



# Strategic Planning Environmental Scan Report

Bristol Community College

November 2019

**CAMPUSWORKS**  
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1767 Lakewood Ranch Blvd. #305  
Bradenton, FL 34211  
T. 941.316.0308 | F. 941.954.2398

[www.campusWorksinc.com](http://www.campusWorksinc.com)

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DRAFT

## Executive Summary

Community colleges must anticipate trends, respond to changes in the communities they serve, and remain agile to facilitate strategic transformation, when necessary, to serve those communities. This environmental scan provides the basis for organization-wide discussions regarding the future of the institution. When used as a complement to the strategic planning process, it helps to focus conversations, speak from the “same page,” and better define the level of uncertainty in the external environment that will ultimately impact Bristol Community College. This report is meant to serve as a starting point; CampusWorks provided key themes for discussion with the intention that Bristol’s Strategic Planning Committee would continue to help gather the as much feedback as possible, engage the entire college community in the work of strategic planning, and provide recommendations that cumulatively emerge from the College’s work in addition to this report.

Bristol Community College will face several internal and external environmental factors, highlighted in this report, that will require the College to construct a clear and inspirational vision for change and transformation. Structural demographic shifts, aging, flattening state funding, and income inequality will require the institution to be inventive in its ability to generate revenue; public pressure for student completion can serve as a clarion call to stave off enrollment declines and continue mission-fulfilling work with a renewed and sustained focus on student success at Bristol. The acceleration of the marketplace and technology, the urgency by policymakers for more skilled workers, and student demands for increased flexibility and access to educational opportunities means that the College will also have opportunities to position itself as a pace-setting organization leading the way into the twenty-first century with vigor and courage.

The following forces will impact Bristol Community College’s ability to be competitive by 2030:

- Demographic changes will govern Bristol’s ability to manage its enrollment. The region will experience modest fluctuations in community college enrollment by high school graduates until 2025 when it will see a 19% drop between 2025-2029.
- Portuguese and Hispanic students will become key opportunities for enrollment growth as the fertility rates, high school graduation rates, and college-going rates for these populations have increased over the last ten years; additionally, the largest percentages of students who did not enroll at Bristol nor any other institution include these groups of students.
- Bristol County will experience a graying population that will create opportunities by opening vacancies for new jobs and growing the region’s healthcare industry; however, it will also create demands on Massachusetts’ state budget through Medicaid payments and pension liabilities that put public higher education at risk for stagnant funding streams.

- Technological changes and automation are pervasive trends, creating a watershed of effects within the southeastern Massachusetts region. Technology has transformed the business models of the region's main industries including healthcare, manufacturing, financial services, and the addition of offshore wind energy.
- While the College will know the main industries that it can serve on a shorter time horizon, the College will also need to create flexible systems, processes, and programming that respond to jobs (and industries) that have yet to be created.
- Bristol has benefited from recent increases in higher education funding at the state level, but these dollars have not reached pre-recession levels, leaving a gap in funding that has increased the burden of tuition on students and families.
- Income inequality and poverty continues to grow in Bristol County, indicating that the greater share of the County's wage growth has been in upper income brackets. While Bristol is one of the most affordable of all community colleges in Massachusetts, it will still have to contend with growing income inequalities where students are attempting to "learn while earning."

## Methodology

Bristol Community College is embarking upon an effort to develop a new strategic plan for the College for the period between 2020-2025. The strategic planning process is intentionally inclusive and actively engages diverse stakeholders in the community – as well as internal college personnel and current students – to provide input to plan priorities and development.

CampusWorks collaborated with Bristol Community College to gather feedback and perspectives from a wide array of stakeholders. CampusWorks analyzed, coded, and reviewed the responses from numerous surveys developed by CampusWorks and previous surveys and data studies conducted by various offices throughout Bristol Community College to glean insights into factors that constituents felt most impacted the College's ability to respond to future conditions of uncertainty. CampusWorks synthesized the data and extended its data analysis on issues that seemed most important to the Bristol internal community and the College's stakeholders. Data are presented, when available, in this report for external trends and CampusWorks attempted to be as specific as possible to the region and county.

## I. Stakeholder Analysis

CampusWorks, in partnership with the Bristol Community College Strategic Planning Committee, distributed several surveys and reviewed institutional data to understand the internal capabilities and resources (strengths) in addition to limitations and challenges (weaknesses) that the College faces. Surveys also assessed what members of the campus community thought were key opportunities and potential threats outside of Bristol that could have an impact on the College's success. A survey was distributed for faculty and staff, students, and community partners (e.g., K-12, community organization, business, non-profit service, and economic development partners). Additionally, the National Initiative for Leadership and Institutional Effectiveness conducted an employee engagement survey, the results of which were considered as part of this overall analysis of internal perspectives.

CampusWorks used each of these data sources to analyze, quantify, and synthesize stakeholder data into key themes, which are represented below. Themes emerged from all stakeholders and are noted as strengths, weaknesses, opportunities, and threats.

### 1. Strengths

- ***Caring Faculty/Staff.*** Faculty and staff shared that there is a strong focus by the institution on student success and noted with high regard the commitment of everyone to ensure students succeed. Student survey responses also reflected this reality. Students shared that they felt like that they were part of a welcoming and caring environment. While some faculty and staff said that there are parts of student success initiatives that are still growing, the institution's continued emphasis on these initiatives have helped strengthen its competitiveness.
- ***Academic Support Services.*** The SWOT surveys also demonstrated that academic support services were a key strength of the College. Respondents shared that services such as tutoring, disability services, TRIO programs, and writing assistance were some of the services that students have come to highly value in support of their academic challenges. Faculty and staff, specifically, recognized that introducing proactive advising has started to become a key strength of the College in supporting students' ability to enroll in courses and remain on schedule toward degree completion or goal attainment.

- ***Student Support Services.*** Additionally, SWOT survey respondents shared that the College's approach to holistic, wrap-around student supports remained a distinctive strength. Respondents shared that the creation and operation of the CARE team and fund was significant to supporting students who experience academic and mental health challenges as well as resource insecurity.
- ***Tuition/Affordability.*** Faculty, staff, and students alike ranked tuition and affordability as a key strength. Some students shared comments that they had weighed the cost of attending Bristol Community College against other community colleges and four-year institutions and made an intentional choice to attend the institution. Many shared that they are engaged in part-time work and must balance their finances to manage living expenses in addition to their tuition dollars.
- ***Conveniently Located and Accessible Campus Locations.*** Faculty, staff and students also shared that campus locations were a clear and distinctive strength of the College. For Bristol Community College students, this was the largest response of all the strengths that they identified. Having the ability to attend college classes near their workplaces where they can quickly and conveniently access in the evenings and during time off is a significant part of their experience. Other students shared that being able to attend classes while caring for children or elderly parents, in addition to flexible scheduling, has been what helped them meet the demands of their personal and professional lives.

## 2. Weaknesses

- ***Culture/Climate/Morale.*** Staff and faculty shared that—for the College to reach its full potential—it will have to consider defining its desired culture. Defining and creating a culture of change and agility was recognized as a key need as the College struggles to navigate recent organizational and staffing changes.
- ***Lack of Staffing.*** Survey respondents shared the concern that the College lacked staffing to help carry out key support services. Another concern that appeared in the survey was that the College felt overworked and that there were too many priorities. The feeling of a lack of staffing may be true, and it may be key departments or areas that especially feel understaffed. However, it may also be the perception that staffing is a concern because employees feel overworked and feel that there is no where to delegate or share such work.



- ***Inefficient Processes.*** A key weakness identified by many college members included inefficient processes that slow down the work of the College. Respondents shared that they thought there were clear opportunities to streamline and automate student-facing processes that would help accelerate the institution's student success efforts.
- ***Internal Communication.*** Staff and faculty specifically shared that there was a need for more communication across departments in the College. On a related note, staff members and students shared their concerns about receiving the right communications and having the right processes to ensure that students received important communications.
- ***Outdated/Missing Technologies.*** Students and staff alike shared that outdated technology posed an opportunity for improvement by bolstering the hardware and technology infrastructure of the College. Staff and faculty shared the need to integrate more computers and technology in the classroom. Others shared a concern about the College's ability to integrate modern and relevant technology in the curriculum that students will use in their professional lives after college.
- ***Class Cancellations.*** Another large concern that faculty and staff shared centered around the growing number of classes that are cancelled due to low enrollment. Some of the concerns shared related to how the cancellation of classes impacts students' degree progress and ability to earn desired credits.

### 3. Opportunities

- ***Online Learning and New Technologies.*** Students, faculty, and staff all shared with great enthusiasm the opportunity to integrate technology in the classroom and to increase offerings of online learning. Students shared their desire for more online classes and appreciated the flexibility that they give them. Faculty and staff also shared the desire to offer additional online courses and student services. Faculty and staff responded that a key opportunity is to continue ensuring that the technologies that students will use in their careers are integrated in the curriculum.
- ***Increase in Regional Diversity.*** The increase in regional diversity through native-born non-white and immigrant populations poses an opportunity. Faculty and staff gave its highest ratings to racial and ethnic minorities within the region as a prime opportunity for recruitment. The region's immigrant communities and increase in immigrant populations also provide an opportunity to increase enrollments and ensure educational pathways that

will strengthen the region's talent pipeline.

- ***Economic Growth and Labor/Skill Shifts.*** Another opportunity identified has been the growth of industries within the region and the ability to offer academic programming that fill supply gaps within the labor market. Faculty and staff also responded that the College will have to be flexible in the face of a labor market that will shift quickly as industries are experiencing disruption, innovation, and acceleration.
- ***K-12 Partnerships/Connecting to High Schools.*** Respondents also shared that there were opportunities to build stronger partnerships with high schools and middle schools to help educate students about career opportunities and pathways. Faculty and staff shared that there were opportunities for the College to consider how it can leverage these kinds of partnerships and dual enrollment to create a long-sustaining pipeline to community college enrollment.
- ***Teaching and Learning.*** Respondents also identified the opportunity to realign certificates and create stackable and micro-credentials that can be used as stand-alone credentials for the workforce or that can be bridged to ensure degree completion. Focus group participants responded that building more experiential opportunities for students will be important as students attempt to translate their learning into actionable skills needed for the workforce; in particular, focus group participants recommended focusing on technological and soft skills (e.g., creativity, problem-solving, communication). These kinds of skills require less lecturing and more active learning such as coaching, mentoring, and teamwork.

#### 4. Threats

- ***Student Income Insecurity/Poverty.*** Students unequivocally expressed that finances and income insecurity remain a key challenge to their education. Specifically, the need to support family members and produce income for living expenses strains their schedules and ability to pursue their education.
- ***Demographic Changes.*** Demographic changes including the reduction in high school students remains a pervasive threat to institutional viability in the eyes of staff and faculty. Respondents also shared that Bristol County's aging population will have an impact on students and the region's ability to keep and retain qualified workers.

- ***Student Perception of Higher Education's Value.*** As the workforce has created a significant opportunity for students from high schools, faculty and staff have shared that another threat to the College's future is the ability to help potential students see the value of an affordable higher education. Part of this has recently been fueled by economic growth and expansion that has needed more prospective students to enter the world of work and led employers to create more corporate training programs to onboard and orient workers in time enough to meet job demands and forestall any loss in productivity.
- ***Increased Competition for Students.*** Changes in the high school population have increased competition from four-year institutions, community colleges, and employers for prospective students at Bristol Community College. The increased investment in marketing higher education to students and intensified recruitment efforts by other institutions create a concern about whether the College will be able to maintain its position with enrollment given these realities.
- ***Students' Academic Preparation.*** Faculty and staff shared concerns about students' reading, writing, and mathematics skills and their ability to accomplish college-level work. Focus group participants, especially for internal groups at the College, also recognized the lack of reading, writing, and mathematics skills necessary to achieve college-level courses.

## II. External Environmental Factors

### Political, Legislative and Regulatory

#### College Attainment & Equity

Massachusetts leads the nation in several educational measures, having the highest percentage of postsecondary credential holders in the nation at 57 percent. Massachusetts also has the highest high school graduation rate, the highest college-going rate, and among the highest public college graduation rates. By and large, these indicators have been improving over time; however, the prevalence of significant and sustained opportunity and achievement gaps is one of the areas where the Commonwealth experiences a significant need for improvement.

By ignoring these gaps, it will be impossible for Massachusetts to surpass its current attainment goal if the opportunity gaps between students of color and their white peers are not closed. At the same time, there is a continuous need to upgrade the skills of the labor force to better drive the innovation economy. Employers are competing for skilled talent and realizing that it has become increasingly difficult to replace the skilled manpower that is already retiring in large numbers.

This is exacerbated by both the declining numbers of high school to college-going students in the northeast as well as the significant increase of retiring baby boomers. While Americans are living longer, this represents a significant portion of the Massachusetts labor force that is older, on average, than most states. To compound the issue, a subsequent report by the Massachusetts Department of Higher Education (DHE) in 2016 indicated that a more detailed analysis showed that 80% of those retiring degree holders would be at the baccalaureate level or higher.

Data from the DHE suggests that if gaps closed between African American and Latinx students and their white peers starting in high school (persistence and graduation) through college (enrollment, retention, and completion), the number of African American graduates between 2025 and 2038 would increase by over 30,000 and the number of Latinx students with degrees would increase by more than 75,000. Even if the gaps were halved, that would still supply the Commonwealth with the requisite number of degree-holders needed to meet workforce demands.

The Massachusetts Department of Higher Education identified communities and gateway cities with high schools where less than half of students identified as white. The identified communities included Worcester/Leicester; Lawrence/Lowell; Brockton; Springfield/Holyoke/Chicopee; Greater Boston; and ***New Bedford/Fall River***. Besides the fact that these communities are known for the significant diversity of their population, they are also

communities with great potential for students of color, as there are two- and four-year public institutions in proximity. Likewise, they are communities that happen to be surrounded by areas of job growth, greater educational attainment, and higher median earnings. Thus, if educational attainment among the target populations in these areas can be enhanced, there will likely be employment opportunities in relative proximity to better economically support their growing communities.

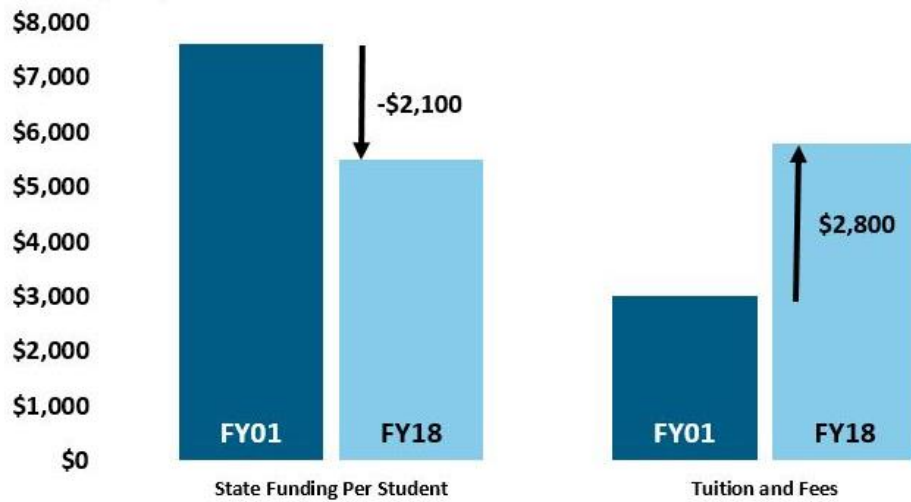
### State Appropriations and Higher Education Funding

Higher education is an important factor in the success of Massachusetts. States with a greater share of college-educated workers tend to have stronger, higher-wage economies. States whose workforces have the highest levels of educational attainment tend to have median hourly wages over \$20, whereas states whose workforces have the lowest levels of educational attainment have wages between \$15 and \$16 an hour.

Adequate state funding helps ensure that these benefits are broadly available to all who want to pursue higher education. Insufficient state funding, on the other hand, leaves students and their families with higher tuition and debt, and thus threatens to put higher education—and the opportunities it offers—beyond the reach of those who cannot afford it.

While Massachusetts has the best educated workforce in the country and the highest median hourly wage, deep cuts in state support for public higher education have costs to families that are struggling to afford tuition and fees. Across the Commonwealth's 15 community colleges, state funding is down \$2,100 per student since FY 2001 while tuition and fees are up \$2,800 per student (see Figures 1 and 2).

