

10

S T R A T E G Y T E N

Invest in a Skilled Workforce

Summary

Adopted in 2008, MetroFuture is Greater Boston's long term regional plan. The foundation of the plan is a well-defined vision for the region. Thirteen implementation strategies were included to support progress towards the vision. An extensive community engagement process ensured that MAPC constructed the vision and strategies from the hopes and dreams of the region. In anticipation of an update to the regional plan, MAPC is evaluating the extent to which regional actors, either intentionally or unintentionally, implemented these strategies. The authors gathered the information that follows through conversations with MAPC staff and content experts.

MetroFuture's tenth strategy, [Investing in a Skilled Workforce](#), addressed the shortfall of skilled workers projected through 2030 and the lack of equity regarding who has access to the region's economic opportunities. To bridge these gaps, this strategy recommended an aggressive expansion of training and the removal of barriers to economic opportunity for underserved members of the region.

MetroFuture recognized public higher education as a prominent actor in developing a skilled workforce, especially among underserved populations in the region. It was vital, MetroFuture posited, that the state actively pursue resources and strategies to increase the capacity of public higher education to better prepare residents for work. In some areas, the state fulfilled this recommendation. The Massachusetts Department of Higher Education (DHE) and Executive Office of Education (EOE) funded programs to increase the preparedness of college freshmen and improved the process by which students seeking associates degrees transfer to 4 year schools.

However, key capacity issues continue to go unresolved. Despite a recent increase in higher education spending, Massachusetts currently spends less per pupil than in 2006. This puts Massachusetts in the bottom quarter of public higher education spending¹. The Baker-Polito Administration established the Workforce Skills Cabinet and through it awarded \$24 million in grants to vocational schools, community colleges and public high schools. Experts suggest that while connections exist, the workforce sector must still be convinced that a more formal relationship with higher education is worth the effort it would take build it.

MetroFuture called for stronger connections between colleges/universities and workforce partners. Bright spots exist, but in general the higher education to work pipeline is inconsistent. The Trade Adjustment Assistance Community College and Career Training federal grant program provided \$54M to sixteen Massachusetts community colleges to build the capacity of community colleges to create or enhance program of study that lead to industry-recognized credentials. Metro Boston's robust medical community partners with colleges and universities to ensure that graduates are prepared to enter the health workforce.

¹ It's worth noting that the predominance of private higher education opportunities in Massachusetts means less reliance on the public higher education system, but that dynamic unfairly benefits those who can afford private higher education.

MetroFuture recommended improvements to performance management within the education industry. The state developed performance based measures for community college funding related to enrollment and student success. The state also added infrastructure to more accurately measure various education programs such as Adult Basic Education (ABE) programs and their ability to move students into employment or higher education. While efforts to share data across institutions were effective, consensus on the permissible level of data sharing varies not only within the system, but sometimes within institutions themselves.

Sub-Strategy Review

Sub-Strategy A: Increase capacity and sustainability of public higher education

EXAMPLES OF PROGRESS

- The legislature spent significantly on campus infrastructure, but spending has been disproportionately allocated to the university system and not the community college system.
- While the legislature did not increase support of higher education per the recommendation in MetroFuture, a state capital campaign resulted in upgrades to a number of high schools in the region.

BARRIERS TO PROGRESS:

- Higher education is significantly underfunded and despite a net increase from 2012 to 2017, 2017 funding is still down 14% from 2001². Massachusetts continues to spend less on public higher education than leading states. Budgetary pressure is to blame, experts say, which all state programs felt since the early 2000s including local aid, early education, and public health.³
- MetroFuture advised that the Division of Capital Asset Management and Maintenance (DCAMM), which is responsible for planning and constructing facilities as well as real estate services, improve processes and procedures, but experts suggest the organization's processes are still burdensome.

