

# Massachusetts School to Career Connecting Activities

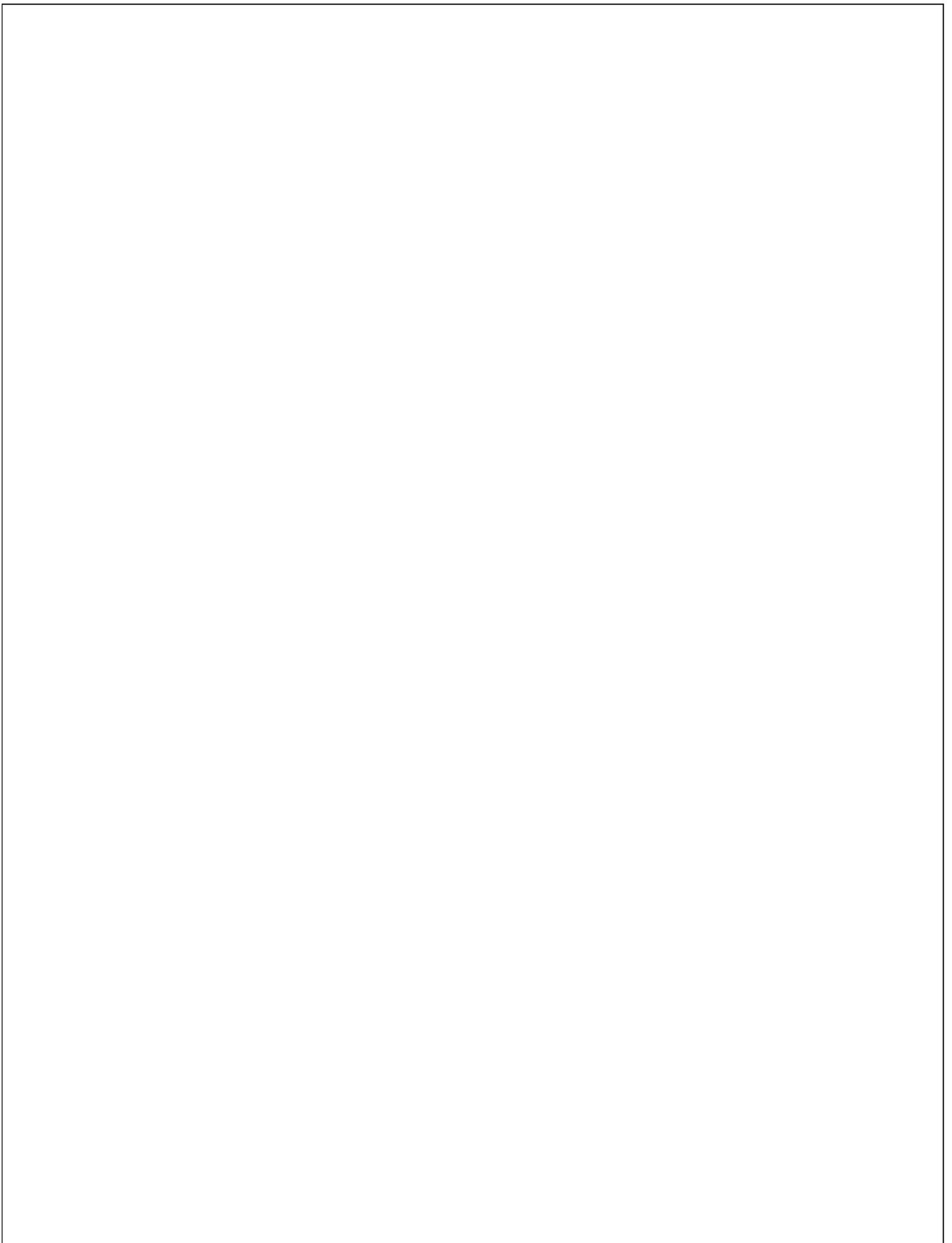
## Annual Report

**FY2018**



*Massachusetts Department of Elementary and Secondary Education  
Office for College, Career, and Technical Education*





## Connecting Activities Annual Report – FY2018

*“I think I know what I want to do after high school, but I want to know more about what my first steps should be.”*

*“I have a lot of interests, and I want to know how to translate my interests into career goals.”*

*“How can I help my students to be excited about the connections between classroom work and future career opportunities?”*

*“We have some exciting industries emerging in our region. How can we connect with local high schools to let students know about these future opportunities?”*



The Massachusetts Department of Elementary and Secondary Education (DESE) is pleased to share the FY2018 Annual Report of the School to Career Connecting Activities initiative. The Connecting Activities (CA) initiative is the state’s leading intermediary system for career development for middle and high school students, and it helps schools, communities, teachers, counselors, students and their families to answer these questions and more.



In May 2018 at its annual conference, the Connecting Activities network celebrated its twenty-year anniversary, marking twenty years of connecting schools and employers to create high-quality career development experiences for students. The initiative has influenced the lives of hundreds of thousands of students over those years. Not resting on its laurels, the gathering focused on current initiatives, including career exploration activities based on regional economic blueprints; the creation of opportunities in STEM career fields; a new initiative to develop high quality college and career pathways; and continuing work supporting school-wide and

individualized career and academic planning for students. This annual report shares highlights of this work.

### What is Connecting Activities?

Connecting Activities is the state-funded intermediary system, led by DESE, linking education, business and workforce development partners through the work of skilled intermediaries. These linkages provide the background for a network that provides powerful career development experiences for students in close to 200, or about half, of the high schools across Massachusetts. A student in Cape Cod interns with the harbormaster to explore his dream career. A group of middle school students from Blackstone Valley discovers science connections on a tour of an advanced manufacturing facility. A science teacher

collaborates with a local company to design curriculum. The owner of a local business startup visits his high school to present at a Career Day. Teams of school and business professionals meet throughout the year to design classroom and workplace experiences for students in new career-themed pathways in the local high school.

The name “Connecting Activities” reflects the idea of building these connections, coming from the national School to Work demonstration program launched in the 1990s. The School to Work model envisioned a career development system for students organized around three elements: (1) School-Based Activities; (2) Workplace-Based Activities; and (3) Connecting Activities that connect schools and workplaces. In 1998, at the conclusion of the national demonstration project, Massachusetts introduced a state-funded initiative, called School to Career Connecting Activities to continue this work. We are proud that the initiative has continued this very important and creative work since 1998.

Connecting Activities is funded annually through an appropriation in the state’s budget (Line Item 7027-0019). CA funds are allocated by DESE to all sixteen local MassHire Workforce Boards (MWB) in the state. In turn, the WDBs partner with high schools and other local stakeholders to offer work-based learning and career development education services to students. The return on investment from CA is very high: For each public dollar invested, CA is leveraging close to five dollars in private sector wages. In FY18, with an appropriation of close to \$3 million, the return was over \$14 million in student wages.

### **How does CA work and whom does it serve?**

The sixteen MWB use CA funding primarily to pay for the intermediary role that is the heart of the initiative, performed by talented workforce professionals and educators. These staff bring together a network of school-based staff in the region, broker work-based learning experiences for students, and help to create career awareness and exploration activities in the community.

Each MWB has a designated lead staff member who serves as the CA point of contact for DESE. A core group of leaders, including these 16 staff members and a comparable number of leaders who have been active in those regions as support, guides CA under the direction of DESE. This core group meets several times a year to share information and effective practices, and to support continual improvement.

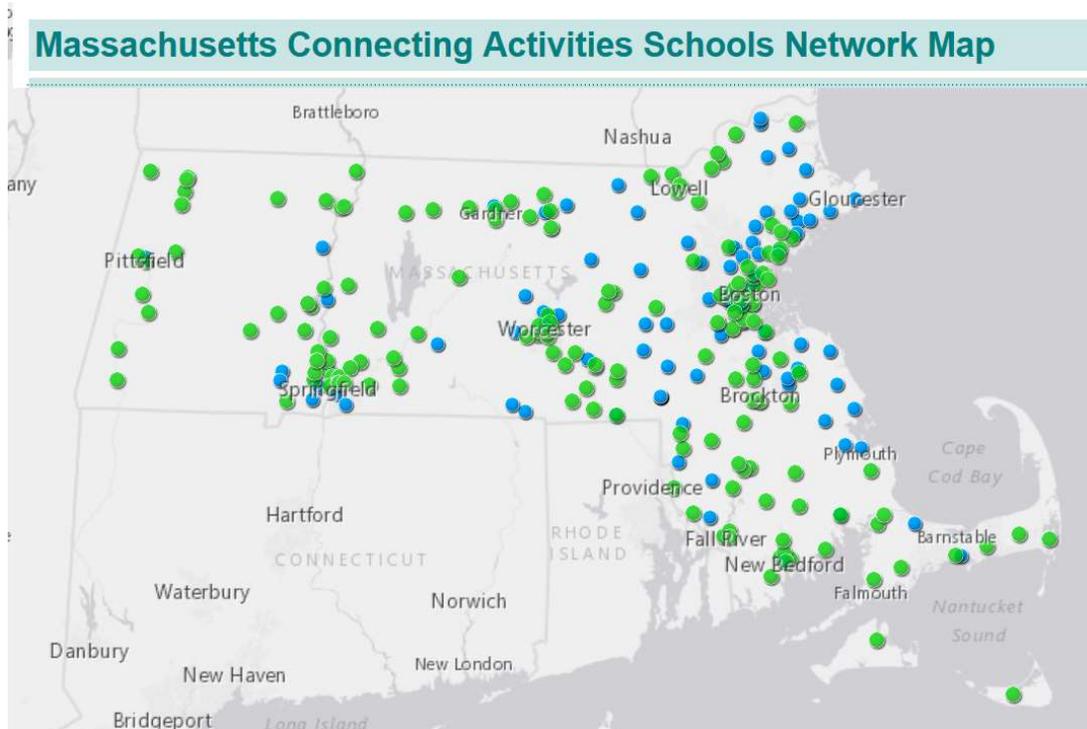
In addition to that core leadership group, there is a much larger network of practitioners who provide the essential functions required in all participating communities, including school district administrators, teachers, guidance counselors, career counselors, workforce professionals at MWB(s), chambers of commerce, and Career Centers, and local leaders of long-standing local School-to-Career partnerships, among others. At our FY2018 spring conference, over 175 practitioners representing many high schools from all sixteen regions along with their workforce partners, came together to share in this work.