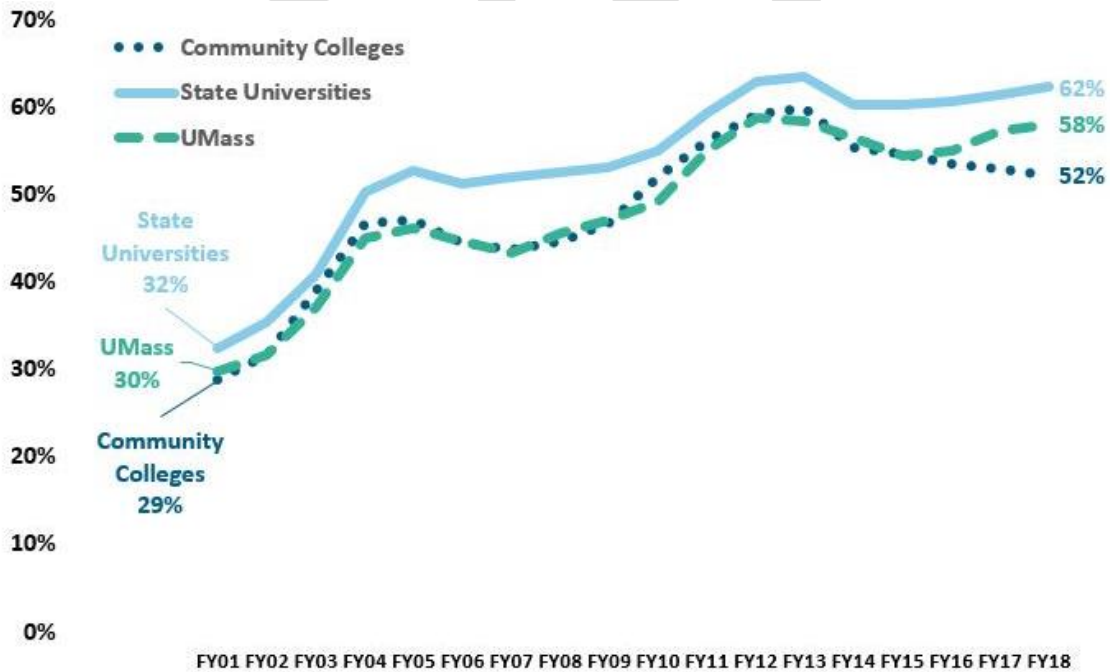
Figure 1. Massachusetts State Funding Per Student versus Tuition and Fees, 2001-2018 (in 2018 dollars)



Note: School-based financial aid not funded by state appropriations is netted out of tuition and fees.

Source: Massachusetts Budget and Policy Center

Figure 2. Percentage of In-State Tuition & Fees as Percentage of Education Revenue



Source: Massachusetts Budget and Policy Center

## Demographics

### Population Projections

The Southeast Massachusetts region, covering the entirety of Plymouth and Bristol counties and extending into the southeastern reaches of Norfolk County, experienced modest population growth in recent years, adding 37,633 persons and with an annualized population growth rate of 0.35% between 2000 and 2010. The region should expect to see continued population growth over the next twenty-five years, although at an increasingly slower rate as time moves on. The region is anticipated to add another 41,500 residents between 2010 and 2020, after which levels of growth start to diminish, with fewer than 28,000 residents gained from 2020 to 2030 (see Table 1).

**Table 1. Southeastern Massachusetts, Population Projection by Gain and Loss, 2010-2035**

	2010-2015	2015-2020	2020-2025	2025-2030	2030-2035
Starting Population	1,108,845	1,132,805	1,150,345	1,166,038	1,178,095
<b>Natural Increase</b>					
Births	58,476	60,541	61,219	60,694	59,810
Deaths	52,082	57,177	62,674	69,403	76,810
Natural Increase	<b>6,394</b>	<b>3,364</b>	<b>-1,455</b>	<b>-8,709</b>	<b>-17,000</b>
<b>Domestic Migration</b>					
Domestic In-Migration, MA & Border	125,472	133,625	134,316	135,015	136,109
Domestic In-Migration, Rest of U.S.	43,962	45,425	46,925	48,369	49,645
Domestic Out-migration	171,223	184,097	183,331	181,833	180,706
Net Domestic Migration	<b>-1,789</b>	<b>-5,048</b>	<b>-2,089</b>	<b>1,552</b>	<b>5,048</b>
<b>Net International Migration</b>					
Net International Migration	<b>19,356</b>	<b>19,223</b>	<b>19,238</b>	<b>19,214</b>	<b>19,188</b>
<b>Total Ending Population</b>					
Ending Population	<b>1,132,805</b>	<b>1,150,345</b>	<b>1,166,038</b>	<b>1,178,095</b>	<b>1,185,331</b>

Source: University of Massachusetts Donahue Institute

By 2035, the population of the Southeast region will approach 1.19 million persons, a gain of 76,486 residents over the 2010 Decennial Census. The Sources of Population Change Population growth in the region will be driven largely by the in-migration of persons in their thirties, and with these young families, a steady number of births. However, increasing deaths with the aging in place of the sizable baby boom population will slowly chip away at the rate of population growth, eventually.

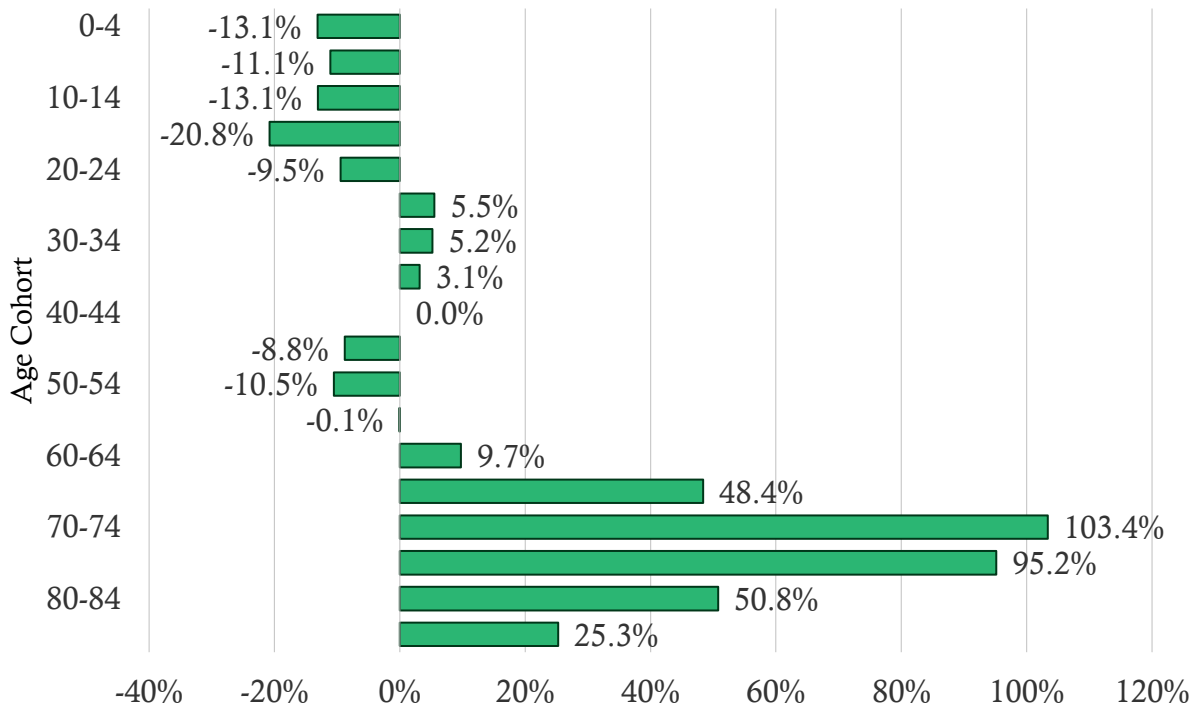
In recent years, the Southeast region has tended to lose residents due to domestic outmigration, and this trend is expected to continue through 2025. At the same time, international migration offsets this net domestic loss, with gains of over 19,000 each five years expected to continue through the time-series such that the region continues to increase in population size. Soon, the large population of Generation Z will move out of their teens and twenties (age-groups prone to leaving the region) and into their thirties (the groups that tend to move in). Domestic in-migration will catch up to out-migration by 2025 to 2030 and start contributing to population gain in the region.

#### *Projections by Age*

By 2030, most baby boomers will have moved into the retirement phase of their life cycles. Although some older residents will retire outside the region, they will be eclipsed by those deciding to age in place, shifting the entire population distribution upward. By 2035, 24% of the region's population will be over the age of 65, compared to 14% in 2010. Yet, the Southeast will continue to attract young families, including many millennials, who will be moving into their forties by 2035. The result will be a regional age profile that, while older, will be more evenly distributed among age groups (see Figure 3).



**Figure 3. Projected Population Change by Age Range in Bristol County, MA from 2010 to 2035**

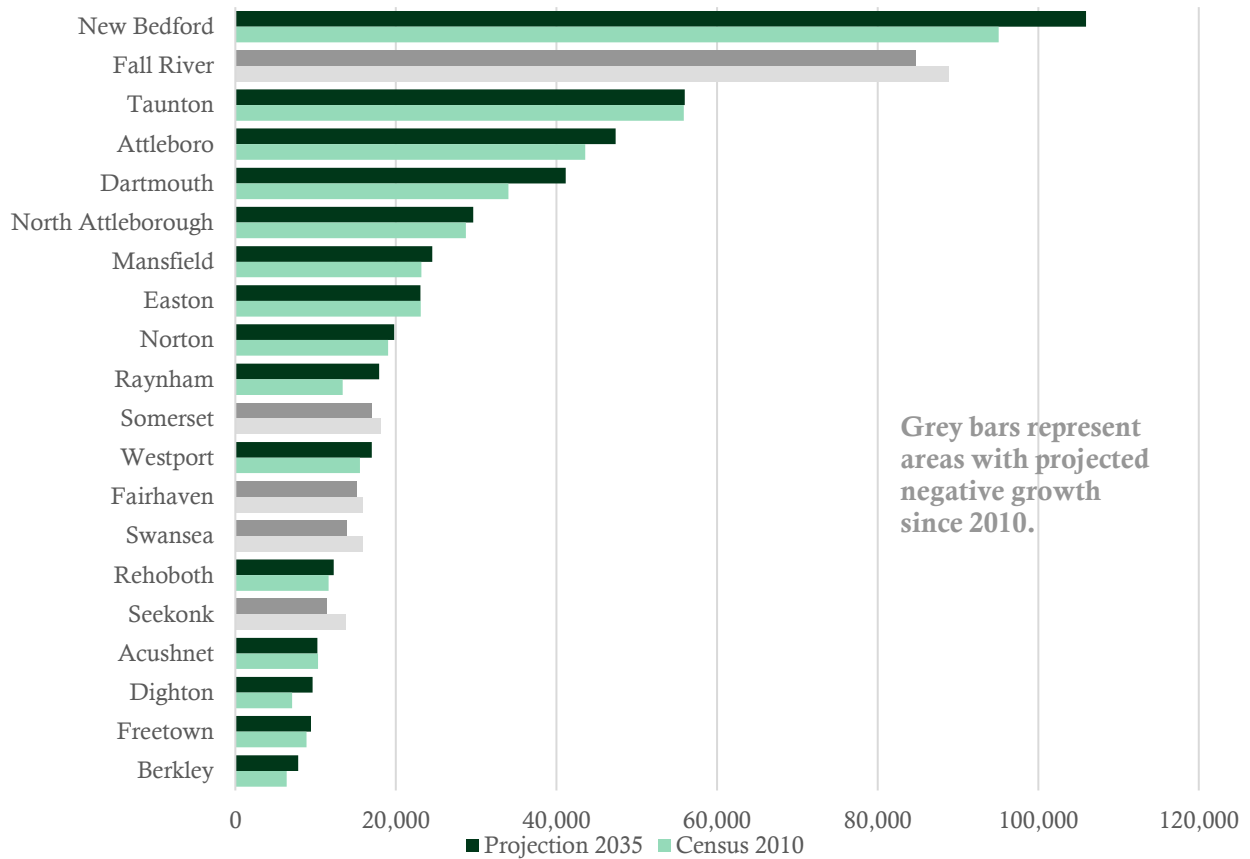


Source: U.S. Census Bureau

### *Local Population Projections in Bristol County*

While the entirety of the Southeast MA region is growing there are key areas in Bristol County that are primed for growth. New Bedford will experience the largest change in growth followed by Taunton, Attleboro, and Dartmouth—all areas that are directly served by Bristol Community College (see Figure 4). Some of this growth may be fueled by the increase in immigration and domestic migration where key industries are located. The introduction of the rail system into Attleboro, which has transitioned into a bedroom community for workers in Boston, may also suggest that the growth represented in Figure 4 might actually be much larger.

**Figure 4. Population Projections by Township/Borough, Bristol County, MA**



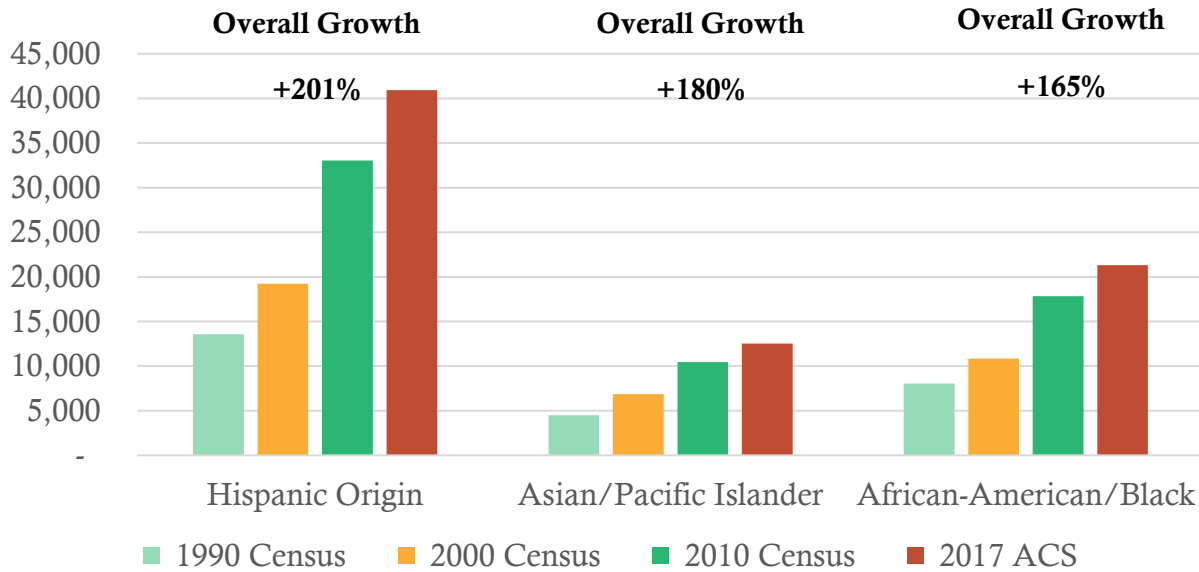
Source: U.S. Census Bureau

*Population Growth for Minority Populations in Bristol County*

Bristol County has continued to see exceptional growth since 1990 among its non-white populations (see Figure 5), a reflection of the growing diversity that is anticipated to occur over the next 15 years. The largest sprints in population growth have been with Hispanic, Asian, and African American populations in the County. The Gastón Institute for Latino Community Development and Public Policy at the University of Massachusetts Boston projects that the Hispanic population will grow by 1.15 million by 2035, making up nearly 15.3% of the state’s population (compared to 9.03% in 2010).<sup>1</sup>

<sup>1</sup> Gastón Institute for Latino Community Development and Public Policy at the University of Massachusetts Boston, *Massachusetts Latino Population: 2010-2035*, February 2019, pg. 2.

