

UPSKILLING NEW ENGLAND

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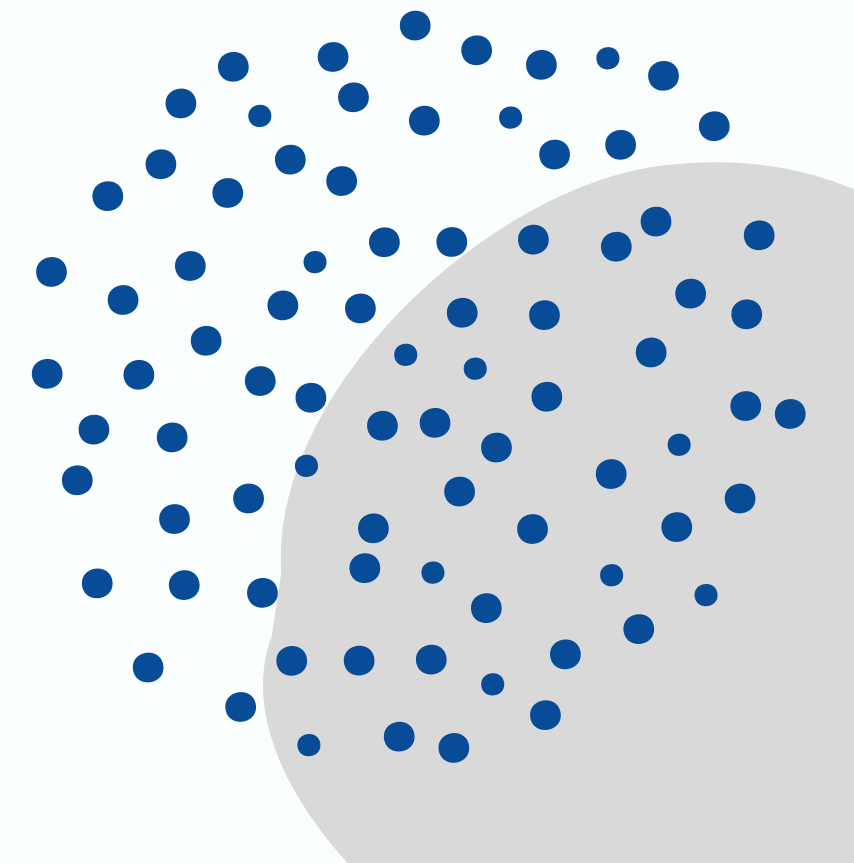
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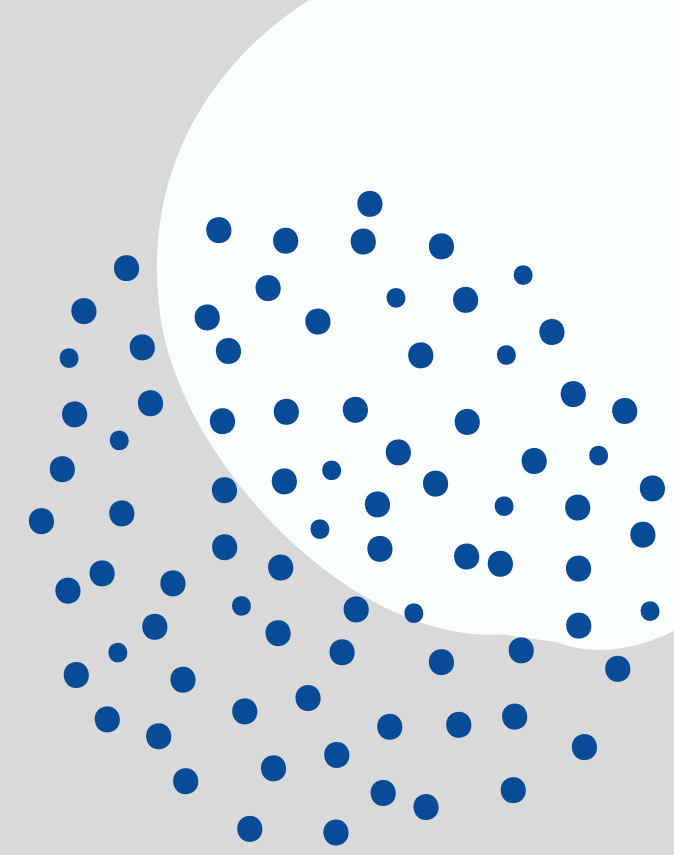
NEBHE

QUINSIGAMOND
COMMUNITY COLLEGE

COMMONWEALTH
CORPORATION



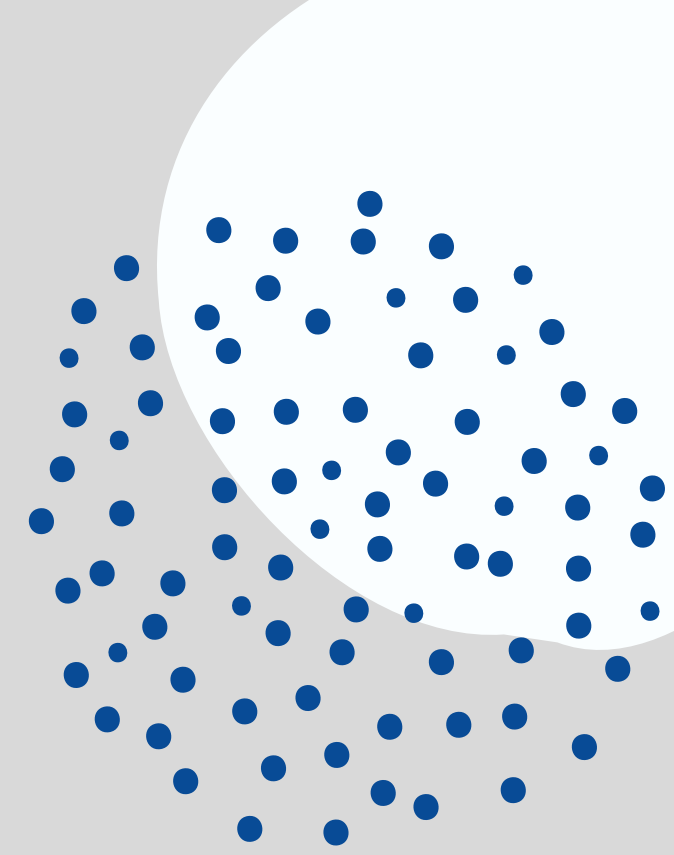
About NEBHE



NEBHE promotes greater education opportunities and services for the residents of New England and its 250 colleges and universities. It works across the six New England states to:

- Help leaders assess, develop and implement sound education practices and policies of regional significance;
- Promote regional cooperation and programs that encourage the efficient use and sharing of educational resources;
- Strengthen the relationship between higher education and the economic well-being and quality of life in New England.

Effects of COVID-19



25% of adults plan to enroll in an education or training program within the next six months

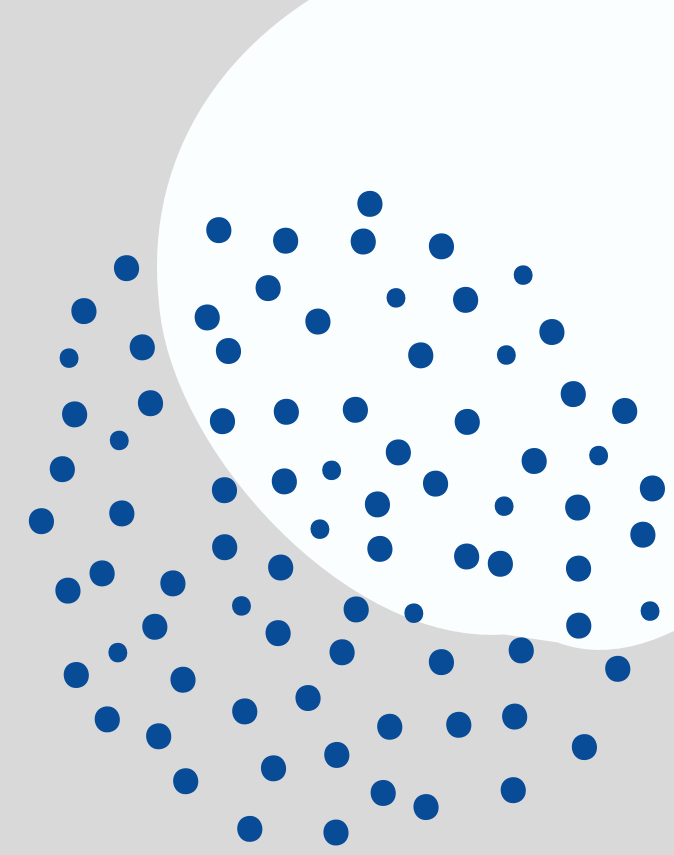






Less than half of Americans have access to the education and training they want



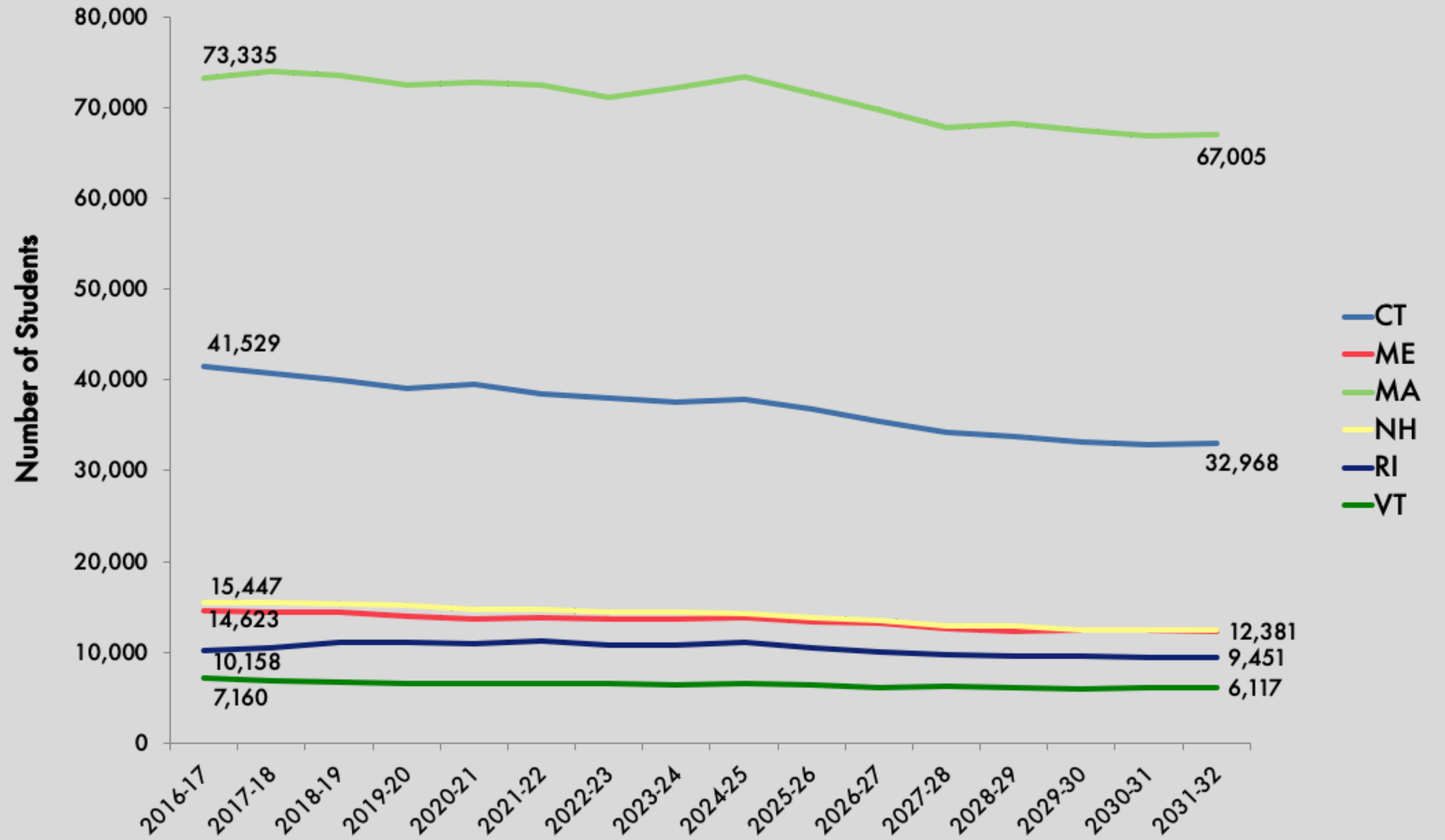
62% of Americans prefer non-degree programs and skills training to degree programs

