



Massachusetts is one of the 10 states selected to participate in New Skills for Youth (NSFY), an initiative enhancing state efforts to increase the number of kids across the country who are prepared for success in both college and career. NSFY is a \$75 million, five-year initiative developed by JPMorgan Chase in collaboration with the Council of Chief State School Officers (CCSSO), Advance CTE and Education Strategy Group.

In Phase One of the initiative, the Massachusetts NSFY team examined gaps in student access to effective career pathways. In Massachusetts, one out of five students are enrolled in the state's Career Technical Education (CTE) programs, while the remaining students are enrolled in more traditional high school settings. To prepare more students to be ready for college and careers — particularly in the science, technology, engineering and mathematics (STEM) sectors of the workforce — state leaders developed a plan to designate and expand access to high-quality career pathways.¹

Phase Two of the NSFY initiative began in January 2017. This snapshot profiles Massachusetts' progress in the first year of Phase Two, including:

- **Developing regional workforce development blueprints:** Massachusetts developed blueprints identifying the top industries and occupations within each of seven regions. This work was led by the Governor's Workforce Skills Cabinet, and the blueprints will be used to organize workforce development services, including CTE.
- **Laying the groundwork to designate high-quality college and career pathways (HQCCPs):** The Massachusetts NSFY team began the process of selecting and designating high-quality early college and innovation pathways using the five HQCCP design principles that were developed in Phase One.

Foundations for Career Pathways in Massachusetts

In 2015, Massachusetts Governor Charlie Baker established the Workforce Skills Cabinet (WSC), charged with developing and implementing a strategy to bridge the needs of the economy with the capacities of its workforce. The WSC includes cabinet secretaries from the Executive Offices of Education, Labor and Workforce Development, and Housing and Economic Development in an effort to create a comprehensive statewide agenda to strengthen the workforce. With the full support of the governor's office, the WSC has worked to align career preparation activities with workforce priorities across all sectors.

This commitment of executive leadership has enabled Massachusetts to quickly turn its vision into action. Since 2016, the commonwealth has awarded more than \$24 million in Workforce Skills Capital

Grants to 63 different institutions, helping to provide a variety of high-quality career pathways affecting 7,100 students each year.²

The main priority for these funding efforts is expanding access to — and participation in — HQCCPs for high school students aligned with economic development needs. In Massachusetts, CTE is primarily delivered through Chapter 74-funded Career/Vocational Technical Education (CVTE) school programs.³ These programs are recognized for their high graduation rates — 94 percent, compared to 87 percent statewide — and their success in preparing students for both postsecondary education and careers in a wide variety of industries.⁴ However, only 40 percent of high school students in the state have access to career and technical programs, and some CVTE programs have waitlists.⁵

Therefore, the Baker Administration prioritized the creation of new career readiness opportunities for Massachusetts youth. With support from NSFY, Massachusetts is identifying potential growth strategies and implementing programs that, in line with the needs of the state economy, bring these career pathways to the 60 percent of students in the commonwealth who do not have access to them.

Developing Regional Labor Market Blueprints

In 2017, Massachusetts commissioned regional labor market blueprints for seven “super regions” across the commonwealth to identify workforce priorities and opportunities in each region. Blueprints were co-developed by representatives from secondary education, postsecondary education, industry, and economic and workforce development councils in each region and are aligned with the WSC’s planning around the 2015 Workforce Innovation and Opportunity Act.

Regional labor market blueprints are designed to guide funding toward programs that will have the greatest benefit for students and regional industries. The blueprints each identify priority industries and occupations, map existing regional resources and resource gaps, and highlight cross-sector strategies to expand priority workforce development pipelines. Additionally, the blueprints will play a major role in the future of HQCCPs because of their focus on aligning program development with local industry needs.

In 2017, core planning groups in each region worked to develop and revise the blueprints. The draft blueprints for all seven regions were submitted for WSC review in late January 2018. Following a 30-day public comment period, the WSC and regional teams are now using the blueprints to plan around career pathways; workforce development; and educational initiatives, including NSFY.

Excerpts from the Berkshire County Labor Market Blueprint

What three industries currently face the most significant workforce development challenges?