**Figure 5. Bristol County, MA Population Estimates by Race/Ethnicity for Three Largest Non-White Populations**



Source: U.S. Census Bureau

### Educational Attainment and College-Going Rate

Educational attainment is an important way of understanding the overall potential of a local economy to welcome higher-wage jobs. Similarly, the college-going rate helps institutions understand the movement in demand for higher education among high school graduates and what choices students are making in terms of college. The following insights show the state of educational attainment and college-going in the county:

- Bristol County is underrepresented in bachelor’s degree and graduate and professional degree holders compared to state and national educational attainment numbers; economic development agencies often see the underrepresentation of these groups as barriers to attracting employers and companies that rely on this workforce;<sup>2</sup>
- Bristol County is overrepresented by associate degree holders and those who have earned college

<sup>2</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2017.

credits, but have not received a degree (see Figure 6);<sup>3</sup>

- By 2025, there is projected to be a sharp drop-off in the number of high school graduates who will enroll in community college in non-metropolitan areas of Massachusetts, Rhode Island, and Connecticut. This region will experience about a 19% decline from 2025 to 2029 (see Figure 7);<sup>4</sup>
- The number of higher school graduates have declined by 1.5%, but the total overall number of Bristol County public high school graduates who have enrolled in higher education following graduation increased from 67.9% in 2007-2008 to 71.8% in 2016-2017;<sup>5</sup>
- Enrollment by Bristol County high school graduates to public, two-year institutions generally has declined by nearly 2 percentage points from 2007-2008 to 2016-2017. More specifically, enrollment by Bristol County high school graduates to a community college in Massachusetts declined by less than a percentage point (see Figure 9);<sup>6</sup>
- There have also been declines in the adult learner population as well. Students who were 25 years or older at Bristol Community College declined by 19% since 2013, when it reached its peak enrollment levels. The College has not yet dipped below its pre-recession enrollment levels of students age 25 or older;<sup>7</sup>
- Additionally, the ratio of adult learners to the general population over 25 years of age has declined from 2007 to 2017 (see Figure 10). This means that not only is enrollment declining locally, but fewer adults are attending community college (and higher education as a whole) than they were in 2007 prior to the recession—this may be a sign of the country’s exceptionally low unemployment rate and the urgency for more skilled workers as the baby boomers have started to enter retirement;<sup>8</sup>

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<sup>3</sup> U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2017.

<sup>4</sup> Nathan Grawe, *Demographics and the Demand for Higher Education*

<sup>5</sup> Massachusetts Department of Elementary and Secondary Education, <http://www.doe.mass.edu/infoservices/reports/enroll/>; CampusWorks Analysis, 2019.

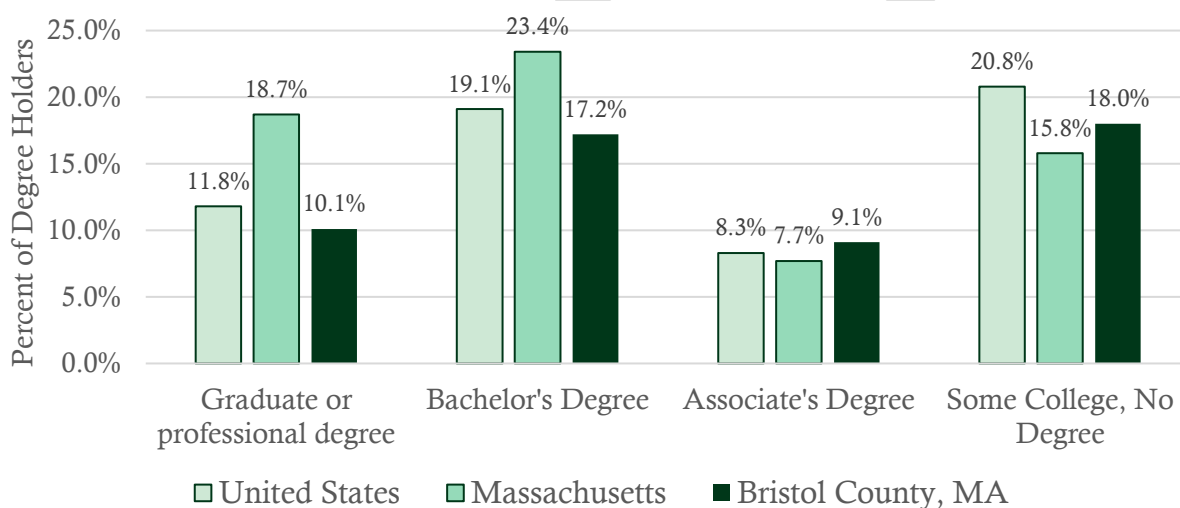
<sup>6</sup> Massachusetts Department of Elementary and Secondary Education, <http://www.doe.mass.edu/infoservices/reports/enroll/>; CampusWorks Analysis, 2019.

<sup>7</sup> IPEDS, 2017.

<sup>8</sup> IPEDS, 2017; U.S. Census Bureau, American Community Survey, 5-Year Estimates, 2017; CampusWorks

- A bright spot in the enrollment decline picture have been Hispanic students. From 2003-2004 to 2016-2017, Hispanic students increased college-going rates from 25.8% to 52.2%; in the same period, the percentage of Hispanic students who attended a two-year, public institution increased from 32.3% to 65.2%. Overall trends suggest that Hispanic students are also more likely to attend community colleges, because of their proximity to their families and the need to support their families.<sup>9</sup>

**Figure 6. Bristol County, MA Educational Attainment, 2017**

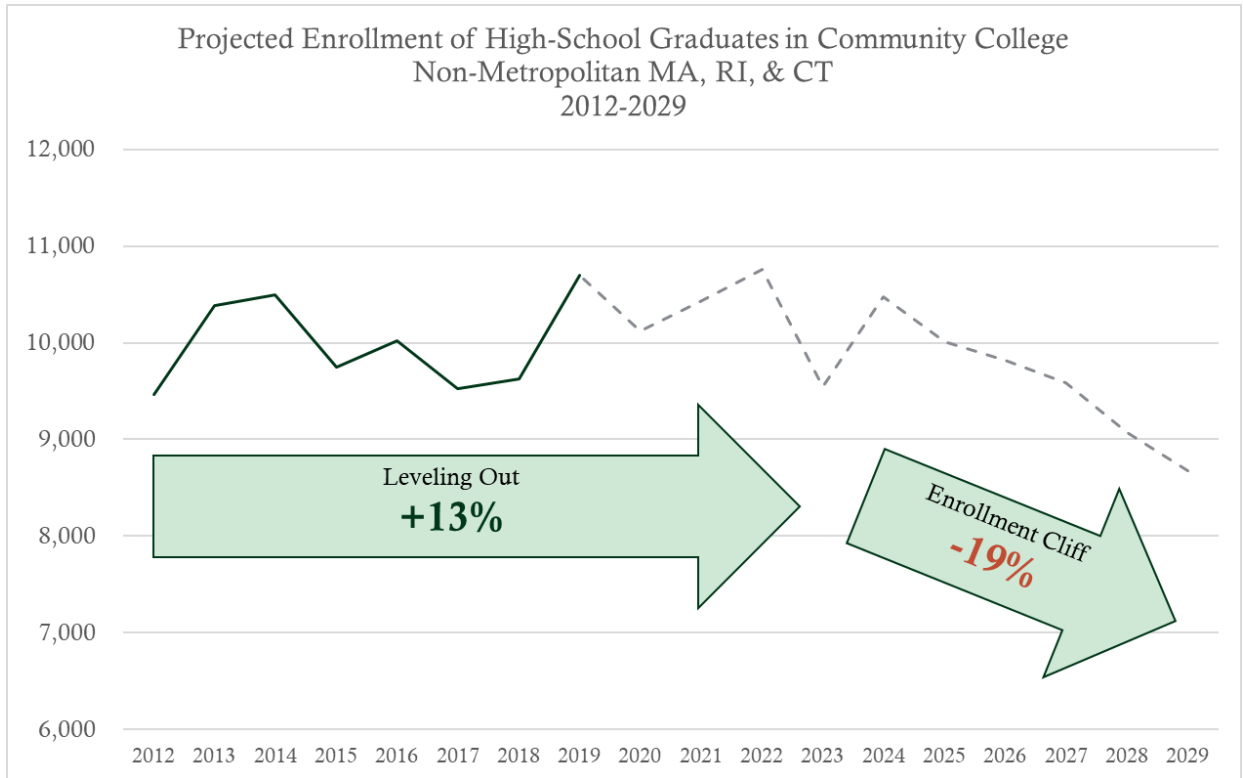


Source: U.S. Census Bureau

Analysis 2019.

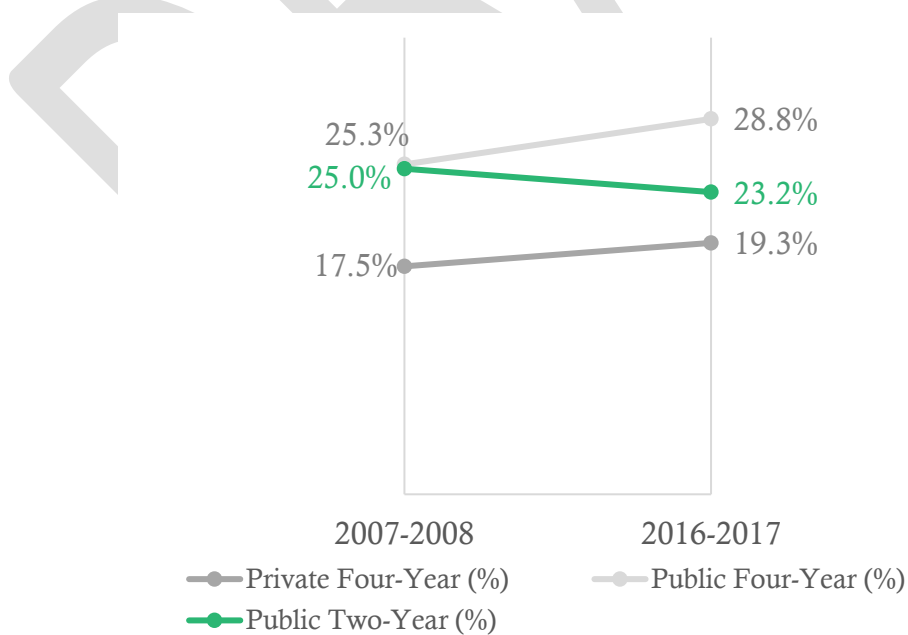
<sup>9</sup> Massachusetts Department of Elementary and Secondary Education, <http://www.doe.mass.edu/infoservices/reports/enroll/>; CampusWorks Analysis, 2019.

**Figure 7. Projected Enrollment of High School Graduates in Community College for Non-Metropolitan Areas of Massachusetts, Rhode Island, and Connecticut, 2012-2029**



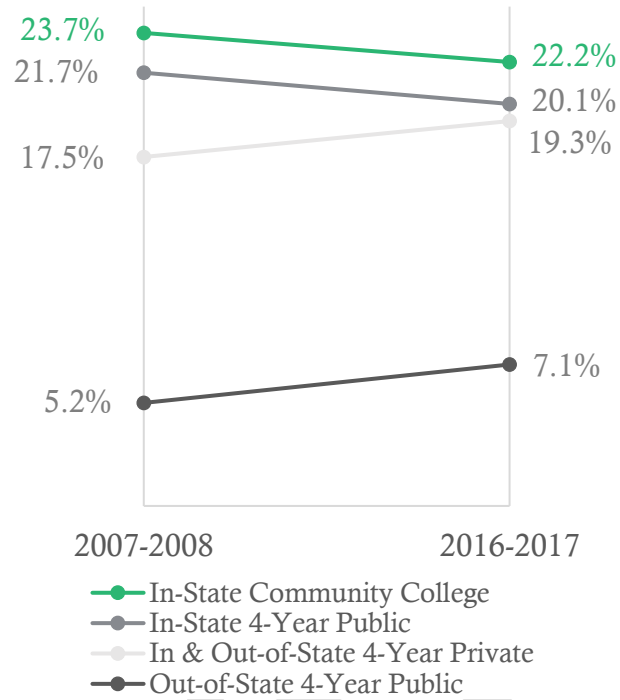
Source: Higher Education Demand Index, Nathan Grawe, *Demographics and the Demand for Higher Education*

**Figure 8. College Enrollment Rates of Bristol County High School Graduates by Institutional Sector, 2007-2008 to 2016-2017**



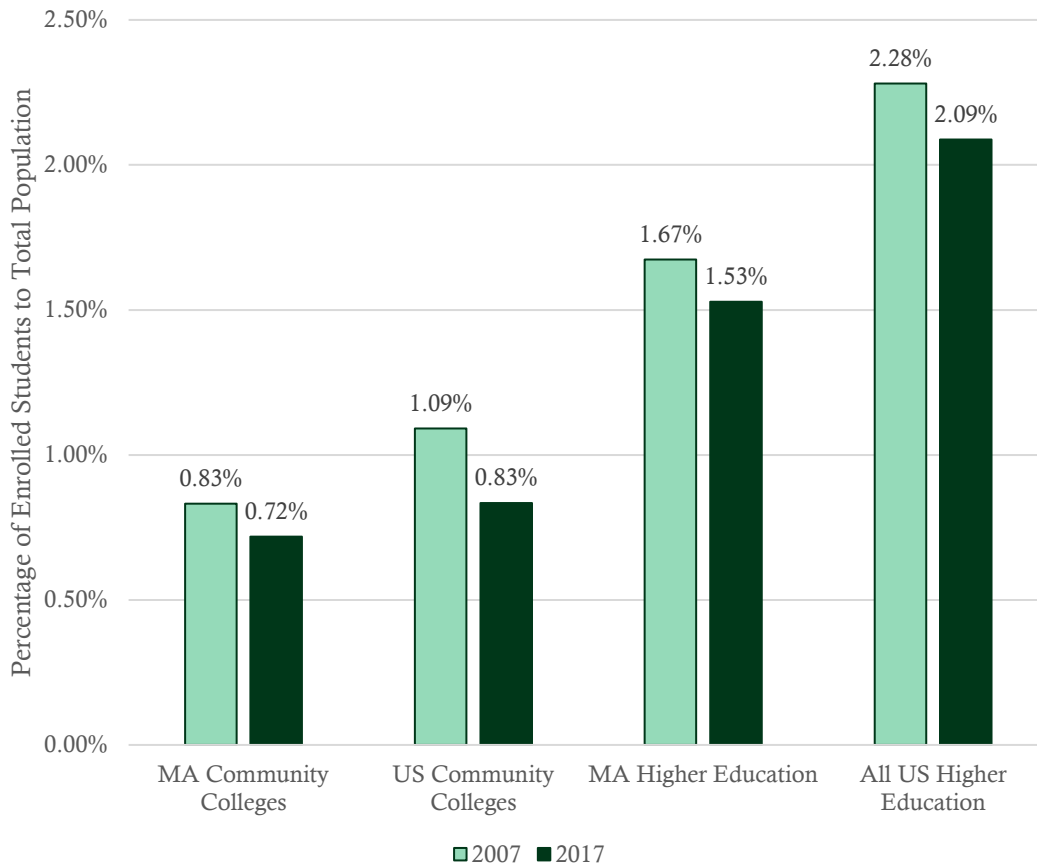
Source: Massachusetts Department of Elementary and Secondary Education, Immediate College Enrollment

**Figure 9. College Enrollment Rates of Bristol County High School Graduates by Sector and Location, 2007-2008 to 2016-2017**



Source: Massachusetts Department of Elementary and Secondary Education, Immediate College Enrollment

**Figure 10. Ratio of Enrolled Students, 25 Years or Older, Compared to the Total Population**



Source: U.S. Census Bureau; IPEDS; CampusWorks analysis

## Employment and Workforce Development

### Long-Term Economic and Workforce Trends

#### *Upskilling and Skill Shifts*

The intense push to upskill and reskill the American workforce by politicians and corporate executives remains a key opportunity for higher education institutions. A 2017 World Economic Forum Education and Skills Report suggested that the half-life of hard skills is on the decline, currently clocking in at around five years; for transfer students who go on to earn a Bachelor's



degree, this means that their technical skills are waning by the time they enter the workforce.<sup>10</sup>

The disruptive force of technology, demographic shifts, and globalization continue to have outsized impacts on the business models of corporations across the globe and in the United States. Effectively, we are living in an age of acceleration.<sup>11</sup> Companies are expected to be more nimble, agile, and flexible to contend with the speed and dynamism of the global marketplace. In place of siloed departments governed by hierarchies, organizations see themselves moving toward a more flexible system of governance, which individuals move among teams and projects rather than with departments with specific functions.<sup>12</sup>

Changes to the traditional corporate business structure, automation, and business model innovation means that skills must shift as well. A survey of more than 3,000 business leaders in seven countries highlighted a new emphasis on continuous learning for workers and a shift to more cross-functional and team-based work as their top priority in workforce development.<sup>13</sup> The integration of historically distinct business units will require greater focus on multi-disciplinary skills development; the rise of both teamwork and independent work will require a simultaneous need for emotional intelligence and emotional regulation skills.