*At the state level, CA is supported through a collaboration among the Massachusetts Department of Elementary and Secondary Education (DESE), the Executive Office of Education (EOE), the Department of Higher Education, and the Executive Office of Labor and Workforce Development (EOLWD) that guides the workforce development system, supported by the state MassHire Workforce Board. Through the MWB(s), knowledge of local and regional industry trends helps to inform development of school-based and workplace-based experiences for students.*

Connecting Activities reaches all corners of the state, from our large urban areas to our smaller cities, from suburban to rural areas, and is designed to serve students of all skill and income levels, including

students with disabilities, English language learners, and low-income students. Career development experiences are designed to support students enrolled in comprehensive high school programs, in Career/Vocational Technical Education, and in any of the career pathway programs described below in this report. Career development experiences are designed to support students in exploring a broad range of post-high-school options, recognizing the variety of post-high-school education and training options that provide access to high quality future careers.

The map below represents the network of Connecting Activities partner and member schools.



### What Was New in Connecting Activities in FY2018?

**Pathway Development:** In FY2018, DESE continued to refine and implement a system of High Quality College and Career Pathways (HQCCP), adding new Innovation Pathways and Early College Pathways to the mix of HQCCP statewide. The CA initiative is an important resource for this work, providing the regional industry connections needed for choosing career themes, establishing partnerships and developing the range of career experiences needed for these programs, including internship opportunities for students.

## What are High Quality College and Career Pathways (HQCCP)?

Massachusetts schools are leaders in offering programming that prepares students for college and careers, including Career/Vocational Technical Education, Innovation Pathways, Early College Programs, and a variety of other initiatives. Each of these provides a foundation that prepares students to enter postsecondary education, apprenticeships and/or employment in a career area of choice, providing career awareness, career skills and valuable credentials to help a graduate get started in postsecondary education and employment, while also providing a broad range of flexibility about future career direction. High Quality College and Career Pathways includes several types of programs.

### **Career/Vocational Technical Education (CVTE) Programs:**

Career/Vocational Technical Education (CVTE) programs are found in the Commonwealth's regional vocational/technical high schools, in city vocational/technical high schools and in many comprehensive high schools. Students concentrate in a career/vocational technical program of study, within one of 44 CVTE frameworks. CVTE coursework complements academic coursework, with frequent connections with math, science and other academic subjects. CVTE program graduates may go on to postsecondary education, apprenticeships, and industry training programs or directly into employment in their field of study. CVTE programs are offered in a wide range of career focus areas, such as biotechnology, carpentry, computer programming and web development, culinary arts, engineering technology, health assisting, machine tool technology and more.

### **Innovation Pathways:**

Innovation Pathways, an initiative launched in 2017, connect student learning to a broadly- defined industry sector that is in demand in the regional and state economy, and guide students to relevant post-secondary education and training. Participation in this kind of pathway contextualizes student learning, engages students in their high school experience, and can lead students to opportunities for meaningful careers in the relevant industry sector upon their completion of needed postsecondary education and training.

### **Early College Programs:**

Early College Programs, characterized by close partnerships between high schools and institutions of higher education, are designed to blend elements of high school and college to provide students with the opportunity to experience and complete college level academic coursework on a clearly articulated pathway and simultaneously gain exposure to a variety of career opportunities. Early college programs also present an opportunity to reduce the time and expense of earning a college credential while increasing the likelihood of completion.

See <http://massconnecting.org/pathwaymapping> for a map showing the array of HQCCP programs throughout Massachusetts.

## Updated Version of the Work-Based Learning Plan:

In July 2017, the Connecting Activities initiative introduced an updated version of its widely used Work-Based Learning Plan (WBLP). The new WBLP version, developed collaboratively by the statewide network, and based on surveys and conversations with school and employer partners, updated the list of employability skills (formerly called foundation skills) and introduced new resources for exploring and defining career-specific skills.

The implementation of the WBLP by the CA network is a critical aspect of the initiative. The WBLP supports student mastery of the skills needed for success in the workplace. It is a diagnostic, goal-setting and assessment tool, offering structure and clarity to internships, summer jobs and other career immersion experiences. The WBLP is widely used across the state. The WBLP is also the data source for DESE's skill gain analysis; reports generated from data collected through the plan offer compelling evidence of students improving their skills through these experiences.



## Focus on STEM Experiences:

Statewide, CA places a special emphasis on providing experiences in STEM careers - science, technology, engineering and math – with field trips, career days, guest speakers and internship programs providing awareness, exploration and immersion experiences in these fields. For example, the Metro South/West regional profile highlights two students from Marlborough High School who started exploring information technology while working on a computer application in school, later going on to an internship in Information Technology. The Central Massachusetts regional profile highlights field trips for middle school students to advanced manufacturing companies. Regional profiles for Boston, Greater Lowell and Franklin/Hampshire focus on internship programs in STEM fields.



## Focus on Regional Blueprints:

Beyond the STEM focus, the workforce boards have also collaborated in the development of Regional Labor Market Blueprints. Over the past two years, the Workforce Skills Cabinet has overseen the development of a comprehensive analysis of labor market needs of the state to support strategic planning for education and training across the Commonwealth. The Cabinet divided the state into seven large regions, sought teams of experts for each region drawn from all key stakeholder groups, and developed a process for those teams to create a blue print for the region, based on all the labor market information (LMI) relevant to the region. Each region has identified the in-demand industry sectors and occupations important in the region and the regions have worked on strategic plans to address skills gap issues and supply problems affecting staffing needs, and ultimately the economic viability of businesses in the regions.

These blueprints now serve as the leading source of relevant data for decision-making for workforce development and career education.

Examples include: the “Blue Economy” focused on marine and environmental work in Southeastern Massachusetts and the Cape and Islands; Advanced Manufacturing in Central, Northeastern, Southeastern and Western Massachusetts; Educational Services in Western Massachusetts; Transportation and Logistics in Central Massachusetts; Hospitality and Tourism in the Berkshires and other regions; and Health Care, Finance, Professional and Technical Services, and more in regions throughout the state.

For Connecting Activities providers, the regional blueprints provide inspiration for career awareness activities and internship placements. For example, the Cape and Islands and Greater New Bedford regional profiles highlight internships in marine-related settings, reflecting this regional focus.

### **Individualized College and Career Planning:**

Career development has a personal side as well. Through a multi-year college and career planning process, students have opportunities to reflect on their career interests, complete career interest assessments and inventories, research potential careers, and seek internships in career areas that interest them.

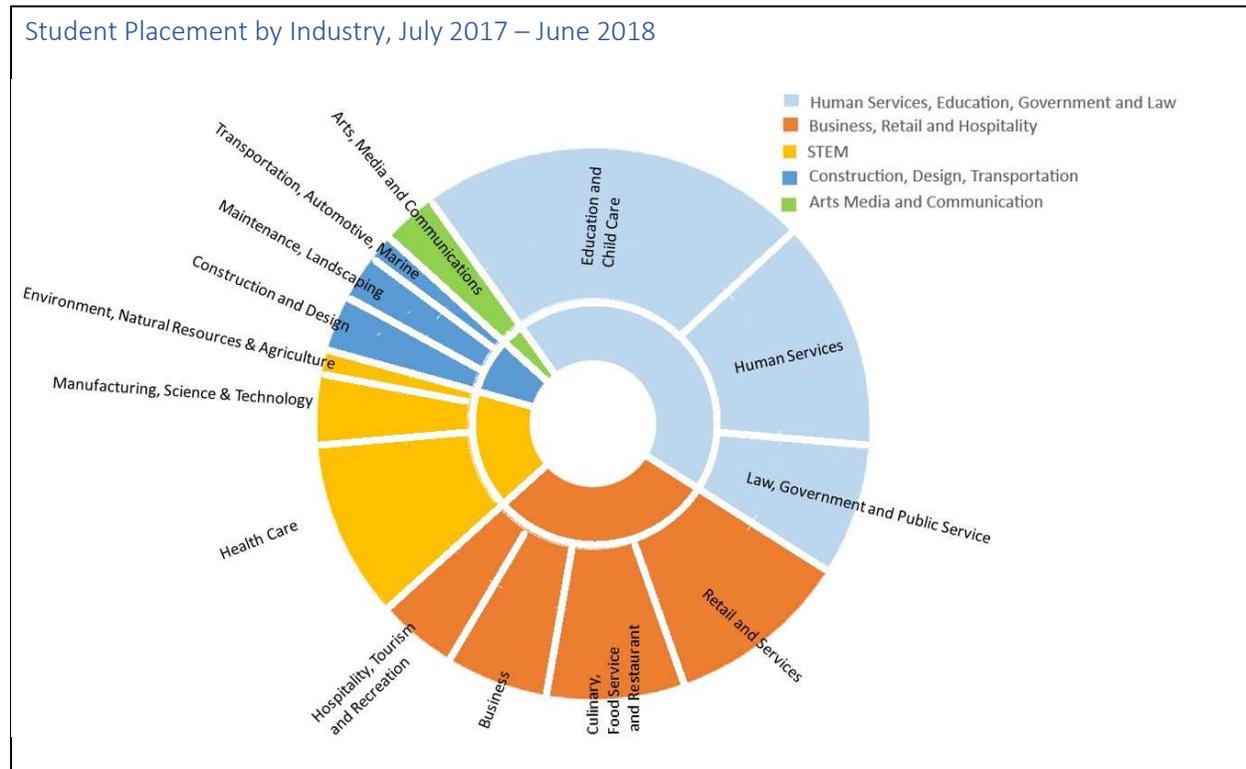
The diversity of internship experiences offered through CA reflect students’ personal interests and student enrollment in career pathways or career-related courses of study, as well as the regional industry trends.