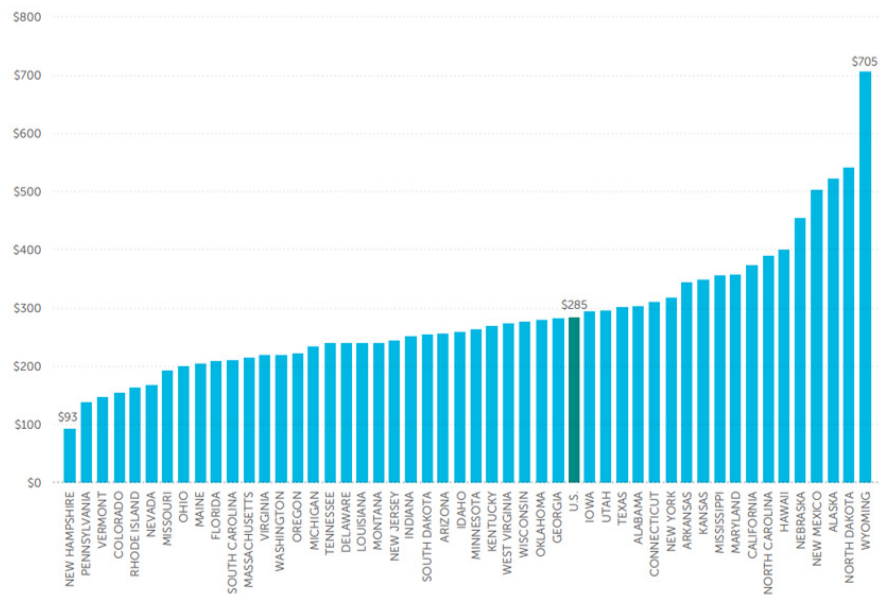
² http://massbudget.org/report_window.php?loc=higher-education-funding-in-massachusetts.html

³ Ibid.

RELEVANT INDICATORS⁴

- Per capita support for higher education averages \$285 nationally and ranges from \$93 in New Hampshire to \$705 in Wyoming. These comparative statistics reflect interstate differences in wealth, population characteristics and density, postsecondary enrollment rates, the relative size of the public and independent higher education sectors, student mobility, and numerous other factors. Poorer states may lag the national average in per capita support, but exceed the national average in support per \$1,000 of personal income. Similarly, sparsely populated states sometimes exceed the national average in both per capita support and per \$1,000 of personal income.

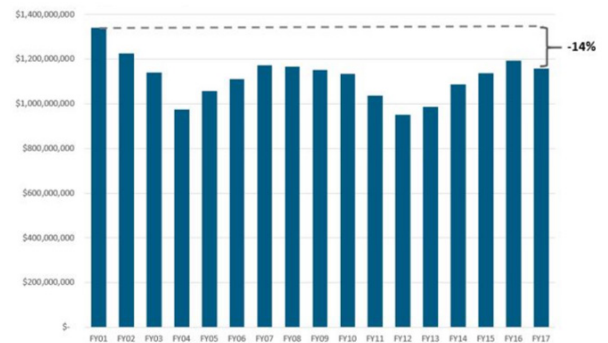
Figure 1: Higher Education Support Per Capita by State (2015)



- Since 2001, the state has cut spending on higher education by 14% (see Figure 2). These cuts are a primary driver of increasing student debt in Massachusetts. Cuts, in combination with increases to tuition and fees are forcing students to take on more and more debt if they want a college degree.

Figure 2: Massachusetts State Spending on Higher Education 2001 to 2017 (adjusted for inflation)

Source: http://massbudget.org/report_window.php?loc=higher-education-funding-in-massachusetts.html



⁴ While not directly tied to the success or failure of a sub-strategy, indicators show how the region has changed in the face of the aforementioned actions or inactions.