Projections reflect this reality as well. The number of hours spent on higher cognitive skills such as creativity and complex information processing will increase by 8% by 2030.<sup>14</sup> Social and emotional skills such as entrepreneurship and initiative taking or leadership and managing others will be expected to increase by 24% in the number of hours dedicated to such tasks.<sup>15</sup> The largest transition and the greatest increase in time spent on tasks will be technological skills—both advanced IT/programming skills and basic digital skills—which will grow by 55%.<sup>16</sup>

The increasing adoption of automation in the U.S. workforce will also lessen the demand

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<sup>10</sup> World Economic Forum, *The Future of Jobs and Skills*, 2017.

<sup>11</sup> Thomas L. Friedman, “Thank You for Being Late: An Optimist’s Guide to Thriving in the Age of Accelerations,” 2016.

<sup>12</sup> McKinsey Global Institute, *Skill Shift: Automation and the Future of the Workforce*, pg. 42, 2018.

<sup>13</sup> McKinsey, pg. iv, 2018.

<sup>14</sup> McKinsey, pg. 42, 2018.

<sup>15</sup> McKinsey, pg. 42.

<sup>16</sup> McKinsey, pg. 42.

for some skill categories. Basic cognitive skills, like basic data input and processing will decline by 15% in the next ten years. Demand for physical and manual skills will continue to remain the largest set of skills in the U.S. workforce, but will see a significant drop by 14%.<sup>17</sup>

The skill shift has already started in many professions. According to CEO Today, “process automation has lifted much of the mathematical burden from accountants, transforming their role to become more akin to a business advisor than a number cruncher.”<sup>18</sup> Large-scale health systems, some of the largest employers in the southeastern Massachusetts regions, anticipates that its workforce will need to be highly skilled in cultural competency skills to accommodate the growing diversity in the population as well as flexibility, teamwork, interpersonal, and communication skills. These skills will work hand-in-hand with digital skills to support initiatives like telehealth that provide holistic care.

While these large-scale trends do not speak directly to Bristol County or Massachusetts, the long-term transformation of the economy and the correspondent uncertainty requires educational practitioners to take notice of these trends. The horizon for these trends will persist through 2035 and requires institutions to consider how their strategies and strategic planning efforts today will ultimately point to these large-scale initiatives.

### Labor Participation and Unemployment

Since the recession in 2008, the national, state, and local unemployment rate has declined and is at record low numbers. For community colleges, the unemployment rate is counter-cyclical; when the prospects of employment are dimmer during a recession, prospective students use the time to enroll in courses and programs that ensure job security or allow them to pivot into a new career or industry. The following key highlights can be noted about the Bristol region:

- In 2018, Bristol County experienced higher than average unemployment rates among all unemployment rates by county within the state of Massachusetts (see Figure 11),<sup>19</sup>
- Fall River and New Bedford, which have some of the most diverse populations in the state, experienced the highest rates of unemployment, nearly doubling Attleboro and outpacing

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<sup>17</sup> McKinsey, pg. 42.

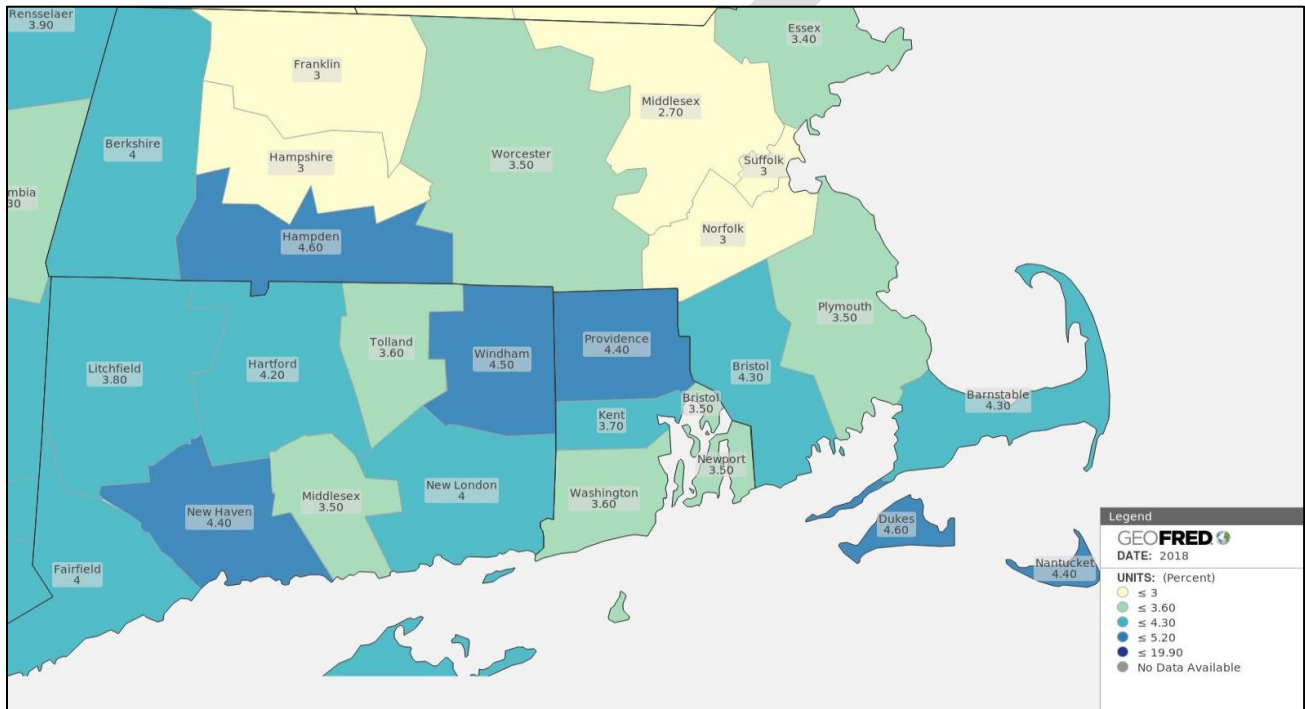
<sup>18</sup> CEO Today Magazine, “Continuous Learning will Empower CEOs of the Future,” April 8, 2019.

<sup>19</sup> St. Louis Federal Reserve Bank, Unemployment Rate by County, 2018.

Taunton and the overall county unemployment rate (4.3%; see Figure 12);<sup>20</sup>

- Nationally, the unemployment rate for 16- to 24-year-olds has hit a record low since 1969, creating opportunities for the lowest rungs of the entry-level workforce that were not previously available (the current 2018 rate is 8.6% as compared to 18.4% in 2010).<sup>21</sup>

**Figure 11. Massachusetts Unemployment Rate by County, Annual Average, 2018**

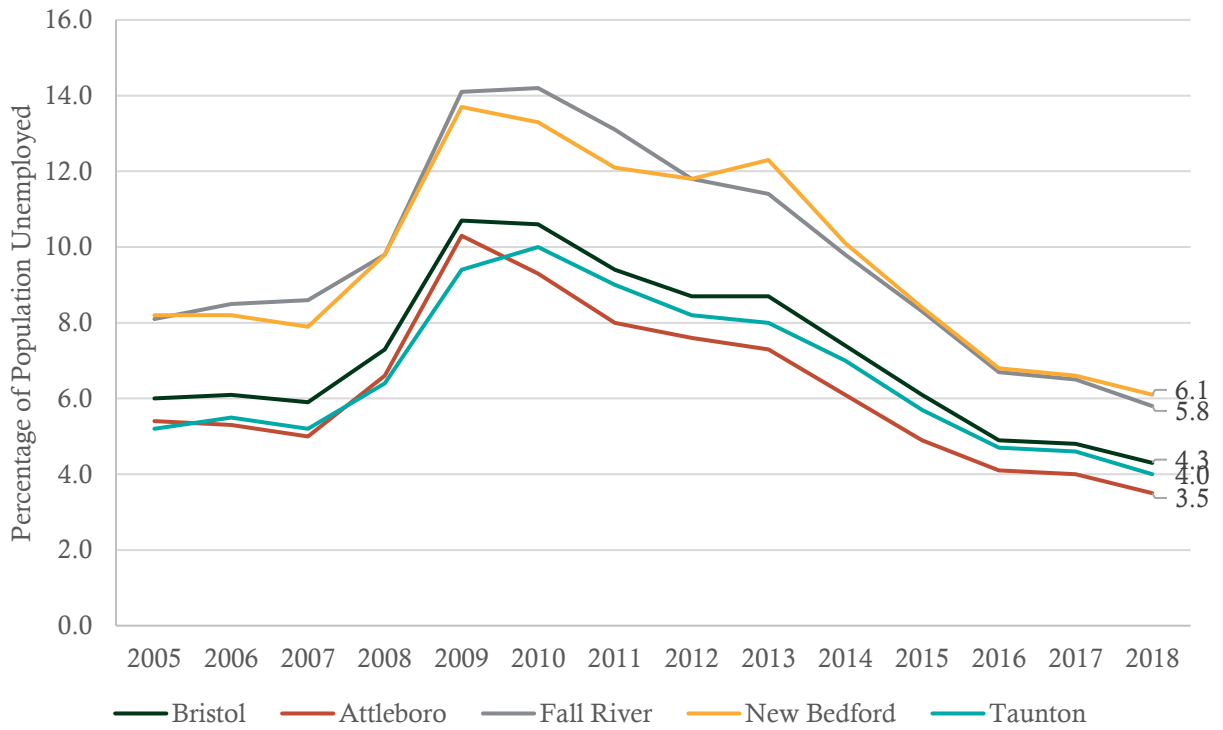


Source: St. Louis Federal Reserve Bank, Unemployment Rates

<sup>20</sup> Bureau of Labor and Statistics, Unemployment Rate, Seasonally Adjusted, 2018.

<sup>21</sup> Bureau of Labor and Statistics, Unemployment Rate, Seasonally Adjusted, 2018

**Figure 12. Unemployment Rate, Bristol County and Select Municipalities, 2005-2018**



Source: Bureau of Labor Statistics

## Industry Projections

As the College considers the way in which it can help support and advance the region's economy, it is important to understand the contours of the region's largest industries. Information gathered from employers and quantitative data showed that several themes emerged among the region's largest industries regarding skill and talent development:

- The fundamental business models for the largest industries in the region are changing as healthcare moves away from acute hospitalization to ambulatory care, as the focus of manufacturing shifts away from mechanical to advanced, digital-intensive manufacturing, and as entry-level roles in financial services organizations have moved from unbundled to bundled job tasks.
- Healthcare is expected to be the largest growing industry in the region with the largest number of jobs as it anticipates the graying population.
- Manufacturing in Bristol County has lost half of all its jobs since 1990 in Bristol County. While manufacturing is expected to decline by 2024, there will be a significant turnover in its workforce from retirements that will create demand for skilled workers.
- Financial services and banking will continue to grow in the region with commercial banks positioned as some of the largest employers in the region.
- Technological changes and an increased need for digital literacy are recognized in all industry sectors, changing the skills for all entry-level positions in each industry.

### *Healthcare and Social Assistance*

As one of the most rapidly growing sectors of the economy, the Healthcare industry also faces significant workforce development challenges. From a labor force standpoint, multiple important occupations within this industry face supply gaps resulting in labor shortages. Supply gap analysis shows most positions with a low ratio of qualified individuals per opening (0.1 to 0.9 per opening) with occupations such as Nursing, Physical Therapy Assistant, Licensed Practical Nurse, Medical Records and Health Information Technicians, Dental Hygienists, Nursing Assistants and Radiologic Technicians showing long-term supply gaps in the southeast. The struggle in developing a talent pipeline for this industry is affected by limited training and education capacity in the region for certain occupations. For example, there is only one associate degree program in Radiologic Technology in the southeast region and the limited number of slots in Registered Nurse degree programs impacted by lack of teaching capacity is well documented. All this is occurring against the

backdrop of ongoing changes in the healthcare industry and the unquestioned trend for increase demand for services, forcing providers to move toward redesigned primary care models and away from acute hospital utilization. This has been supported by a precipitous increase in jobs that will support the operation and maintenance of ambulatory care centers.

### *Manufacturing*

Within the manufacturing sector, multiple labor supply gaps exist and are likely to increase in the near and longer term. The manufacturing sector is marked by an aging labor pool in the southeast, with 34% of the workforce over the age of 55. As a result, the industry faces large-scale attrition over the next 5-10 years, which has been confirmed through feedback from the region's manufacturers, particularly among members of the Southeast MA Advanced Manufacturing Consortium. This issue is compounded by the fact that the region has a limited training pipeline to develop the future workforce in this industry. The region's vocational technical high schools provide valuable programs and a supply of graduates who enter the manufacturing field, but this number does not meet the demand or level for skilled employees in this industry. While additional training opportunities for adults exist through partnerships among workforce boards, vocational technical high schools and community colleges, the programs are not as formalized as in other industry clusters and in many cases, lack systemic funding. Another contributing factor in the limited talent pipeline is the perception among area youth that manufacturing is a declining industry that does not offer strong career ladder opportunities.

### *Financial Services*

The financial services sector is an industry that in recent years has faced dramatic changes in its operations and it appears that such trends will continue. Technology has been integrated into consumers' lives at a rapid pace. This has had significant residual effects in the financial service industry with demand for services growing but fewer people visiting banks. Online portals and self-service kiosks are examples of technologies that have streamlined services and changed the face of the labor force. Still, the industry shows steady employment growth and importantly, significant wage growth (12.45% from 2013-2016).

On a talent development level, financial institutions often used the entry-level teller position as the most common access point to career ladder progression, but this has lessened somewhat as the industry has adopted a "Universal Banker" model. Representing many skill sets required by a Customer Service Representative, the Universal Banker provides customer service across a wide range of traditional financial services such as basic transactions, new accounts, and loan

applications. The Bank Administration Institute named increased implementation of universal bankers as one of the most anticipated trends in retail banking. A significant challenge to the industry is that these and similarly situated positions require significant cross training. In addition, there is a lack of training and education programs in the region that are specific to entry-level positions in financial services.

Feedback from local employers reveals customer service, problem solving, work readiness skills, interpersonal skills, teamwork, financial literacy, and writing skills as core competencies to succeed in the industry. Additional workforce challenges articulated by local employers include difficulty in identifying and recruiting a more diverse and multi-lingual workforce, challenges in attracting younger workers into the industry who often do not see the available career pathways, and the desire to “home grow” employees. Leaders in the industry have investigated several strategies to address some of these issues including an effort to establish apprenticeships in the region through such mechanisms as internships. Clearly, these initial efforts would benefit from additional supports in the region, as the region’s financial services sector has not been as systemically connected to the skills.

### *Offshore Wind Energy*

A new opportunity for the region includes offshore wind, which will add jobs through 2030. It is yet unclear how many jobs will be needed locally to satisfy this growth initiative off Nantucket sound, an offshore wind development of over 120 wind turbines. However, it is imperative to create a talent pipeline to meet the demands of this recent initiative. There will be three phases of job growth as the building of wind turbines offshore will continue over the next decade. The first phase, the Planning and Development phase, will include the hiring of more than 550 jobs that are primarily baccalaureate occupations such as legal, public relations, site managers, finance, surveying, and engineering. The second phase, Construction, will introduce more than 1,700 jobs that will primarily hire longshoreman, iron and steel workers, electricians, and water transportation workers. Finally, the Operations and Maintenance phase will employ more than 140 workers including site managers, project engineers, offshore and marine technicians, and water transportation workers.