Effects of COVID-19



-  56% of New Englanders believe that COVID-19 has impacted their perception of the need for additional education and training
-  41% of Massachusetts adults agreed that short-term training has become more of a necessity in light of the coronavirus pandemic.
-  Half of New Englanders are in need of additional financial assistance to pursue further education
-  Half of New Englanders are concerned about the stability of their employment

PROJECTED NUMBER OF HIGH SCHOOL GRADUATES



Source: NEBHE analysis of the *Knocking at the College Door*

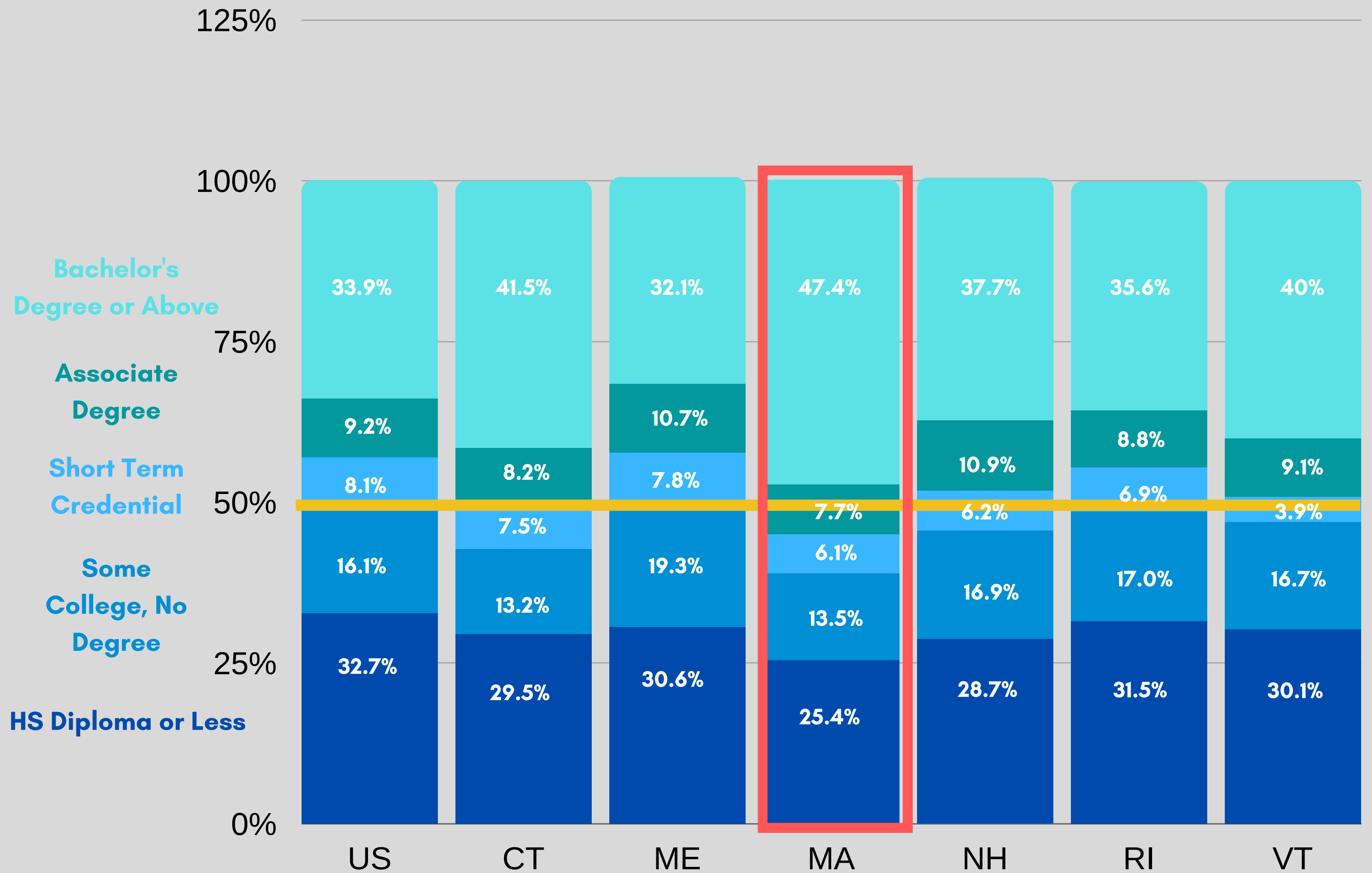


WHAT THE DATA TELLS US...