### **A Profile of FY2018 Work-Based Learning Experiences**

Connecting Activities has managed a [database](#) of the detailed information generated by the MA WBLP for many years where practitioners across the state log on to store the detailed information that underpins this initiative. Through this mechanism, DESE is able to document the practices for which CA is responsible, including the pre and post-assessments of work experience that enables students’ skill gain as well as the amount of wages generated through the brokering work of the initiative. Key performance outcomes for FY2018 include:

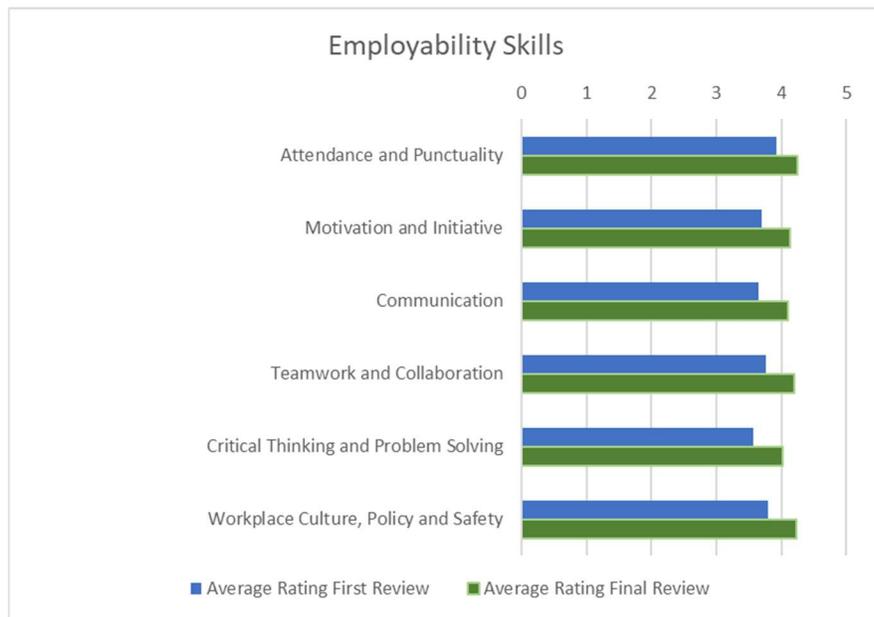
- 10,673 students were placed in internships at 4,273 employer sites.
- 7,610 (71% of these students) utilized the Massachusetts Work-Based Learning Plan (WBLP) on the job. The WBLP structures learning and productivity at the worksite and formally connects classroom lessons (MA Curriculum Frameworks aligned with Common Core Standards) to work-based learning experiences.
- Employers invested \$ 14,597,085 in wages to support student internships, almost a 5:1 match (the legislation requires 2:1, but the initiative consistently exceeds that).
- 7,753 students participated in classes/workshops including career exploration, work-readiness and internship workshops related to their internship experiences.
- 2,648 employers sponsored career awareness and exploration activities for students including career days, job shadowing and guest speaker programs.
- 185 high schools were partners in the CA initiative, and another 91 were members.

The following chart illustrates the diversity of industry sectors in which students have been placed. Placements reflect the network’s efforts to connect students with internships in career areas of personal interest, in emerging career areas and in local businesses that provide a valuable introduction to workplace skills and resume building opportunities. An area of particular emphasis now is STEM-focused placements, with a focus on placements in health care, manufacturing, science, engineering and technology, information technology, environment, natural resources and agriculture, finance and other STEM-related settings.



The following two charts show the initiative’s “skill gain analysis,” as documented by the Work-Based Learning Plans entered into its database. The skill gain analysis is based on data from Work-Based Learning Plans, looking at the initial baseline performance review and an end-of-program performance review. Students are evaluated on a set of six employability skills, common to all jobs and internships, and a list of three to five career-specific skills that are specific to the student placement and goals. This data shows that students show skill gain during their work experiences, with skill gains strongest in the highest-quality experiences with challenging job description and skill targets. The analysis below looks at the six employability skills and the most-commonly-used career-specific skills.

Work-Based Learning Plan, Skill Gain in Employability Skills, July 2017 – June 2018



Work-Based Learning Plan, Skill Gain in Common Workplace Skills, July 2017 – June 2018



This approach to career development provides a continuum of experiences, from career awareness to career exploration to career immersion. Career awareness experiences provide a glimpse of career possibilities, with career-related field trips, career days, guest speakers, career information and self-reflection opportunities to students to create awareness of the wide range of career opportunities in the local and regional economy and beyond. Career exploration experiences allow students to dig deeper, to find out about career pathways and skills important in areas of interest. Career immersion experiences provide in-depth experiences, through internships, hands-on projects and mentoring programs, giving students high quality experiences that will form a foundation for future career development. The following chart illustrates the richness of career exploration activities provided by the CA network.

### Career Development Activities – Database Highlights

Connecting Activities staff can browse the CA database to learn about hundreds of different workshops, career days, field trips and more. In FY2018, there were: **1,400** career development events and activities added to the database, representing career awareness and exploration opportunities for an estimated **30,000+** students and representing participation by **2,648** employers.

#### *For example:*

##### **From BMC Durfee High School, Fall River:**

Career Day – Career Day is an annual event for the sophomores at BMC Durfee High School. Professionals from a wide variety of careers are invited by the Career Specialist to participate. The Guidance Department collaborated with the History teachers on a labor market lesson to prepare students for the event; students compared current trends (provided by Bristol WIB) to World War 2 era trends. At the Career Day event, students are encouraged to speak to several professionals and collect signatures on their Career Day Passport, which are entered into a raffle for various prizes. (540 students; 54 employers)

##### **From Everett High School:**

Greater Boston Food Bank Field Trip -- Students in the Culinary Internship program at EHS embarked on an educational journey to learn about the mission of the Greater Boston Food Bank. The students toured the facility, participated in a Q&A session with a current employee and tried out volunteer work in the kitchen, contributing to the boxing of over 4,000 meals. (13 students; 1 employer)

##### **From Merrimack Valley: Lawrence High School, Andover high School, Phoenix Academy**

A Workshop: Do What You Love! Career Awareness – In coordination with area high schools, Connecting Activities staff present a job-readiness workshop to help students understand the importance of career awareness. Students complete a Career Interest profile, identify careers of interest, and learn how to gather and compare career pathways and Labor Market Information that can be useful to make educated future career decisions. (62 students)

##### **From Brockton High School:**

Tour of Accurounds -- Freshmen students from Brockton High Schools STEM Career Connect Program took a field trip to Accurounds. Students participated in a tour of the facility and learned about advanced manufacturing careers. (100 students; 1 employer)

## Regional Profiles

The remainder of this report presents highlights of each region's achievements and activities in FY18 to give a sense of the depth and breadth of the CA work across the state. These selections do not purport to represent all of the critical CA work being done by each region but offer only a sample. Readers are encouraged to visit each workforce board's website, included in their segment, for more information about their supports for youth and their CA work.

A student, employer or activity is profiled for each region, and these stories bring the CA initiative to life. The internships and career exploration offered to students by the region's CA initiatives have guided them to important life choices for post-secondary education and career. Their stories illustrate the power and potential of work-based learning experiences, enabled by Connecting Activities.

## MassHire Berkshire Workforce Board (BWB)

Website: <https://masshireberkshire.com/>

Since the start of the initiative, the statewide Connecting Activities program has been more than a stand-alone program, but also an initiative that connects with a wider network in support of career development for youth.

This network-building focus is visible in the Berkshire region's work. FY2018 activities of the Berkshire Connecting Activities program included continued support for regional collaboratives such as the Berkshire Compact for Education and the Berkshire United Way's Positive Youth

Development Impact Council. The Positive Youth Development concept focuses on how positive factors such as career exploration experiences (and more!) help youth to avoid risky behavior and to attain positive goals.

The BWB also placed priority on expanding upon partnering school districts' college and career readiness models and assisting the school districts with the development of High Quality College and Career Pathways.