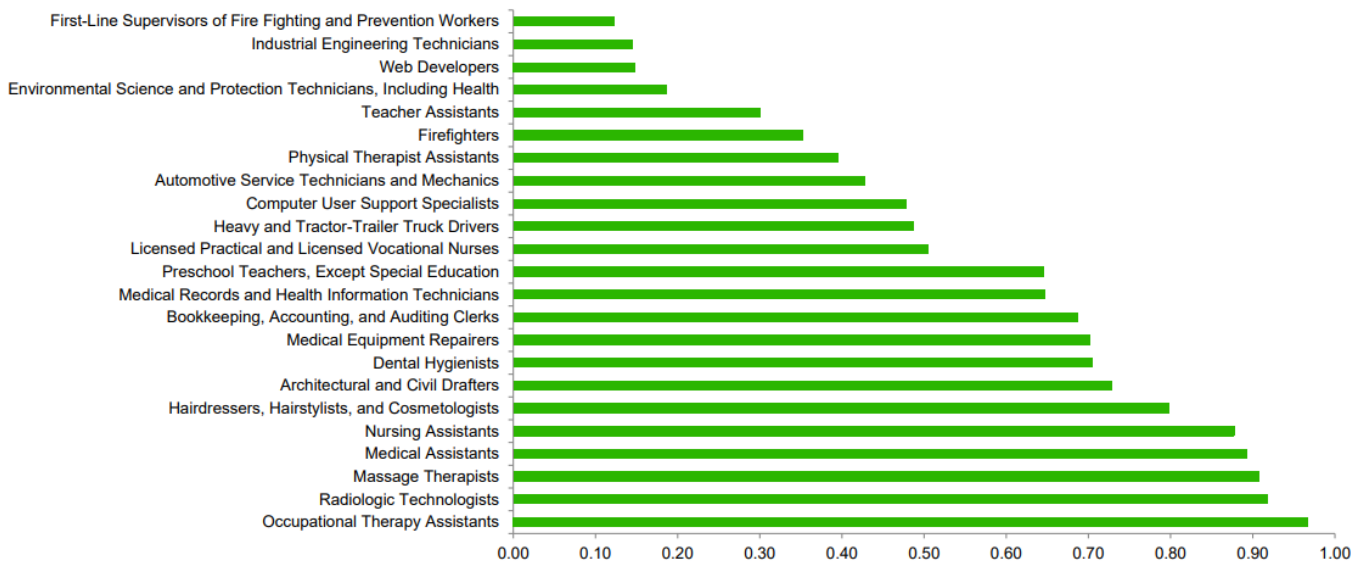
## Occupational Projections

Occupational, wage growth, and career progression are three indicators to help determine

academic programs that can support the needs of the region. One metric that is especially helpful to informing the academic program mix is whether there is an insufficient supply of graduates to a greater demand for jobs (job openings). While understanding supply and demand is important, another factor is where students are enrolling and for what programs as well as how they are educated and counseled on making career decisions. The following points highlight, specifically, the demand and supply for occupations that requires less than a bachelor’s degree, but some training and certification as well as occupations that require greater than a bachelor’s degree. The effect the aging population demographics is that a large portion of jobs where there will be retirements will likely be openings that require a bachelor’s degree. Colleges are straddling two tracks: fulfilling increased demand for middle skill workers generated by economic growth and supplying baccalaureate graduates who can fulfill positions left open by retirement.

Among all occupations requiring an associate degree or certificate, computer/IT, healthcare support occupations, transportation and installation professions face supply gaps in the southeastern Massachusetts region. As the region considers transfer pathways from community college degree programs to four-year colleges and universities, most of the occupations that will be in short supply of qualified staff largely include STEM fields, especially healthcare, engineering, and computer and information technology fields (see Figures 13 and 14).

**Figure 13. Southeast Massachusetts, Sub-Baccalaureate Occupations with Largest Gaps between Demand and Supply, 2018<sup>22</sup>**

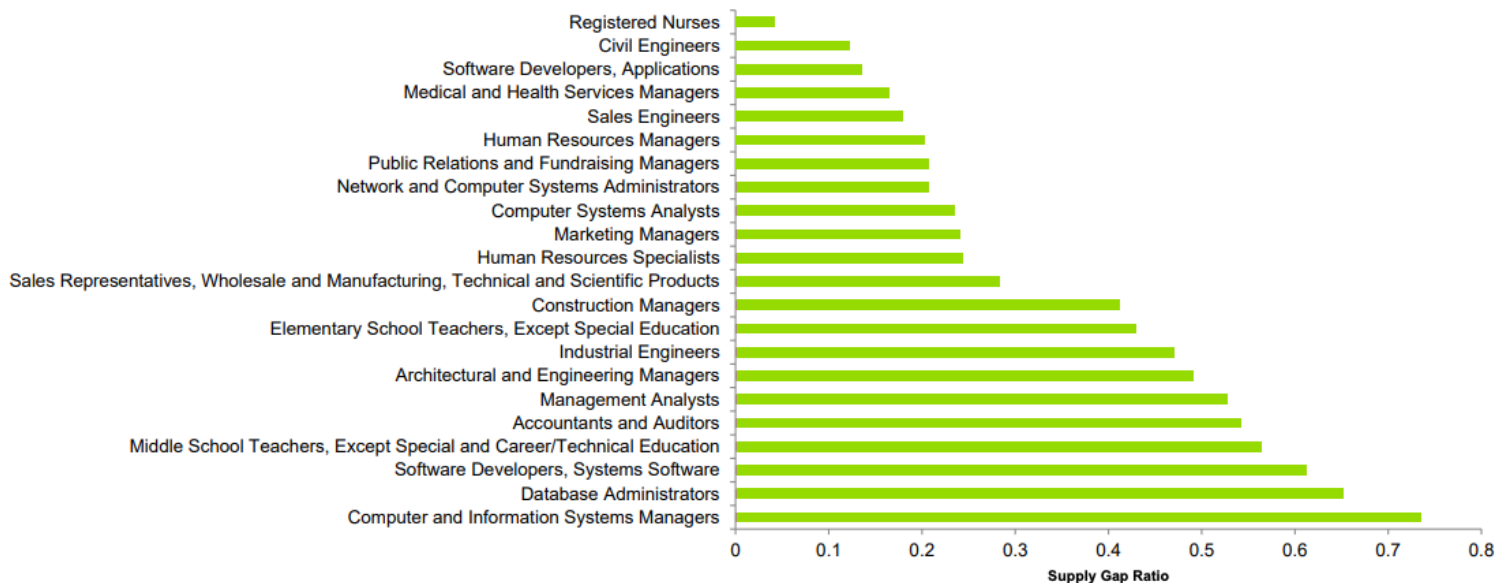


<sup>22</sup> Demand is based on openings from 2017 occupational projections, 2024 projections, and annualized job postings from Help Wanted Online (HWOL); Supply is measured based on unique unemployment insurance



Source: Southeast Mass Data Package, Massachusetts Workforce Skills Cabinet 2017

**Figure 14. Commonwealth of Massachusetts, Baccalaureate Occupations with Largest Gaps between Demand and Supply, 2018<sup>23</sup>**



Source: Southeast Mass Data Package, Massachusetts Workforce Skills Cabinet 2017

## Income, Poverty, and Affordability

Measures of income and poverty within Bristol County remain critical to understanding the context of affordability of tuition and fees for families and individuals in the region. The following key insights show that:

- Median wages have risen since the recession in 2010 by more than \$10,000 (in 2017 dollars; see Figure 15);
- The poverty rate for individuals and families in Bristol County has increased (see Figure 16);

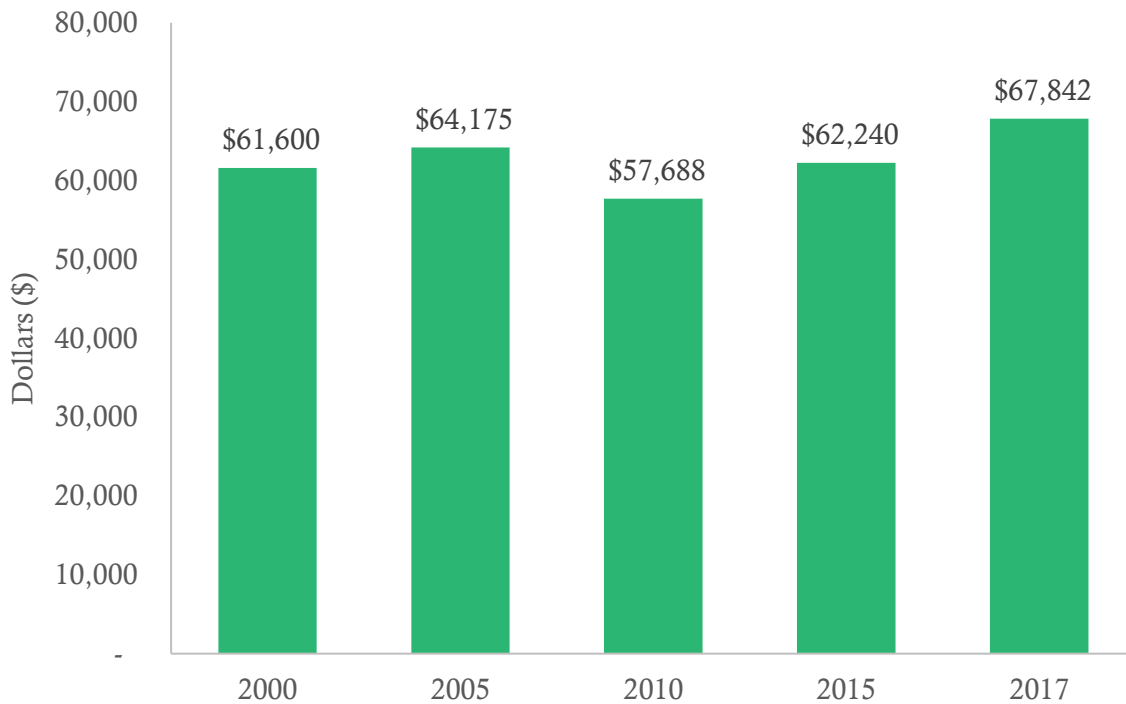
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claims, relevant completion data (Voc-Tech, Community College, State University, and Private University). Southeast Mass Data Package, Massachusetts Workforce Skills Cabinet, 2017. Pg. 49.

<sup>23</sup> Demand is based on openings from 2017 occupational projections, 2024 projections, and annualized job postings from Help Wanted Online (HWOL); Supply is measured based on unique unemployment insurance claims, relevant completion data (Voc-Tech, Community College, State University, and Private University). Southeast Mass Data Package, Massachusetts Workforce Skills Cabinet, 2017. Pg. 49.

- The gap between the top quintile and bottom quintile of income in Bristol County continues to widen, indicating that most of the wage growth in Bristol County is for top paid professions and quintiles (see Figure 17); and
- Bristol Community College’s tuition and fees make up about 5% of the median household income in Bristol County and 13% of the median income for the lowest quintile in the County, meaning that enrollment—without associated grants and scholarships—can be a stretch for individuals who could most benefit from the College’s services.<sup>24</sup>
- Bristol Community College, however, has one of the lowest tuition rates among all Massachusetts community colleges.<sup>25</sup>

**Figure 15. Bristol County, MA Median Household Income, 2017 Inflation-Adjusted Dollars**

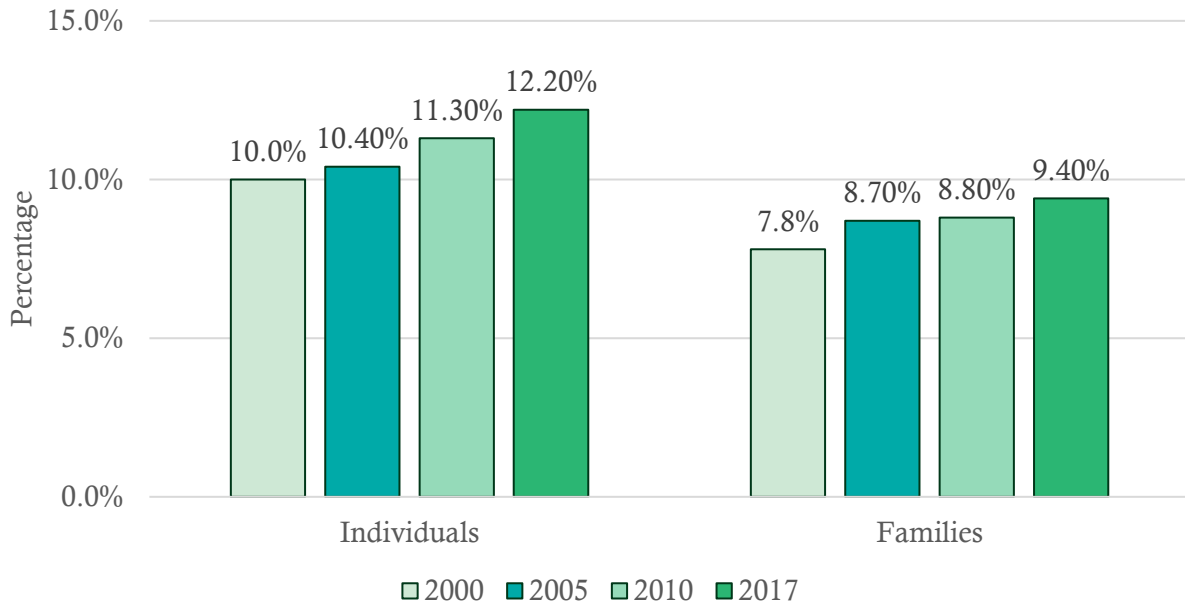


Source: U.S. Census Bureau; CampusWorks analysis

<sup>24</sup> Department of Higher Education, Massachusetts Performance Monitoring System, 2018

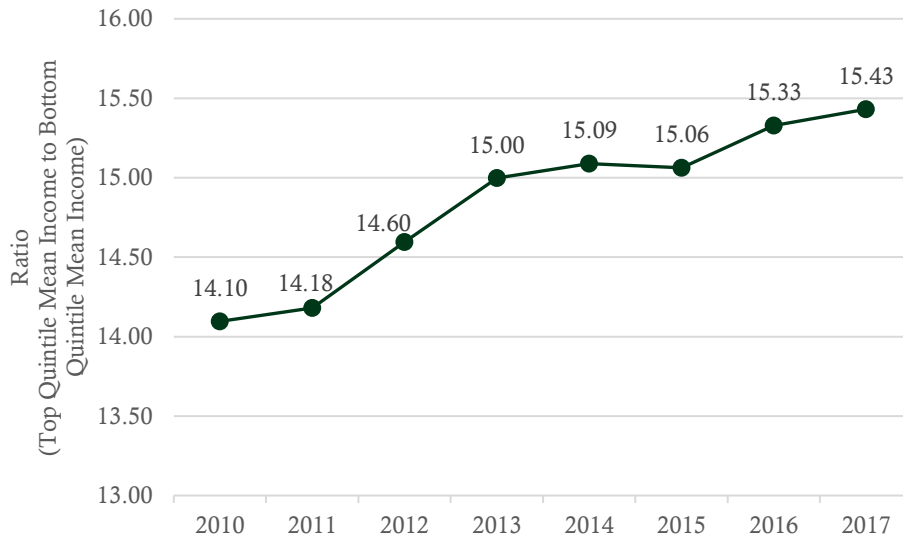
<sup>25</sup> IPEDS, 2017.

**Figure 16. Bristol County, MA, Individuals and Families Below Federal Poverty Line**



Source: U.S. Census Bureau

**Figure 17. Bristol County, MA, Measure of Income Inequality, Comparison of Top Quintile Mean Income to Bottom Quintile Mean Income**



Source: U.S. Census Bureau, CampusWorks analysis

### III. Internal Environmental Factors

#### Admissions

The primary method that colleges and universities have historically grown their enrollments has been through the conversion and acquisition of applicants. Along the way, admissions officers work to create a recruiting and admissions pipeline that works as efficiently as possible including recruiting the profile of students who are most likely to come to Bristol and who will likely have the greatest chance of success. Part of this pipeline carries over from the College's marketing and public relations activities where awareness is created about Bristol's opportunities; prospects demonstrate interest through the completion of inquiry forms or attendance at open house events; the admissions team works to convert those interested prospects into applicants through completion of an application that demonstrates their intention to be accepted into the institution and finally, they attempt to convert those applicants into depositors (make a deposit to reserve their seat) and/or into enrolled students.

Colleges have still been successful in increasing their entering classes by not only reaching out and investing more heavily into marketing, but also because they have made investments to make their pipelines and each conversion (aware prospect → interested prospect → applicant → depositor → enrolled student) more efficient. Fewer students, as a result, drop off earlier in the admissions process and more remain interested and committed to attending the College.