72% OF JOBS IN MASSACHUSETTS
REQUIRE A POSTSECONDARY
CREDENTIAL

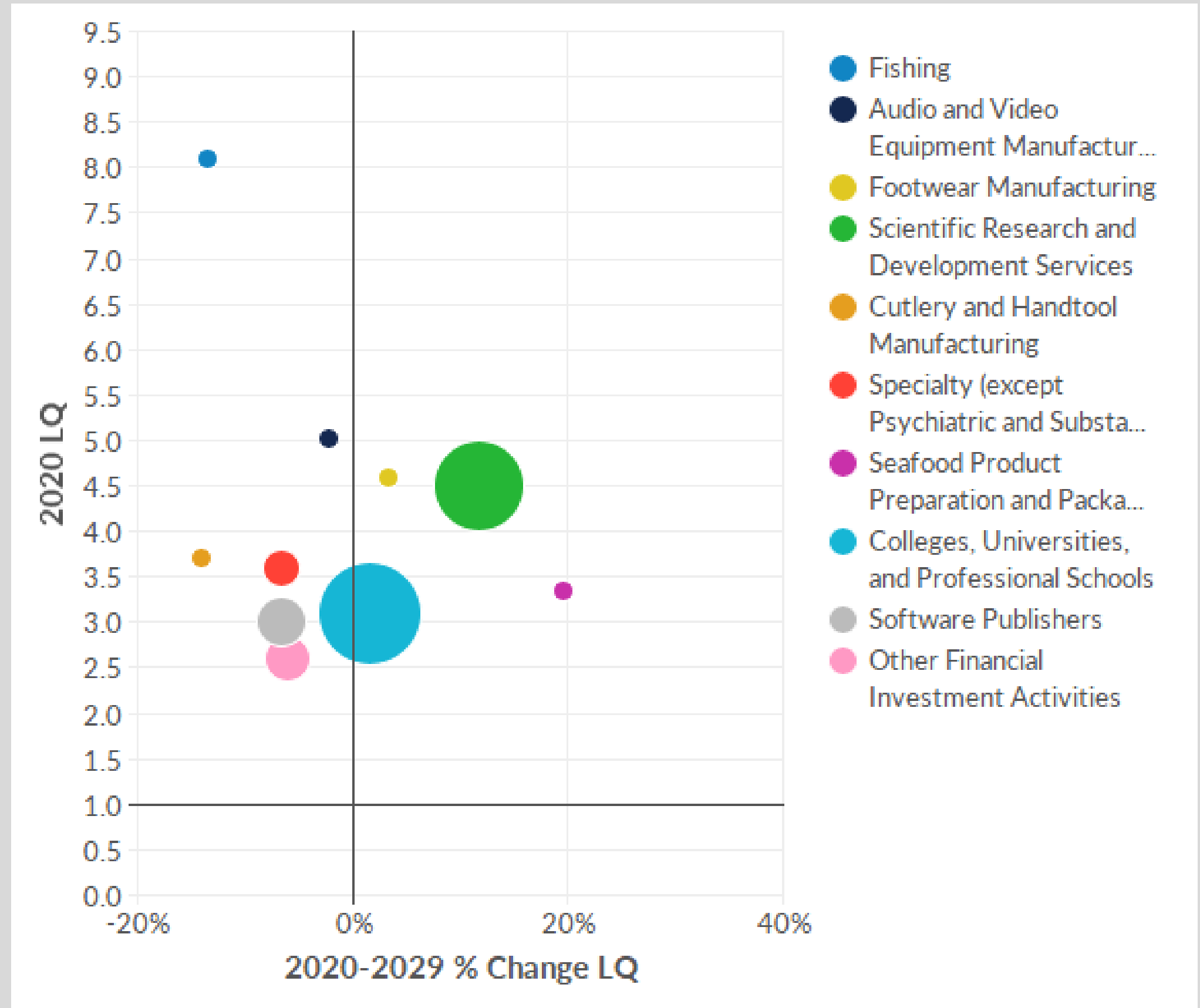
MASSACHUSETTS' CURRENT
ATTAINMENT RATE OF
POSTSECONDARY CREDENTIALS IS
61.1%

ATTAINMENT OF ADULTS IN NEW ENGLAND



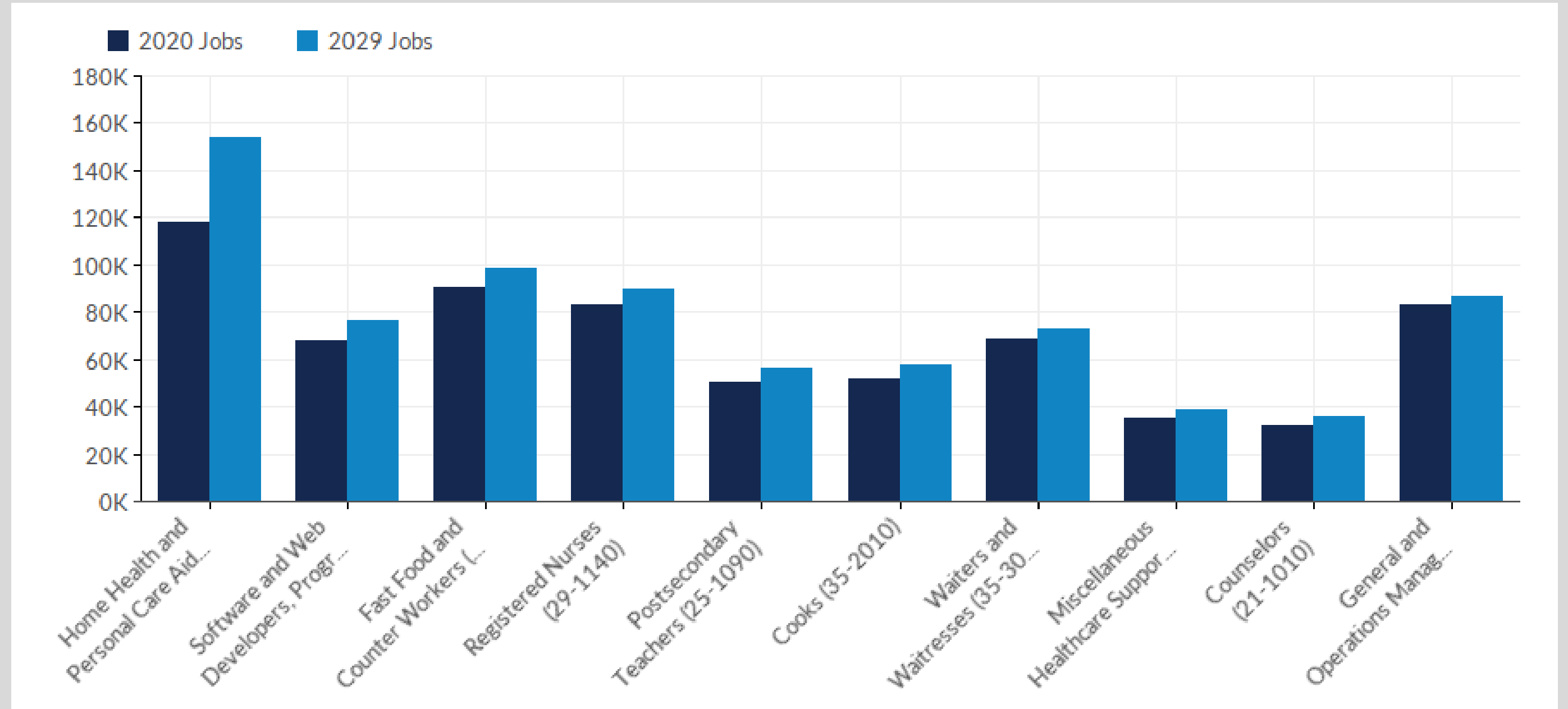
Source: Lumina Foundation Stronger Nation 2020

INDUSTRIES UNIQUE TO MASSACHUSETTS



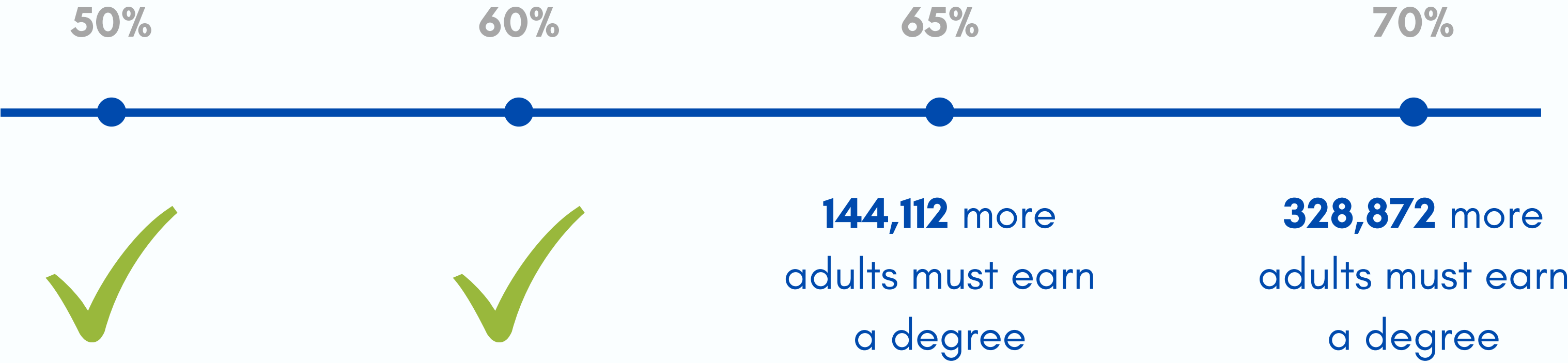
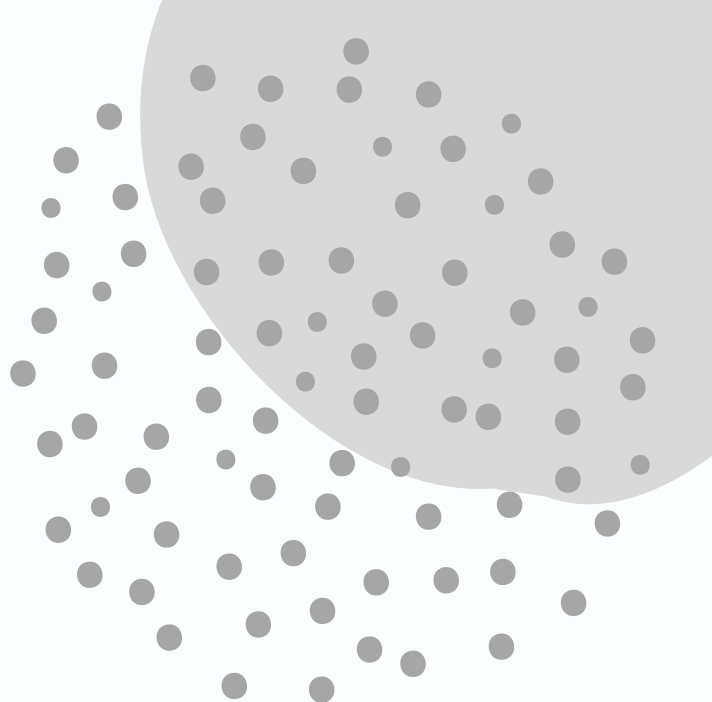
Source: NEBHE analysis of Emsi LMI, retrieved June 2020

FASTEST GROWING INDUSTRIES IN MASSACHUSETTS

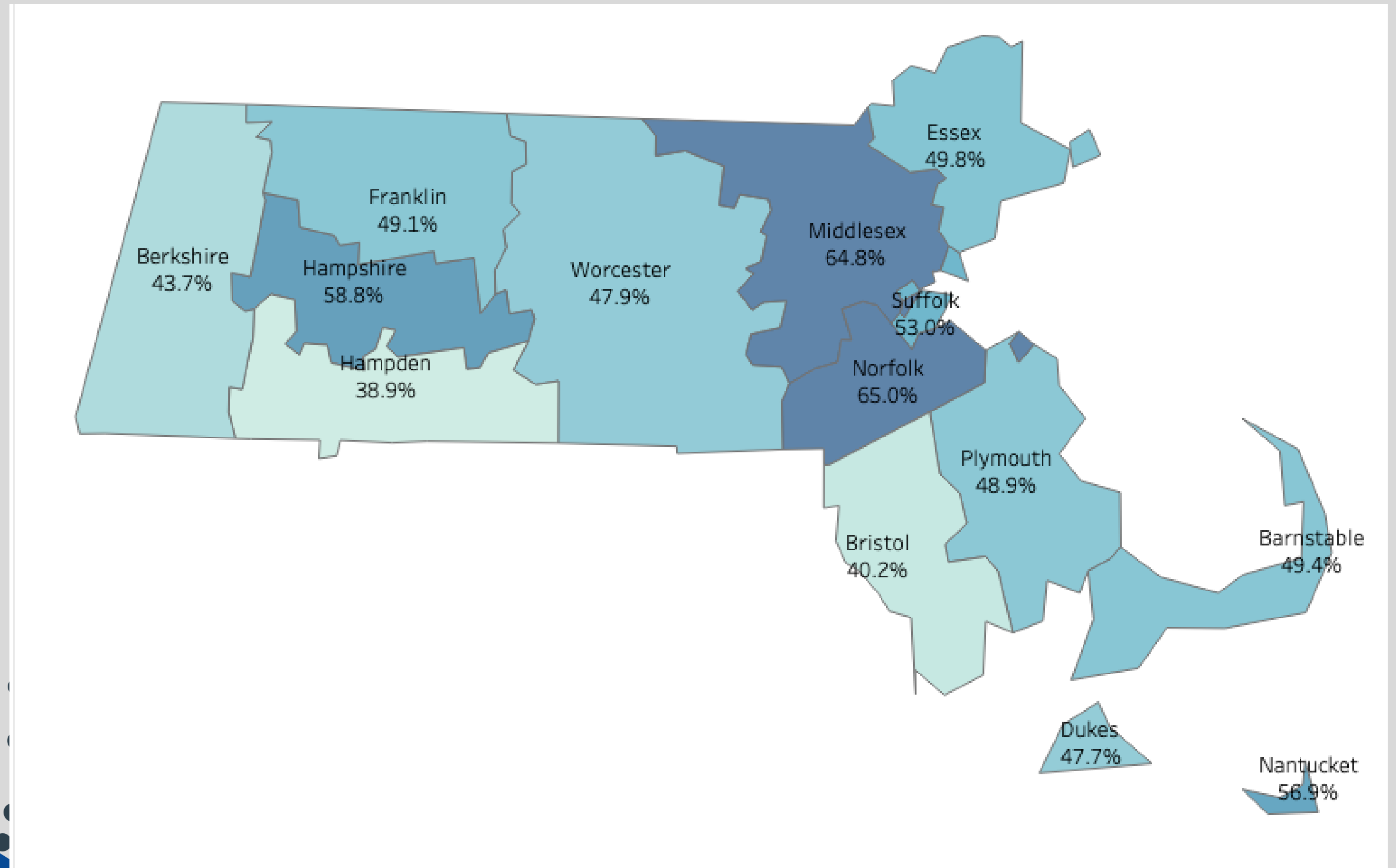


Source: NEBHE analysis of Emsi LMI, retrieved June 2020

Requirements to raise Massachusetts's attainment of postsecondary credentials from 61.1% to...



