computer and electronic product manufacturing is the second largest cluster (23%) of companies. Overall, food processing and production comprises just 9% of the region's manufacturing. However, many of the Chelsea residents working in manufacturing are working in the lower-skilled, lower-paid food processing, for example State Gardens, Kayem, and Signature Breads. Information about job openings, hiring requirements, or opportunities for training and advancement were not available on these companies' websites.

Scan of Job Postings

Many of the manufacturing companies use staffing agencies, such as National Engineering Service Corp (NESC) and Randstad). A search of entry level positions, such as Assembler and CNC Operator, within a 25 mile radius of Chelsea yielded openings in Bedford, Danvers, Andover, Peabody, Merrimack Valley, and among NAMC member companies, but none in Chelsea.

Metro North REB held a NAMC event in 2016 with Middlesex and these companies:

- ABIOMED
- Boston Centerless
- Essco Calibration Laboratory
- General Electric
- Laser Services
- Microline Surgical
- Sekisui Voltek
- Paradigm Precision
- Smyth Companies
- LLC Dow Division
- Xperttech
- WestRock

SkillUp Washington's Manufacturing Employer Survey

<https://skillupwa.org/resources/manufacturing-employer-survey/>

Though respondents are manufacturing businesses in WA, there is information about employer challenges, hiring needs, and recommendations for preparing students for entry into the field, and for retention and advancement once hired.

Construction and Maintenance Pathway

Opportunities

- Labor market still seems good for construction trades and maintenance.
- Many settings with maintenance needs – Hospitals, hotels, universities, housing complexes are the many settings where property maintenance technicians are needed.
- Aligned with MN REB priorities.
- There are high quality programs in Boston that are recruiting participants for building maintenance (BEEMS) and pre-apprenticeship trades (Building Pathways) programs that are accessible by public transportation. These programs are eager to reach out to Chelsea residents for information sessions and recruitment. Building Pathways has union penetration and industry expertise that would be hard to duplicate (and why duplicate it when it's accessible?).
- May be able to enter both construction and maintenance side with limited training, but advancement requires additional training and English skills.
- Maintenance may provide pathway that's easier to access and easier physically without competing with/for unions and apprenticeship slots.
- Associated Builders and Contractors (ABC) may have an increasing commitment to diversity under Morrissey St. Preux's leadership.
- Hospitals, hotels, universities, housing complexes are the many settings where property maintenance technicians are needed.
- Metro North REB (Chris Abrizio Lee) is interested in developing pathways to property maintenance jobs and companies and researching Certified Occupation Specialists as an accessible occupation.
- Search of facilities maintenance positions yielded a few that required additional certifications beyond some knowledge of basic repairs (in multiple trades). However, they do require HSE and a drivers' license.

Challenges and Gaps

- Union and apprenticeship training is hard to navigate and access. Each has their own application schedule and takes applications only periodically.
- Industry expertise really key at all levels of program design and implementation. Can generalists be effective?
- Maintenance pathway and requirements are not fully developed and will require more research and interviews with local companies to map.
- Still requires HSE, reading, writing, English, and some computer literacy (for maintenance and management, especially).
- The unionized commercial construction industry in Boston lacks the capacity to advance individuals who do not have strong English skills. Pre-apprenticeships and apprenticeships might consider incorporating contextualized English language learning into the career pathway. Associated Builders and Contractors (ABC) is considering an English support class for pre-apprentice candidates.

- Most of Building Pathways students are Boston residents because the unions are recruiting from Boston for residency requirements. BP can take non-Boston residents, but they have to place them in other jobs. The requirement is 50% residents. The state and federal jobs have different requirements.
- Limited bridge training programs for adults that include support services.
- Apprenticeships are not appropriate for someone who needs a job right away, because the training is full time and there is a lag between the pre-apprenticeship and the apprenticeship, though they will help with stop-gap job placement.

Questions

- What lessons can be learned from the Chelsea Connect pilot? How can you build on the contacts made with training and industry and implement with sufficient planning, partner development, coordination, and industry input?
- How to partner with the Pre-Apprenticeship programs (union-based and non-union based) to develop pathways and opportunities for low skilled residents?
- How does the group feel about pursuing non-union training and companies?

LABOR MARKET INFORMATION

Metro North REB has identified Construction/Property Management in the 3-year strategic plan as a primary industry sector to research, making it a board. Additional labor market information on this sector will be compiled by the REB early in FY18.

Massachusetts (2014 – 2024)	Median Hourly Wages*	Growth # openings/ year	Growth %	Postings using 02150 (25 miles)	Description
Construction Helpers (MA CIS)	\$19.00	54	7%		Construction helpers are entry-level workers. They have skilled trades with a variety of basic tasks. They also use the materials and tools of the trade.
Construction Laborers	\$23.67	510 (MA)	+2%	32 – US Jobs 19 – Career Building	Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types. May assist other craft workers.
SOC: 47-2061.00		53 (MNWDA)			
Construction Carpenters	26.84	380	+5%	14	Construct, erect, install, and repair structures and fixtures of wood, plywood, and wallboard, using carpenter's hand tools and power tools.
SOC: 47-2031.01					
Maintenance and Repair (General)	\$20.62	680	+4%	280 – US Jobs 580 – Job Bldrs (few near Chelsea)	Perform work involving the skills of two or more maintenance or craft occupations to keep machines, equipment, or structures in repair.
SOC: 49-9071.00		81 (MNWDA)			
Painters, Construction, Maintenance	\$20.54	120	+3%	5	Paint walls, equipment, buildings, bridges, and other structural surfaces.
SOC: 47-2141.00					
Building Maintenance (MA CIS)	\$20.62	760/120 MA/Boston	+5%/ +6%	Job postings more in the \$15/hour start range	Primary job is to maintain the safety and comfort of the occupants of the building. Work on all the mechanical systems of the buildings. This includes HVAC, plumbing and electrical jobs (only jobs where licensing isn't required).

Massachusetts (2014 – 2024)	Median Hourly Wages*	Growth # openings/ year	Growth %	Postings using 02150 (25 miles)	Description
Property, Real Estate, Associations Manager SOC: 11-9141.00	\$35.91	140/47 MA/Boston	+1%/ 6.5% MA/ Boston	25 – US Jobs 27 – America's Job Xchange	Coordinate the selling, buying, leasing of real estate properties. Includes managers of owned, rented, or leased housing units/buildings.
Certified Occupancy Specialist	N/A				From Posting for Recertification Specialist: Responsible for handling all certifications and all necessary paperwork to comply with regulatory agencies. Maintain accurate reports. Also see Property Manager/Assistant Property Manager.

*Median wages are usually a good proxy for wages of workers in the position for a few years. For example, Building Maintenance median wages are \$20.62/hour, but job listings posted wages closer to \$15.00/hour.

From Building Futures: Crafts expected to be in highest demand and are carpenters, masons, pipefitters, heavy equipment operators, electricians, and welders. Specific areas of opportunity for construction (and maintenance) will be: Senior housing and healthcare residences; renovation and expansion of older homes; Repair and remodel of existing homes; Replacement of many industrial plants; Medical treatment facilities; Infrastructure maintenance and repairs (e.g., highway, bridge, and street construction); Power line and related construction. Many tradespeople are up for retirement, causing additional replacement openings.

REQUIREMENTS

Massachusetts	Education and Training	Certifications	Relevant Industry Associations
Construction Laborers	Usually requires a HS Diploma and some preparation. (Job Zone 2).	Many certifications on the market. Requirements vary by employer, typically: <ul style="list-style-type: none"> • OSHA 10 or 30 • Valid Driver License 	<ul style="list-style-type: none"> • National Center for Construction Education and Research (NCCER) • New England Carpenters Fund • Boston Building Trades • National Association of Home Builders • Association of Builders and Contractors
Construction Carpenters	Usually requires a HS Diploma and some preparation. (Job Zone 2).	Variety of certifications on the market. Requirements vary by employer, typically: <ul style="list-style-type: none"> • OSHA 10 or 30 • Valid Driver License 	<ul style="list-style-type: none"> • National Apartment Association • National Hotel and Lodging
Maintenance and Repair (General)	Usually requires training in vocational schools, related on-the-job experience, or an associate's degree. (Job Zone 3).	Some certifications on the market (Nat'l Apt Association, Nat'l Hotel and Lodging). Requirements vary by employer, typically, postings list general understanding and experience with one or more – HVAC, electrical, plumbing – preferred, but certification not required. <ul style="list-style-type: none"> • OSHA 10 or 30 • Valid Driver License 	<ul style="list-style-type: none"> • National Apartment Association • National Hotel and Lodging
Painters, Construction, Maintenance	Usually requires a HS Diploma and some preparation. (Job Zone 2).	Some certifications on the market. Requirements vary by employer, typically, postings list general understanding and experience with one or more – HVAC, electrical, plumbing – preferred, but certification not needed.	<ul style="list-style-type: none"> • National Apartment Association • National Hotel and Lodging

Massachusetts	Education and Training	Certifications	Relevant Industry Associations
		Job postings are interchangeable with maintenance and repair.	
Building Maintenance (MA CIS)	HS or equivalent, on-the-job training, skills in trades such as plumbing and construction.	Most job posting don't indicate that certifications are required. HVAC and electrical maintenance listed as below those where trade licensing required.	<ul style="list-style-type: none"> Facilities Management Association National Apartment Association
Property, Real Estate, Associations Manager	Bachelor's degree and experience.	NCHM and others offer certification, but not always required.	<ul style="list-style-type: none"> National Center for Housing Management American Apartment Association
	Maintenance workers may also advance as managers.	Some postings list Certified Apartment Manager (CAM) or Accredited Resident Manager	
Certified Occupancy Specialist (or Recertification Specialist)	<p>A scan of job postings finds this function embedded in Property Manager and Assistant Property Manager positions requiring 2-4 year degrees plus certification.</p> <p>A posting specifically for Recertification Specialist required just a HSE.</p> <p>Knowledge of affordable housing programs such as Low Income Housing Tax Credit (LIHTC) or HUD is beneficial.</p>	Certified Occupancy Specialist granted by the National Center for Housing Management.	