Sub-Strategy B: Reduce financial and transportation barriers to public higher education

EXAMPLES OF PROGRESS:

- There has been increased alignment so that students can transition smoothly from high school to community colleges and from community colleges to four-year degree programs, but students sometimes still lose credits in the process.
- The [Commonwealth Commitment](#), created in 2016, commits every public campus to providing 10% rebates at the end of each successfully completed semester to qualifying undergraduate student. While promising, to date not many students have taken advantage of it.
- The DOE also streamlined transfers from community colleges to four-year degree programs without repeating credits.
- The [Open Education Database](#), an organization that catalogs free online courses reports that Massachusetts online course availability “creates an easy-to-access, flexible option for students who already reside in Massachusetts to study online, as well as those looking to explore out-of-state learning.”
- In collaboration with the governor’s office, Mayor Walsh funded the [Boston Bridge](#), which covers gaps in Pell Grants for graduating Boston high school students who meet Pell grant income standards and enroll full time at Bunker Hill Community College, Roxbury Community College, or Mass Bay Community College.

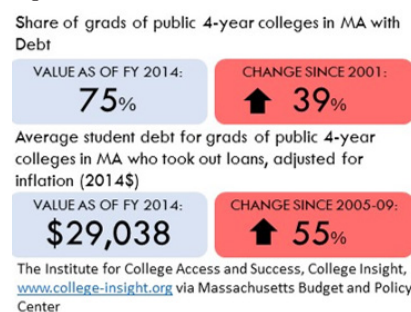
BARRIERS TO PROGRESS:

- There has been significant innovation and creativity in making continuing education more effective and accessible, but funding barriers prevent scaling to a degree that would have a significant impact on the region.
- While every year approximately 25,000 individuals take Adult Basic Education (ABE) programs funded by the Massachusetts Department of Elementary and Secondary Education (DESE), nearly the same amount are currently on waiting lists that can last 2 to 8 months.

RELEVANT INDICATORS:

- Massachusetts’ economy is dependent on a highly educated workforce and more and more students are forced to use loans to pay for post-secondary education. Figure 3 shows the percentage of public four-year Massachusetts college graduates with student loans rose from 54% in 2001 to 75% in FY 2014. Cumulatively, student debt rose 55% on average.

Figure 3: Student Debt Indicators



Sub-Strategy C: Coordinate and align public higher education curriculum with local workforce actors

EXAMPLES OF PROGRESS:

- When the state colleges became universities, they added graduate level programs in curriculum areas they recognized as high demand occupations areas.
- MAPC advocated for post-secondary groups, such as [Life Sciences Consortium of North Shore](#), which is composed of public and private post-secondary institutions sharing grades, credits, and tuition and fees across four institutions.
- Governor Baker's [Workforce Skills Cabinet](#), created by an Executive Order in February 2015, is responsible for developing and implementing regional strategies to develop workforce skills to meet the varying needs of employers in the Commonwealth's regions, today and in the future.
- The most successful partnerships are in the health care industry:
 - The [Emergency Medical Careers Partnership](#) (EMCP), a partnership between ambulatory companies, the Boston Private Industry Council, and Northeastern University, seeks to address the employment needs of the emergency medical services industry in greater Boston, while providing new opportunities for low-skilled individuals to move into medium-skilled, higher paying jobs.

BARRIERS TO PROGRESS:

- While some success examples exist at the municipal level, there was limited regional and state investment in after-school and out-of-school programs.
- School district priorities often do not support expansion of out-of-school programs

Sub-Strategy D: Adopt new strategies to improve student performance, graduation rates, and employment outcomes

EXAMPLES OF PROGRESS:

- In an effort to increase transparency and incentivize participation, the state moved to [performance-based funding for community colleges](#). 50% of each college's allocation is based on performance metrics related to enrollment and student success, with added incentives for "at-risk" students completing certificates and degrees and those graduating in disciplines that fuel that state's economy .
- The [Massachusetts Early College Initiative](#), developed by the Massachusetts Board of Higher Education (BHE) and the Board of Elementary and Secondary Education (BESE) provides grants of up to \$80k to districts and schools to grow and sustain high quality early college partnerships with state colleges.