ATTAINMENT IN MASSACHUSETTS

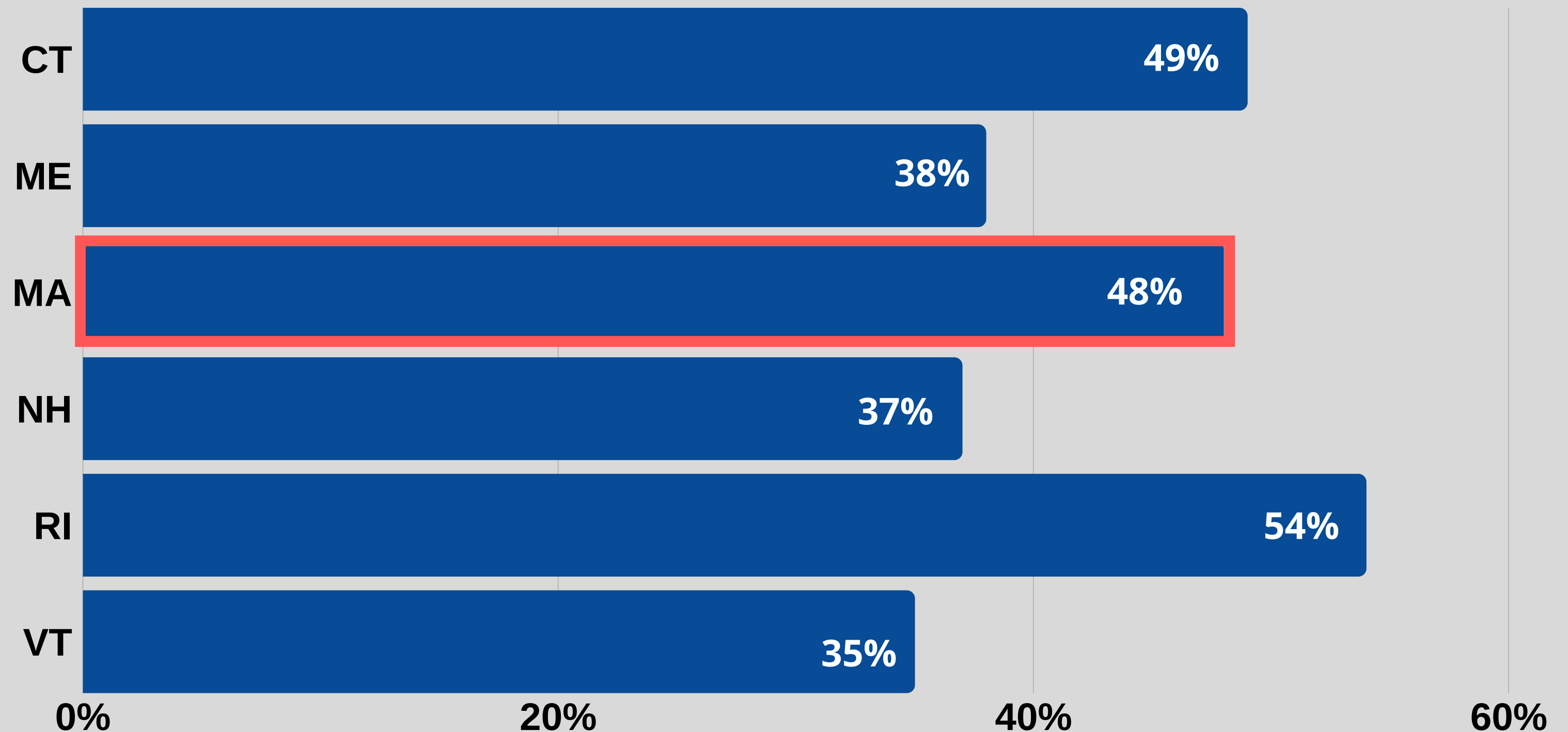


Adults (25+) with a postsecondary credential

CONSUMER INSIGHTS:

Perceived need for additional education in New England

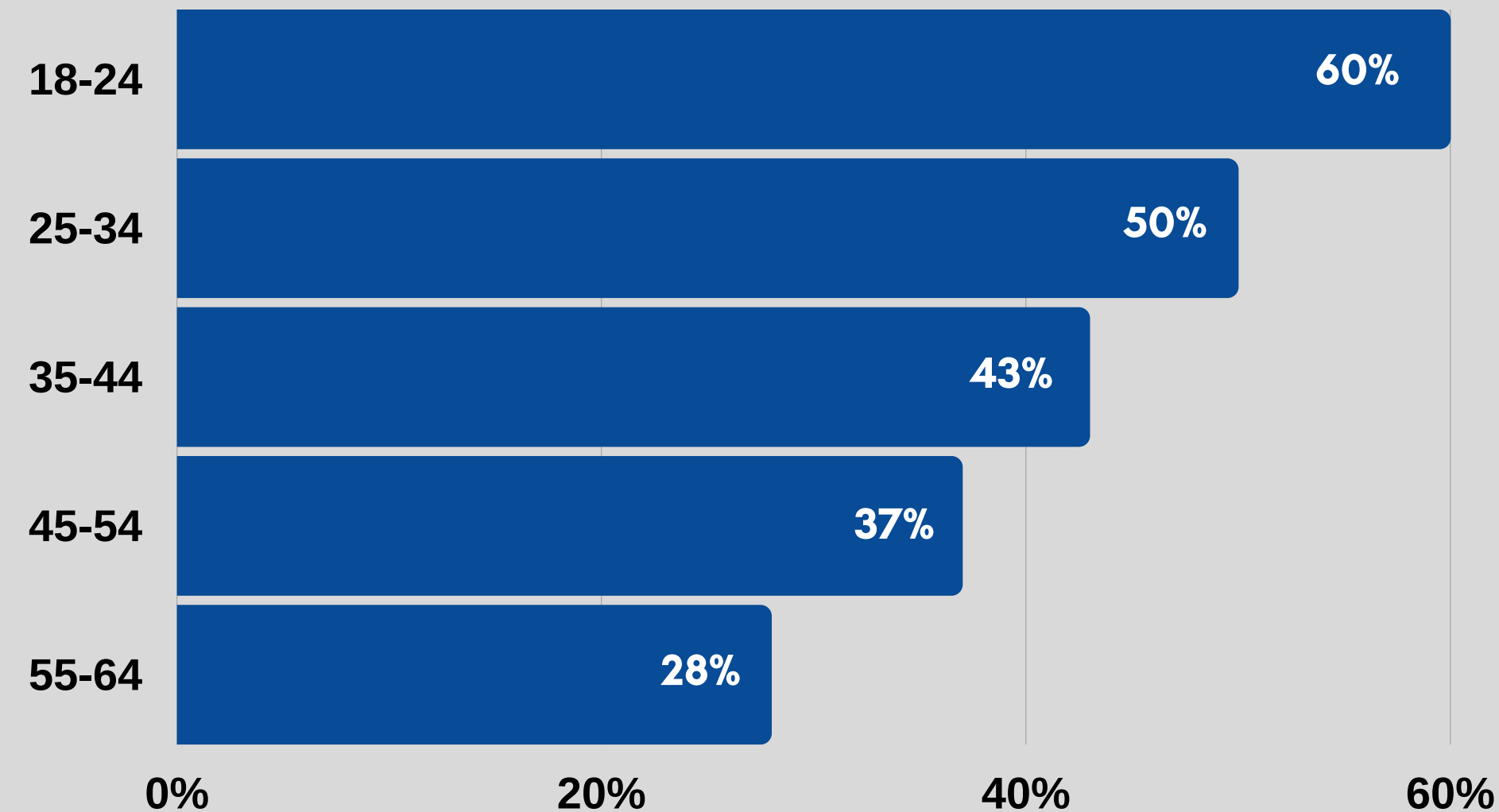
Source: Strada-Gallup Education Consumer Survey



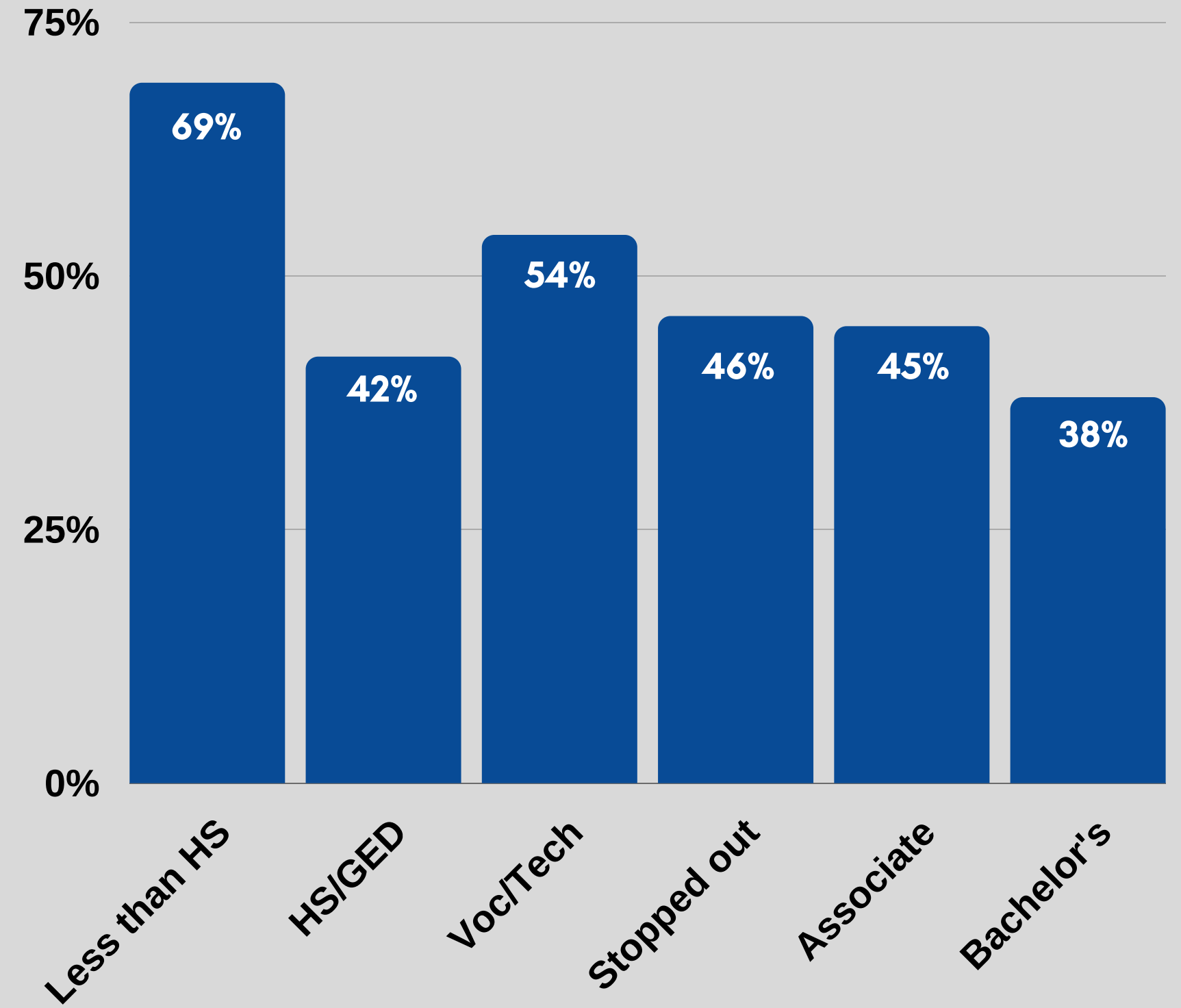
Consumer Insights:

Perceived need for additional
education in Massachusetts

Source: Strada-Gallup Education Consumer Survey



BY ATTAINMENT LEVEL

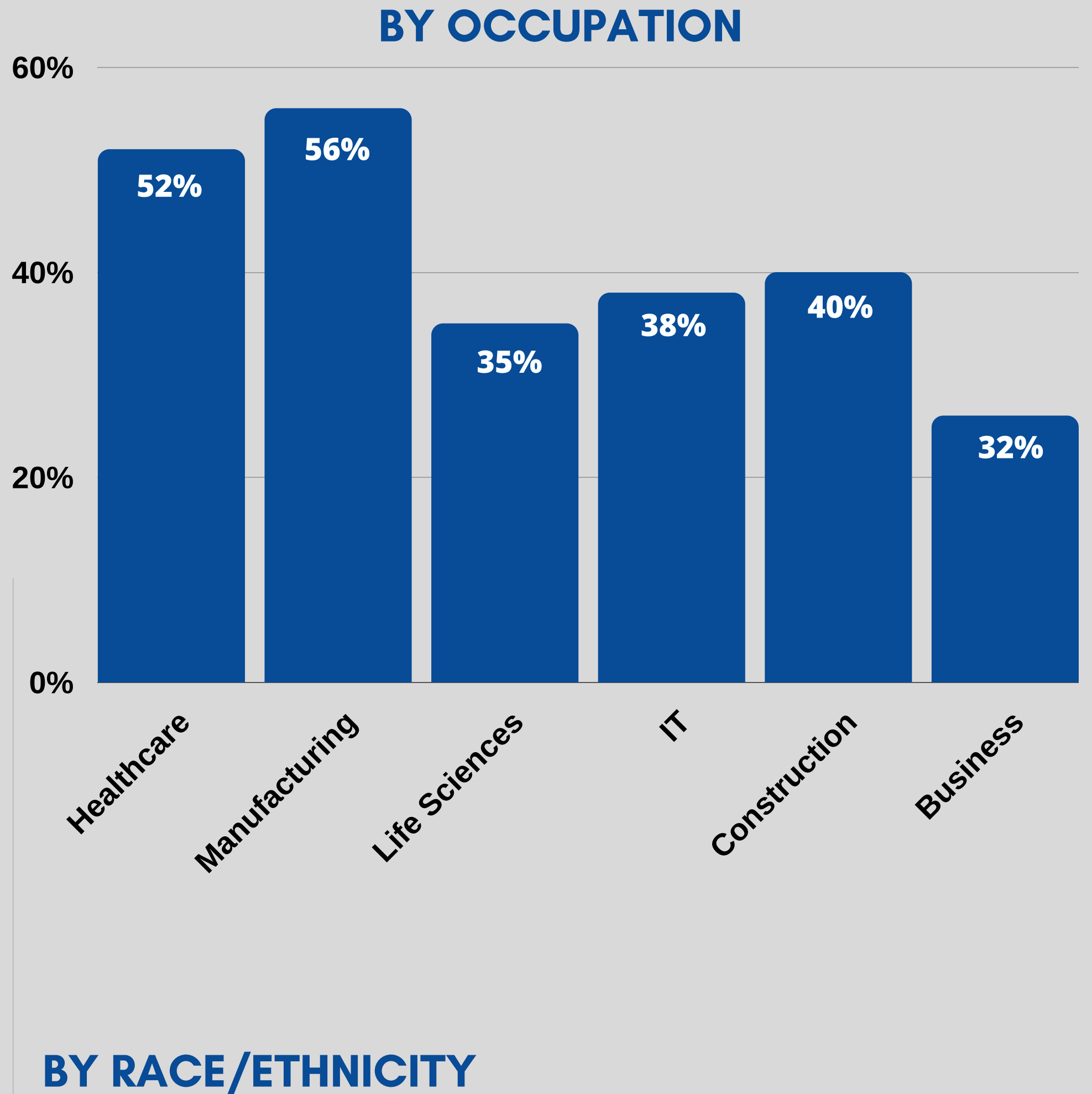
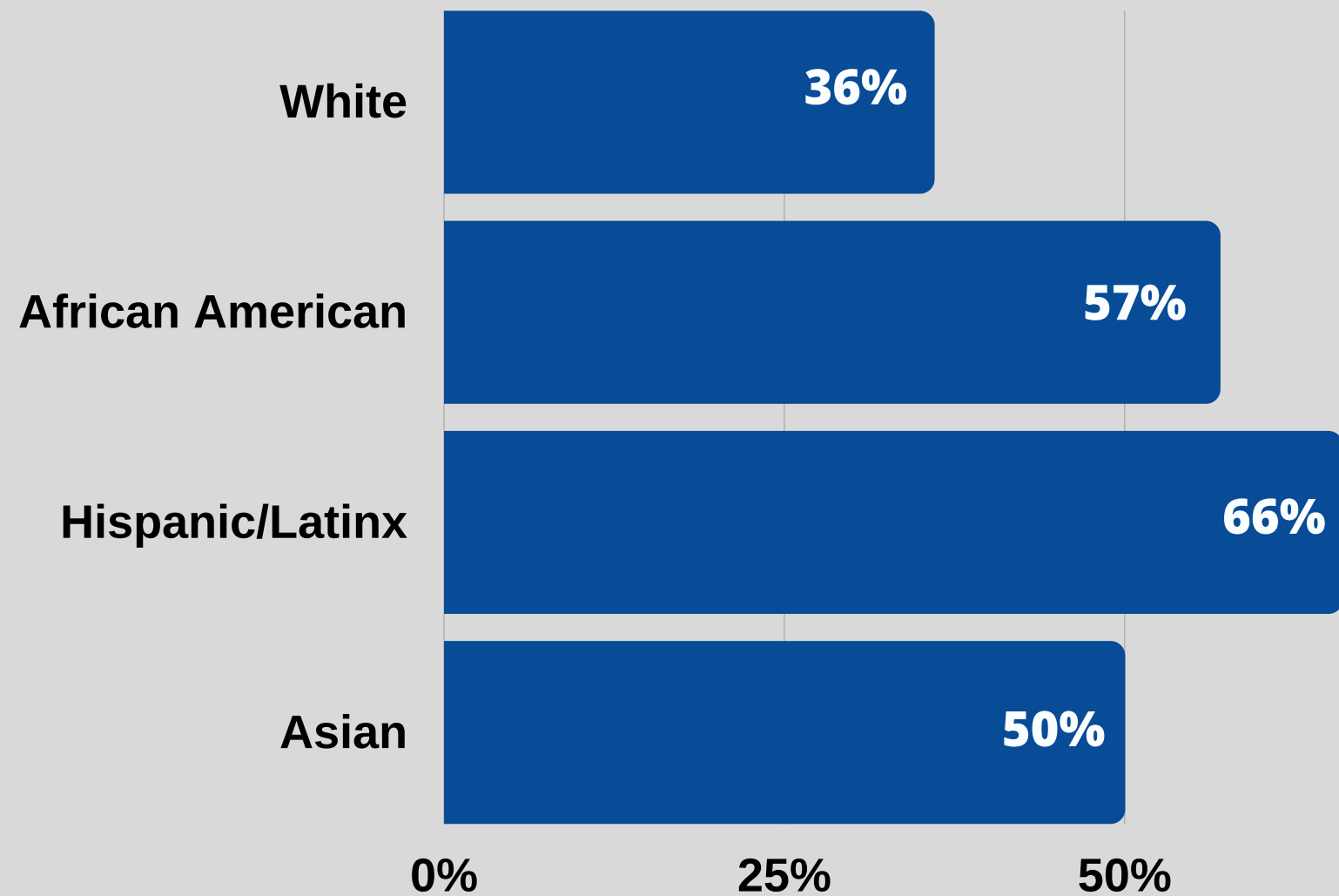


BY AGE

Consumer Insights:

Perceived need for additional education in Massachusetts

Source: Strada-Gallup Education Consumer Survey



WHAT IS UPSKILLING?

Types according to Aspen Institute's Upskill America Initiative

Employer Training:

In-house and out-of-house retraining and upskilling opportunities for incumbent workers

Credentials:

Verification of an individual's qualification or competence issued by a third party, such as a trade association, and can include educational certificates, digital badges, degrees, certifications, and government-issued licenses

College Degrees:

Employer pays for some or all of the cost of upskilling workers through a degree granting institution

WHY IS UPSKILLING IMPORTANT?