EDUCATION AND TRAINING AVAILABLE LOCALLY (INCLUDING ABE, SKILLS TRAINING, BRIDGE TRAINING)

Building Energy Efficient Building Maintenance (BEEMS)

Asian American Civic Association, Chinatown (Training at Madison Park Voc. Tech HS, Roxbury)

<http://aaca-boston.org/programs-services/job-training/technician/>

The BEEMS Program is a 22-week long program that trains participants for a career as a maintenance worker/engineer. It teaches the fundamentals of carpentry, plumbing, painting, electricity, appliance repair, and cleaning plus English, math (area, perimeter, fractions), and basic computers. Graduates earn OSHA 10 certification.

This course includes a new “green” curriculum on energy efficiency and weatherization. The course includes a five-week internship with major hotels and property management companies. Program may be free for low-income or dislocated workers who qualify for WIOA funding.

- Must pass basic English, math, and writing tests (SPL 5 and 5th GLE, reading, writing, computation)
- GED / High School diploma
- Valid U.S. driver’s license (preferred for training, required for most jobs)
- 20 hrs./week, Monday-Friday 2:30 pm - 6:30 pm
- Graduates are hired in f/t maintenance positions starting at \$16 - \$18/hour with benefits.
- Some apply for union apprenticeships

Building Pathways Pre-Apprentice Program

ABCD – Training takes place in Dudley Sq.

<https://buildingpathwaysboston.org/>

This six-week program was originally established and sponsored by the Boston Building Trades, so there are deep industry expertise and connections. The goal is to prepare participants to gain preparation and a competitive edge in the apprenticeship application process. The training is general and students get exposure to a variety of trades through field trips to different shops. Graduates earn OSHA 10 and Pre-Apprentice certificates.

- 18 years or older
- Specifically targeting women and communities of color
- BP does serve Chelsea in their range – minimum age is 18, targeting women and communities of color
- Screening includes attending information session, drug test, interest in construction
- High School Equivalency
- TABE testing
- Physical aptitude test (can they follow instructions)
- Valid driver’s license
- 6-weeks training, Monday-Friday, 7:00 am - 3:30 pm

Placement rate is over 86% -- either in apprenticeship or a job in the industry leading to an apprenticeship.

The numbers of apprenticeship openings vary from trade-to-trade and year-to-year, but there are always more applications than openings.

Youth Build/Boston Trades Assessment Center at RCC

<http://www.youthbuildboston.org/new-programs/>

The three-week Introduction to Building Trades Program offers participants exposure to construction trades and OSHA 10, CPR/First Aid, RRP, Signal Rigger and 2A/IC Forklift Crane certifications. This is a pre-requisite for the nine-week Construction Methods and Materials Program. The nine-week program consists of 400 hours of hands-on, onsite building with certified instructors. Participants who complete the nine-week course earn a Pre-Apprentice certificate and three college credits that can be applied towards an associate's degree in Engineering, Management, and Liberal Arts.

- 18-26 years old only
- Monday-Friday from 8:00 am – 4:00 pm
- Also have a Building Trades Exploration class for HiSET preparation and exposure to trades for 16-24 year olds

Just a Start YouthBuild, Cambridge

<https://www.justastart.org/education-and-training/youthbuild/>

JAS YouthBuild is a comprehensive youth development program for 16 to 24 year-old out-of-school-youth that provides education leading to grade level increases and credential attainment (high school diploma or HiSET – formerly GED); career exploration and employment skills building; and leadership and life skills training. Through their housing community service work experience, youth gain occupational skills in construction leading to HBI PACT and OSHA certificates (industry recognized credentials).

BHCC - Energy and Sustainability Management

<http://bhcc.edu/programsofstudy/programs/energyandsustainabilitymanagement/>

This is a 26-28 credit certificate program combining coursework in project management and finance for renewable and efficient energy projects with training in operating and maintaining buildings. “Graduates of the ESM program may seek employment in a variety of entry-level positions such as technicians, coordinators, administrators, sales representatives, or specialists in a wide range of industries including renewable energy, construction, facilities management, environmental protection services, energy efficient services, utilities, and industrial operations. In addition to earning BHCC’s ESM Certificate, graduates will qualify to sit for the LEED Green Associate (LEED GA) exam, a nationally recognized certification administered by the US Green Building Council.”

Minuteman Technical Institute (MTI), Lexington

Building Construction Technology

<http://www.minutemanti.org/post-graduate-programs/programs-one-pagers/building-construction-technology>

Minuteman provides the technical training for the Associates in Building Construction Technology offered by Middlesex CC. Minuteman Tech also offers a ten-month, tuition-based program in residential carpentry for adults. In addition to a Construction Technology Certificate from MTI, graduates earn OSHA 10 and one year's credit towards Construction Supervisor License.

- 10 Months, daytime program - September-June
- Tuition and fees for an out-of-district student are \$7,300

Associated Builders and Contractors Massachusetts (ABCMA)

<http://www.abcma.org/about-us.html>

Morisset St. Preux is the new Merit Apprenticeship Program (MAP) Director

The Massachusetts Chapter of Associated Builders and Contractors is the largest construction trade association in the Commonwealth, representing over 400 local general contractor, subcontractor, supplier, and associate companies. These companies employ more than 22,000 workers throughout Massachusetts.

ABC promotes a “merit” philosophy, which is that “all construction contracts, both public and private, should be awarded to the lowest responsible bidder, regardless of labor affiliation”.

ABC sponsors the Merit Apprenticeship Program (MAP) at 20 Merit Apprenticeships slots in a variety of trades about every six months in Boston and they have trouble filling them with eligible candidates. They are looking for people who have some background in the trades already, enough to know what the work entails and to have made a deep commitment to it. Otherwise, ABE is reluctant to invest time and money in apprenticeship.

Requirements:

- Attend an Apprenticeship 101 Orientation
- Be at least 18 years of age
- High School Equivalency
- Possess a valid driver's license and have a dependable means of transportation
- OSHA 10
- Applicants who make it through initial screening may be asked to take a physical aptitude test, depending on the trade of interest (some prior experience in and commitment to trades)

ABC doesn't have an English minimum requirement now, because it's not required by state or federal government. But, they are now piloting an ESOL (or Spanish/English) class (through Gould) for laborers working in ABC member companies, because language is an increasing issue.

Gould Construction Institute, Woburn

<http://www.gwgci.org/>

Gould is a proprietary school that provides the classroom-based training component for the Merit Apprenticeship Program sponsored by Associated Builders and Contractors (ABC).

Gould also takes walk-ins for training (who are not in registered apprentice programs). In this case, tuition is \$1,775 for the classroom-based training that would result in a certificate of hours completed. They also offer short-term certification trainings, such as OSHA 10. A graduate would have to be hired by a company to complete their on-the-job training hours. Gould doesn't do any career development or job placement. They also take graduates of pre-apprenticeships.

Application requirements:

- 18 years old
- High School Equivalency
- No testing, just an application

Northeast Metropolitan Regional Vocational High School

<http://www.neadulted.com/courses/trade-preparation>

Based in Wakefield, the Community Education Department offers tuition based-courses on cabinet making and OSHA construction health and safety, basic construction, and construction licensing preparation. Some are listed as apprenticeship courses, but the information about the apprenticeship sponsor or application process isn't included in the catalogue. They offer classes in the evening.

Mass Building Trades

<http://massbuildingtrades.org/boston-metropolitan-district-building-trades-council>

Mass Building Trades is the overarching coordinating body for 74 local trade unions. The information about apprenticeship programs is complicated – applications taken during specific time periods, GED, aptitude test required in many cases. Provides reams of information about the various joint apprenticeship sponsors, but not so helpful to our work without a bridge or entrance in.