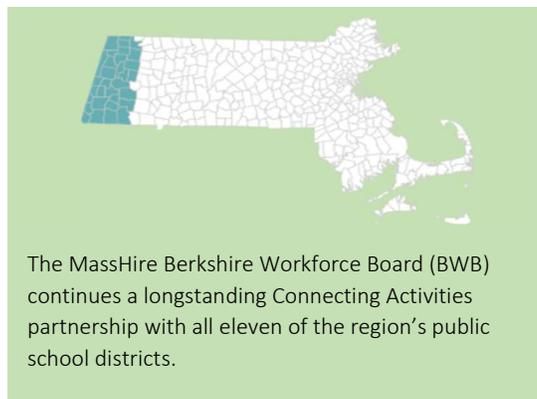
These focus areas are aligned with the region's Workforce Skills Cabinet initiative and the Regional Skills Blueprint, with emphasis on the region's critical and STEM industry sectors – Healthcare/Social Assistance; Hospitality and Tourism; and Advanced Manufacturing.

During FY2018, students participated in 426 internships and structured work experiences, provided by 210 regional employers. In addition, a total of 2,373 unduplicated students in grades K-12 and over 240 employers participated in career awareness, exploration and immersion activities and programs. Despite Berkshire County's declining population and resulting decreases in partnering school districts' student enrollments, a notable increase in student participation in career readiness activities is occurring on an annual basis. These increases are a direct result of the continued expansion of K-12 career readiness models, continued career readiness and academic integration, further development of college and career centers within the schools and enhanced career readiness professional development opportunities.

### ACTIVITY SPOTLIGHT: 8th Grade Career Fairs

The Connecting Activities model of career development education is based on a continuum of experiences, from career awareness to career exploration to career immersion. The Berkshire County Connecting Activities program is outstanding in the application of this model, with career awareness and exploration activities beginning in middle school and earlier.

Grade eight students from schools throughout the Berkshire County region attend career fairs at Berkshire Community College or the Massachusetts College of Liberal Arts. Each student participates in three workshops based on their career interests, working with industry professional from the region.



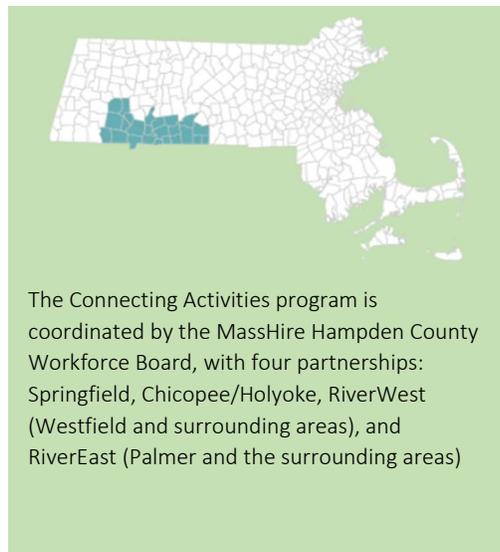
The MassHire Berkshire Workforce Board (BWB) continues a longstanding Connecting Activities partnership with all eleven of the region's public school districts.

## MassHire Hampden County Workforce Board, Inc.

Website: <http://masshirehcb.com/>

In FY2018, Hampden County ramped up its focus on paid STEM internships. Last year the four Hampden County partnerships worked with STEM employers to outline high demand areas such as Healthcare, Advanced Manufacturing, Educational Services, Cross-Industry Occupations such as IT-related and other critical industries such as Finance and Insurance. These targeted high demand areas are consistent with the Pioneer Valley Labor Market Blueprint that is designed to guide the work of regional partners to address talent gaps and needs.

MassHire Hampden County Workforce Board, Inc. is also the recipient of a second year of funding for the STEM@Work grant to coordinate paid STEM internships with STEM employers. All partnerships continue to focus on employer engagement and developing quality career pathway internship experiences for in-school youth.



The Connecting Activities program is coordinated by the MassHire Hampden County Workforce Board, with four partnerships: Springfield, Chicopee/Holyoke, RiverWest (Westfield and surrounding areas), and RiverEast (Palmer and the surrounding areas)

### STUDENT/EMPLOYER HIGHLIGHT: Big Y Foods, Inc.

Elaine, a graduating senior at the Springfield Conservatory of the Arts, was searching for a paid position for the summer to help with her fall college tuition bill. When the Springfield Public Schools School-to-Career Program partnership announced a position with the Big Y Foods Corporate Office, she applied. "I was interested because it was a paid internship, but also, I wanted to gain some experience with people who had a background around business and marketing. The reason for this is I was/still thinking of a double major in Business Management and Dance." Elaine, who had participated in the Dance program at the Conservatory, was excited to gain exposure to the world of corporate business.

During her internship, the Big Y Corporate Office provided her with experience in diverse aspects of retail operations and management, including print jobs, checking store orders and packing orders, handling coupon bags, restocking shelves, assisting with mailroom projects and gaining exposure to the IT department and computer programming. Her successful internship led to a part-time position. Elaine is now working part-time as a cashier for Big Y Foods, while studying as a full-time dance major at Springfield College.



## MassHire Franklin Hampshire Workforce Board

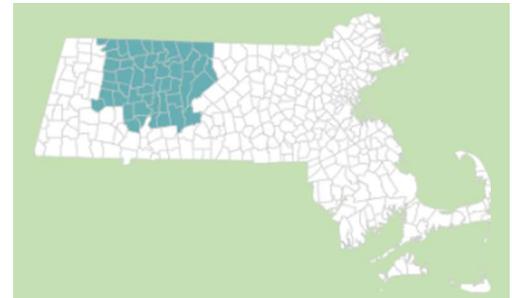
Website: [www.masshirefhw.org](http://www.masshirefhw.org)

Franklin Hampshire Connecting Activities School to Career (STC) program leaders describe their mission as helping youth to “develop a career focus, gain technical and employability skills, obtain work experience, and achieve their career goals.” Strategies used to achieve this mission include professional development and resource sharing; identification of youths’ employment-related needs and resources; and cross-sector collaboration to reduce systemic barriers and increase access to work-related opportunities for youth.

What does that look like in the schools? In Franklin County, STC invited school librarians and health teachers to collaborate on career projects and worked with schoolwide teams to integrate career development education into student experiences. Many partner schools also embraced the challenge of creating a CDE “scope and sequence” – planning a year-by-year continuum of CDE experiences – with a new series of student CDE interventions: workplace safety (in Health classes), MassHire CIS Portfolio Accounts, career assessments, resume development, reference sheets, and other practical information and tools designed to empower and prepare youth for the work world. This year the Greenfield office also helped match six faculty members across the workforce region with Teacher Externships in industry.

In Hampshire County, the STC Coordinator kicked off the recruitment of employers and students for the STEM Paid Internship Program, leading to 33 student slots (exceeding the goal of 20 by more than 50 percent) and over a dozen employers, with most placements starting during the summer of FY2018. More than half of these placements took place at the University of Massachusetts Amherst and were funded through a partnership with the Massachusetts Life Sciences Center. The program reports a diverse population of student participants by race, gender, disability and other characteristics, reflecting the goal of opening STEM career opportunities to all students.

Overall, in FY2018, 530 youth participated in a job or internship with a total of 285 employers. Additionally, 2,470 youth experienced a combination of career awareness, exploration and immersion experiences, making them more prepared for work-based learning, career/education decision-making, and the world of work. Notably, more schools are integrating the labor market information provided, embracing a more nuanced view of viable career and education options for their students, recognizing the importance of fostering early work experiences, and examining how school design can include pathways to viable careers and industry recognized credentials – especially within critical industries.



MassHire Franklin Hampshire Workforce Board provides oversight of regional program out of its office in Greenfield. In Franklin County and the North Quabbin area, a Connecting Activities School to Career (STC) Coordinator and USDOL-funded Summer Jobs and Beyond Youth Pathways Coordinator provide services to seven partner schools. In Hampshire County, the Collaborative for Educational Services (CES) in Northampton provides services to eight partner schools.

## STUDENT SPOTLIGHT: Sarah



After attending a Hampshire County School-to-Career information session for students and guidance counselors about the STEM@Work Paid Internship Program, Sarah, a Junior at Northampton High School, applied and was offered a placement at the Amherst Department of Public Works. (Amherst DPW).

She participated in several separate rotations with Wastewater, Water Treatment, and Civil

Engineering. Through these rotations, Sarah learned how a municipal water system works, from the point the water leaves the residence or business through the process of its collection, wastewater treatment, and release into the local river. Sarah accompanied workers on morning plant rounds to check the operation of the machinery, including a device called a “gravity belt thickener.” Sarah assisted the operators in the daily flushing, cleaning, and maintenance procedures for the plant equipment. Her rounds included visiting the town’s 21 pump stations, as well as routine maintenance, including diagnostic inspections of some stations affected by a recent power outage. Sarah also assisted in a procedure called

a “solids balance check” using volumetric settling comparisons



Pump station gauge

One of the things Sarah enjoyed most about her placement with Amherst DPW was how much she learned about microorganisms and how they can indicate the age of sludge and reveal facts about the community itself—for example, what sorts of pharmaceuticals are flushing into the river from townspeople’s use.



As part of her exposure to the wastewater treatment process, Sarah helped hose algae off the weirs, baffles, and outfalls of a device called a “final clarifier” at a central wastewater processing hub.

## MassHire Central Region Workforce Board (MCRWB)

Website: <https://masshirecentral.com/>

FY2018 highlights for the Central Massachusetts region include a successful STEM initiative, the launch of a teacher externship program, and collaborative work on the regional blueprint with the North Central region.