As Bristol considers the issues and challenges that it will face in recruiting a more elusive body of high school graduates and grabbing the attention of adult learners who are busy in the workplace and at home, it will be vital to understand all the levers that may help impact enrollment. The following key insights were developed as part of the data reviewed and examined for admissions:

- Bristol is still experiencing the afterglow of enrollment from the recession, having declined from a peak in its undergraduate entering classes, yet increasing by 27 percentage points since 2005 or pre-recession levels; this has not been the case for all institutions in Massachusetts (see Figure 18);<sup>26</sup>
- The majority of students (nearly 70%) who applied to Bristol (but did not attend) did not

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<sup>26</sup> IPEDS, 2017.

enroll at any other institution after submitting their application between Fall 2014 and Summer 2019 (see Figure 19);<sup>27</sup>

- The remaining one-third of students, who attended another institution after applying to Bristol, were almost split evenly into thirds between private and public four-year universities as well as public two-year universities. This includes adult learners and traditional-aged students;<sup>28</sup>
- Of the one-third of students who enrolled elsewhere, the four largest institutions that received Bristol's non-enrolled applicants included the Community College of Rhode Island, Bridgewater State University, University of Massachusetts Dartmouth, and Massasoit Community College (see Figure 20). The large number of community college attendees suggests that there are a contingent of students who are serious about attending community college specifically;<sup>29</sup>
- Among the non-enrolled applicants who did not enroll elsewhere, three ethnic categories stood out as having rates higher than the general population (69%) of not attending Bristol or any other institution: Portuguese applicants, Hispanic applicants, and Cape Verdean applicants (see Figure 21). This may provide conversation about how the College can build pathways and on-ramps to capture this growing population.

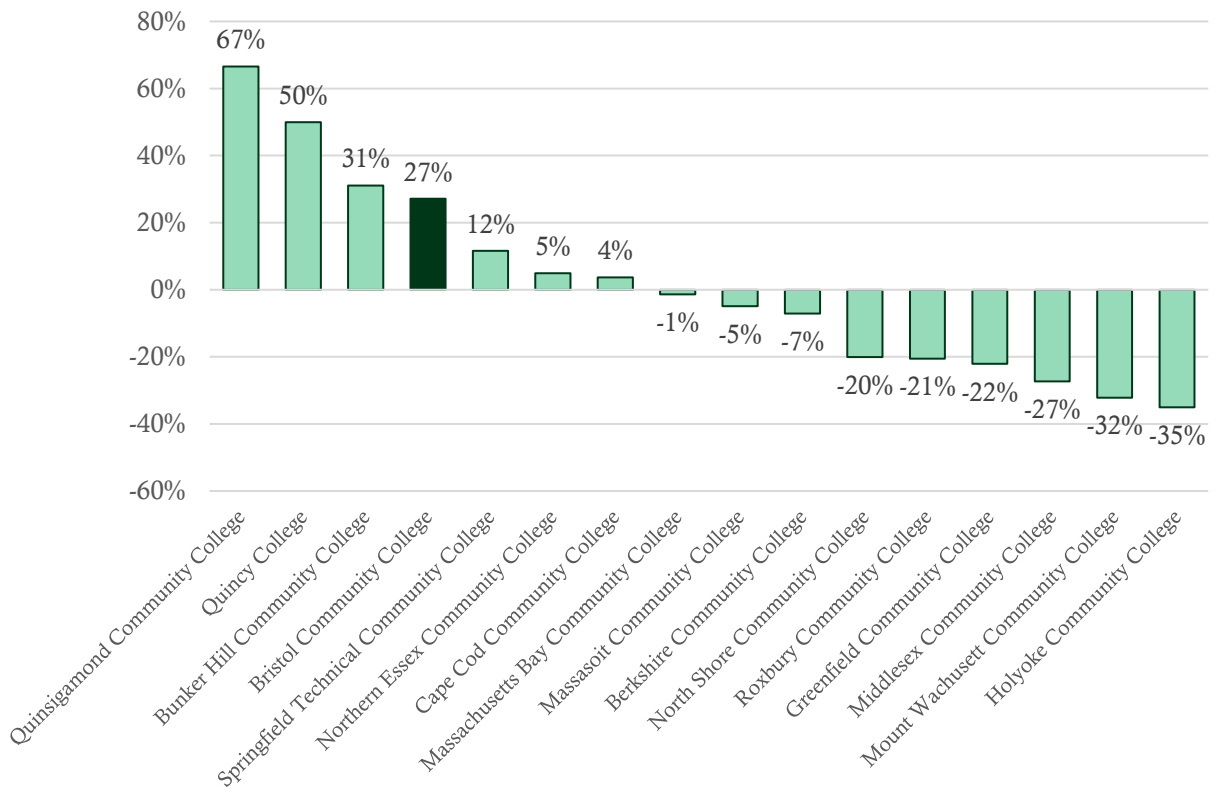
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<sup>27</sup> National Student Clearinghouse, Bristol Community College, Declined Admit Student Data, Fall 2014-Summer 2019.

<sup>28</sup> National Student Clearinghouse, Bristol Community College, Declined Admit Student Data, Fall 2014-Summer 2019.

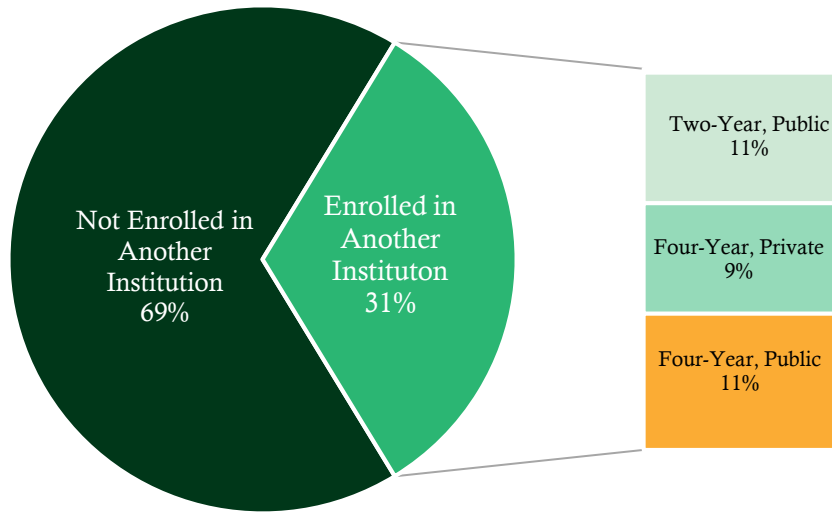
<sup>29</sup> National Student Clearinghouse, Bristol Community College, Declined Admit Student Data, Fall 2014-Summer 2019.

**Figure 18. Bristol Community College, Percentage Change of Headcount for Total Undergraduate Entering Class, 2005-2017**



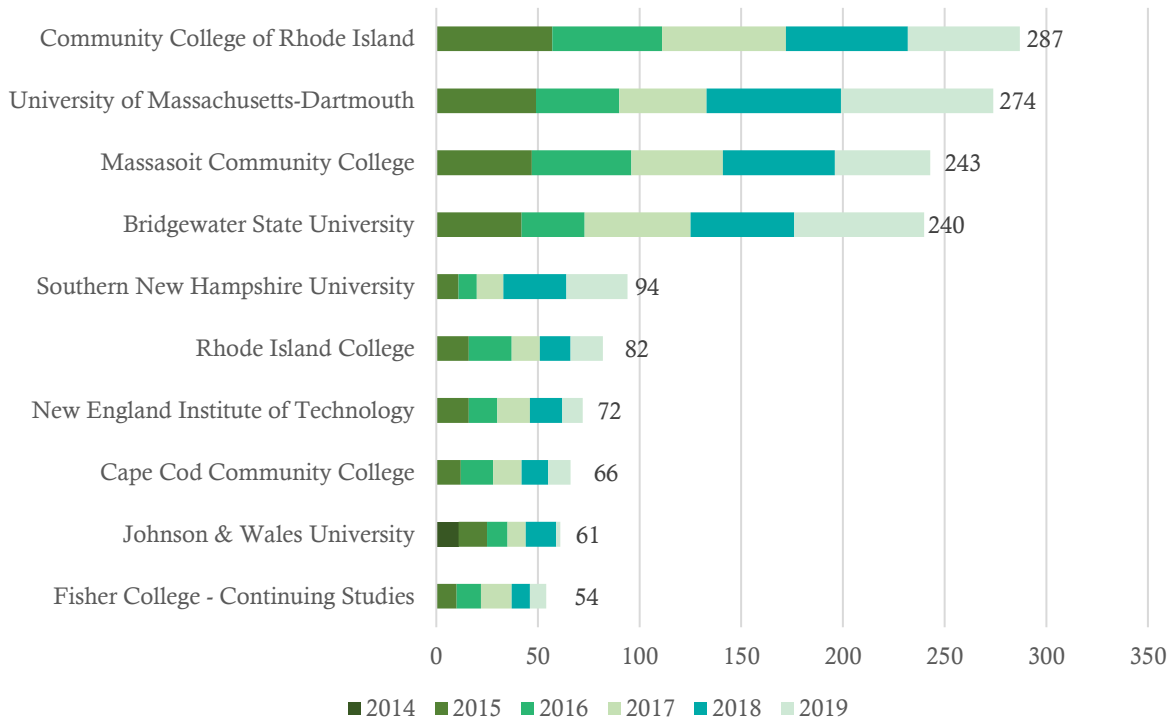
Source: IPEDS, 2017

**Figure 19. Enrollment Activity of Bristol Community College Non-Enrolled Applicants, Fall 2014-Summer 2019**



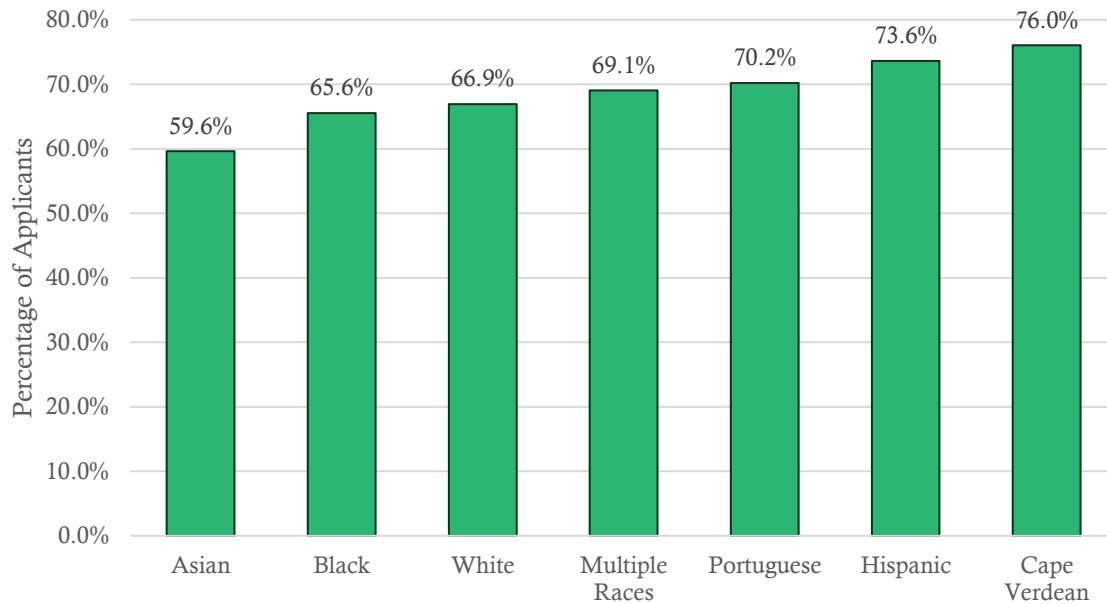
Source: National Student Clearinghouse, Declined Admit Student Inquiry, 2019

**Figure 20. First Institution Enrolled for Bristol Community College Non-Enrolled Applicants, 2014-2019**



Source: National Student Clearinghouse, Declined Admit Student Inquiry, 2019

**Figure 21. Percentage of Bristol Community College Non-Enrolled Applicants (Not Enrolled in Another Institution) by Race/Ethnicity, Fall 2014-Summer 2019**



Source: National Student Clearinghouse, Declined Admit Student Inquiry, 2019

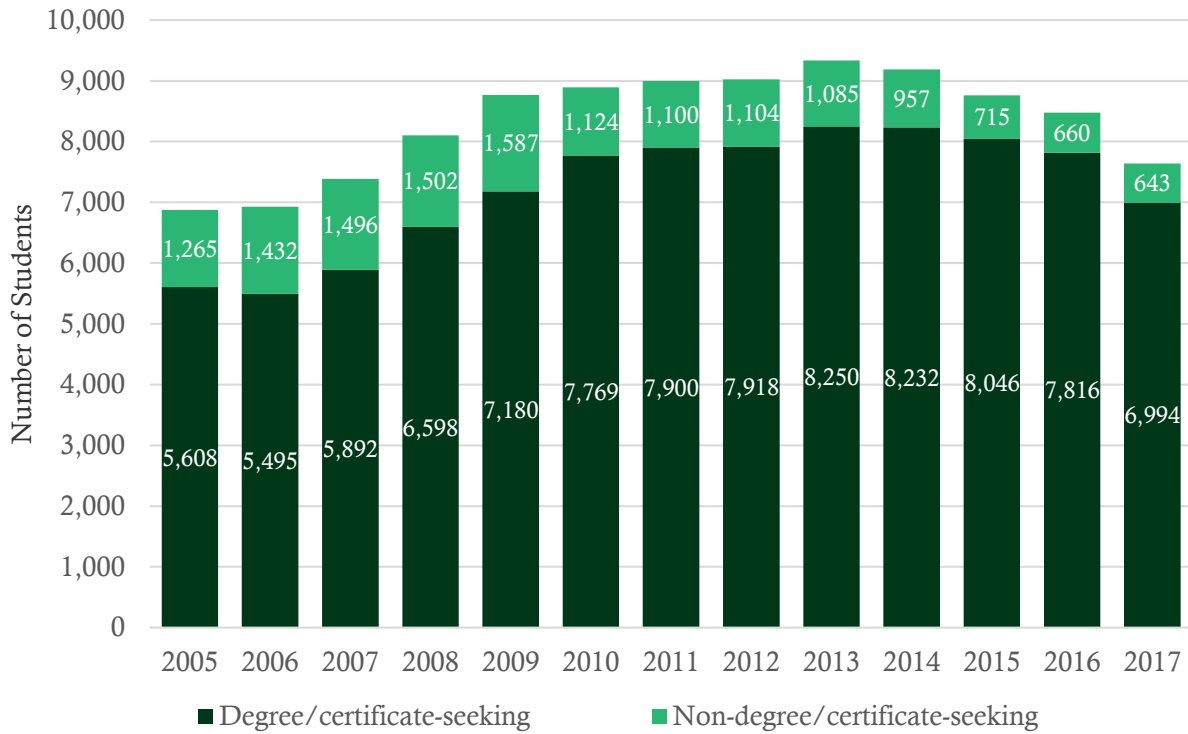
## Enrollment

Overall, enrollment at most institutions across the country has declined since 2011. According to the National Student Clearinghouse, community college enrollments across the country has declined by 3.4% from 2018 to 2019. The following results highlight the reality of enrollments at Bristol Community College over the last several years:

- Bristol Community College has experienced an enrollment dip from an all-time high of 9,335 students in Fall 2012 to 7,637 students in Fall 2017, however the College has yet to see enrollment drop to pre-recession levels (6,927 in 2006; see Figure 22);
- The ratio of part-time and full-time students has remained relatively stable throughout the past twelve years with a slight dip in full-time attendance status in 2017 (see Figure 23);
- Increases in enrollment have largely come from Hispanic and African American student populations, increasing from 10% in 2010 to a high of 17% in 2016 (see Figure 24);
- Non-credit enrollments have fallen since their high in 2010 in terms of workforce development and non-credit courses as well as adult literacy and English proficiency (see Figure 25).