- **Health Care:** The health care industry faces significant workforce development challenges as many employers are unable to find a sufficient number of qualified applicants to fill open positions.
- **Manufacturing:** Many employers also show concern related to work readiness of the applicants including ... fluency in technology, problem solving skills and general work ethic. This industry is facing high replacement demand as workers are getting older and closer to retirement age.
- **Engineering:** Engineering industries are experiencing workforce challenges as there is such a lack of qualified engineers to serve the many different technical sectors.⁶

Designating HQCCPs

Massachusetts launched a new HQCCP designation process in 2017 to expand career preparation opportunities and align program offerings with the priority industries identified in each regional blueprint. By focusing on programs that can be delivered in traditional high schools, the designation and design of HQCCPs will bring new college and career readiness pathway programs to students in the commonwealth.

These college and career readiness pathways take two forms: early college programs, which provide the students with opportunities to complete college-level academic coursework that articulates to postsecondary credit, and innovation pathways, which contextualize student learning through experiential work-based learning opportunities that connect students to in-demand growth sectors in the regional economy. In Phase Two, the NSFY project team worked with educators and industry leaders throughout the commonwealth to solidify criteria and map out development plans for HQCCP programs.

The design of these new HQCCPs was anchored by two influential reports, CCSSO's Opportunities and Options⁷ and the Parthenon report, a 2016 document that explores the potential of the early college landscape in Massachusetts.⁸

In 2016, following the release of the Parthenon report, Massachusetts established a five-member joint committee to define design principles for carrying out the report's recommendations at the state, local and regional levels. The committee consists of members from the state Department of Education, educational institutions, the governor's office and other bodies. In 2017, the committee published five guiding principles for HQCCP design, which have anchored the state's work for both early college and innovation pathways.⁹ The guiding principles are aligned with the core components of high-quality career pathways, as defined by the NSFY initiative.

Under the criteria, programs should **provide equitable access**, prioritizing students who are under-represented in higher education and high-skill industries. HQCCPs should **establish guided academic pathways** that allow students to achieve tangible goals — for example, early college students should be able to earn at least 12 credits toward a college degree, while innovation pathway students should take at least two technical courses and two college-level courses. Importantly, **enhanced student support** mechanisms should promote success and completion of HQCCP programs. And pathways should provide more opportunities to **connect**

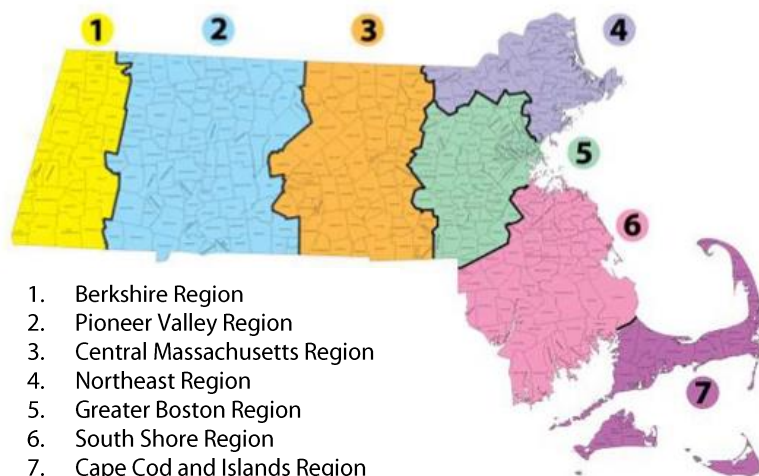


Figure 1: Massachusetts workforce development regions. Retrieved from <http://franklinhamphshirereb.org/labor-market-information/ma-rwdp>







	 ADVISING	 LABOR MARKET DEMAND	 INTEGRATED INSTRUCTION	 WORK-BASED LEARNING	 CREDENTIAL PREPARATION	 POSTSECONDARY LINKAGES
Definition	Students complete a college and career plan that identifies areas of aptitude and interest, explores career opportunities, and establishes a transition path to college, apprenticeship, and/or employment training.	Students engage in curriculum that develop both career alignment strategies and gain the awareness of job growth opportunities across the Commonwealth. Pathway programs vary based on the specificity of the alignment to an industry sector.	Students participate in a carefully designed sequence of integrated, rigorous instructional courses aligned to the student's college and career plan.	Students participate in structured career readiness activities and career development education (CDE).	Students have the opportunity to progress towards and/or earn an industry-recognized credential and college credits toward a Certificate, Associates, or Baccalaureate degree.	Students participate in a wide range of college, apprenticeship, and employment training awareness, engagement, and preparation activities.