The MCRWB received funding from the MA Executive Office of Education's Grant to Increase STEM-Focused Internships for High School Students grant. Through this grant there have been several exciting developments:

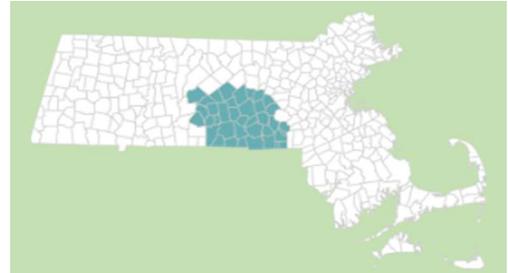
- A marketing campaign, video, and marketing materials to recruit employers to sponsor paid STEM internships.
- A roundtable with manufacturing employers at the Worcester Regional Chamber of Commerce.
- Internships for 116 high students, including many internships with first-time employer hosts.
- The re-introduction of the region's Growing and Readyng Our Workforce (GROW) Awards, which recognize Central Massachusetts businesses for support for youth employment and work readiness.
- Manufacturing Month tours for students from Worcester and Blackstone Valley. Students across the region toured manufacturing facilities through BVEF, and through Quinsigamond Community College.
- A STEM Conference sponsored by BVEF and Tufts University Cummings School of Veterinary Medicine for students and their parents, with hands-on workshops relating to STEM subjects.

Establishment of a teacher externship program, which began in Summer 2018, which places teachers in industry settings in order to gather industry experience and insights to apply in classroom teaching. Establishment of the Educational Hub, through the Central Massachusetts Center for Business and Enterprise, of the Blackstone Valley Chamber of Commerce (BVCC). Through the Educational Hub, the BVCC is adding educational opportunities for small businesses and local public schools to utilize its Fab Lab that is filled with 3D printing, high-end Roland and FARO machines, state of the art computers running the most recent version of AutoCAD, MasterCAM, Solidworks, and a variety of Microsoft and Adobe applications.

### SPOTLIGHT: WATERS CORPORATION

Waters Corporation, a world leader in advanced analytical scientific technologies, hosted 90 middle school students and teachers from Webster, Douglas, Millbury, and Hopedale as part of the Blackstone Valley Education Foundation's (BVEF) Manufacturing Month event.

Managers, scientists, and engineers from the company introduced the students to multiple STEM career options within Waters, which operates in more than 110 countries worldwide. The visit to Waters Corporation was one of several STEM employer visits coordinated by BVEF as part of their 2018 Manufacturing Month activities – other events included visits the Saint-Gobain R&D labs, Dell Technologies, and Unified Global Packaging.



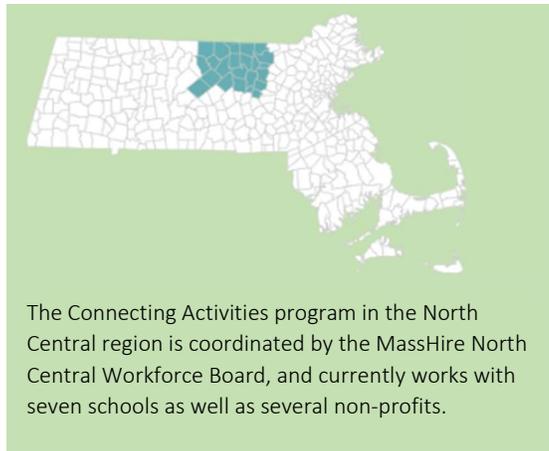
The MassHire Central Region Workforce Board (MCRWB)'s Connecting Activities collaborating partners are the Worcester Public Schools (WPS) and the Blackstone Valley Education Foundation (BVEF), who oversee grant activity for twenty-four schools across Southern Worcester County.



## MassHire North Central Workforce Board

Website: <http://masshirenorthcentralwb.com/>

In FY2018, the North Central region coordinated 920 placements in a variety of private sector, non-profit organizations and school-based settings. Placements reflect the strengths of the rural and small urban communities of the region. For example, through Narragansett Regional High School's internship program, students identify career goals and work with the internship coordinator to arrange internship sites. Students work with local police and fire departments, graphic design and photography businesses, medical offices and law offices, the local television station, and elementary, middle and high school departments. Students complete a series of assignments designed to encourage thoughtful reflection on the internship experience. The Massachusetts Work-Based Learning Plan provides a foundation for the experience, with students working with their internship supervisors to develop job descriptions and to identify and evaluate career skills relevant to the position.



The Connecting Activities program in the North Central region is coordinated by the MassHire North Central Workforce Board, and currently works with seven schools as well as several non-profits.

The flagship program in the North Central region has been for the past sixteen years the Women in Technology program hosted by Johnson Controls, Inc. Five local schools take part with their students meeting twice a month at Johnson Controls throughout the school year to work on real world projects lead by mentors from the company. In FY2018, Illinois Tool Works hosted two projects as well. The program typically provides projects for about twenty-five students who, at the end of the year, present their final projects to teachers, mentors, administrators and parents at Monty Tech in May.

### ACTIVITY SPOTLIGHT: COMPANY TOURS

Company tours provide an important opportunity for students, teachers and administrators to see the work of local companies, hear about career opportunities, and see connections between classroom work and workplaces. In the North Central region, where one in four jobs is related to manufacturing, company tours in Manufacturing and STEM companies have been an important focus. In FY2018, the North Central Connecting Activities program featured tours for superintendents, teachers and students of companies including AIS, BJA Magnetics, NyproMold and RestRock.

## MassHire Greater Lowell Workforce Board

Website: <https://masshiregreaterlowell.com/>

The MassHire Greater Lowell Workforce Board (MGLWB) Connecting Activities Program continues to create work-based learning opportunities for youth in our local area. CA staff are located on-site at four high schools, during and after school, on a set weekly and bi-weekly schedule. Students from Lowell High School, Tewksbury Memorial High School, Dracut High School and Greater Lowell Technical High School participate in career readiness workshops such as resume and cover letter writing, job application assistance, and interviewing skills in addition to job fairs, job shadowing, and facility tours at various companies. These activities are developed, coordinated and/or facilitated by CA staff.



The Connecting Activities initiative in the greater Lowell region is coordinated by the MassHire Greater Lowell Workforce Board, in partnership with area schools.

In FY2018, CA Staff coordinated with school guidance and administrative staff to host four job fairs on-site at the high schools; in which more than 70 employers participated. Before each job fair, CA staff offered workshops at each school on “How to prepare for a Job Fair”.

The Employer Appreciation Breakfast is an annual event where employers are recognized for their help, participation, and support of our activities throughout the year. Employer support includes, for example:

- Employers from various disciplines present and expose students to different professional backgrounds and experiences. Students can ask questions and network with businesses.
- Employers assist with internship placement by helping students prepare for interview questions, teaching them how to present themselves to employers and fill out preparatory applications.
- Several employers joined CA staff to film a video as they discussed the importance of soft skills. This video was broadcast in schools and sent to nearby communities for broadcast on local television. The goal of the video is to help prepare students for upcoming internships and job fairs.
- Participation in a STEM roundtable to emphasize the importance of STEM internships and exposure to STEM occupations for students.

Throughout the year, CA staff maintain relationships with employers by visiting their offices, checking in regularly on youth placed with their company. CA staff network with employers through Chamber of Commerce meetings, economic development meetings and on-site meetings with selected companies, to share initiatives, and invite businesses to become involved in the program.

### STUDENT SPOTLIGHT: Felicia, Stephanie and Catherine

Thermo Fisher Scientific, with a facility in Tewksbury, decided to participate in the state’s STEM@Work initiative in FY2018, and was connected with Tewksbury High School by CA staff. The high school jumped at the chance to include students in the company’s new Internship program, and identified three young women who each wanted to explore a career in STEM. Prior to starting their internship, these seniors attended CA’s career readiness workshops to prepare them for the Thermo Fisher experience.

Thermo Fisher's Intern Program reflected the company's interest in talent development, and offered a high-powered and comprehensive look at the industry. The interns participated in a wide range of activities including a STEM design challenge, product demonstrations, and conversations with STEM professionals from outside companies. Interns also had the opportunity to tour Thermo Fisher's Biomarkers Research Initiatives in Mass Spectrometry (BRIMS) center, manufacturing facility in Bedford, MA, and Corporate Headquarters in Waltham, MA. The program's orientation included learning how to use Outlook, iConnect, Yammer and eTime as well as workshops for networking skills, professional development, and career exploration.

At the end of the internship, the students presented on their work, accomplishments, and learning experiences. The presentations included promoting lab safety culture, including awareness of potential hazards and standardized safety symbols, and how to operate a clean room with proper use of the equipment.

The students were very happy with their experiences at Thermo Fisher and would like to return in the coming year. They have all gone on to college, with goals to stay in STEM fields after graduation. Jessika Fabiano, Senior Program Manager, Early Talent Program at Thermo Fisher, Beatriz Sierra, Youth Employer Services Specialist at the MassHire Greater Lowell Workforce Board and the three Tewksbury High School interns were recognized by the Tewksbury School Committee for their collaboration and opening new doors to Tewksbury youth.



## MassHire Merrimack Valley Workforce Board (MassHire MVWB)

Website: <https://masshiremvwb.org/>

The Connecting Activities program in Merrimack Valley provides high school students with work-based learning experiences and other career development activities that support their preparation for post-secondary education and jobs.

During FY2018 the program met or exceeded the region's goals, giving participating youth the tools and experiences needed to advance their education and become productive members of the region's workforce. The model supported students through counseling and career readiness workshops; and continually increased the number and variety of employers involved in programming.