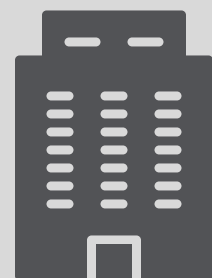
FOR WORKERS

Access to educational opportunities that lead to increased wages, job promotions and lifelong learning



FOR EDUCATORS

Partnerships between education providers and employers yield to innovative delivery models that may widen application pool



FOR EMPLOYERS

Upskilling leads to increased work product and enhanced worker retention--more affordable than new hires



FOR POLICYMAKERS

Forward-thinking financial aid policies and incentives for employers/educators that engage in upskilling initiatives opens opportunities to more citizens and fosters economic success

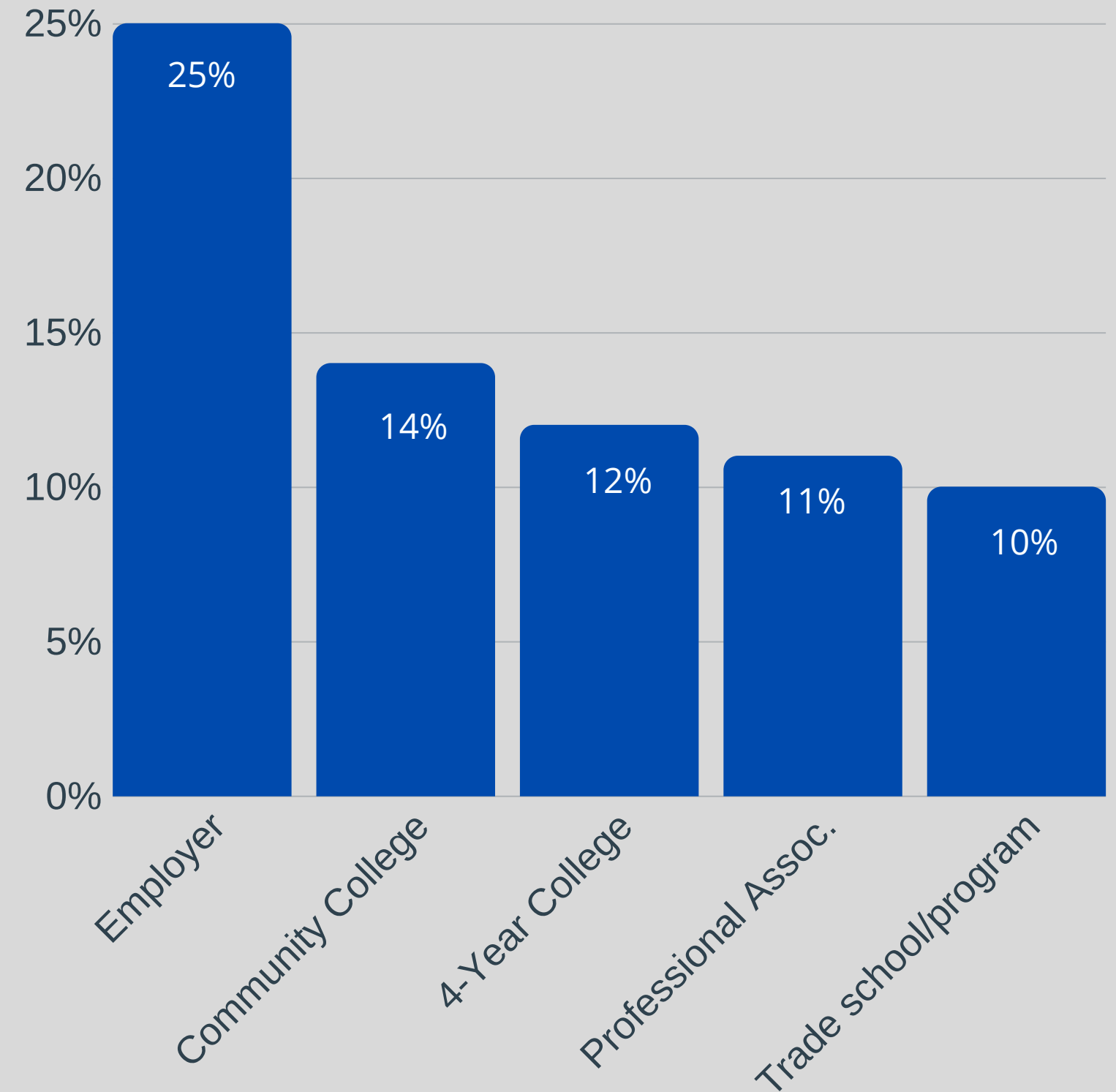
Consumer Insights:

Most likely sources for education and training

Source: Strada-Gallup Education Consumer Survey

New England adults are "extremely likely" to enroll in education/training through their employer

Within the next five years, how likely are you to enroll in courses or training from the following providers?
(data represents those that answered "extremely likely")



WHAT IS UPSKILLING?

Models and Exemplars

In-House Upskilling

Employer-developed training on-site

Cianbro Institute (ME)



Direct Employer-Institution Partnership

Partnership between employer and institution with customized programming when necessary

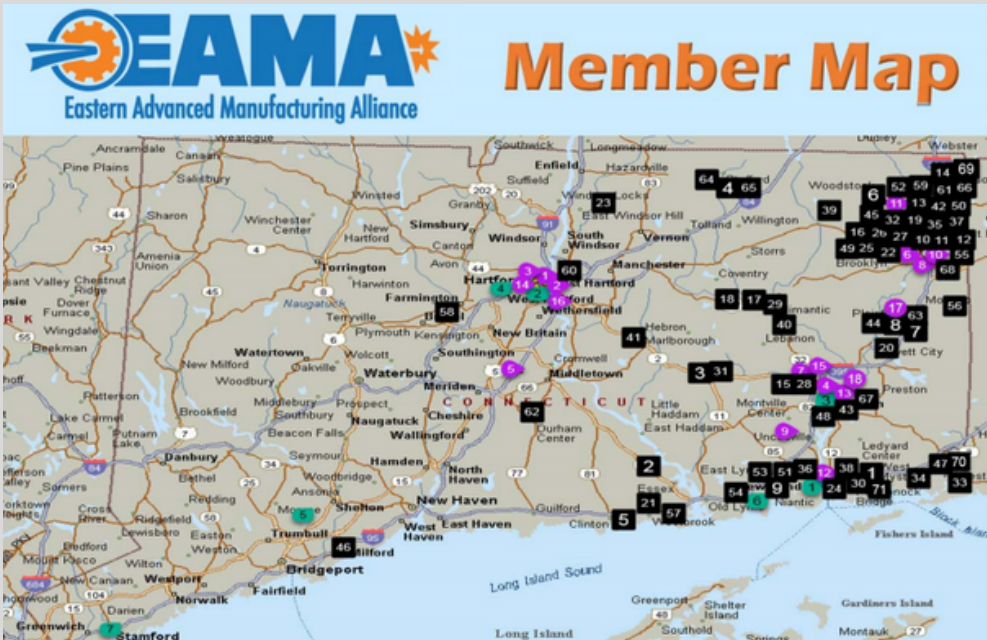
Beth Israel Deaconess Medical Center (MA)



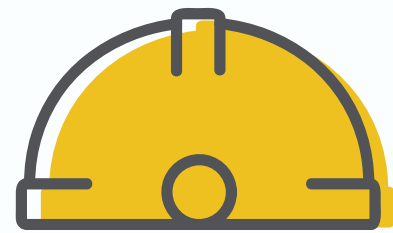
Industry-Led Partnership

Intermediary communicates skills needs, connects employers to education providers, and ensures sustainability/viability of partnerships

Eastern Advanced Manufacturing Alliance (CT/MA/RI)



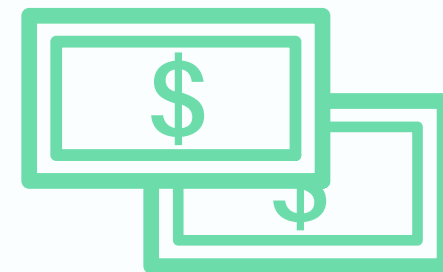
Role of Employers



Assess workforce
needs/skills gaps



Form partnerships
with education
providers

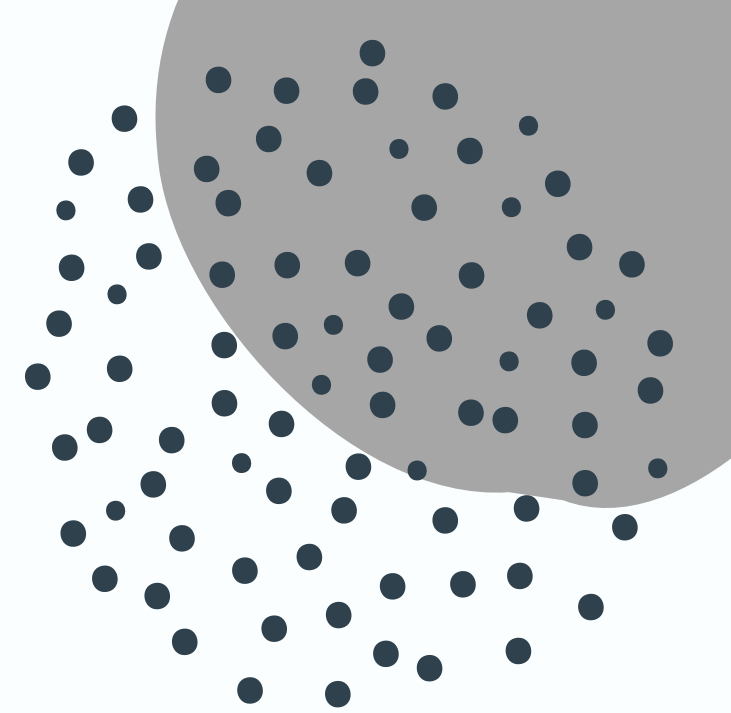


Invest in and
promote upskilling
programs



Standardize skills
language

Validate recognized learning and work experiences to shorten the time to in-demand credentials, and promote participation in upskilling programs



- **7,300 requested transcripts**
- **76 individual accelerated curricula**
- **25 credits awarded per veteran**

Recommendation #1:

VALIDATE PRIOR LEARNING

Develop accessible, transparent pathway models so that all stakeholders understand how upskilling programs translate to promotional structures or postsecondary credentials



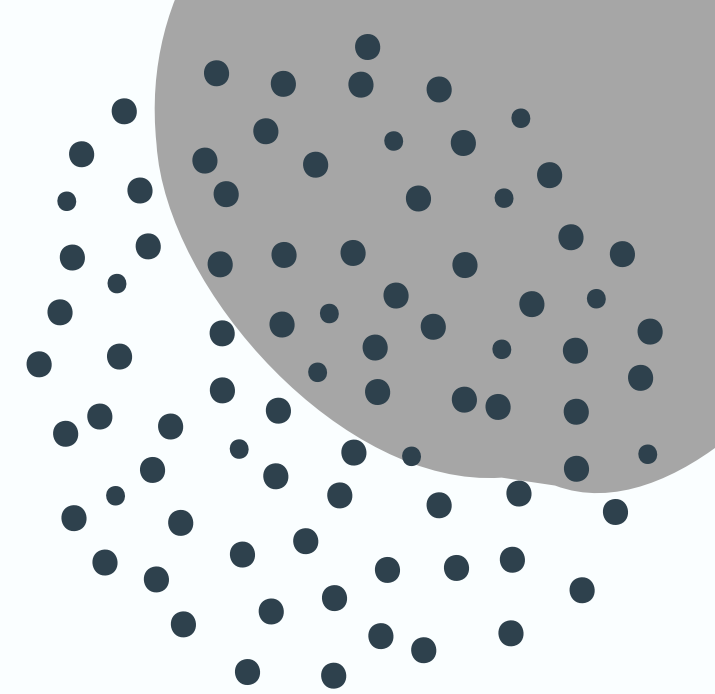
DEPARTMENT OF LABOR MUST

Collaborate with postsecondary education and training providers, government agencies and employers TO:

- **Recruit adults into education/training programs**
- **Locate funding for participants**
- **Map pathways from high value credential programs to high quality job outcomes**