- The Baker-Polito Administration also awarded \$1.25M in grants to launch new college access and completion programs. Through the [Department of Higher Educations' Performance Incentive Fund](#), the largest share of the fund is being used to launch new programs to allow high school students to take college course before graduating from high school.
- In early 2017 the state was awarded [\\$2M from JP Morgan Chase](#) to improve career education and expand career pathways for students.
- DESE introduced [college and career readiness indicators](#), which give districts timely data on enrollment in developmental courses to more successfully monitor a student's path to college readiness.
- The state also created a measurement system for Adult Basic Education programs including transition from programs to higher education.
- Many new strategies exist at the municipal level, but have not spread throughout the region:
 - [Success Boston](#), a collaboration between the Boston Foundation, the Boston Public Schools the City of Boston, 37 higher education institutions, and local non-profits, is a successful college completion initiative.
 - [Boston Workforce Investment Network](#) (Boston Wins) is a State Street funded, multi-year partnership between five non-profit partners (the Boston Private Industry Council (PIC), Bottom Line, College Advising Corps, uAspire, and Year Up) that advances college completion and job readiness.
 - [Triangle, Inc](#) supports people with disabilities in Malden, Winchester, and Medford along specialized tracks to employment.

RELEVANT INDICATORS:

- Educational attainment plays a significant role in employment, earnings, and wealth-building outcomes. Metro Boston residents with a college degree have higher rates of employment, earn higher wages, and are better able to build wealth than those who do not. Across Metro Boston, educational attainment is on the rise. Today, 54% of the region's working age adults have a 2- or 4-year college degree or greater, a 5 percentage point increase since 2000.

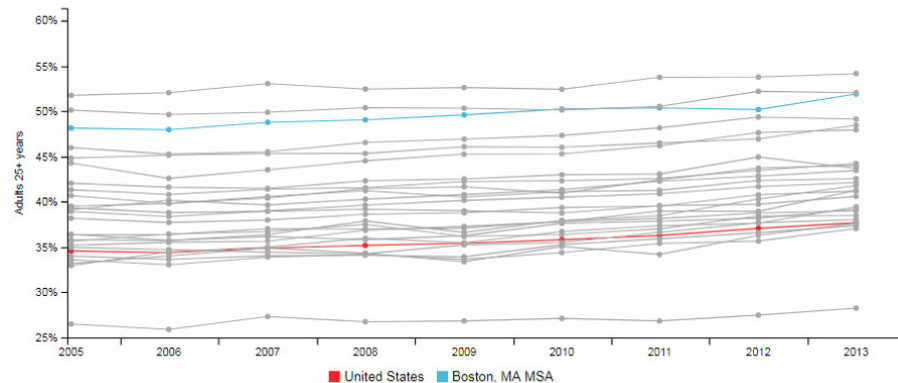
Figure 4: Adults with a College Degree in the Region

Source: http://www.regionalindicators.org/topic_areas/1#an-educated-workforce



- Metro Boston consistently ranks high among the top 25 most populous U.S. metropolitan areas for share of adults ages 25 and over with an associate's or bachelor's degree. In 2013 the region was third highest, after Washington D.C. and San Francisco.

Figure 5: Share of Adults Ages 25+ with a 2- or 4-year Degree or Higher among 25 Most Populous Metro Areas
 Source: http://www.regionalindicators.org/topic_areas/1#an-educated-workforce



- While college attainment rates have improved for all racial and ethnic groups over the past decade, stubborn gaps in educational attainment persist and have worsened since the year 2000. The college attainment gap (the percentage point difference in working age adults with a 2- or 4-year college degree) between Black and White working-age adults is 23 points, up from 21 points in 2000; between Latinos and Whites the gap is 33 points, up from 30 points in 2000.