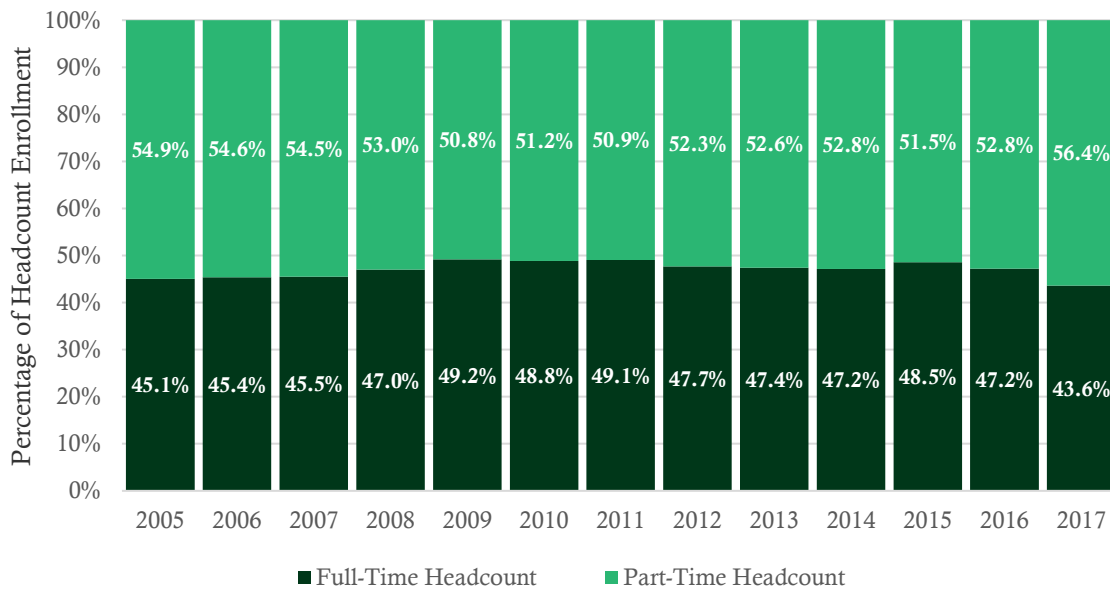


**Figure 22. Bristol Community College, Headcount Enrollment by Degree-Seeking Status, 2005-2017**



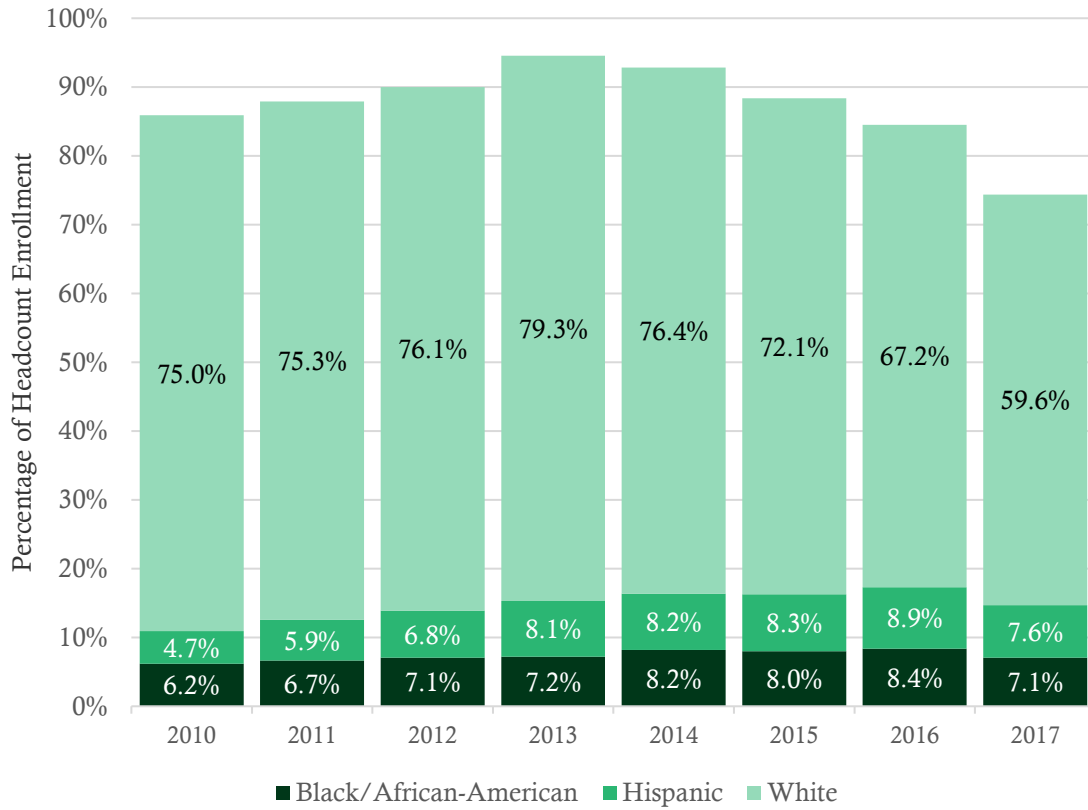
Source: IPEDS

**Figure 23. Bristol Community College, Percentage of Headcount Enrollment by Enrollment Intensity, 2005-2017**



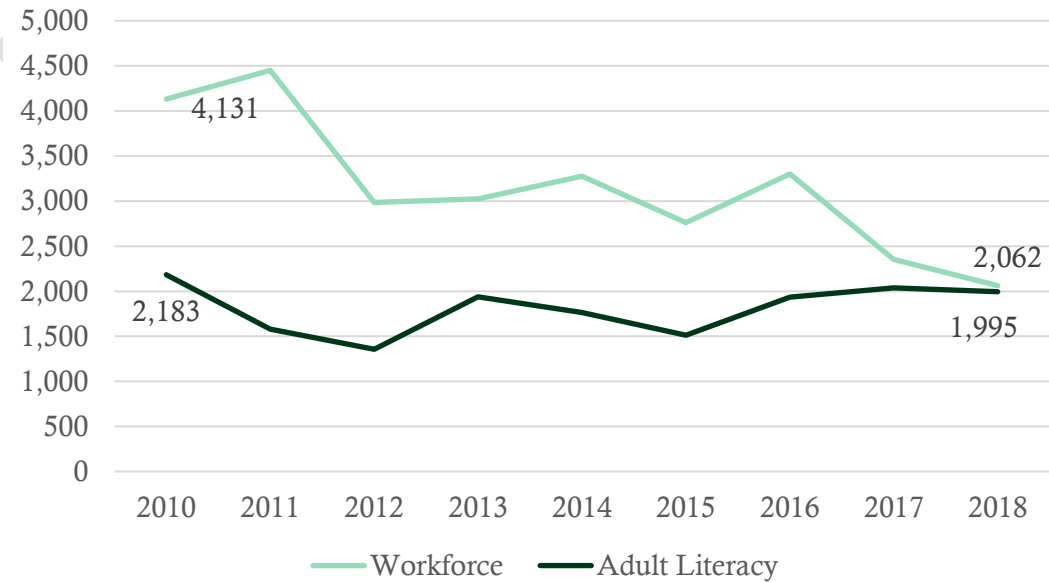
Source: IPEDS

**Figure 24. Bristol Community College, Headcount Enrollment Percentage by Race/Ethnicity, 2010-2017**



Source: IPEDS

**Figure 25. Bristol Community College, Workforce Education Institute Enrollment by Headcount, 2010-2018**



Source: Bristol County Community College, Workforce Education Institute

## Retention and Completion

Retention and completion remain a central priority of community colleges across the country. Retention, specifically, is a promising indicator of students' potential to reach completion in the community college setting. Key insights include:

- Bristol Community College's retention rates for first-time, full-time degree-seeking and first-time, part-time degree-seeking students has remained relatively flat since 2010 (see Figure 26);<sup>30</sup>
- Bristol Community College follows behind six other Massachusetts community colleges, which have increased its retention rates by 4-9 percentage points over the last seven years (see Figure 27);<sup>31</sup>
- Bristol Community College has moderately increased its success rates (associate degree completions, certificate completions, and transfers) and sits in the “middle of the road” of Massachusetts community colleges that have increased their success rates (see Figures 28 and 29).<sup>32</sup>

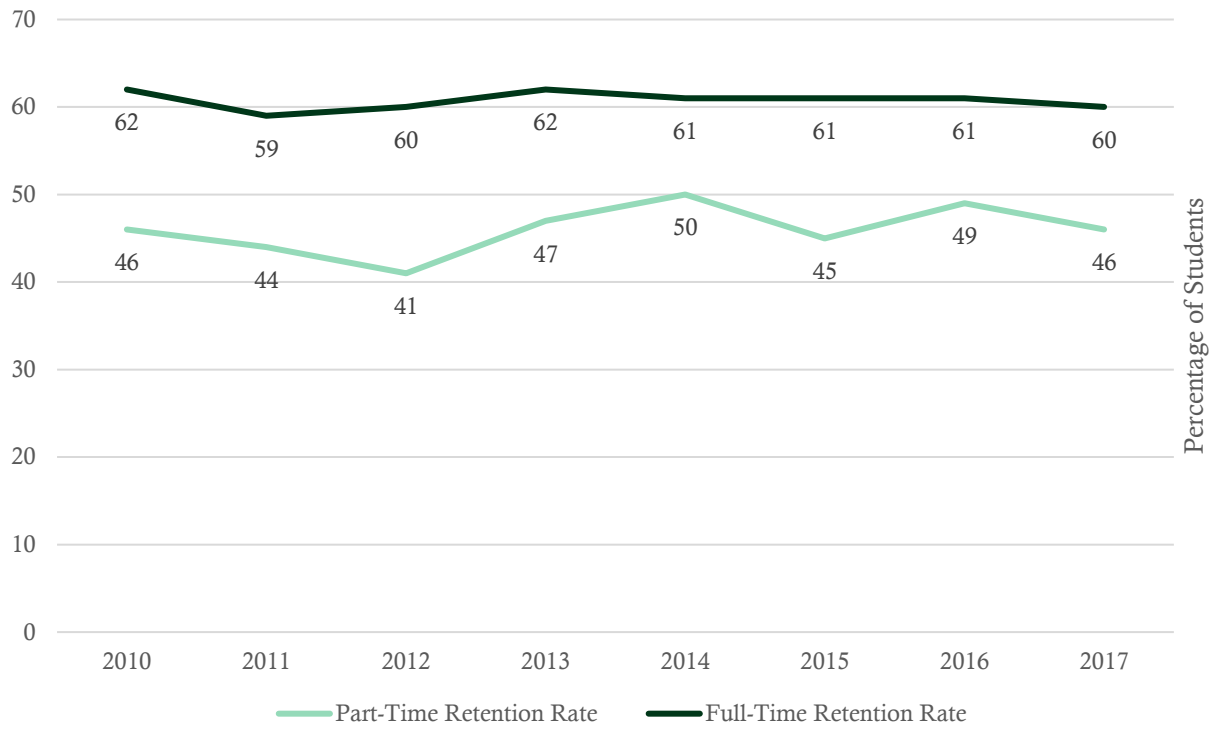
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<sup>30</sup> IPEDS, 2017.

<sup>31</sup> IPEDS, 2017.

<sup>32</sup> IPEDS, 2017.

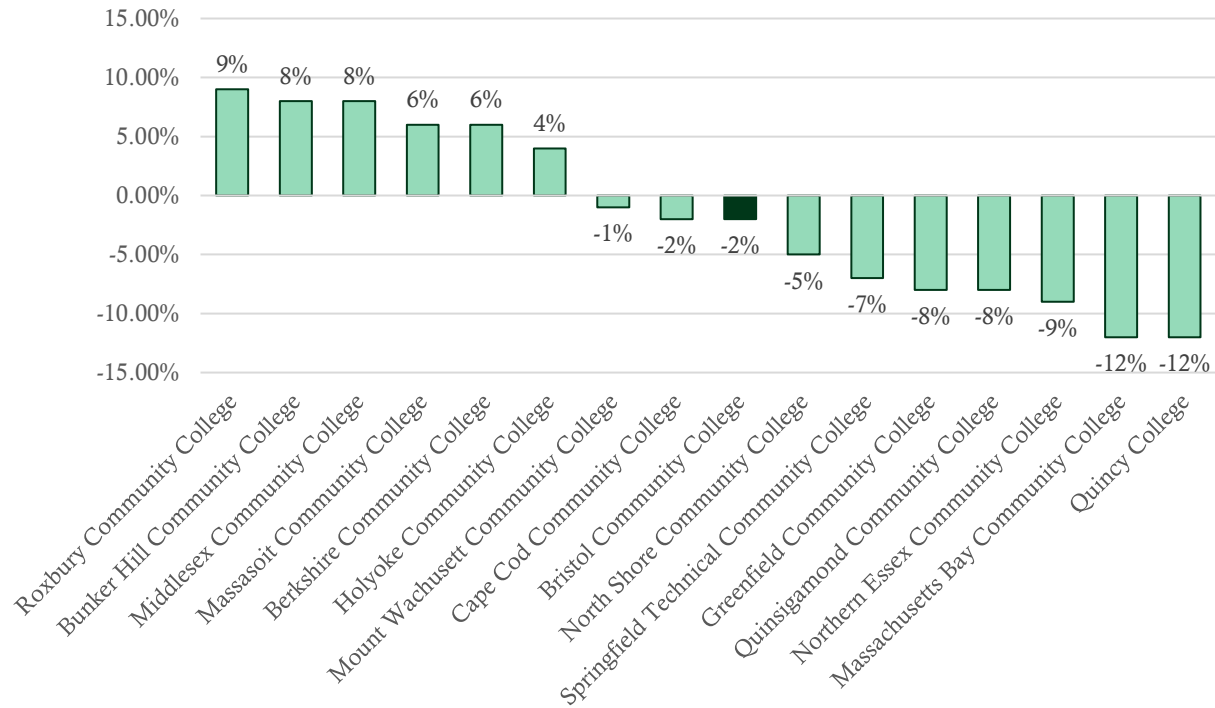
**Figure 26. Bristol Community College, First-Time, Full-Time and Part-Time Retention Rates, 2010-2017<sup>33</sup>**



Source: IPEDS

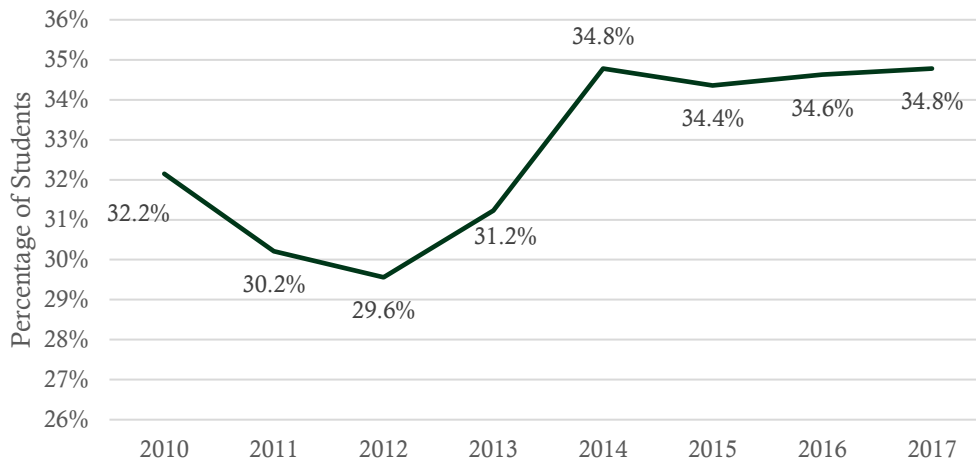
<sup>33</sup> IPEDS, 2017.