Examples of Building Management Companies with strong Boston/Metro Presence

- Consigli – have information about commitment to diversity
- Shawmut Construction –Employee owned, philanthropic
- NEI General Contracting (previous Chelsea CONNECT partner?)
- Wynn Residential
- Corcoron
- Geneson
- Peabody
- Maloney
- Cummings
- Dolben
- GTI – Commercial and Residential

- Lundgren management
- Corcoran
- Trinity
- Mediate Management Co. (Bunker Hill Industrial Park)
- The BBJ Research Department largest commercial property managers
<http://www.bizjournals.com/boston/subscriber-only/2013/06/28/mass-commercial-property-managers.html>

Other Models and Resources

- Generation Next, This Old House Foundation might be a source of funding to support pathways for underserved communities.
<https://www.thisoldhouse.com/more/toh-generation-next>
- Building Futures is a pre-apprenticeship program in Providence that is similar to Building Pathways in Boston. <http://www.bfri.org/>
- Build Your Future is a career exploration site sponsored by National Center for Construction Education and Research to attract young people to careers in construction and crafts trades
<http://byf.org/about> .
- The Aspen Institute is doing a national survey of construction pre- and apprenticeship trainings in anticipation of the potential infrastructure projects. It will serve as an update to a similar survey conducted in 2009. <http://www.aspenwsi.org/resource/construction-results-national-survey/>. The report will be informative when it's released (no date announced).
<https://ina.workforcegps.org/blog/general/2017/03/27/17/37/Aspen-Institute-Announces-Survey-to-Help-Identify-Construction-Related-Workforce-Services-with?p=1>

Health Care Pathway

Opportunities

- The state-funded [Training Resources and Internship Networks \(TRAIN\)](#) pilot ends this year (2017). Gleaning the lessons from Bunker Hill Community College's participation provide an opportunity to establish strategies to meet students particular academic and social/personal needs and to help accelerate their education and training.
- There are entry- and mid-level positions that do not require more formal education than high school diploma.
- Labor market indicators – including job descriptions – show that there is still growth in the region.
- The pathway is aligned with Metro North Regional Employment Board priorities.
- The ongoing state-wide survey to employers that is aimed at gathering the range of titles, scope of work, and certificate requirements across the state for the Medical Assistant position may inform education and training programs' efforts to build a stronger profession.
- The Advanced Leadership in Geriatric Care program developed by Boston's Hebrew Senior Life with seed funding by The Boston Foundation provides an excellent curriculum and approach to advance the role of CNAs with a leadership focus. The curriculum can be replicated.
- MA Health and Human Services Personal and Home Care Aide State Training initiative's (PHCAST) purpose is to define core competencies among direct care workers, and to develop a training to serve as a base for further competency standardization. It is a collaborative effort with internal (e.g., Executive Office of Elder Affairs) and external partners (e.g., Paraprofessional Healthcare Institute). This information will help inform future pathway development.

Gaps and Challenges

- CNA training is a primary focus in healthcare training for lower skilled adults. Given the mobility limits this pathway creates (exacerbated by BHCC's recent decision to end its LPN program), attention is needed to create advancement steps for Home Health Aides and CNAs.
- Partnerships across education and workforce systems need to be strengthened.
- More contextualized approaches to healthcare in ABE curricula are needed, especially for English Language Learners.
- Awareness of state-wide initiatives aimed at building consistency in the training for those interested in allied health and direct service professions, needs to be expanded beyond specific academic programs in a given community college.
- The connection within existing resources to provide comprehensive student supports needs to be expanded and integrated.

Questions

- Once the current students are “taught out” of BHCC’s LPN program, how will advancement for a CNA be established and promoted?
- How can resources be leveraged to continue the comprehensive approach to healthcare training demonstrated in TRAIN?
- How can the group engage the Community Action Program to join this effort?

LABOR MARKET INFORMATION

2014 – 2024	Median Hourly Wages*	Growth # openings/ year	Growth %	Postings using 02150 (25 miles)	Description
Certified Nursing Assistant	\$14.50	48	1.20%		Provide basic patient care under direction of nursing staff. Perform duties such as feeding, bathing, dressing, grooming, and changing linens. May transfer or transport patients. Includes nursing care attendants, nursing aides, and nursing attendants.
Home Health Aide	\$12.88	70	3.10%		Provide routine individualized healthcare such as changing bandages and dressing wounds, applying topical medications to the elderly, convalescents, or persons with disabilities at the patient's home or in a care facility, monitoring and/or reporting changes in health status. May also provide personal care such as bathing, dressing, and grooming of patient.
Medical Assistant	\$18.09	22	1.5%		Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.
Pharmacy Technician	\$14.00	110 (MA)**	4% (MA)		Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.

*Median wages are usually a good proxy for wages of workers in the position for a few years.

**Except for where indicated (MA) for Massachusetts-wide, data is for the Metro North region.

REQUIREMENTS

Occupation	Typical Education and Training	Certifications	Relevant Industry Associations
Certified Nursing Assistant	No high school degree or HSE: 13.8% HS degree or HSE: 37% Some college: 31.7% The most direct path is to complete a training program explicitly approved by the MA Department of Health.	State licensing exam and skills test required. Massachusetts CNAs take the Nurse Aide Competency Evaluation (NACE), administered by the American Red Cross (ARC).	The National Association for Home Care & Hospice (NAHC)
Home Health Aide	No HS or HSE: 13.8% HS or HSE.: 37% Some college: 31.7%	No certification is required.	The National Association for Home Care & Hospice (NAHC)
Medical Assistant	Need high school degree or equivalency.	No certification is required.	American Association of Medical Assistants
	HS degree or HSE: 23.3% Some college: 42.9% Associate Degree: 22%		
Pharmacy Technician	Need high school degree of equivalency. HS or HSE: 25.3% Some college: 34.4% Associate Degree: 20%	After successfully completing a Board-approved training program or 500 hours of pharmacy technician employment and passing the Board approved exam, one is required to be either certified by the MA State Board of Pharmacy or be nationally certified.	American Society of Health System Pharmacists

Occupation	Typical Education and Training	Certifications	Relevant Industry Associations
		Pharmacy Technicians must obtain a license. Approved National Exams: Pharmacy Technician Certification Board (PTCB) and Exam for the Certification of Pharmacy Technicians (EXCPT).	

EDUCATION AND TRAINING AVAILABLE LOCALLY (INCLUDING ABE, SKILLS TRAINING, BRIDGE TRAINING)

Health Care Career Preparation

Bunker Hill Community College Adult Basic Education and Transitions to College Programs offers a Health Career Pathways courses at the Chelsea campus. The Health Career Pathways program includes four classes: Health Care English, Health Care Math, and Health Care Science, and Success in College, Health Careers, and Technology. The program lasts 32 weeks and serves 15 students per course.

This program provides the academic rigor students need for college level work in English and math, as well as, having the students create career pathways plans in the healthcare field. Students are then ready to apply to the allied health certificate programs offered at the College. The ABE program collaborates with the LARE Institute/American Training.

The **Cambridge Community Learning Center** offers a contextualized ESOL/Healthcare Career Prep program. Classes meet four mornings per week and include English, math, computer skills, and career awareness. The program prepares immigrants to succeed in training for a job in healthcare (e.g. nursing assistant or home health aide.) In FY 2017, two groups of 13 students per group will be enrolled for one four-month cycle each for a total of 26 students served. (Metro North residents are welcome.)

Certified Nursing Assistant Training

The **American Red Cross** offers exclusively face-to-face CNA classes in Cambridge. Participants need to pass a reading and math assessment or present their high school diploma or high school equivalency certificate, pass a Red Cross criminal background check, and complete the Red Cross physical form/TB test. Classes consist of two sections: in-class training and clinical rotations. During their clinical training, students work directly with patients in a health care facility.

Bunker Hill Community College offers an 8-week intensive CNA (7 cr.) program on its Chelsea Campus each fall and spring semester with online and in-class learning plus off-site Clinical Practica. The courses – Principles of Clinical Practice (online course) Patient Care Skills (in-class 2-3 nights/week), and Practicum for Nurse Aide (off-site) – must be taken concurrently. Participants need to have a high school diploma or equivalency and have successfully completed a college writing and math course, or take the college placement tests or ESL Placement Test. Students are eligible for certification by the American Red Cross upon completion of the course. BHCC's Certified Nurse Assistant Program is accredited by the MA Department of Public Health, Nurse Aide Registry, DPH/Division of Health Care Quality.

The CNA program is one of three BHCC health professional training programs (other two programs: EMT and Pharmacy Tech.) participating in the [Training Resources and Internship Networks \(TRAIN\)](#) Program sponsored by a grant (2016) from Massachusetts Department of Higher Education. The

TRAIN program includes a workforce readiness course and an internship at Massachusetts Eye and Ear Infirmary. TRAIN provides free career training to 36 long-term unemployed Massachusetts residents. Students enrolled in the TRAIN program will receive a \$200/month stipend to cover transportation and other expenses. Participants must have been unemployed for 26 or more continuous weeks, and have a high school diploma or high school equivalency and a clean CORI to qualify for the program. Applicants must also possess a Green Card if they are not U.S. citizens.

Cambridge Community Learning Center (CLC) in partnership with the Academy of Health Care Training (The Academy), and the Rindge School of Technical Arts (RSTA) offers an 11-week CNA training. The CLC provides contextualized ESOL and math instruction, the Academy provides CNA instruction, and RSTA provides the training space, and their faculty share curriculum and other resources. The initial 11 weeks of instruction includes three weekly ESOL classes. The number of ESOL classes will be reduced in weeks 12–17, and the occupational training hours will increase accordingly. The course will conclude with three weekends of clinical work in a healthcare facility, supervised by The Academy. CLC coordinates with the ESOL and training instructors to integrate the curriculum into weekly lessons. The Academy instructors are Department of Public Health and Division of Professional Licensure approved. A Cambridge Employment Program job developer cultivates existing relationships and develops new relationships with health care employers and provides student employment assistance to students.

Jewish Vocational Services (JVS) provides a 14-week CAN Training Program. It is a full-time program designed for non-native, intermediate English speakers. The focus is on strengthening students' English and computer skills, and preparing them to pass the CNA certification exam. Program serves Metro North residents.

The **Spectrum Health Care Training** program is a for-profit organization offering CNA training at its Lynn site. Teachers are approved by the Commonwealth of Massachusetts Division of Professional Licensure, Office of Private Occupational School Education and Massachusetts Department of public Health. It is a 120-hour program that meets Monday through Friday offering both day and evening classes. Tuition is \$1,000. Students successfully completing the Nursing Assistant Training program are eligible to take the Nurse Aide Competency Evaluation (NACE), administered by the American Red Cross.