Sub-Strategy E: Remove barriers to labor force participation

EXAMPLES OF PROGRESS:

- In 2014, the Obama administration passed the [Workplace Innovation and Opportunity Act](#) to bring about increased coordination among federal workforce development programs.
- [MassHire Workforce Boards](#) continue to support the region's jobseekers through training and job matching.
- A new economic development law was passed, [An Act Relative to Job Creation and Workforce Development](#) (2016), which sought to connect residents to economic opportunities, strengthen community and housing development efforts, and invest in emerging technologies and included \$45m in workforce skills capital grants.
- In 2016 the Massachusetts Rehabilitation Commission (MRC) partnered with local service providers in the [Transition Pathway Services](#) program to enhance competitive integrated employment and post-secondary enrollment for high school students living with significant disabilities.
- Programs that have helped:
 - In 2013 the [Paul and Phyllis Fireman Charitable Foundation](#) in collaboration with the state government, seven regional partner organizations, and many direct service agencies, launched the Secure Jobs program which provides participants with resources to combat barriers to childcare, transportation, and transitional assistance.

- In April 2015, U.S. Department of Housing and Urban Development (HUD) announced a \$2 million grant for the next four years to the Boston Housing Authority to fund a [Jobs Plus program in Charlestown](#), which aims to increase education levels, job search and placement and financial literacy assistance for public housing residents.
- [ROCA](#) in Chelsea has become a national standard for how to transition youth from gang involved into the workforce.

BARRIERS TO PROGRESS:

- [CORI](#) reform occurred, which MAPC actively advocated for, but evidence suggests that reform has not led to the level of change expected and additional reform is under consideration particularly for individuals who have been sentenced to and have completed their term of incarceration.

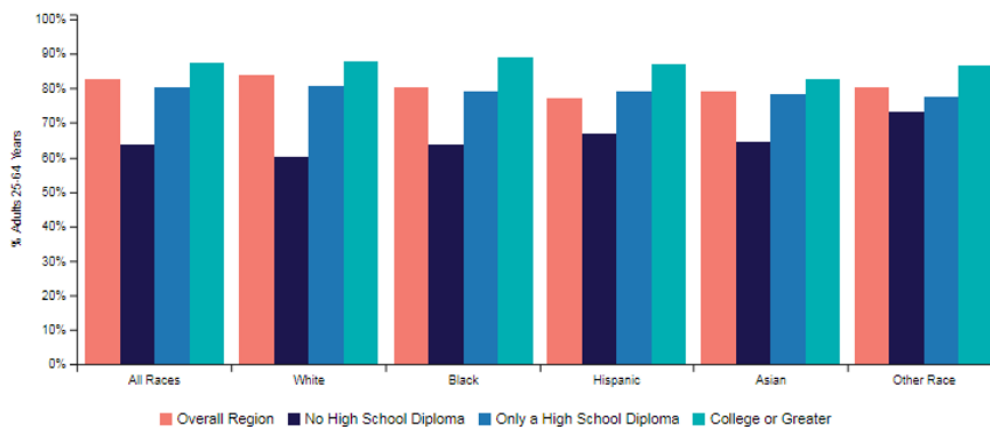
RELEVANT INDICATORS:

Figure 7: Participation Gap, Black to White
 Source: http://www.regionalindicators.org/topic_areas/7#making-a-good-living



- Black and Latino workers have closed the labor force participation gap by roughly 10 points since 2000, due to increasing participation rates among Blacks and Latinos and not much change among Whites. Compared to national averages, the participation gap in Metro Boston between Blacks and Whites is smaller by 3 percentage points. For Latinos and Asians compared to Whites, however, the gap is larger by about 4 points relative to the nation.

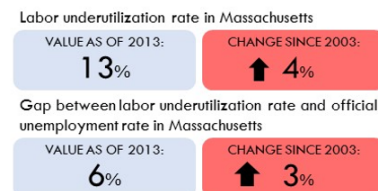
Figure 8: Regional Labor Force Participation Rate, Ages 25-64 by Race and Educational Attainment
 Source: http://www.regionalindicators.org/topic_areas/7#making-a-good-living



- Between 2008 and 2013 the region gained 64,700 workers ages 25-64. The positive growth has been primarily among workers with a college degree or higher degree. In fact, the region has lost workers ages 25-64 across all educational attainment levels except for those with a college degree or more. Combined, the region lost 26,200 workers ages 25-64 in the labor force with less than a college degree and gained 91,100 with a college degree or more.