Figure 2: Massachusetts' six core characteristics for designated innovation pathways programs. Retrieved from <http://www.doe.mass.edu/ccte/ccr/hqccp/>

with specific careers, leveraging **effective partnerships between schools and local businesses** to expose learners to targeted pathway opportunities and internships or capstone projects that directly relate to career goals.

To improve student support, designated programs are also required to incorporate the My Career and Academic Plan (MyCAP) career planning tool for their students. MyCAP is a support tool that enables secondary school students to develop individualized plans around their career and academic goals, including work-based learning and credential attainment.

The HQCCP designation process has two steps: a preliminary designation and, once sites demonstrate capacity and preparedness to fully implement pathways, a final designation. In fall 2017, the commonwealth issued a request for proposal for preliminary designation of both early college and innovation pathways. Of 43 total applicants, 28 were selected based on their early planning and design work.

Programs selected for preliminary designation were invited to apply for final designation, which will be awarded to programs that fulfilled the essential program elements as defined by the designation criteria or have the necessary infrastructure to begin enrolling students in fall 2018. Applicants that are not prepared for final designation will receive technical assistance for fall 2019 enrollment. Awardees will be announced in spring 2018. Once designations are issued, awarded sites will enter into a five-year designation contract during which they will receive ongoing support and technical assistance and be accountable for student performance.¹⁰

HQCCP designations will be awarded to all qualifying early college and innovation pathway programs, and designated sites will work as a cohort, with guidance and support from the Massachusetts NSFY team, to design and scale high-quality pathways. Additionally, a select number of sites will receive grants to support implementation of HQCCPs. These grants are made available by braiding funding from a variety of sources: NSFY, Carl D. Perkins Career and Technical Education Act of 2006 funds, performance incentive funds, and the state STEM Advisory Council. Agreements between each

participating agency outline the funding commitments and sources for supporting designation grants. Massachusetts will use awardee reports, experience and feedback over the initial five-year grant period to create plans for statewide use of these pathways.

Looking Ahead

With a long record of impactful regional career preparation initiatives and clearly articulated goals from the governor's office, Massachusetts quickly took steps to establish and scale up high-quality career pathways for its students. Guided by the regional blueprints, the WSC will be able to work more effectively with local governments and organizations to bring workforce skills in line with industry needs.

The designation and scale-up of HQCCPs is designed to expand access to and awareness of college and career opportunities in each region and spur other schools and institutions to apply for designation in future years. Additionally, the Massachusetts NSFY team is working to develop a priority list of industry-recognized credentials with labor market value that will help to guide the establishment of future programs. To keep track of student experiences and success, the NSFY team will also work to enhance the student data system, enabling the collection of data on students participating in designated career pathways and earning credentials of value.

Massachusetts is also using NSFY resources to develop a new training program for high schools to help them improve the quality of college and career advising for all students, in partnership with the Massachusetts School Counselors Association. Since counseling services reach all students in the commonwealth, whether they are interested in enrolling in an HQCCP or not, this work has the potential to be fully scalable. The state intends to widely support better career advising and offer more access to work-based learning through this initiative, at the same time that it helps interested districts develop and seek designation for new HQCCPs.

¹ <https://careertech.org/resource/massachusetts-phase-one-nsfy-snapshot>

² <https://www.mass.gov/orgs/workforce-skills-cabinet>

³ <http://www.doe.mass.edu/cte/>

⁴ https://cte.careertech.org/sites/default/files/Massachusetts_CTE_Factsheet_2017.pdf

⁵ <https://www.bostonglobe.com/metro/2016/11/25/students-vocational-education-wait-lists/JsfYrz5pvWTpqtZSINvQoL/story.html>

⁶ <http://bcreb.com/berkshire-blueprint-seeks-public-comment/>

⁷ <https://careertech.org/resource/opportunities-and-options>

⁸ http://cdn.ey.com/parthenon/pdf/perspectives/Early-college_Report_final_web.122016.pdf

⁹ <http://www.doe.mass.edu/ccte/ccr/hqccp/>

¹⁰ <http://www.doe.mass.edu/ccte/ccr/hqccp/2017-08innovation.pptx>