Home Health Aide

The Patient Care Technician 26 credit program at **Bunker Hill Community College** is offered at the Chelsea campus. Being qualified for home health aide employment is among the occupations available to graduates. Graduates can perform direct patient care competently and perform basic computer skills. The program prepares students in Healthcare Provider CPR certifications. They are also eligible to sit for certification exams for State Nurse Aide and Home Health Aide. To be admitted into the program, students need a high school diploma or its equivalency, and complete college placement tests in reading and English.

Charlestown Community Center through funding from English for New Bostonians and the Office for Housing and Urban Development (HUD) offers a two part Home Health Aid seventy-five hour (15 hours/week, 3 days/week, for 5 weeks) training program. The first part, ESOL Home Health Support Program, provides ESOL training within a contextualized health care curriculum. The second part is focused on teaching the skills needed to be a competent home health care aide. The program was developed and is taught by a nurse from Associated Home Health. Associated Home Health also provides the simulation equipment, and sees hiring program completers a priority. Influenced by the I-BEST model, the ESOL teacher team teaches the second part of the course with the nurse instructor. Two cohorts have completed the program with a 100% completion rate. Of those who have completed, half are employed as home health care workers.

The **Cambridge Community Learning Center** program described above incorporates Home Health Aide training, too. The main difference from CNA training is that Home Health Aides are not preparing for certification.

The **Spectrum Health Care Training** program also offers Home Health Care Aide training at its Lynn site

Medical Assistant

The **Medical Assistant Certificate Program** at **Bunker Hill Community College** is a 28 credit program offered at the Chelsea Campus each fall and spring. Graduates are able to assist with the examinations and treatment of patients in clinical areas; phlebotomy; and EKG, and perform computer and medical office tasks. Admission requirements include possessing a high school diploma or its equivalent, and placing out of, or completing ENG095 and RDG095 with a C or better.

The **Medical Professional Institute** in Malden is a private for-profit organization offering a six-month medical assistant program. It is a MA approved training center. Graduates experience 355 hours of classroom learning, 135 laboratory hours, and 240 clinical hours. Among the courses are: Phlebotomy and Specimen Collection, Anatomy, Physiology, Medical Terminology, Medical Office Administration, and Physician's Office Laboratory Testing. To be accepted candidates must show evidence of high school graduation or equivalency.

Pharmacy Technician

Bunker Hill Community College's Pharmacy Technician program is a 16 credit program. Courses include: Pharmacy Operations, Pharmaceutical Calculations, Pharmacology, and Pharmacy Law. Students also participate in a 150 hour internship in a pharmacy. The program is approved by the MA Board of Registration in Pharmacy. Also, the Pharmacy Technician Certification Program is one of the three TRAIN health professional training programs (See BHCC CNA description above.) The program partners with CVS for internship placements.

The Pharmacy Technician Certification Training Program at **Jewish Vocational Services** is a full-time, 12 week program that prepares participants to pass the national pharmacy technician certification exam. The program includes a 114-hour externship at CVS, Students are in classes four days per week

from 9:00 am – 3:00 pm and on externship at CVS for an additional 9.5 hours per week. Ongoing support is provided throughout the program. Ideal candidates have a high school diploma/equivalency, communicate well in English, and have a clean CORI.

Models to Consider

- LaGuardia Community College, New York, NY
[GED Bridge to College Careers Program/NY-BEST Integrated Academic and Healthcare Careers Pathway Training](#)

The New York Basic Education and Skills Training (NYBEST) Programs at LaGuardia Community College are designed to address the needs of non-traditional, adult students who may read at levels far below the secondary threshold, have family responsibilities, and face economic and educational disadvantages that often impede a professional course of study.

NYBEST integrated healthcare career pathways programs employ a developmental instructional model that includes a pre-training vestibule focused on developing academic skills needed to complete rigorous training, academic support services, job placement services and both didactic and student-centered teaching strategies. Training and curriculum is designed and taught collaboratively by an experienced Allied Health technical instructor and a basic skills educator trained to teach adult learners.

- The Genesis Center, Providence, RI
<https://john-lloyd-a6xx.squarespace.com/adult-education/>

The Genesis Center offers a twelve-week Health Care Orientation training program for those interested in careers in healthcare or direct support. Participants learn basic, entry-level content that will familiarize them with the field and potential career paths, including CNA, Home Maker, Direct Support, and Elder Care. September and January classes are offered in partnership with Rhode Island Hospital and Women and Infants Hospitals' Stepping Up program, which assists students in getting internships and jobs.

Supporting Documents

1. Action Plan Recommendations
2. Inventory: Key Adult Basic Education and Workforce Training Centers – Metro Chelsea Area
3. Interim Report
4. November 10, 2016 Advisory Group Meeting: Power Point Deck

Chelsea ABE/Workforce Development Advisory Group Action Plan Recommendations

This action plan reflects the recommendations from World Education, Inc. to the Chelsea ABE/Workforce Development Advisory Group (Advisory Group). The Advisory Group was convened by Chelsea CONNECT to guide and inform the career pathway research conducted by World Education. World Education was tasked with researching three distinct career pathways and to identify opportunities and challenges/gaps in services for Chelsea residents and suggest how the Advisory Group might address them. The career pathways were selected by the Advisory Group, based on a set of guiding assumptions, labor market data, and criteria through a process facilitated by World Education.

This action plan focuses on recommendations related to overall network development and building linkages to existing services in order to create a foundation necessary for developing an effective career pathway system.

World Education convened a meeting of the Advisory Group on June 1st to present these recommendations and solicit feedback on the action plan in an effort to make the action plan realistic and achievable. From this point forward, it will be the work of the Advisory Group to flesh out the details and outline the activities, identify the leads, target dates, resources, opportunities, and constraints as they emerge, through an iterative process.

RECOMMENDATION #1

Build network capacity and strengthen the foundation that is essential to build an effective career pathways system.

Rationale: ABE/Workforce Advisory members expressed interest in seeing the group continue beyond this project. A strong foundation and commitment to a shared mission is required to build and sustain an effective career pathway system.

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
1. Commit to a shared mission and goal.	Review original problem statement from the RFP. Review research from WEI.	Stefanie	C = Many committees and networks with overlapping membership and missions. This group needs to sharpen its focus to address gaps not addressed elsewhere.	Draft mission to be shared for discussion by June 16.

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
2. Identify overlapping and intersecting member initiatives, committees, to identify opportunities, duplicated efforts, etc.	Share WEI matrix initiative template Revise and build the matrix aimed at listing initiatives. Add other relevant networks targeted needs (e.g., childcare, transportation, CONNECT partners).	Sandy Barbara will update and send around the matrix for member input.	R = The updated matrix to identify resources. C = Competition as well as collaboration among members is a reality.	Done 6/8 Barbara will circulate the matrix by 6/30.
3. Identify additional members & stakeholders	Distinguish members from stakeholders. Each member will scan their contacts and other networks. Start w/ student and resident needs (e.g., childcare, transportation, immigration) and seek out related expertise. Communicate a targeted mission and focus (that is not redundant to other groups) when reaching out to potential members. Be clear about focus of group and what you're asking of them.	Meelynn and Darrell	R = Members participate in diverse networks with specific expertise and perspectives that can be tapped. R = ABE and Workforce Training Provider Inventory C = Time is limited and there are many competing demands for participation in various networks and groups. Identifying is easier than getting people to the table.	M & D will meet and solicit ideas for identifying additional stakeholders and members by 6/30.

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
4. Articulate a leadership structure and process for decision making and accountability.			R = DOL Career Pathways Toolkit, pg. 14.	
5. Articulate process for communication and expectations for sharing information, e.g., funding opportunities, new initiatives and changes in policy landscape.				

RECOMMENDATION #2

Build stronger linkages to stakeholders (e.g. REB, training providers, employers, NAIMC), to increase accessibility and opportunity for Chelsea residents.

Rationale: There are underutilized training resources in the region that could be accessible to Chelsea residents with improved linkages. Steps to leverage local/regional expertise and resources should be taken before any attempts to duplicate or develop similar local training.

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
1. Build stronger linkages and coordination with Metro North REB to align and build on mutual priority pathways, such as manufacturing, housing management. Tap into the synergy that is creating the broader collaboration (i.e., WIOA push) to assess how research and	Organize a meeting or series of meetings to: <ul style="list-style-type: none"> Promote and build awareness of Chelsea Network. Learn about the overarching goals and initiatives of REB and WIOA plan. Identify differences in focus (WIOA MOU and partners doesn't capture 			

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
partnerships can support the Chelsea network's linkages.	<ul style="list-style-type: none"> all the need). Be better informed about labor market data. Educate REB about the particular needs of Chelsea and gaps in services. Learn about results of REB's investigation of building maintenance pathways. Identify mutual goals and interests. 			
<p>2. Build linkages to Northeast Advanced Manufacturing Consortium to bridge gaps in NAMC recruitment and training of low-skilled residents.</p>	<p>Organize a meeting or series of meetings to:</p> <ul style="list-style-type: none"> Promote and build awareness of Chelsea Network. Define the problem and gaps in service for Chelsea target population. Investigate linkages between lower paid food manufacturing (e.g. Chelsea companies) and better-paying advanced manufacturing to explore whether a pathway/bridge might be developed. Identify elements of bridge to manufacturing (e.g. career awareness/exposure, academic skills, workforce readiness/soft skills needed). 			