- The Bureau of Labor Statistics calculates alternative measures of labor underutilization at the statewide level to capture discouraged and underemployed workers. While the underutilization rate is inherently greater than the unemployment rate, and the trends for both rates

Figure 9: Labor underutilization Indicators in Massachusetts
Source: http://www.regionalindicators.org/topic_areas/7#making-a-good-living



in Massachusetts more or less track with each other, there was a significant jump in the gap between the underutilization rate and unemployment rate during the Great Recession that the state has not yet been able to close. In 2007, just before the recession, the underutilization rate, at 7.3% was 2.7 percentage points greater than the unemployment rate. In 2009, the gap jumped to 6.1 points, and in 2014, with an underutilization rate of 11.5%, the gap remains stubbornly at 5.7 points. Of course, the gap would decrease if the underutilization rate held steady and the unemployment rate went up, so it is important to watch the trends of all three indicators: official unemployment rate, underutilization rate, and the gap between the two. Relative to the rest of the 50 U.S. states and the District of Columbia, Massachusetts ranks around the middle for all three of these measures.

Sub-strategy F: Position immigrants as key assets to the region's economy.

EXAMPLES OF PROGRESS:

- The Patrick-Murray Administration launched the New American's Agenda as well as the Governor's Advisory Council for Refugees and Immigrants, which sought to successfully integrate immigrants and refugees into the Massachusetts' economy and communities.
- In 2011 the Massachusetts Immigrant and Refugee Advocacy Coalition (MIRA) launched the [New American Integration Institute](#) with support from The Boston Foundation in an effort to promote civic integration, economic integration, and social integration.
- Many MassHire Workforce Boards support immigrants and their pursuit of work through collaborations with English as a Second Language (ESL) providers.
- In 2017, the Baker-Polito Administration established the Latino Advisory Commission, which is intended to address the concerns of the Massachusetts Latino community and promoting economic prosperity and well-being.
- [Jewish Vocational Services](#) continues to offer free ESL classes and job training for refugees and unemployed residents looking for work.

- The [Global Entrepreneur in Resident Program](#) (GEIR) was established in the 2014 Jobs Bill. Through the GEIR, universities provide part-time work and cap-exempt visas for graduates with advanced degrees who want to grow their companies but cannot due to a lack of available visa slots. GEIR quickly became a national model, but the Trump Administration's immigration policies have put its future into doubt.
- [The Immigrant Learning Center](#) issued a series of briefs, webinars, and workshops to address the most pressing issues related to U.S. immigration policy and opportunity.

BARRIERS TO PROGRESS:

- Although the budget line item for Adult Basic Education for immigrants has not significantly changed, current programs are much more career focused than previous iterations.
- ESL classes have been cut every year under DESE and redistributed to other programs.
- The Trump Administration's decision to severely reduce both the number of immigrants allowed to enter the United States and the length of their stay negatively impacts the potential of the immigrant community.

Sub-strategy G: Support older workers and lifelong productivity

EXAMPLES OF PROGRESS:

- In April of 2017, the Baker-Polito administration established the Governor's Council to Address Aging in Massachusetts. The Council, in partnership with AARP, published a report in 2018 that a variety of working groups will seek to implement, aided by a grant from Tufts Health Foundation.
- The Massachusetts Council on Aging is piloting the 50+ Job Seekers Networking Group which offers those 50 and older opportunities to network with peers and develop new relationships, skills, and strategies to help in their career transition

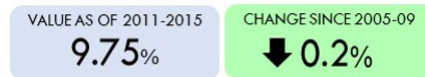
BARRIERS TO PROGRESS:

- The majority of programs and funding in the workforce training sector goes to youth.
- Employers have not committed to hiring the 50+ population.
- Employers are also hesitant to offer flexible hours to the 50+ community.