Merrimack Valley program leaders reflect that "our CA strategy for offering students work-based learning and career development education activities began with fostering multi-program coordination and collaboration. Working consistently in the same communities, allowed the CA staff to create and build upon local employer connections, resulting in more career development education opportunities for participating youth. Additional work-based learning took place as students participated in career days, career and employment fairs, and job shadowing. The result of this braiding of programs and resources resulted in optimal delivery of services through a cost-effective, organized and comprehensive approach."



The MassHire Merrimack Valley Workforce Board (MassHire MVWB) FY2018 Connecting Activities (CA) program is implemented in collaboration with MassHire Merrimack Valley Career Center (MassHire MVCC), partner schools, and local employers.

## STUDENT SPOTLIGHT: Derling

Derling first met the Connecting Activities (CA) staff during her junior year at Lawrence High School, when she attended a series of job readiness workshops coordinated by CA and the non-profit Global Deeds. These after-school sessions guided her in the creation of her resume, how to complete job applications and interview for a job, and the importance of learning about her career interests. With English as her second language and being a newcomer to the country, these basic skills provided the foundational skills and self-confidence needed for her to be prepared for future opportunities.

To venture into the exploration of careers in Business and Marketing, Derling participated in a CA Job Shadow Day where she had the opportunity to spend time with professional staff at Solectria Renewables LLS, a solar inverter manufacturing company. At the end of this experience, Derling expressed that she had “learned what it’s like to work in a team - that all co-workers are important” and she “was surprised by the fact that Solectria is a company that helps the environment”. We can appreciate from her comments how she valued the job shadow experience.

During her senior year, Derling made a post-secondary commitment to the Health Care Pilot Program. This multi-sector partners’ program provided her with training and subsidized employment within the healthcare industry. She completed the Signal Success training and her work-based learning summer experience, securing entry-level unsubsidized employment within the healthcare field. Currently, she is on track to obtain her Medical Assistant Certificate and continues to work as a Call Representative at the Greater Lawrence Family Health Center.

## North Shore Workforce Board (NSWB)

Website: <https://masshire-northshorewb.com/>

The North Shore Connecting Activities program continues to expand the network of member and partner schools, offering a continuum of career awareness, career exploration and career immersion activities in schools throughout the region. A major theme of Connecting Activities work in the region is “raising career awareness,” as the regional blueprint planning process has sharpened focus on key industries in the region and on the way that key occupations cross-over industries, such as the prevalence of Information Technology work across all types of industries.

A second major theme of the region’s Connecting Activities work is simply the one-on-one attention that the staff and partners provide to students, helping to make matches between student interests and opportunities.

Like many programs around the state, Connecting Activities programming in the North Shore is complemented by additional youth programming, including programs for out-of-school youth. For example, in Spring 2018, the North Shore launched a pilot program, without grant funding, to offer an IT Helpdesk Program to out-of-school youth. The class included eight youth who were interested in IT yet needed additional skills in order to enter the workforce in this field. We made it a priority to include career speakers from several companies, a tour of the IT departments of Salem Hospital.

Program staff reflect that their work has shown that “students ‘don’t know what they don’t know’ and therefore need more opportunity to explore various career pathways, some that they may never have considered, in order to make informed decisions for their future. For example, those interested in health care most often state that they will pursue nursing, without knowledge of the various other health care occupations. Our IT students were unaware of the significant crossover between industries- their guest speakers included IT professionals from two banks, a hospital, a college, the Career Center, and an IT company. Our goal is to offer and encourage career exploration as frequently as possible.”

### STUDENT SPOTLIGHT: Angelia

Angelia attends Salem High School and has been a "Club kid" (participant in Boys and Girls Club of Lynn) since kindergarten, and has followed the B&G Club all the way to junior year of high school. The staff there describes her as always one to accept a challenge and eager to learn new things. When she turned 13, she started her first summer as a Junior Staff, and after working with the NS Youth Career Center this year, and attending career readiness workshops, she was offered a summer position. This fall, she was offered a year round position, and at the same time, she enrolled in the Salem High School/Salem State University Early College program. Through this program, she also receives additional career readiness from MassHire and college readiness from LEAP for Education.



The North Shore region’s Connecting Activities program is coordinated by the MassHire North Shore Workforce Board (NSWB) with partner schools in each of the region’s three cities and member schools in the school districts across the region.

## MassHire Metro South/West

Website: <https://www.masshiremsw.com/>

Teacher externships, which are short-term professional internships that allow teachers to explore industry connections, are a hallmark of the CA initiative.

In Metro South/West, the CA program recruited four teachers and employers for summer teacher externships in IT and Healthcare. The participating teachers created curriculum that integrated industry trends with their classroom curriculum. Two projects focused on healthcare: one on memory care, with a curriculum project about dementia care, titled “I’m Still Here” and another about home health care. Two projects focused on information technology, with one project focused on application development and web scripting and another project focused on robotics.

Another highlight for FY2018 was the launch of a Career Center in Marlborough High School. The Marlborough High School Career Specialist worked with MHS Guidance to open the center, which increased student interest in career exploration. Students drop in for questions and make appointments to search for part-time jobs or internships, or to schedule career coaching, and sign up for resume writing and interview workshops. In addition, Marlborough’s speed networking events with local businesses provides practice with informational interviewing in the comfort and safety of a small group. Students ask prepared and spontaneous questions and hear professionals from different backgrounds talk about their school-to-work experience. Students gain exposure to a variety of careers, including biotech, IT, healthcare, financial services, hospitality and the construction trades. Students in grades 9-12 report greater interest in exploring careers after they participate in speed networking events.

Career workshops at Framingham High School are another FY2018 highlight, where Framingham Career Specialist Kevin Lopez brings Framingham High School alumni into career workshops each year so that students see examples and role models from their own school, who gained the foundation and resources they needed to find their success.

### STUDENT SPOTLIGHT: Michelle and Cyra

At Marlborough High School, two students found new challenges at their second app-development internship. Michelle and Cyra first gained experience in the summer of 2017 building an app for the MetroWest Women’s Conference, when they worked with Geisel Software under the supervision of their MHS Math teacher. With the success of this conference app, word spread among the business community in Marlborough that Marlborough Public School students were learning to develop apps.

When GE Life Science offered a new opportunity to build an app the following year, Michelle and Cyra took the challenge, but soon realized they this project would require them to become more independent in a large company without on-demand technical assistance. After working at GE Life Sciences throughout the spring and summer of senior year, Michelle and Cyra completed the app, which allows GE Life Science employees to reserve and customize meeting space. Michelle and Cyra are studying computer engineering in their first year of college. “This experience at GE was hard but it was worth it!”



Connecting Activities in the Metro South/West region is coordinated by MassHire Metro South/West, formerly Partnerships for a Skilled Workforce.

## MassHire Metro North Workforce Board

Website: <https://masshiremetronorth.org/>

During FY2018, schools throughout Massachusetts began to launch new High Quality College and Career Pathways, including Innovation Pathways, Early College Pathways and Career/Vocational Technical Education (CVTE) programs.

In Metro North, the Connecting Activities program has supported Everett high School as it launches several different types of pathways – including new CVTE programs and Innovation Pathways.

One CA highlight: In FY2018, a Careers in Technology industry panel was held at Everett High School, where 50 students had the opportunity to hear from IT professionals to learn about the industry and potential career pathways. CA staff provided support to annual career fairs at several high schools and provided both group workshops and individual one-to-one support to students to provide career awareness and job readiness support.



The MassHire Metro North Workforce Board serves the Metro North region, with strong partnerships with the school districts of Chelsea, Everett, Malden, Revere, Somerville, and Woburn.

### EMPLOYER SPOTLIGHT: Metro Credit Union

The Metro Credit Union currently has a satellite branch at Chelsea High School where students can gain access to financial planning and services directly through the bank. The selected internship students have worked alongside bank employees to learn about banking, accounting and financial planning on a larger scale. The students were prepared for the interview through one-on-one counseling and resume building support from the Metro North Youth Specialists who currently provide career services and job readiness support to students of the Metro North region.



Ashley Castro, Stevewee Duong, Diana Hercules, Masireh Ceesay pose with site supervisor, Joshua Mora, at their Metro Credit Union internship.

## MassHire Boston Workforce Board

Website: <http://bostonpic.org>

The Boston Private Industry Council (PIC) serves as Boston's MassHire Workforce Board and the city's school-to-career intermediary organization. The PIC prepares students from 31 Boston public high schools for the workplace through a variety of career development activities and connects them with jobs and internships, both summer and school-year. The PIC oversees the private sector component of the Mayor's Summer Jobs Program and partners with the Mayor's office to recruit new private sector employers to supervise students and pay their wages.



The Boston region's Connecting Activities program is coordinated by the Boston Private Industry Council (PIC).

The core of the PIC's School-to-Career initiative is a team of career specialists and employer engagement staff supported by Connecting Activities funding, as well as other revenue streams. Career specialists work within Boston's public high schools. They guide, mentor, and inspire thousands of students annually and connect them with work-based learning opportunities. Throughout the school year, the PIC arranges career awareness and exploration activities such as career panels, workplace tours, mock interviews, and job shadows. Career specialists also match hundreds of other students with community-based jobs sponsored by foundations, corporations, and the public sector. The PIC's employer engagement team recruits new partners, and assists existing employer partners with hiring processes, supervisor recruitment and training, and student evaluations using the Work-Based Learning Plan.

As part of the statewide STEM@Work initiative, the PIC is expanding STEM-related internships and career exploration activities for high school students. Tech Apprentice, a six-to-seven week paid summer internship program, is at the center of the PIC's overall IT pipeline strategy. Over the past year, the number of Tech Apprentice placements increased by 46%. Students also have the opportunity to work in science laboratories at life science companies, colleges and universities, and hospitals.