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
3. Formalize recruitment pipeline from Chelsea to Building Pathways pre-apprenticeship program.	Organize a meeting or series of meetings to: <ul style="list-style-type: none"> • Promote and build awareness of Chelsea Network. • Define the problem and gaps in service for Chelsea target population. • Identify elements of bridge to construction (e.g., career awareness/exposure, academic skills, workforce readiness/soft skills needed). 			
4. Formalize recruitment pipeline from Chelsea to BEEMS facilities maintenance program.	Organize a meeting or series of meetings to: <ul style="list-style-type: none"> • Promote and build awareness of Chelsea Network. • Define the problem and gaps in service for Chelsea target population. • Identify elements of bridge to facilities maintenance (e.g., career awareness/exposure, academic skills, workforce readiness/soft skills needed). 			
5. Explore pre-apprenticeship recruitment opportunities with Morriset St. Preux, new Director of Workforce Development and Apprenticeship at Associated Builders and Contractors (ABCMA).	Organize a meeting or series of meetings to: <ul style="list-style-type: none"> • Promote and build awareness of Chelsea Network. • Define the problem and gaps in service for Chelsea target population. 			

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
	<ul style="list-style-type: none"> Identify elements of bridge to construction (e.g. career awareness/exposure, academic skills, workforce readiness/soft skills needed). 			
6. Incorporate lessons from state-wide initiatives in healthcare pathways, and from the Training Resources and Internship Networks (TRAIN) pilot to integrate comprehensive student support.	Organize a meeting with Geoff Vercauteren, Director of Healthcare Workforce Development at MA Department of Higher Education.			
7. Create career steps for advancement for Home Health Aides and CNAs with employers.			R = Hebrew Senior Life Advanced Geriatric Care curriculum to advance CNA.	
8. Consider outreach to a variety of credible training providers, including tuition-based opportunities, to develop a recruitment pipeline to the targeted pathways.			<p>R = Career pathway research and education and training inventory developed by World Ed.</p> <p>C = Career Source is bound by Eligible Provider List for WIOA-funded training and is not supposed to have a preferred provider. ABE programs are not constrained in this way.</p>	

RECOMMENDATION #3

Build individual program capacity

Rationale: Individual organizations and programs need to use the expertise tapped by the network to inform their curriculum and program design so that they are better equipped to help participants explore, prepare for, and access the opportunities, options, and career pathways.

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
1. Review demographic and participant applications to understand the educational and employment background of immigrants and ELLs in Chelsea to develop targeted approaches (for example distinguish approaches for high skilled immigrants lacking ESOL skills versus those with limited education).			R = BHCC Welcome Back Center for those with health care background. R = WES Global Talent Bridge resources for high skilled immigrants. http://www.globaltalentbridge.org/	
2. Increase contextualized curriculum and Integrated Education and Training (IET) approaches to ABE curricula, especially for English Language Learners, to increase student understanding of career pathways and opportunities in health care, manufacturing, and/or construction and maintenance.	Pursue training and PD on how to incorporate career exploration and sector/occupational content and workforce preparation skills into academic curriculum (e.g., contextualized instruction, integrated education and training).		R = SABES Professional Development system and resource library http://www.sabes.org/ , LINCS resources collection and online PD courses https://lincs.ed.gov/ , National College Transition Network http://www.collegetransition.org/home.html , Penn State IET Toolkit https://tinyurl.com/yccb83pme Webinar on IET Models http://www.collegetransition.org/services/webinars.html	

Priority Action Steps	How you'll do it	Leader	Constraints, Opportunities, Resources	Target Date
			C = Part-time staff with limited time for PD and for curriculum development and preparation.	
3. Address skills gap through academic rigor and inclusion of career readiness & employability skills in ABE and transition curriculum.	Pursue training and PD on aligning curriculum with the College and Career Readiness Standards and employability skills frameworks.		R = Same as above, plus Employability Skills Framework http://cte.ed.gov/employabilityskills/ Achieve the Core http://achievethecore.org/ C = Part-time staff with limited time for PD and for curriculum development and preparation.	
4. Share instructional and advising resources to develop a consistent, aligned approach to raising awareness of career pathways and opportunities across Advisor Group members.				

June 28, 2017

Agency	Funding	Service Location	Services	Schedule/ Open Summers?	Wait List	Access to Public Transport/ Support Provided?	Cost	Child Care	Staff Speak Other Languages?	Comments
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CAMBRIDGE

Literacy Project	City of Cambridge	Cambridge	ESOL, computer, family literacy, volunteer opps	Morning, afternoon, evening, and Saturday morning/Open summers	No	Central Sq./No	Free	No	English, Spanish, French, Portuguese	
Phillips Brooks House	Support from Harvard, volunteers, donations	Chelsea	ESOL - one-on-one ESOL tutoring; Also, ESOL for kids at CHANCE, Cambridge Rindge & Latin School on Fri. afternoons	Evening/Open summers	No	Harvard Sq./No	Free	No	n/a	
Community Learning Center	MA DESE	Cambridge	ABE, ESOL, GED/HISET, family literacy, volunteer opps	Morning, afternoon/Open summers	No	Central Square/No	Free	Yes	Haitian Creole, Spanish, Chinese (limited), French, language line	Cambridge residents only
Future Media Concepts	Tuition and fees	Cambridge	Video, web, multimedia, and graphic design	Morning, afternoon/Open summers	No	Kendall Sq./No	Varies by program discounts available	No	Not indicated	Eligible MA Job Quest Training Provider - Section 30, ITA, Trade Vouchers
New England School of English	Tuition and fees	Cambridge	ESOL, transition to college	Morning, afternoon/Open summers	No	Harvard Sq./No	Varies by subject	No	Spanish, French, Portuguese and Chinese	Accepts students with student visa, work permit or residency only.
Cambridge Center for Adult Education	Tuition and fees	n/a	ESOL, job training, computer literacy, volunteer opps	Morning, afternoon, evening, weekends/Open summers	No	Harvard/No	Varies by subject, scholarships available	No	Spanish, French, Portuguese, German, Chinese Mandarin	All computer classes are "Bring your own device"
Job Corps	U.S. Dept. of Labor	Statewide, Boston regional office	ABE, diploma completion, GED/HISET, computer, job readiness, transition to college,	Morning, afternoon, evenings, weekends/Open summers	No	Depends on site/Yes	Free	No	None indicated	16-24 yrs., legal US resident, free of open court case;

Key Adult Basic Education and Workforce Training Services - Metro Chelsea Area – June 2017 Edition

Agency	Funding	Service Location	Services	Schedule/ Open Summers?	Wait List	Access to Public Transport/ Support Provided?	Cost	Child Care	Staff Speak Other Languages?	Comments
										residential training program.
Ross Education	Tuition and fees	Cambridge	Cardio-plebotomy tech., medical assisting certificate, patient care tech., and phlebotomy tech.	Morning, evenings/Open summers	No		Varies by program, no financial aid	No	No	Eligible MA Job Quest Training Provider - Section 30, ITA, Trade Vouchers
YouthBuild	Primary: U.S. Dept. of Labor	Cambridge and Chelsea areas	Basic math, computer, diploma completion, GED/HISET, job readiness, volunteer opps	Morning, afternoon/Open summers	No	Not listed/Yes	Free	No	None indicated	17-24; high school dropouts

CHARLESTOWN/REVERE

Smart from the Start	Donations and private funding	Charlestown	ESOL, computer literacy, financial literacy, career planning, volunteer opps	Morning/Not open summers	No	Sullivan Square	Free	Yes	Spanish, Cantonese, Somali, Haitian Creole at other sites	Must have or be primary caregiver to children ages 0-5, Section 8 or subsidized housing residents, or receive public assistance
Charlestown Community Center	Not indicated	Charlestown	Computer, basic math, ESOL, citizenship, GED/HISET, volunteer opps	Morning/Not open summers	No	Not listed/No	Free	No	Spanish, Cantonese	16+ yrs. old; MA resident

Agency	Funding	Service Location	Services	Schedule/ Open Summers?	Wait List	Access to Public Transport/ Support Provided?	Cost	Child Care	Staff Speak Other Languages?	Comments
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Revere Community School	City of Revere	Revere	ESOL, Citizenship GED/HiSET, job readiness, volunteer opps	Evening/Not open summers	Yes, 3-6 months	Wonderland	Varies by subject	Yes	Spanish, Arabic, Mandinga, Wolof, French	Revere residents only; Scholarships available for Revere public school parents
First Cong. Church of Revere	Private donations	Revere	ESOL, volunteer opps	Mornings/Not open summers	No	Not listed	\$40 for books	No	Spanish	

CHELSEA

Bunker Hill Community College	MA DESE	Chelsea	ESOL, distance learning, computer, family literacy, Spanish GED, GED/HiSET	Morning, afternoon, evening, weekends/ Not open summers	Yes, 36 month wait time	/No	Free	No	Spanish, Vietnamese, Portuguese, Arabic	Few sites offer Spanish GED preparation/ testing; Must meet Accuplacer score requirements
Inter-generational Literacy Project	MA DESE	Chelsea	Computer, ESOL, Spanish GED/HiSET, volunteer opps	Morning, evening/ Open Summers	Yes	Not listed	Free	Yes	Spanish, Portuguese, French, Somali	Parents of Chelsea Public School students; Should be Chelsea resident; primarily caregiver of at least one child under age 10
LARE Institute	Tuition and fees	Chelsea	Computer, Basic Math, GED/HiSET, job training, readiness, volunteer opps	Morning, Afternoon, Evening, open summers	No	Not listed/No	Varies by subject		Spanish, Cambodian, English	

Agency	Funding	Service Location	Services	Schedule/ Open Summers?	Wait List	Access to Public Transport/ Support Provided?	Cost	Child Care	Staff Speak Other Languages?	Comments
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Chelsea Community School	City of Chelsea	Chelsea	Computer literacy in English and Spanish, ESOL, HiSET/GED in Spanish	Evening/Not open summers	No	Not listed/No	Registration (\$25-\$40)	No	Spanish	Chelsea residents primarily and surrounding cities
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EAST BOSTON