RELEVANT INDICATORS:

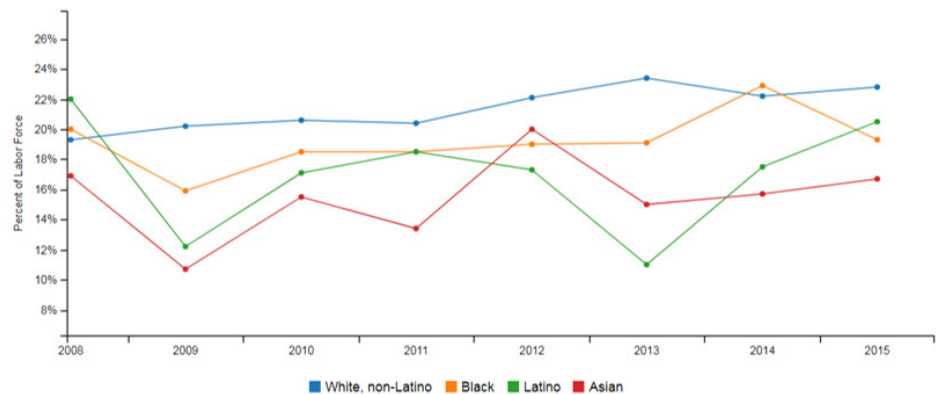
- Approximately 9.8% of the region's older adults live in poverty, just below the regional poverty rate. Between 2005-2009 and 2011-15 there has been no significant change in the percentage of older adults living in poverty throughout the region. Even if this poverty rate for older adults holds steady, the substantial growth in the older adult population in the coming decades (projected to grow 75% from 2010 to 2030) will result in a much larger number of older adults in poverty ⁵.

Figure 10: Poverty Rate for Adults 65 and Over



- Adults over the age of 65 are continuing to work through their retirement years more and more. Across all races and ethnicities, the post-recession labor force participation rates are trending up for adults over 65, although rates are still much lower than those of “working-age adults”. Older adults may be working more because we are living longer because they are happy at their place of employment, or because they are facing financial pressures that force them to maintain a reliable source of income. Within the region, Older White adults have the highest labor force participation rates, at 23%, and older Asian adults have the lowest at just under 17%.⁶

Figure 11: Labor Force Participation Rate Amount Adults 65 and Over by Race in Metro Boston
Source: http://www.regionalindicators.org/topic_areas/7#poverty



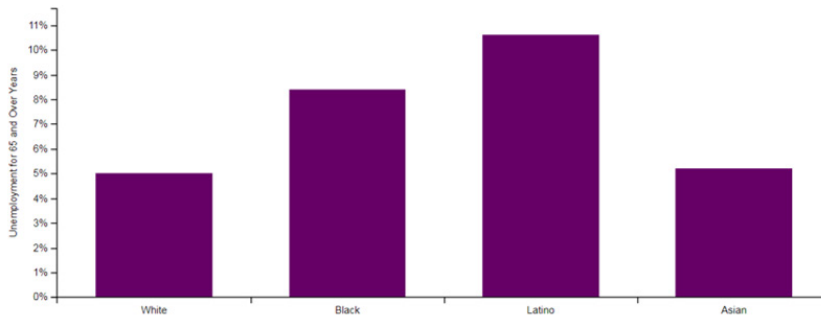
- The unemployment rate among older adults (5.4%) is lower than that of the population 25 to 64, though only by about one percentage point. Unemployment gaps by race among older adults are also smaller for older Black adults than working-age Black adults, but they are about the same for older Latino adults⁷.