The PIC prepared nearly 3,200 Boston public high school students for school-year and summer jobs during FY2018. Over 88% of these positions were privately funded, typically by supervising employers that are paying the wages of student interns and in some cases by foundations supporting community-based placements. Many of these students obtained work-based learning experiences with Boston's top healthcare, financial services, life science and technology companies.

### ACTIVITY SPOTLIGHT: TechApprentice

Tech Apprentice is a six-week, paid summer internship program for tech-savvy Boston Public Schools (BPS) high school students who want to work at local companies. These talented students are considering pursuing IT majors in college, and they need a work-based experience to help them understand the options available to them in the high-tech arena. Students work at companies throughout Boston in a wide range of industries. Assigned projects include but are not limited to:

- helpdesk/ troubleshooting support
- web design and programming
- quality control
- social media and video production

## MassHire South Shore Workforce Board

Website: <http://www.masshiresouthshorewb.com/>

Financial literacy is an important component of career development education. Program leaders in the South Shore region reflect that “we have seen an increase this past year of schools in our region making concerted efforts in the realm of financial literacy. Through Credit for Life Fairs and additional financial literacy offerings, schools are providing crucial opportunities for students to envision making real world decisions when it comes to saving, spending, and budgeting their money based on a range of potential career choices and lifestyle decisions.”



The South Shore region’s Connecting Activities program is coordinated by the MassHire South Shore Workforce Board, with partner schools throughout the region.

In partnership with the participating schools, the Connecting Activities program brokered 406 placements in FY2018, with an increasing focus on private sector work-based learning experiences, with placements occurring at 154 distinct settings, 104 of them being in the private sector. Partner schools also provide a rich array of Career Development Education (CDE) activities. These ranged from guest speakers to field trips, job shadow events to career fairs and from workshops on resume development to the interpretation of local Labor Market Information.

Of particular note this past year has been a partnership with South Shore Vocational Technical High School. Leaders there have been trying to increase their co-op participation rate but noted that low-income students frequently miss this opportunity due to a lack of transportation. Some creative planning and support has led to an increase in the number of juniors who are able to afford to take driver’s education, setting them up for success during their co-op placement in their senior year.

### STUDENT SPOTLIGHT: Don

Don was born in Haiti but moved to the Dominican Republic in 2006 after his father passed away. When he moved to the United States at the age of 14, he spoke no English.

At Randolph High School, Don met the Connecting Activities Coordinator who made a referral to help him find employment. He was placed at Charley’s Philly Steaks, which turned out to be the perfect first job for him. His supervisor was impressed by his work ethic, his friendly demeanor and his willingness to serve as a mentor to other employees. Don proved to be a leader and an inspiration amongst his peers.



Don said: “What I like about my supervisor, is that when I do something, he gives me feedback right away. I also learned some new things about myself that no one had ever told me. I had to discover them myself. The greatest experience is that I learned how to deal with different kinds of people. This job has given me more knowledge and has helped me financially and economically. I am thankful to this program because if you didn’t give me the opportunity I would be so far behind.” Don has gotten his driver’s license and was able to buy a car. He now speaks four languages and is enrolled at Massasoit Community College.

## MassHire Greater Brockton Workforce Board

Website: [www.masshiregbwb.org](http://www.masshiregbwb.org)

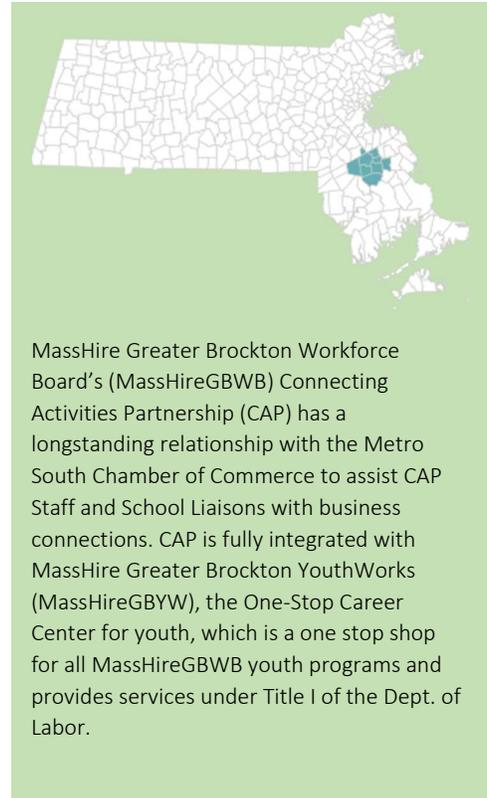
MassHire Greater Brockton Workforce Board's (MassHireGBWB) Connecting Activities Partnership (CAP) brokered 282 internships in FY2018 with over 100 businesses that helped guide youth in college and career readiness. Career development education is supported through the One-Stop Career Center for youth, giving partner schools and youth ages 14 - 24 in the Brockton Service Area instant access to the resources in the Center which includes area job postings, the resource room computer lab and employer partners. The schools can also set-up work readiness, life skills, career development and other educational or career focused workshops for their students.

Businesses and schools region wide connect for major annual events in support of area students. Highlights of FY2018 include:

The 7th Annual STEM Career Exploration Event in conjunction with Bridgewater State University's Center for the Advancement of STEM Education (CASE) was held on February 27, 2018. About 90 students from Avon-Middle High School, Brockton High School, Edison Academy, Keith Center, Southeastern Reg. Voc. Tech. High School, and South Shore Voc. Tech. High School attended this event. Youth participated in "speed networking" (conversing for 8-10 minutes with fourteen different professionals from the STEM field), and enjoyed the keynote address along with a tour of the University's multimillion Science Building.

MassHireGBWB's Future Entrepreneurs Series Planning Team hosted their 8th Annual Youth Business Plan Competition on May 8, 2018. Contestants pitched their entrepreneurial ideas via PowerPoint at MassHireGBWB, to a panel of three expert judges. The primary goal of this competition is to empower the entrepreneurial spirit among our region's young population and encourage the development of feasible business ideas. The top three awardees are awarded funds for startup materials.

On May 3, 2018, high school students from Avon, Brockton, Stoughton and the regional vocational schools participated in the 2nd Annual Brockton Area Construction Career Day at the Brockton Fairgrounds. This event gave students an immersive and hands-on experience while interacting with and learning from industry professionals from a wide range of construction & engineering careers. The students had the opportunity to get up close and personal with large machinery, vehicles, equipment and tools that are used by industry professionals in these specific fields. Private businesses, city and state departments, utility providers, and trade schools combined to offer students an in-depth glimpse into what a typical day is like for professionals in these fields.



## STUDENT SPOTLIGHT: Liam

Liam is a student from the class of 2018 at South Shore Vocational Technical High School. In Spring 2017 of his Junior year, Liam entered the school's Co-Op Program in his selected trade as an electrical apprentice in hopes to one day be licensed as a Master Electrician. Liam has always known he wanted to be in a construction trade before even entering high school as he has always worked for his family's company.

Liam obtained an internship at a commercial electrical contracting company where he started in a prefabrication workshop. His co-workers and employer have been great influences on him. Liam stated, "I owe a lot to those guys; they really want me to do well and have a long happy career".

At this company, Liam has been able to experience a variety of different job sites where he has worked in pharmaceutical, educational, and residential buildings. His instructors note that from the start of his internship to now, Liam has shown a strong initiative and enthusiasm towards his career. Liam plans to pursue a career as an electrician after high school.



## MassHire Bristol Workforce Board (MHBWB)

Website: <http://bristolwib.org/>

The MassHire Bristol Workforce Board (MHBWB), along with its partner schools and organizations, had another successful year of Connecting Activities. Of the 20 public high schools in the MHBWB service delivery area, twelve are Connecting Activities partners, and four are members. With 70% of the total public high school population of the region in the 12 partner schools, MHBWB was able to expose over 2,619 students to Career Awareness and Career Exploration activities with the participation of 195 local employers.

A key element of the region's Connecting Activities success is that the CA Career Specialists in each partner organization have solid relationships with the staff at each of the partner schools. While some partner schools have dedicated staff to Connecting Activities programs, other schools have devoted office space for Connecting Activities Staff. The most impactful programs that Connecting Activities offer students paid work experience while earning academic credit.



Over 170 employers paid for Connecting Activities Jobs and Internships with a total estimated employer-paid wages being over \$1,178,000 that places the wage match at a 9.3:1 ratio. Also, over 400 students in the Bristol area had a work-based learning plan. In addition to CA staff members, youth in the Bristol region are able to connect with MassHire one stop career centers in Fall River, Attleboro, and Taunton for career assessment, work readiness skills training, and job search assistance.

## EMPLOYER SPOTLIGHT: St. Anne's Hospital

Saint Anne's Hospital is a member of Steward Health Care, the nation's largest private, for profit physician led health care network in the United States. Dedicated to serving the needs of the community and values collaboration with community partners, Saint Anne's has been a strong supporter of MassHire Youth Connection's Connecting Activities program for several years, through their participation in career exploration activities, including: Career Days at schools, Informational Interviews, attending Job Fairs, and hosting an on-site Health Care Career Day at the hospital.