East Boston Ecumenical Center	Private Foundation; BALF; EDIC	East Boston	ESOL, citizenship support, not classes, volunteer opps	Morning, afternoon, evening, weekends/ Open summers	No	Not listed/No	Varies by subject	Yes	Spanish	Latina women, immigration services, counseling, tenant education and advocacy
English Innovations	No sources listed	East Boston	Computer, ESOL, legal assistance in completing DACA applications, volunteer opps	Evening/Open summers	No	Maverick/No	Free	No	Spanish, Portuguese	
East Boston Harborside Adult Learning Program	MA DESE	East Boston	Spanish native language literacy, basic math, computer, ESOL, distance learning, citizenship, GED/HiSET	Evening/Not open summers	Yes	Not Listed/No	Free	No	Spanish	

EVERETT

Everett Adult Learning Center	MA DESE, Donations	Everett	Computer, ESOL, volunteer opps	Evening/Open summers	No	Wellington/No	Varies by subject	No	Spanish, Portuguese, French	
La Comunidad	Donations, grants	Everett	Spanish native language literacy, ESOL, citizenship, legal services, translation, interpreting, and notary public	Morning, evening, weekends/Open summers	No	Not listed/No	Varies by subject	No	Spanish, Portuguese	No eligibility requirements

LYNN

Pathways Inc.	MA DESE	Lynn	Family Literacy, ABE, ESOL, HiSET/GED, Citizenship, Distance	Morning, evening/Open summers	Yes	Not listed/No	Free	No	Spanish, Russian, Haitian Creole, Vietnamese	16+, resident of Greater Lynn area
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Key Adult Basic Education and Workforce Training Services - Metro Chelsea Area – June 2017 Edition

Agency	Funding	Service Location	Services	Schedule/ Open Summers?	Wait List	Access to Public Transport/ Support Provided?	Cost	Child Care	Staff Speak Other Languages?	Comments
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MALDEN										
BCI, Inc.	Tuition and fees	Malden		Hospital Central Service Tech,, Medical Asst., Medical Office Administrator	No	No/No	Varies by course and program	No	None indicated	Job Quest Training Provider - Section 30, ITA, Trade Vouchers
Immigrant Learning Center	MA DESE	Malden	ESOL, Citizenship, Family Literacy, Volunteer opps, Educational and career advising available	Morning, evening/ Open summers	Yes	Malden Center/No	Free	No	None indicated	Immigrant and refugees primarily
Network Technology Academy	Tuition and fees	Malden	Computer information systems and Information Technology	Morning, afternoon evening/Open summers	No	Malden Center/No	Cost varies by course, financial aid available	No	No	Eligible MA Job Quest Training Provider - Section 30, ITA, Trade Vouchers

SOMERVILLE										
SCALE	Key source: MA DESE, Somerville Public Schools, City funds	Somerville	Basic math, diploma completion, ESOL, HISET/GED, HISET/GED in Spanish, test center, volunteer opps	Morning, evening/No summer	Yes	Davis Sq./No	Free	No	Spanish, Haitian Creole, French, Portuguese	18+, MA resident, wait list for 18 months
The Welcome Project	Somerville Housing Authority, donations	Somerville	Family literacy, ESOL, volunteer opps	Morning, evening	No	Not direct/No	Varies by subject	No	Spanish	Residency in Somerville only for scholarships/ \$50
Just a Start House	Key source: private funding, donations	Somerville	Basic math, computer literacy, HISET/GED, HISET/GED in Spanish, job readiness, computer literacy, volunteer opps	Morning, afternoon/Open summers	No	Not direct/No	Free	No	Spanish, Romanian	Pregnant and/or parenting 14-20 year olds
Network	Tuition and	Somerville	Computer Information	Morning,	No	Davis Sq./No	Cost varies	No	None indicated	Eligible MA

Agency	Funding	Service Location	Services	Schedule/ Open Summers?	Wait List	Access to Public Transport/ Support Provided?	Cost	Child Care	Staff Speak Other Languages?	Comments
Technology Academy	fees		Systems, IT	afternoon/Open summers			by course, financial aid available			Job Quest Training Provider - Section 30, ITA, Trade Vouchers
Lincoln Technical Institute	Tuition and fees	Somerville	Dental asst., medical office asst., medical asst.		No	Not direct/No	Varies by course	No	None indicated	Eligible MA Job Quest Training Provider - Section 30, ITA, Trade Vouchers



Chelsea Adult Basic Education/Workforce Development Action Plan Interim Report

Overview

The National College Transition Network (NCTN) at World Education, Inc. was contracted by the City of Chelsea and its community partners to study and report on local/regional adult educational services and gaps in those services relative to local labor market needs. This interim report summarizes the key accomplishments and activities related to this task as of January 31, 2017. The work commenced in September 2016 and will be completed by May 1, 2017. (There was a pre-launch meeting with the advisory group in August.) The initial time frame indicated that the project would be completed in February 2017. It became clear that the Advisory Group needed additional time to establish criteria, and to more fully consider additional labor market information. Given the importance of the Advisory Group, the number of planned meetings was increased from three to five. A revised timeline is included in this report.

Key Actions of Advisory Group via NCTN Staff Facilitation

- Developed a collaborative working group.
- Established a common understanding of career pathways through NCTN's sharing of research on career pathway models.
- Analyzed information the NCTN team collected from Advisory Group members and home organizations to inform the selection of career pathway selection, target wage, and criteria for pathway selection.
- Selected three pathways for further investigation: Advanced Manufacturing, Construction and Property Management, and Healthcare.
- Agreed that the entry point of the chosen pathways is the first point on a career pathway (e.g., ABE, TANF, ESOL, Workforce participants), and that the target wage for the first exit point would be \$17/hour - \$35,000 annual wage).

The appendix of this report includes the summary of actions from the three 2016 advisory group meetings (August 5, September 19 and November 10). A summary of activities follows:

Activities	Actions
August 5, 2016 Advisory Group (AG) Pre-Launch Meeting.	Confirmed AG's role, listed potential career pathways to consider, and reviewed SOW.
September 19, 2016 Meeting	Determined job wage criteria, articulated factors for assessing program quality and robustness, established criteria for industry paths labor market, confirmed entry point of pathway, reviewed career pathway models, identified 5 potential fields (i.e., Retail, Healthcare, Advanced Manufacturing, Construction & Property Management, and Information Technology), and agreed to select 3 pathways from these fields on 11/10/16.
Interviewed Metro-North sector specialists to collect career pathway information in 5 fields listed at 9/19/16 meeting. This data informed the decision-making process at the 11/10/16 meeting.	See 11/10/16 PPT deck for data summary.
November 10, 2016 Virtual Meeting	Selected 3 pathways for further investigation: Healthcare, Adv. Manufacturing, and Construction & Building Management
Generating an expanded ABE/WFD inventory for the 3 selected pathways.	Ongoing
Interviewing employers and/or training specialists to determine the current training services and needs regarding the 3 pathways. See Chelsea Career Pathways Information Template in report's appendix for data collection categories.	Ongoing
Researching best practices, strategies and models.	Ongoing

Chelsea ABE/Workforce Development Action Plan Timeline

Revised Period of Performance: September 2016 – May 1, 2017

Tasks	Months							
	1	2	3	4	5	6	7	8
1. Hold pre-launch orientation meeting (August) to review SOW, confirm goal, and clarify roles.								
2. Meet with Action Plan Advisory Group to 1) determine catchment area, accessibility factors, how program quality and robustness should be assessed, identify community stakeholders; 2) help select 3 career sectors; 3) present interim report; 4) discuss action plan priorities; 5) present recommendations for Action Plan.	◆		◆				◆	◆
3. Analyze skill requirements for living wage jobs for 3 high-demand, accessible career sectors in greater Chelsea.		◆	◆					
4. Assess programs' accessibility: location, public transportation, schedule, eligibility requirements.					◆	◆	◆	
5. Assess programs' quality (persistence, completion, entries to further ed., training or jobs) and robustness (employment & support services, intensity, pathways, articulation agreements), timeline to career.					◆	◆	◆	
6. Identify gaps in ABE/ training, and services and related challenges.						◆	◆	
7. Research best practices, strategies, and models.	◆	◆	◆	◆	◆	◆	◆	
Deliverable #1: Interim report that summarizes the data collection						◎		
8. Recommend how local community can apply learnings in Chelsea.	◆		◆			◆	◆	◆
9. Convene stakeholder focus group for input on gap assessment and initial recommendations.							◆	
Deliverable #2: Recommendations for Action Plan Priorities					◎			
Deliverable #3: Recommendations for final Action Plan								◎

Appendix

Chelsea ABE/Workforce Action Plan

Advisory Group Pre-launch Meeting 8/5/16

Agenda

Welcome and Introductions

Goal of Action Plan

Role of Advisory Group

Role of the NCTN/WEI

Feedback on Approach and Timeline

Coordination and Information Sharing About Other Related Initiatives

Wrap-up/Next Steps

Present

Kimberly Napier (Metro North REB), Darrell Lemar (Bunker Hill CC - Workforce), Toni Borge (Bunker Hill CC – ABE), Barbara Krol-Sinclair (Chelsea Public Schools), Linda Rohrer (Career Source), Stefanie Shul (Connect), Sandy Goodman (NCTN/WEI), and Ellen Hewett (NCTN/WEI)

Key Actions

- Explored Gaming and Hospitality, Information Technology, Financial Services, Construction and Property Management, Retail, and Health Care as potential sectors to explore. Narrowed down selection to Gaming and Hospitality, Information Technology, and Health care. The NCTN team will provide more information about these areas for the September meeting.
- Indicated importance that this work be informed by regional planning data.
- Agreed that this Advisory Group can eventually be the group to coordinate ABE grant efforts.