Recommendation #2:

**DEVELOP TRANSPARENT
CREDENTIAL PATHWAYS**



Incentivize employers to prioritize upskilling as a key business strategy through state-issued grants or tax breaks

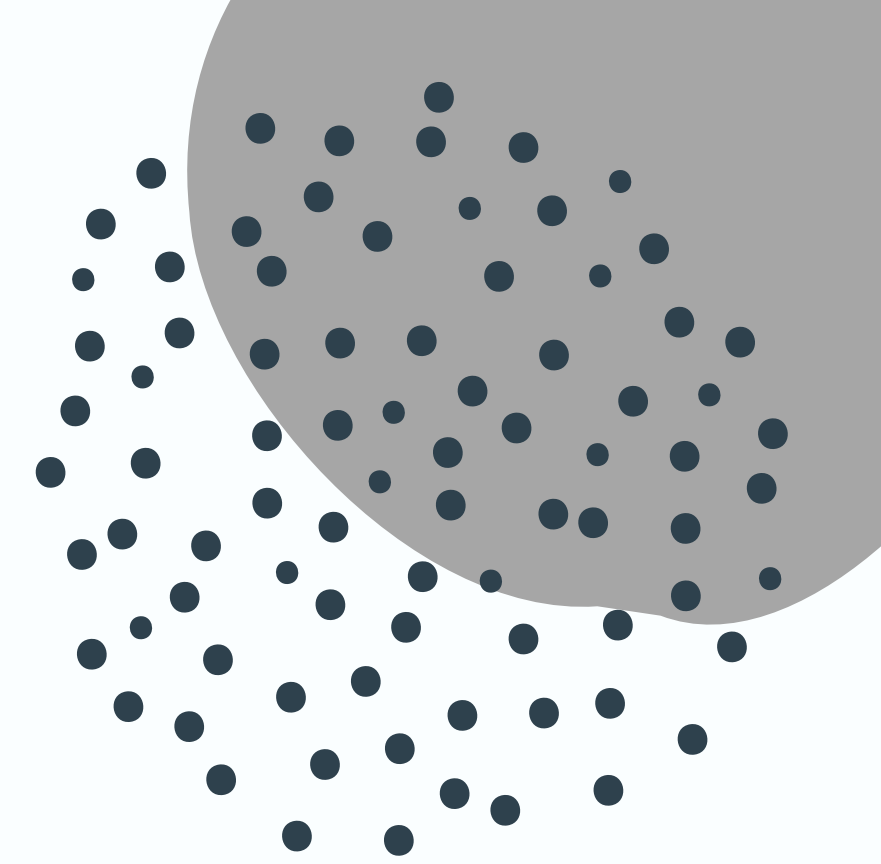
MASSACHUSETTS



- **Businesses can apply for grants up to \$250,000**
- **Employers, employer organizations, labor organizations, training providers, and a consortia of such entities have access to funding**
- **Funds to be used to train current and newly hired workers**

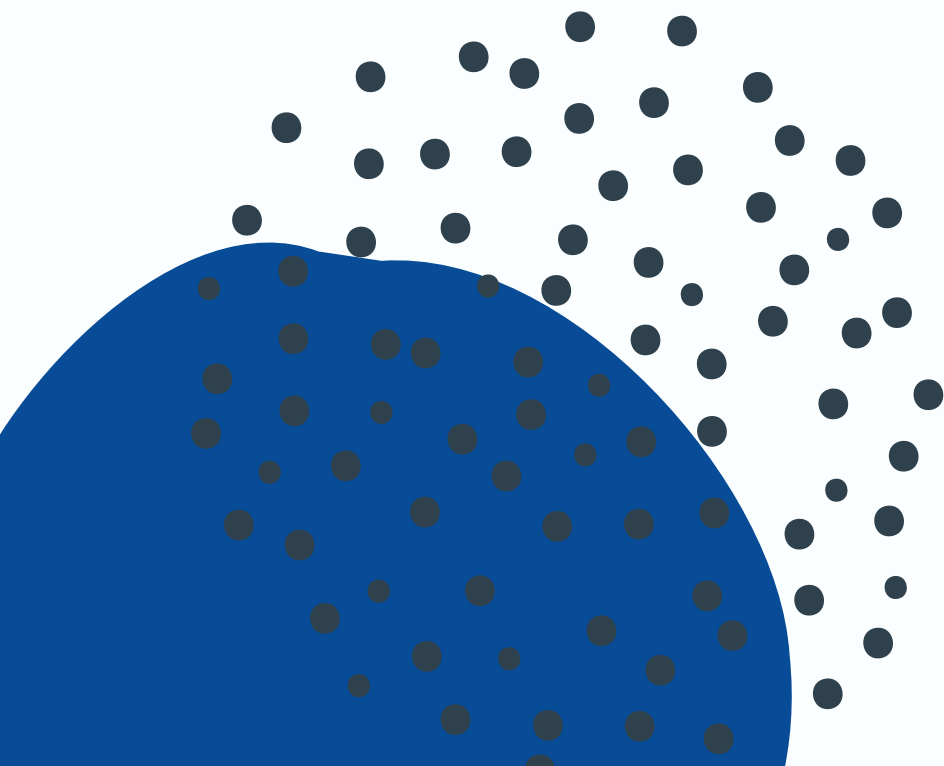
Recommendation #3:

INCENTIVIZE UPSKILLING



APPRENTICESHIPS: A PROVEN STRATEGY FOR UPSKILLING

Kathie Manning, Dean
Center for Workforce Development & Continuing Education
Quinsigamond Community College



APPRENTICESHIP

FAST FACTS

-  **150,000 businesses have apprenticeship programs**
-  **There are over 400,000 apprentices across the country**
-  **Apprentice graduates earn an average of \$50,000 per year**

Whether you are a growing business, are a workforce intermediary helping employers build a skilled workforce, or are community college educating the local workforce, what workforce challenges have you identified?

- Jobs for which it is difficult to find workers with the right skills?
- Positions with high turnover?
- Occupations where a highly skilled workforce is retiring soon?
- Challenges helping workers keep pace with continuing industry advances?
- Positions requiring skills that can be learned on the job?
- Difficulty in attracting new and more diverse talent pools?

If the answer is "yes" to any of these questions, then apprenticeship is the right strategy to meet your needs for skilled workers.

WHAT IS AN APPRENTICESHIP?

- Apprenticeship is an arrangement that includes a paid-work component and an educational or instructional component, where individuals obtain workplace-relevant knowledge and skills (Source: U.S. Department of Labor)
- Employer hires an apprentice as a FT employee at entry level rate
- As apprentice demonstrates increased competence, he/she is rewarded with a scaled pay increase
- Sometimes referred to as an *Earn & Learn* program
- Developed first in the building and construction trades, but now deployed in healthcare, manufacturing, information technology, financial services, insurance, and many other fields

RETURN ON INVESTMENT (ROI)

- ...the single most common benefit of apprenticeships was filling jobs that otherwise sat vacant
- ...broadened companies' recruiting pool by opening doors to less-skilled candidates from more diverse backgrounds who would otherwise not be recruited
- Dartmouth-Hitchcock Medical Center Medical Assistant apprenticeship program nearly paid for itself within the first year
- Siemens USA: at least a 50% rate of return on its apprenticeship program, compared to hiring machinists off the street
- Costs for firms varied widely, from less than \$25,000 to \$250,000 per apprentice, and benefits were diverse, but the companies studied were unanimous and enthusiastic in finding the benefits to outweigh the costs

APPRENTICESHIPS

- Employer driven
 - A job with potential for career growth
- On-the-job learning
 - With an experienced mentor
- Related instruction
 - QCC offers the educational component (Certificate or AS degree)
- Annual wage increases
- National credentials

VS.

COOPERATIVE EDUCATION

- Meaningful capstone experience
 - Carries academic credit
- On-the-job learning
 - With faculty and company oversight
- Related instruction
 - Majority completed prior to co-op placement
- Short duration
 - 15 hours weekly for 15 weeks (225 hours)
- No commitment beyond 15 weeks

REGISTERED APPRENTICESHIP: A TALENT DEVELOPMENT SOLUTION THAT WORKS



QCC + MASS RESTAURANT ASSOCIATION PARTNERSHIP

Goal: Build a sustainable apprenticeship program to meet member workforce needs

- **Employer Role**

- Commit to co-development of apprenticeship program
- Hire apprentices
- Provide mentor for OJT
- Commit to regular wage increases for competency demonstration

- **QCC Role**

- Commit to co-development of apprenticeship program
- Provide relevant related instruction for apprentices

- **Apprentice Role**

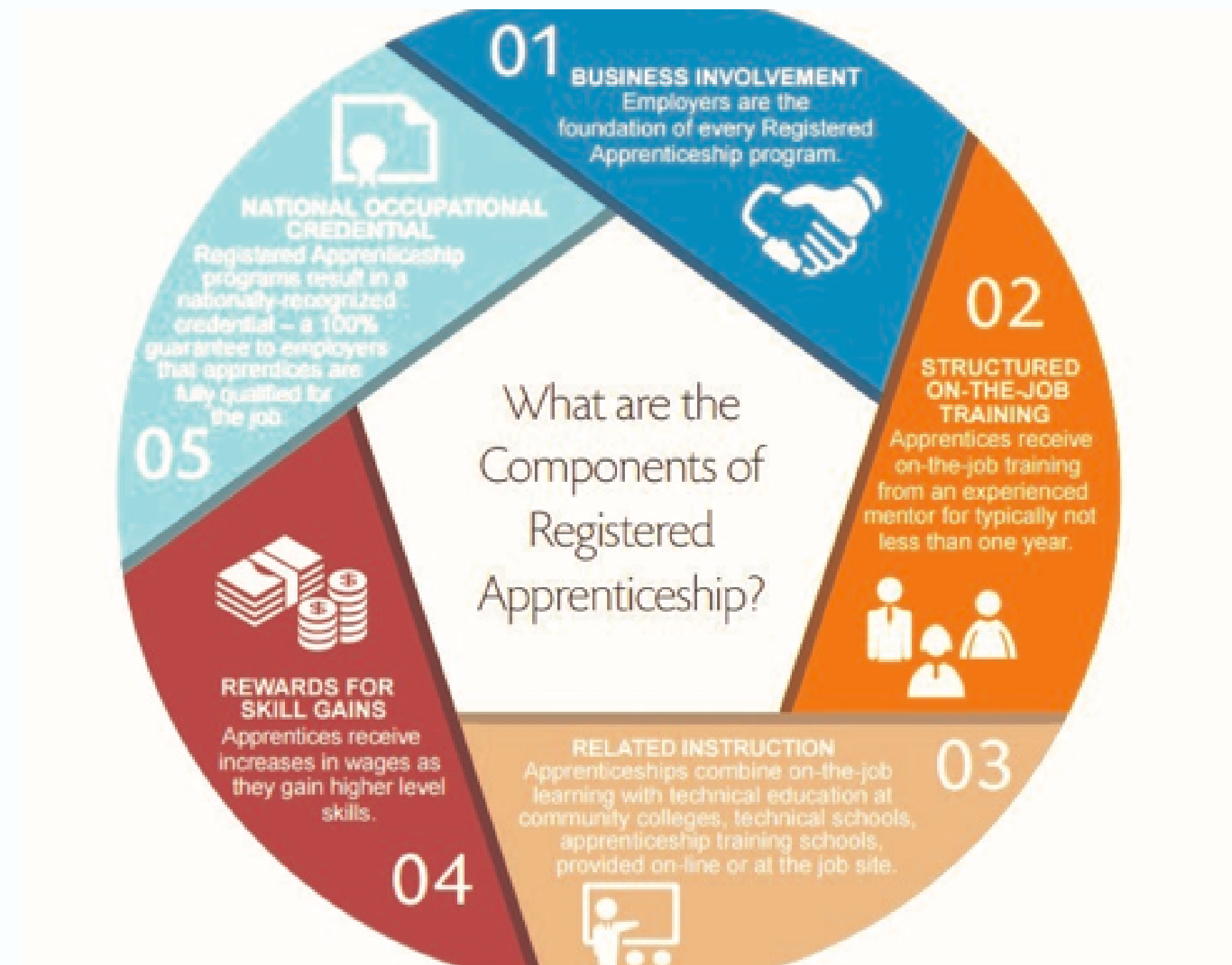
- Excel in all aspects of the apprenticeship and pave the way for more!