In FY2018, electronics and engineering students, teachers and administrators from B.M.C. Durfee High School and Diman Regional Vocational Technical High School were invited to Saint Anne's to learn about their robotic assisted surgical program. During this event, students were able to interact with St. Anne's Hospital administration, surgeons, other hospital staff, and representatives from the robotics companies. Students were introduced to the technology through presentations and hands-on demonstrations, which featured the robotics in health care. The focus was on the growing number of health care career paths that robotics can offer- e.g. not just surgeons and other health care providers, but also designers, medical device engineers, biomedical engineers, technicians, etc.). After the event, one student noted that he had never considered how his interest in engineering could connect to a career in Health Care.

## MassHire Greater New Bedford Workforce Board

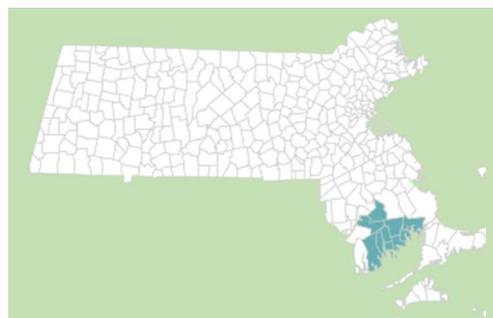
Website: <http://masshiregreaternewbedford.com>

The Greater New Bedford regional Connecting Activities (CA) program has support from district superintendents, high school principals, school staff, community organizations, and area employers, allowing the region to succeed with its college and career readiness initiatives.

Career activities in FY2018 centered on internships, resume writing, and job readiness/preparation. CA staff also implemented paid internships for rising seniors with employers recruited through our regional STEM outreach efforts.

In a region with a strong history of manufacturing work, the Greater New Bedford program has created opportunities for students to explore opportunities in manufacturing through company tours and internships.

The regional Connecting Activities program also has strong ties to higher education and builds opportunities for high school students to enjoy dual enrollment opportunities, with students studying business, entrepreneurship and more through local colleges.



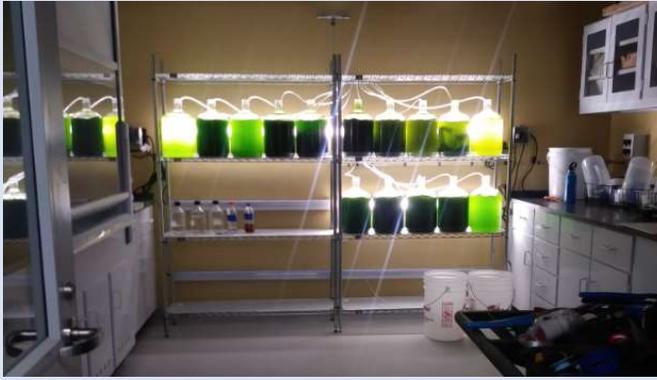
The Greater New Bedford Connecting Activities Partnership (GNBCAP) is a partnership between the MassHire Greater New Bedford Workforce Board, the MassHire Greater New Bedford Career Center, the South Coast Chamber of Commerce and the ten municipalities in the workforce region on the South Coast.

### EMPLOYER SPOTLIGHT: UMass Dartmouth's School for Marine Science and Technology (SMAST)

UMass Dartmouth's School for Marine Science and Technology (SMAST) is a nationally and internationally recognized institution for graduate study and research in marine sciences, fisheries and ocean technology. SMAST facilities are located in New Bedford, including a seawater lab, a greenhouse, an acoustic-optic tank, classrooms, research vessels and docking facilities. In addition to scholarly research and study, the SMAST mission emphasizes interaction with regional industry, including the New Bedford fishing industry, and with government and non-governmental agencies on compelling regional marine-related issues and technological development.

An outstanding local partner to the Connecting Activities initiative, SMAST has hosted a total of eighteen high school student interns from New Bedford High School, Dartmouth High School and Fairhaven High School over the past years, since 2010, in addition to company tours and other career exploration opportunities.





Four interns worked at SMAST in FY2018. High school interns assist in the Sea Lab, working with the Aquaculture Technician, as well as alongside graduate students. Skills and tasks highlighted in the Work-Based Learning Plans for these internships include project management (performing water quality testing, including reading ammonia, nitrate, nitrite, and pH levels in the water of various systems in the seawater lab); research and analysis (conducting research, using both online resources as well as books, in order to troubleshoot systems issues; consulting with

Aquaculture Technician or graduate students regarding any questions/issues.); animal husbandry (feeding of a wide range of vertebrates and invertebrates within the seawater lab, understanding the different types of food as well as the different breeding methods involved); and understanding equipment/systems (becoming familiar with the various pieces of equipment used within the lab, including YSI testing devices and the various chemicals involved in water testing; becoming familiar with the various filters used in each system, and becoming familiar with the different systems used within the seawater lab, and assisting in the maintenance of each system, including cleaning, as well as advancing maintenance, such as construction of new systems).

## Cape & Islands Workforce Board (CIWB)

Website: <https://masshire-capeandislandswb.com/>

The CIWB has developed strong collaborative partnerships throughout the region with School to Career staff, school superintendents and principals. These longstanding relationships within our school systems and business communities assisted the region in placing students in 563 immersive internship experiences, provided by 351 employers. Some highlights of the year include:

Residential Construction Career Day has become a premier event on Cape Cod for students in grades 9-12. During FY2018, the event celebrated its third anniversary with over 200 students in attendance. The event is a partnership between the CIWB and the Home Builders and Remodelers Association, which is held annually at the Cape Cod Fairgrounds. The residential construction industry is one of the primary economic drivers on Cape Cod, providing year-round, self-sustaining wages. RCCD provides students with the opportunity to participate in hands-on industry specific activities, as well as having the opportunity to speak with industry professionals. Students learn about the complete process of building, buying, owning and maintaining a home, as well related careers such as architecture, engineering, sales, marketing, financial services, carpentry, green building, smart technology, energy management, and landscape services and design. Many of the students who attend this event received offers for informational interviews, internships, co-ops, and job shadow opportunities.



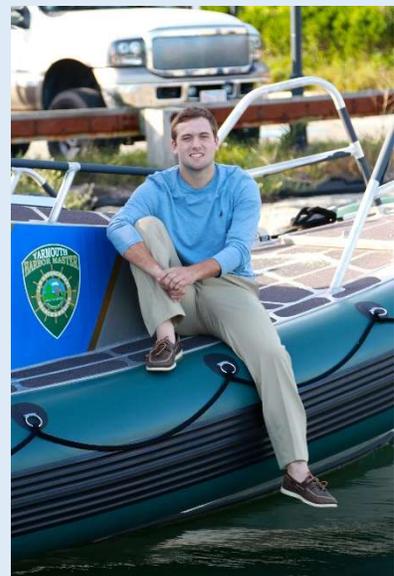
The Cape and Islands Connecting Activities program is coordinated by the MassHire Cape and Islands Workforce Board. The Cape & Islands Workforce Board (CIWB) serves a wide seaside geographic area that is comprised of many diverse school districts, including two vocational schools.

The ArtWorks Program, which is unique to Cape Cod, continues to be a popular Connecting Activities initiative for high school students in grades 10-12. During FY2018, the ArtWorks Program continued to evolve to meet the needs of students. The program welcomed several new mentors, created the ArtWorks Advisory Board, added the Cultural Center of Cape Cod as one of the exhibit venues and held the first exhibit during the summer. The ArtWorks Program continues to create career pathways for our students who are interested in pursuing a career within the arts, while providing critical education on the creative economy on Cape Cod. Students in the ArtWorks Program participated in drawing/painting, fashion, photography, ceramics, creative writing, jewelry design, and digital media.

Credit for Life, is a nationally recognized financial literacy program designed to assist high school juniors and seniors develop their financial management skills. On Cape Cod and the Islands, the event is a collaboration between Cape Cod Five Cents Savings Bank and the region's partner schools. The reality fair provides students with interactive and hands-on experiences in which students identify their career choice, starting salaries, budgets, housing choices cell phone plans, transportation, as well as additional expenditures utilizing a budget sheet. The Credit for Life event brings together academic partners, community members and business partners, as it is recognized how important this event is for young adults. Many seniors utilize this event as a senior project and/or a School to Career internship and are instrumental in working with the Cape Cod Five team to implement the event at their school.

#### STUDENT SPOTLIGHT: Jack

Jack is a senior at Dennis-Yarmouth Regional High School, like many students, he enjoys the Cape Cod beaches in the summer. This past summer, Jack had the opportunity to work as an Assistant Harbormaster with the Department of Natural Resources. This position was an ideal fit for Jack, whose dream is to attend Massachusetts Maritime Academy upon graduation. The Assistant Harbormasters are responsible for providing safe navigation and assistance to mariners and others in distress. They must work well under pressure and stressful conditions, work well with the public, perform strenuous physical duties, and have knowledge of rescue operations and marine regulations. Though Jack handled the training and the position with maturity, enthusiasm and responsibility, he hardly expected that all of his training during the summer would enable him to make such a difference.



However, on the afternoon of August 10, Jack put all of his training and skills to test when he saved a young man's life in Lewis Bay. When Jack was honored at a Selectmen's Meeting in Yarmouth for his bravery, it was noted that Jack handled the situation calmly and responsibly. Jack was able to pull his boat up to the breakwater and get the near-drowning victim on board the patrol boat, transporting him to a nearby dock, where fire rescue crews were waiting to transport him to the hospital for treatment.

"Glad I was there; glad I could use my resources to save another person's life. STC has provided me with the opportunity to get a job with the Department of Natural Resources and influenced my decision to pursue a career in the marine industry."