Chelsea ABE/Workforce Action Plan

Advisory Group Meeting 9/19/16 Notes

Present

Darrell Lemar (Bunker HillCC - Workforce), Toni Borge (Bunker Hill CC – ABE Dept.), Barbara Krol-Sinclair (Chelsea Public Schools), Linda Rohrer (Career Source), Stefanie Shul (Connect), Sandy Goodman (NCTN/WEI), and Ellen Hewett (NCTN/WEI)

Confirming Assumptions/Consensus

- The target audience, that is the starting point for the pathway, is low-income adults, English Language Learners, and adults without a high school credential.
- The targeted occupations are those that are attainable to residents with a high school diploma and 6 months-to-2 years of postsecondary education and training or on the job training.
- Our work is to study and report on the local/regional adult education and training services and gaps in those services relative to local labor market needs and opportunities and propose an action plan for bridging the gaps.

Determining Quality Job Criteria

We will analyze the skill requirements for three targeted occupations, selected based on the following criteria, to be finalized in consultation with the Action Plan Advisory Group.

- High rate of growth and number of openings projected over 10-year period .
- Minimum entry wage meets living wage standard established for Chelsea. The [MIT Living Wage Calculator](#) provides a range of wages, based on family size and location

\$13.50 is the wage for an individual without dependents in Suffolk County.

\$26.75 is the wage for a family of 2 adults and 2 children, where one adult is employed *

\$17.00 is the wage for a family of 2 adults and 2 children, where both adults are employed.

- Agreed that the target wage will be \$17/hour (\$35,000/yearw).
- Positions are attainable to residents with a high school diploma and 6 months-to-2 years of postsecondary education and training or on the job training.
- Other issues to consider in establishing criteria:
 - location and accessibility of employers
 - restricting or prohibiting factors (e.g, requires a car and license, clear CORI, drug and alcohol screens)
 - challenges to attainment for English Language Learners
 - challenges for undocumented residents.

*Connect uses this for the living wage.

Identifying 3 Occupational Pathways to Research

Shared the following chart. At the August meeting we decided that more research into Health Care, Construction and Building Trades, and Gaming and Hospitality is needed.

Industry	Growth 2012– 2022	Wages (2014 Mean)
Health Care and Social Assistance	21.7%	\$27.75
Hospitals	15.3%	\$31.00
Nursing and Residential Care Facilities	20.10%	\$18.00
Construction	31.40%	\$33.63
Specialty Trade Contractors	30.10%	\$32.23
Amusement, Gambling, Recreation	27.8%	\$17.70

Following a dynamic discussion, the group agreed that more clarity regarding the divergent information is needed. The NCTN team will provide this for the Retail, Healthcare, Advanced Manufacturing, Information Technology, and Construction and Property Management sectors at the November 10 meeting.

Assessing Program Quality and Robustness

What are the factors to consider?

- Accessibility
- Job placement record
- Industrial recognized credentials
- Adult friendly
- Hands-on
- Up-to-date with industry standards
- Connection to employers

Chelsea ABE/Workforce Action Plan

Advisory Group Meeting 11/10/16

Present

Kimberly Napier (Metro North REB), Darrell Lemar (Bunker HillCC - Workforce), Toni Borge (Bunker Hill CC – ABE Dept.), Barbara Krol-Sinclair (Chelsea Public Schools, Stefanie Shul (Connect), Sandy Goodman (NCTN/WEI), and Ellen Hewett (NCTN/WEI)

Key Actions

See accompanying ppt. for summary of data presented at the meeting. The slides provide reasons to select (+) and reasons not to select (-) a given pathway based on interviews and LMI data.

After thoughtful deliberation, the Advisory Group selected 3 pathways for further investigation: Construction and Property Maintenance, Healthcare, and Advanced Manufacturing.

Chelsea Career Pathway Information Template

Title of Targeted entry- and mid-level occupation(s)

LMI

Projected growth in state and region

Projected # of openings in state and region

Wages

Requirements

Education, training, certifications

Skills

Aptitudes

Interests

Physical abilities

Education and Training available locally (including ABE, skills training, bridge training)

Alignment with industry needs

Lead to HSE and a PSE credential

Enable entering occupation

Include support services

Implemented through partnerships across systems

Accessibility of training and jobs

Waiting lists

Transportation

Scheduling

Academic Skill requirements

English language level requirements

Analysis of Quality (using WIOA Elements and MA ACP Guidelines as standards)

- Aligns with local industry needs
- Leads to the attainment of a high school equivalency and at least one postsecondary credential, Enables a participant to enter or advance within a specific occupation or cluster
- Includes, as appropriate, education offered concurrently with and in the same context as workforce preparation activities and training
- Organizes education, training, and other services to meet the particular needs of an individual in a manner that accelerates the educational and career
- Counseling and supportive services can be leveraged to help participants reach their goals
- Partnerships across education and workforce systems in place

Applicable Models (local and nationwide)

Chelsea ABEMWFD Advisory Group

November 10, 2016 Meeting Goal:

- Select three pathways to investigate further.

Underlying Assumptions

- Results of pathway investigation will inform the action plan.
- Investigation of the pathways includes identifying education and training services as well as gaps in services to prepare residents for the pathways.
- Advisor Group members and home organizations have expertise, contacts, and foundational research to tap for the action plan.



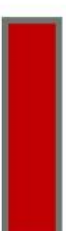
Pathways to Consider

- Retail
- Health Care
- Advanced Manufacturing
- Information Technology
- Construction and Property Management

Retail



- Minimal entry requirements = HS
- Opportunities for advancement in store operations.
- More retention and advancement w/in some companies.
- REB employer contacts



- Entry-level jobs unattractive
- High turnover rate
- Limited opportunities for advancement
- Takes 2 steps up the ladder to reach target \$\$.

RETAIL CAREER PATHWAY

Salaries calculated using data from Indeed.com

Merchandising and Logistics

Store Operations

Senior Manager or Director
MN Salary: \$91,000
MA Salary: \$89,000
Minimal Ed: BA

Marketing Manager
MN Salary: \$64,000
MA Salary: \$61,000
Minimal Ed: BA

Prevention Loss Manager
MN Salary: \$57,000
MA Salary: \$55,000
Minimal Ed: BA

Buyer
MN Salary: \$69,000
MA Salary: \$67,000
Minimal Ed: BA

Store Manager
MN Salary: \$60,000
MA Salary: \$57,000
Minimal Ed: HS

Training Manager
MN Salary: \$60,000
MA Salary: \$58,000
Minimal Ed: HS

Department Assistant
MN Salary: \$43,000
MA Salary: \$42,000
Minimal Ed: AS

Department Manager
MA Salary: \$46,000
MA Salary: \$46,000
Minimal Ed: HS

Assistant Store Manager
MN Salary: \$42,000
MA Salary: \$42,000
Minimum Ed: HS

Training Specialist
MN Salary: \$38,000
MA Salary: \$37,000
Minimal Ed: HS

Merchandise
MN Salary: \$28,000
MA Salary: \$27,000
Minimal Ed: HS

Prevention Loss Specialist
MN Salary: \$28,000
MA Salary: \$27,000
Minimal Ed: HS

Customer Service Rep
MN Salary: \$30,000
MA Salary: \$29,000
Minimal Ed: LHS

Retail Sales Associate
MN Salary: \$28,000
MA Salary: \$27,000
Minimal Ed: LHS

Cashier
MN Salary: \$24,000
MA Salary: \$23,000
Minimal Ed: LHS

Stock Clerk, Sales Floor
MN Salary: \$23,000
MA Salary: \$22,000
Minimal Ed: LHS

Legend: MN = Metro North Region; MA = Massachusetts; LHS = Less than a high school diploma; HS = High school diploma; AS = Associate degree; BA = Bachelor's degree



Metro North Regional Employment Board

IT



- Entry-level meets the \$\$ mark
- REEB plans to explore further.
- Opportunity to build bridges- Microsoft Certs?
- Opportunities lie in the many businesses using IT.



- Staffing agencies typical hiring vehicle
- Lots of legwork to find the right fit companies
- Hard to find right people w/ right skills & interest
- Some PSE required
- Entry-level a reach w/out defined bridges.