THE RESULTS

- Launched July 2019 with 12 apprentices from 7 different organizations
- 11 completed the program in July 2020
- All worked full-time while attending RTI at QCC
- Earned the following:
 - Certification by the MA Division of Apprenticeship Standards as a Certified Restaurant Professional
 - Certification by the National Restaurant Association Educational Foundation as a Certified Restaurant Professional
 - Ten college credits from QCC towards a degree in hospitality

REGISTERED APPRENTICESHIPS: KEY COMPONENTS

1. Business involvement
2. Structured OJT
3. Related instruction
4. Rewards for skills gains
5. National occupational credential



REGISTERED APPRENTICESHIPS: KEY COMPONENTS

1. **Business involvement:** employers are the foundation of every registered apprenticeship program
2. **Structured on-the-job training:** apprentices receive on-the-job training from an experienced mentor for no less than one year
3. **Related instruction:** apprenticeships combine on-the-job learning with technical education at community colleges, technical schools, apprenticeship training schools, online or at the jobsite
4. **Rewards for skills gains:** apprentices receive increases in wages as they gain higher-level skills
5. **National occupational credential:** registered apprenticeship programs result in a nationally recognized credential--a 100% guarantee to employers that apprentices are fully qualified for the job

CONCLUSION

Training programs like apprenticeships are a clear path to shared prosperity and provide hard working Americans with the skills and knowledge they need to advance their careers, get good jobs and grow the economy

As Benjamin Franklin once said, "An investment in knowledge pays the best interest." Training isn't something that's "nice" to have in your organization. It is a vital part of a company's long-term investment and growth strategy.

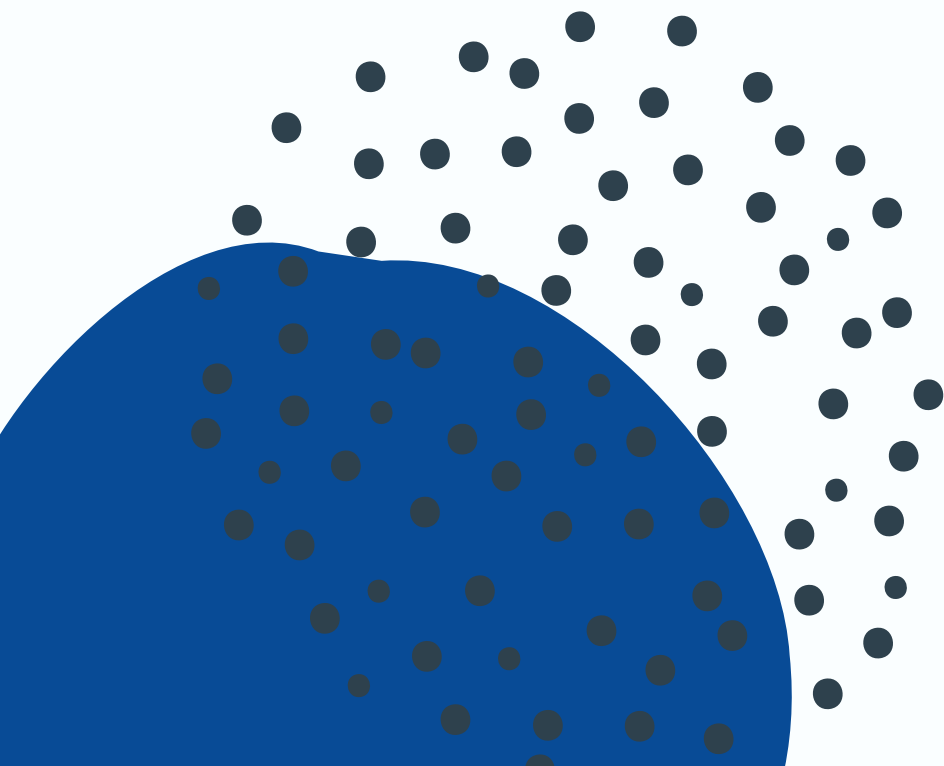
GRANT DOLLARS AND OTHER SOURCES

- **Massachusetts Workforce Training Fund**
- **Federal and State Grants**
- **Private foundation grants**

MASSACHUSETTS: AN EFFECTIVE POLICY RESPONSE

Kathy Rentsch, EdD

Associate Vice President for Strategic Academic & Workforce Initiatives
Quinsigamond Community College



STATE POLICYMAKING:

ADVANCED MANUFACTURING WORKFORCE PLAN

- Published by MA Department of Higher Education, Spring 2015
 - In collaboration with MA Executive Office of Housing & Economic Development and the Executive Office of Labor & Workforce Development
- **Key Recommendations**
 - Identify **regional and sector workforce gaps**
 - **Stronger curricular alignment** among CTE high schools, community colleges and other public higher education institutions
 - **Increased regional coordination** among advanced manufacturing education and training providers
- Resulted in strategic investments in [public higher education](#) in facilities renovation at community colleges and CTE high schools, [equipment upgrades](#), [skills upgrading & pipeline development](#)

PARTNERSHIPS:

ADVANCED MANUFACTURING WORKFORCE PLAN

- Funds qualifying consortia to develop, coordinate and maintain comprehensive manufacturing workforce development systems
- Services include recruitment, job training, placement activities and supportive services
 - Special emphasis on providing training to unemployed and underemployed individuals, and underrepresented populations including: veterans, minorities and women
- Partners include CTE high schools, community colleges, MassHire workforce boards, employers

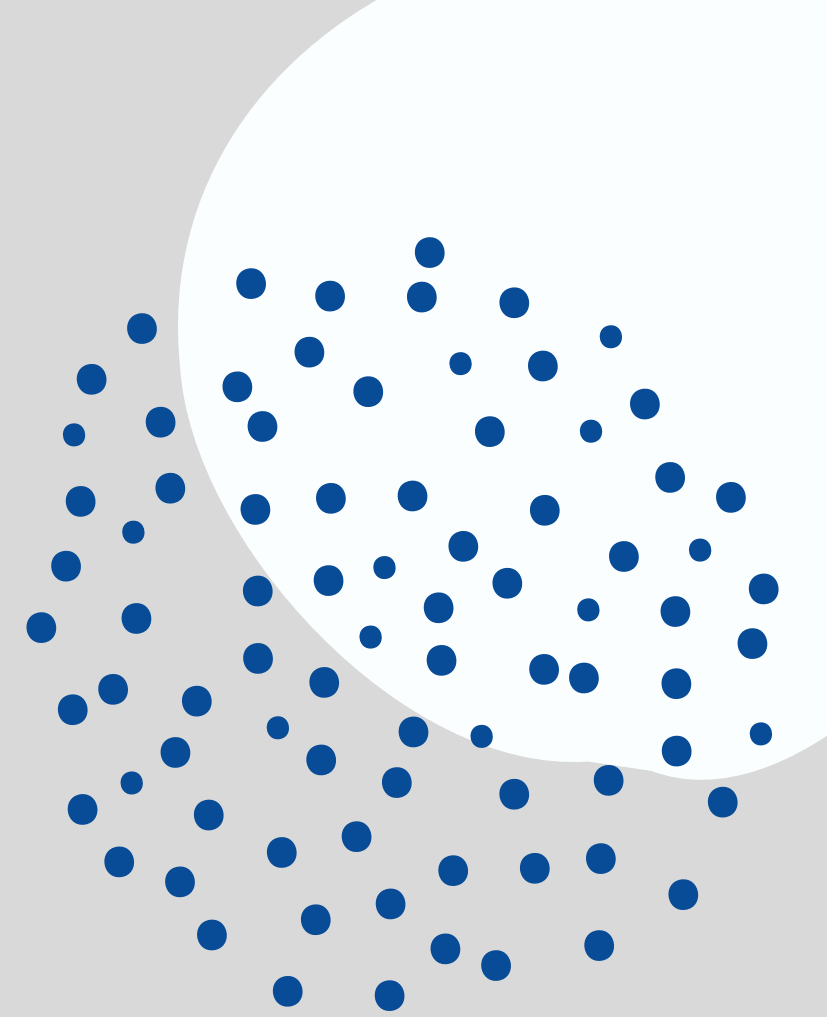
The Central MA Consortium: reMAke 4.0

- Delivers coordinated and complementary training opportunities across central MA through a network of community colleges and CTE high school partners
- Offers regional job board, virtual job fairs, apprenticeships for new workers, upskilling and career development for incumbent workers

NEW DELIVERY MODELS

- **Flexible education and training models** that integrate quality online learning content coupled with hands-on training on commercial grade manufacturing equipment
- **Stackable industry-recognized credentials**, e.g. Quality Lean Six Sigma Yellow Belt; OSHA 30; or FANUC CERT
- **Credit for prior learning** to build upon industry expertise and training and facilitate pathways to further education

Questions to consider...



- What barriers exist at the state level that hinder the development of upskilling programs?
- Who are the champions in Massachusetts (employers, policymakers, institutions) that can help scale this initiative?
- How can Massachusetts policymakers, especially in the wake of coronavirus, create the conditions to enhance transparency of pathways from credentials to career?
- What incentives can Massachusetts offer to employers/education providers to develop and implement upskilling programs?

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