⁵ http://www.regionalindicators.org/topic_areas/7#aging-in-place

⁶ http://www.regionalindicators.org/topic_areas/7#aging-in-place

⁷ http://www.regionalindicators.org/topic_areas/7#aging-in-place

Figure 12: Average Unemployment Rate among Adults 65 and Over by Race in Metro Boston 2011-15
 Source: http://www.regionalindicators.org/topic_areas/7#older-adults-unemployment



Sub-strategy H: Support individual asset building and financial literacy

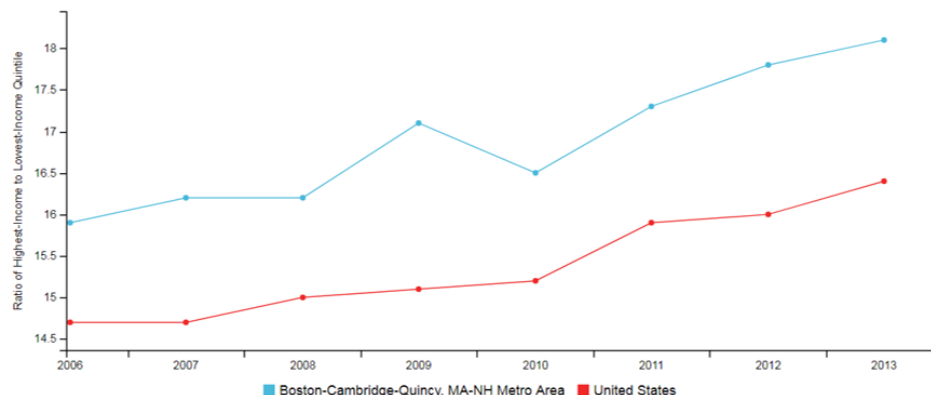
RELEVANT INDICATORS:

- The trend of growing income inequality is consistent throughout most metro areas, including Metro Boston, where the rich are getting richer, the poor are getting poorer, and the middle class are stuck in place. Adjusted for inflation, mean income for the top fifth of households increased by 10% between 2006 and 2013, while for the bottom fifth, it decreased 3%. Households in the middle fifth of the income range saw little change in income over this time. The mean income of the richest fifth of Metro Boston households is \$258,300, 3.5 times greater than the \$73,400 mean income of the middle fifth, and 18 times greater than the \$14,300 mean income (barely above the poverty line) of the fifth of households with the lowest income. This top-fifth to bottom-fifth ratio (or 20/20 Ratio) is 2 points higher than it was in 2006 (see Figure 13). Metro Boston's 20/20 ratio has been consistently higher than the national average since 2006 (see Figure 14), and in 2013 ranks 5th highest among the top 25 most populous U.S. metro areas.

Figure 13: Top-Fifth Mean Income to Bottom-Fifth Mean Income Ratio (20/20) for Metro Boston



Figure 14: Ratio of Mean Household Income for Highest-Income to Lowest-Income Quintiles



Emergent Themes

- Online college is a reliable and flexible option for those in pursuit of higher education.
- Training programs, like [Per Scholars](#) and [Resilient Coders](#), offer shorter training programs that deliver occupationally relevant skills.
- The [Innovation Schools initiative](#), a signature component of [An Act Relative to the Achievement Gap](#) signed into law by Governor Patrick in January 2010 allows some schools to operate with increased autonomy and flexibility with the goal of establishing the school conditions that lead to improved teaching and learning
- A shift is occurring where educational experts now acknowledge that it is unreasonable to assume all young people should go to college and pursue a 4-year degree.
- Increases us of a systems-planning approach to sector-based workforce strategies. For example, instead of just churning out new nurses, Bunker Hill Community College brought the hospitals together to discuss how many were needed locally and what skills they need.
- The apprentice model moved from time-based to skill based to ensure that apprentices were adequately trained.
- Experts suggest that instituting a [Guided Pathways](#) model, which has been shown to increase graduation rates by requiring students to choose a program and develop an academic plan, would improve educational outcomes.
- Industry experts recognize a lack of data for some educational indicators. The state could implement a longitudinal data system like the ones existing in over 30 states now that provide timely data on the employment and earnings of college graduates.