Information Technology Career Pathway Chart



Development

Internet and Interactive Media

Web Administrator
MN Salary: \$93,092*
MA Salary: \$92,400*
Minimal Ed.: Post-secondary certificate

Web Developer
MN Salary: \$77,360
MA Salary: \$74,080
Minimal Ed.: Post-secondary certificate

Graphic Designer
MN Salary: \$56,075
MA Salary: \$52,070
Minimal Ed.: Post-secondary certificate

Multimedia Artists and Animators
MN Salary: \$66,100
Minimal Ed.: Post-secondary certificate

Software Developer, Applications
MN Salary: \$104,548
MA Salary: \$104,460
Minimal Ed.: Bachelors

Software Developer, System Software
MN Salary: \$114,307
MA Salary: \$114,690
Minimal Ed.: Bachelors

Software QA Engineer/Tester
MN Salary: \$93,092*
MA Salary: \$92,400*
Minimal Ed.: Bachelors

Computer Programmer
MN Salary: \$78,803
MA Salary: \$83,870
Minimal Ed.: Bachelors

Computer and Info Systems Manager
MN Salary: \$128,438
MA Salary: \$133,510
Minimal Ed.: Bachelors

Computer Network Architect
MN Salary: \$125,066
MA Salary: \$113,970
Minimal Ed.: Bachelors

Computer Systems Engineer/Architect
MN Salary: \$93,092*
MA Salary: \$92,400*
Minimal Ed.: Bachelors

Network & Computer Systems Administrator
MN Salary: \$87,702
MA Salary: \$81,390
Minimal Ed.: Bachelors

Database Architects
MN Salary: \$93,092*
MA Salary: \$92,400*
Minimal Ed.: Bachelors

Info Security Analyst
MN Salary: \$89,999
MA Salary: \$84,800
Minimal Ed.: Bachelors

Computer Systems Analyst
MN Salary: \$83,797
MA Salary: \$83,180
Minimal Ed.: Bachelors

Database Administrator
MN Salary: \$85,319
MA Salary: \$79,560
Minimal Ed.: Bachelors

Computer User Support Specialist
MN Salary: \$59,247
MA Salary: \$58,430
Minimal Ed.: Post-secondary certificate

Computer Network Support Specialist
MN Salary: \$70,750
MA Salary: \$76,700
Minimal Ed.: Associates

Minimal Ed. = Typical minimal credential needed for entry into occupation based on a 17% threshold for the % of surveyed IT employees that acquired the minimal credential

MN = Metro North Region; MA = Massachusetts

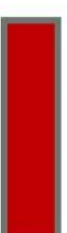
Salaries calculated using the median salary data during May 2014 from www.mass.gov

* Occupations listed under 15-1199 includes grouped and/or estimated Occupational Employment Statistics (OES) from the Bureau of Labor Statistics (BLS)

Advanced Manufacturing



- Entry-level meets the \$\$ mark
- Minimal education = HS
- NEMAC very well developed
- Strategy testing – math remediation course launching.



- Math, math, math
- Stigma to overcome
- Hard to find right people w/ right skills & interest
- Few NEMAC employers in Chelsea area or T-access

.

Advanced Manufacturing Career Pathways



Metro North Regional Employment Board

Industrial Production Manager
 MN Salary: \$113,114
 MA Salary: \$102,300
 Typical Ed: Bachelor's

Mechanical Engineer
 MN Salary: \$89,922
 MA Salary: \$87,790
 Typical Ed: Bachelor's

Materials Engineer
 MN Salary: \$85,997
 MA Salary: \$90,990
 Typical Ed: Bachelor's

Electrical Engineer
 MN Salary: \$99,933
 MA Salary: \$103,090
 Typical Ed: Bachelor's

Mechatronics Engineer
 MN Salary: \$115,578
 MA Salary: \$106,870
 Typical Ed: Bachelor's

Electronics Engineer
 MN Salary: \$100,726
 MA Salary: \$100,290
 Typical Ed: Bachelor's

Industrial Engineer
 MN Salary: \$94,740
 MA Salary: \$92,480
 Typical Ed: Bachelor's

Mechanical Engineering Technologist
 MN Salary: \$65,204
 MA Salary: \$69,330
 Typical Ed: Some College

Manufacturing Engineer Technologist
 MN Salary: \$65,204
 MA Salary: \$69,330
 Typical Ed: Some College

Electronics Engineering Technician
 MN Salary: \$69,890
 MA Salary: \$65,260
 Typical Ed: Some College

Industrial Engineer Technician
 MN Salary: \$60,459
 MA Salary: \$55,930
 Typical Ed: Some College

CNC Machine Programmer
 MN Salary: \$61,097
 MA Salary: \$50,860
 Typical Ed: High School

Manufacturing Production Technician
 MN Salary: \$65,204
 MA Salary: \$69,330
 Typical Ed: Some College

CNC Machine Operator
 MN Salary: \$48,717
 MA Salary: \$43,450
 Typical Ed: High School

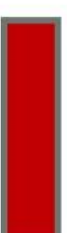
Electronic Equipment Assembler
 MN Salary: \$34,511
 MA Salary: \$36,300
 Typical Ed: High School

Note: Salaries shown are median salaries for Metro North and MA as of May 2015.

Construction & Property Maintenance



- Entry-level meets the \$\$ mark
- Minimal education to enter
- CONNECT laying groundwork
- REEB identified as a targeted industry
- Entry level skills same for Con. & Prop. Maintenance

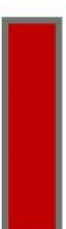


- From laborer to skilled trade or management requires much more training.
- .Specific physical abilities, skills, interests required.
- REEB does not have LMI. Expect research completion by 6/30/17

Healthcare



- Minimal education to enter
- Medical secretary, entry level, meets \$\$ mark
- Direct care second level (EMT, Med. Asst.) meets \$\$ mark
- Strong opportunities for PCA, HHA and EMT.
- Uptick in need for med. sec. and med. assist.



Direct care entry level does not meet \$\$ mark

Pathway already receives lots of attention

High turnover of HHAs

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graph TD
    A[Pharmacist $117,150*] --> B[Pharmacy Technician $28,720]
    B --> C[Pharmacy Aide $22,876]
    D[Magnetic Resonance Imaging Technologist $89,104] --> E[Nuclear Medicine Technologist $84,827]
    E --> F[Radiologic Technologist $72,575]
    G[Medical and Health Services Manager $100,341] --> H[Nurse Practitioner $108,909]
    H --> I[Physician Assistant $108,815]
    J[Medical Clinical Lab Technologist $69,669] --> K[Medical Lab Technician $43,559]
    K --> L[Dietetic Technician $24,149]
    M[Dietitian and Nutritionist $52,332] --> N[Insurance Claims and Policy Processing Clerk $44,712]
    N --> O[Medical Records & Health Information Technician $41,929]
    O --> P[Billing and Posting Clerk $40,653]
    P --> Q[Medical Secretary $37,905]
    R[Database Administrator $85,319] --> S[Network & Computer Systems Administrator $84,286]
    S --> T[Computer Systems Analyst $83,797]
    T --> U[Computer Network Support Specialist $70,750]
    U --> V[Computer User Support Specialist $59,247]
    W[Physical Therapist $83,878] --> X[Physical Therapy Assistant $59,656]
    X --> Y[Physical Therapy Aide $30,317]
    Z[Registered Nurse $85,474] --> AA[Health Educator $61,089]
    Z --> AB[Medical Lab Technician $43,559]
    Z --> AC[Dietetic Technician $24,149]
    Z --> AD[Billing and Posting Clerk $40,653]
    Z --> AE[Medical Secretary $37,905]
    Z --> AF[Computer Network Support Specialist $70,750]
    Z --> AG[Computer User Support Specialist $59,247]
    Z --> AH[Physical Therapy Assistant $59,656]
    Z --> AI[Physical Therapy Aide $30,317]
    Z --> AJ[Phlebotomist $36,767]
    Z --> AK[Surgical Technologist $55,307]
    Z --> AL[Licensed Practical Nurse** $50,970]
    Z --> AM[Respiratory Therapist $68,006]
    Z --> AN[Emergency Medical Technician $38,334]
    Z --> AO[Respiratory Therapy Technician $50,785]
    Z --> AP[Medical Assistant $38,334]
    Z --> AQ[Community Health Worker $46,406]
    Z --> AR[Certified Nursing Assistant $29,951]
    Z --> AS[Home Health Aide $25,277]
    
```

The flowchart illustrates the career progression and salary ranges for various medical and healthcare professions. The chart is organized into a hierarchical structure, starting with entry-level roles at the top and branching out into specialized roles, eventually leading to advanced and administrative positions at the bottom. Salaries are listed in dollars for each role.

Top Level (Entry-Level Roles):

- Pharmacist \$117,150*
- Magnetic Resonance Imaging Technologist \$89,104
- Medical and Health Services Manager \$100,341
- Medical Clinical Lab Technologist \$69,669
- Dietitian and Nutritionist \$52,332
- Insurance Claims and Policy Processing Clerk \$44,712
- Database Administrator \$85,319
- Physical Therapist \$83,878

Second Level (Specialized Roles):

- Pharmacy Technician \$28,720
- Nuclear Medicine Technologist \$84,827
- Nurse Practitioner \$108,909
- Medical Lab Technician \$43,559
- Dietetic Technician \$24,149
- Medical Records & Health Information Technician \$41,929
- Network & Computer Systems Administrator \$84,286
- Physical Therapy Assistant \$59,656

Third Level (Advanced Roles):

- Pharmacy Aide \$22,876
- Radiologic Technologist \$72,575
- Physician Assistant \$108,815
- Medical Secretary \$37,905
- Computer Network Support Specialist \$70,750
- Physical Therapy Aide \$30,317

Fourth Level (Administrative Roles):

- Registered Nurse \$85,474
- Health Educator \$61,089
- Billing and Posting Clerk \$40,653
- Computer Systems Analyst \$83,797
- Computer User Support Specialist \$59,247

Fifth Level (Specialized Roles):

- Emergency Medical Technician \$38,334
- Respiratory Therapist \$68,006
- Licensed Practical Nurse** \$50,970
- Surgical Technologist \$55,307
- Phlebotomist \$36,767
- Respiratory Therapy Technician \$50,785
- Medical Assistant \$38,334
- Community Health Worker \$46,406
- Certified Nursing Assistant \$29,951
- Home Health Aide \$25,277

*Median Wage data from Occupational Employment and Wage Statistics Survey, Metro North Workforce Investment Area, Bureau of Labor Statistics May 2014

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