**Figure 27. Bristol Community College, Percentage Point Change in Full-Time and Part-Time Retention Rates, 2010-2017**



Source: IPEDS

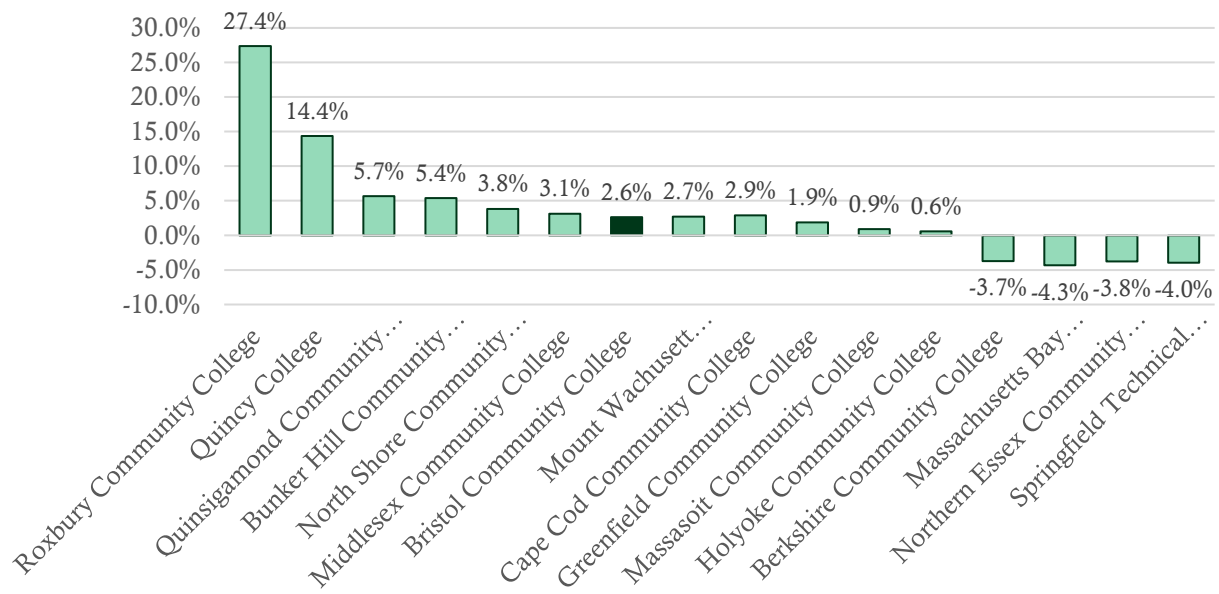
**Figure 28. Bristol Community College, Success Rates, 2010-2017<sup>34</sup>**



Source: IPEDS

<sup>34</sup> First-time, degree-seeking students. Student success rates equal completion of associate degrees and certificates in addition to transfers.

**Figure 29. Massachusetts Community Colleges, Percentage Point Change in Success Rates, 2010-2017<sup>35</sup>**



Source: IPEDS

### Student Success Outcomes by Race/Ethnicity and Pell Eligibility

As the country and the Commonwealth of Massachusetts continues to experience unprecedented increases in minority and immigrant populations, equity remains a central concern to ensuring completion and competitiveness throughout the United States and abroad. Community colleges have been at the forefront of reducing educational disparities that have often left underrepresented minorities and low-income students<sup>36</sup> with significant debt and no degree.<sup>37</sup> The current problem is that student success metrics such as three-year and six-year graduation rates are too far out to monitor, analyze, and respond to disparities; as a result, community college researchers have identified early momentum metrics that help predict students' chances of success. Such metrics include whether students completed gateway courses in a timely manner,<sup>38</sup> on-time

<sup>35</sup> Success rates equal degree and certificate completions plus transfers divided by the adjusted cohort reported. IPEDS, 2017.

<sup>36</sup> Educational practitioners typically use Pell eligibility as a proxy to measure the number of low-income students, since eligibility is based on income being a maximum of 150% above the Federal poverty line.

<sup>37</sup> For the sake of brevity, male and female disparities are not included in this analysis with charts, but are included in key insights.

<sup>38</sup> Percentage of first-time, full-time degree-seeking students who completed college-level English and

credit accumulation,<sup>39</sup> and first-year retention.<sup>40</sup>

As Bristol Community College considers how it will address equity gaps, the following insights have emerged:

- Males and females have the least disparity among all groups with an 8-percentage point difference in six-year outcomes with females succeeding at a rate of 65% in 2017 and males at a rate of 57%. On some measures, males and females have nearly identical progress, potentially indicating future success in six-year outcomes and closure of equity gaps;
- The largest increases have included on-time credit accumulation for Hispanic (+8 points) and African American (+5 points) students, which may demonstrate the early efforts of the institution to scale up its guided pathways initiatives (see Figure 32);
- First-year retention for African American students (+7 points) has increased (see Figure 34), which may represent the College's progress in assisting students through developmental courses and advising students to pursue at least 15 credits; and
- The largest disparity among all groups has been first-year retention rates for Pell eligible students, who have experienced a 16 percent disparity (as compared to an average 6 percent disparity among all Massachusetts community colleges; see Figure 35). This may represent a larger portion of students who are both low-income and are an underrepresented minority.

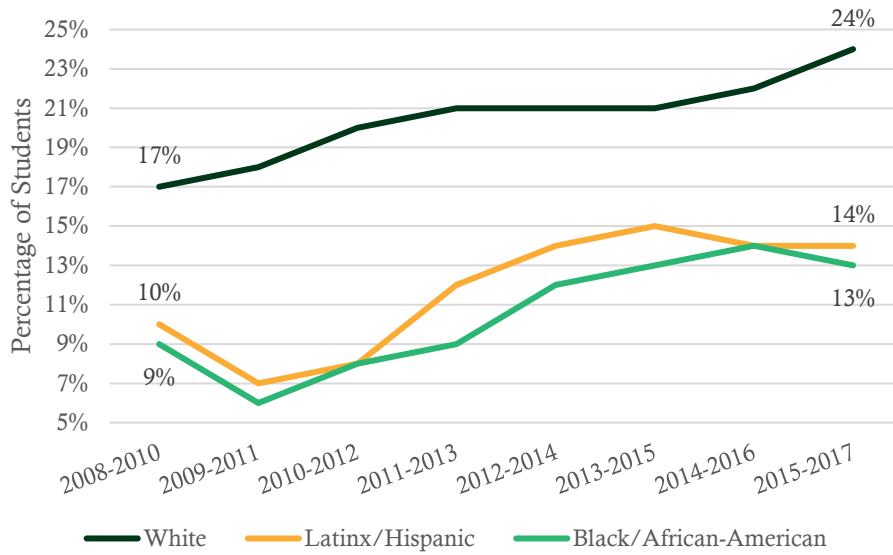
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mathematics courses by the end of their first academic year.

<sup>39</sup> Percentage of first-time, degree-seeking completing expected credits within first years (24 credits for full-time students; 12 credits for part-time students).

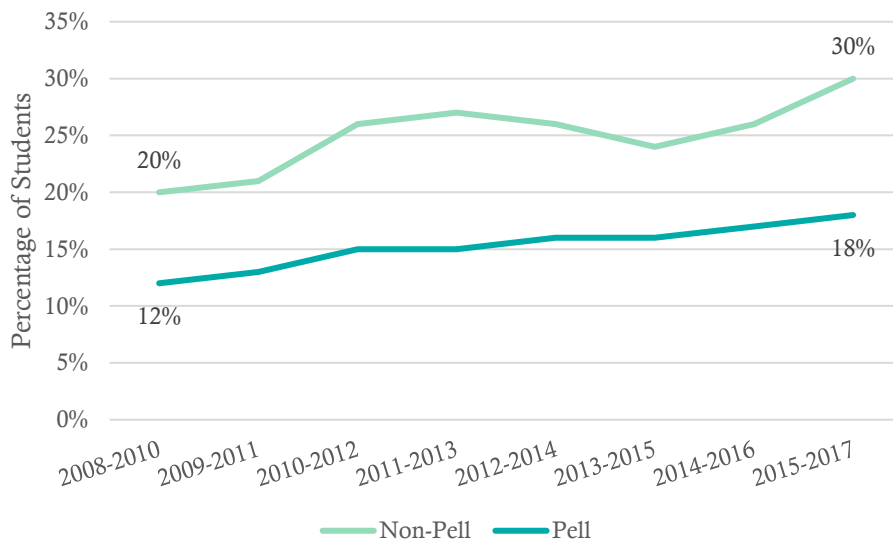
<sup>40</sup> Percentage of first-time, full-time, degree-seeking students returning to the same institution or transferring to another institution during the academic year after initial enrollment.

**Figure 30. Bristol Community College, Timely Completion of Gateway Courses by Race/Ethnicity**



Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

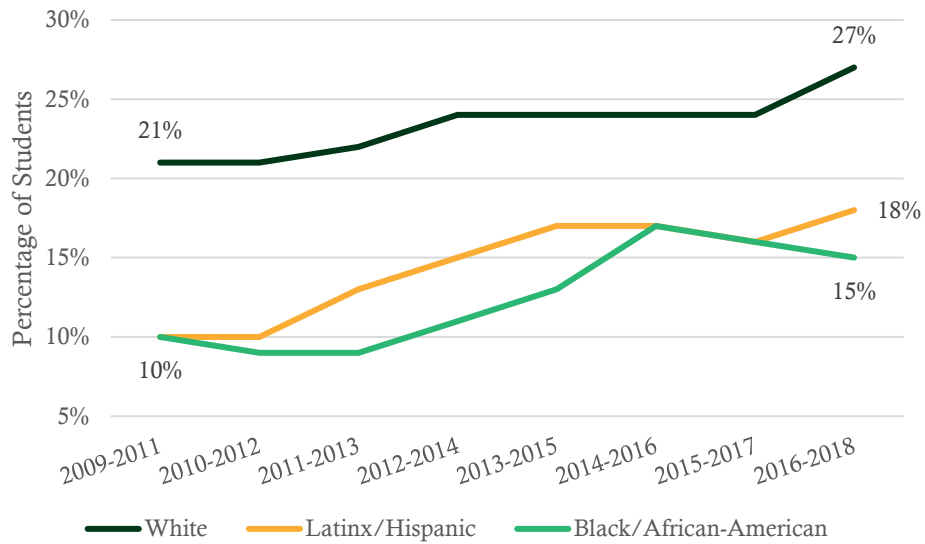
**Figure 31. Bristol Community College, Timely Completion of Gateway Courses by Pell Eligibility**



Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

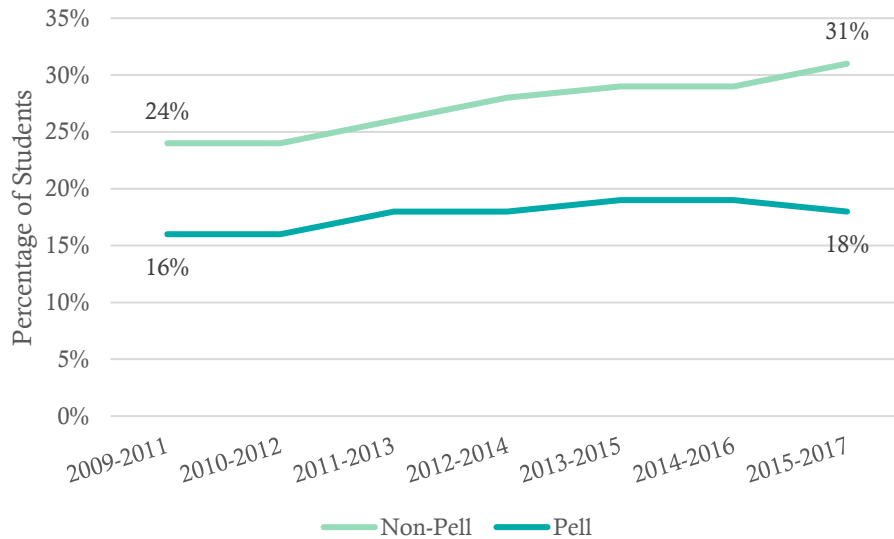


**Figure 32. Bristol Community College, On-Time Credit Accumulation by Race/Ethnicity**



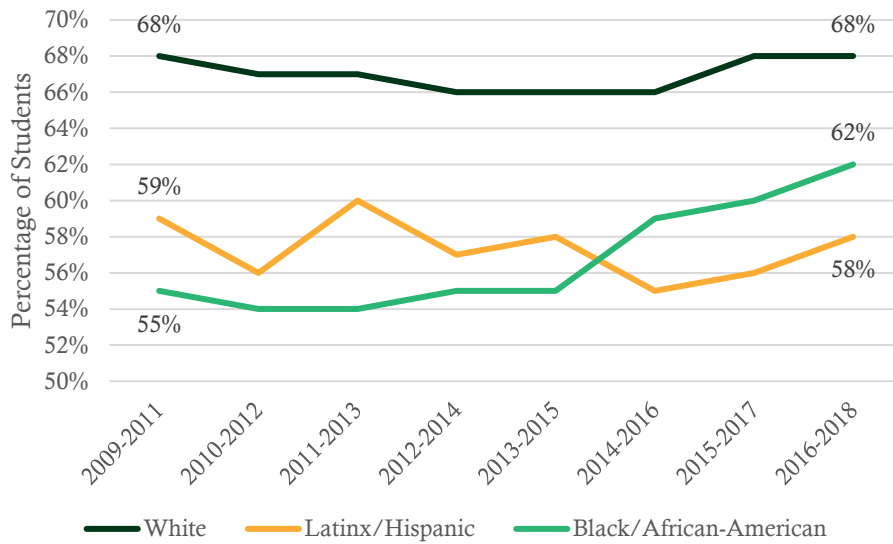
Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

**Figure 33. Bristol Community College, On-Time Credit Accumulation by Pell Eligibility Status**



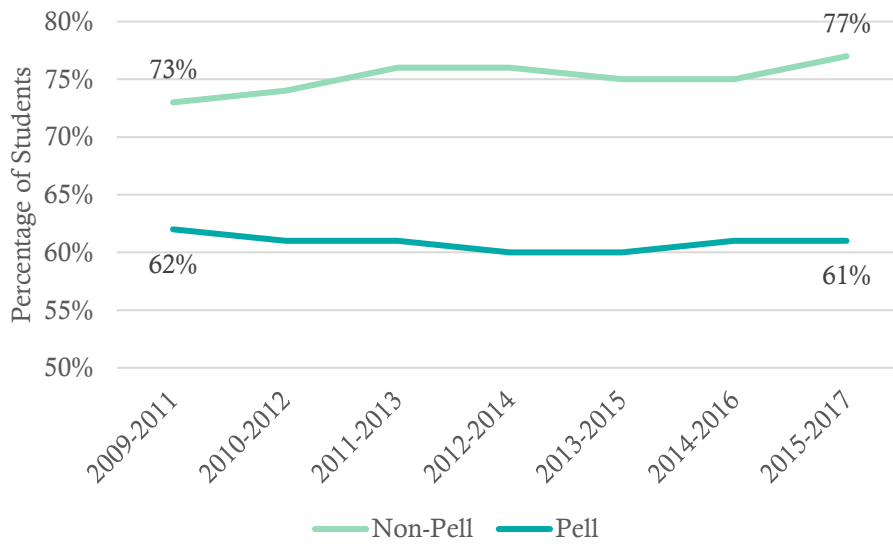
Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

**Figure 34. Bristol Community College, First-Year Retention by Race/Ethnicity**



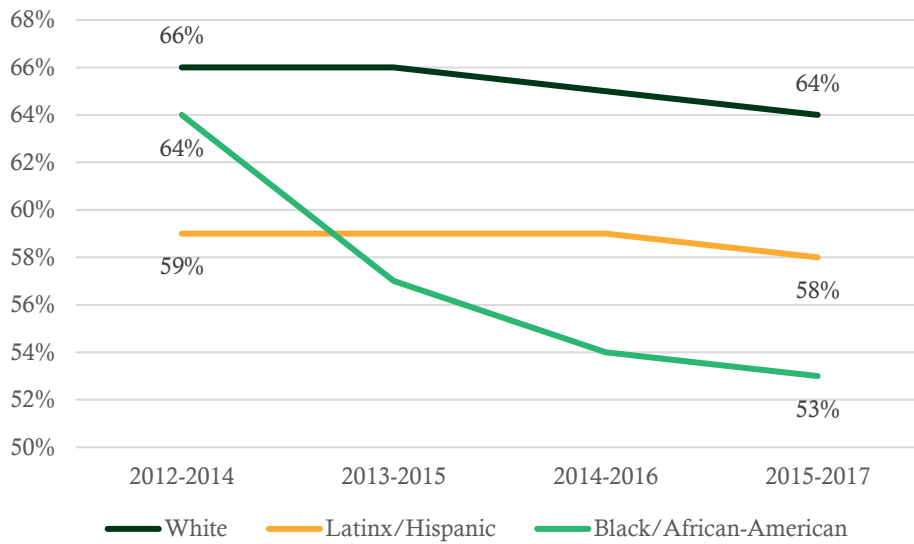
Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

**Figure 35. Bristol Community College, First-Year Retention Rate by Pell Eligibility Status**



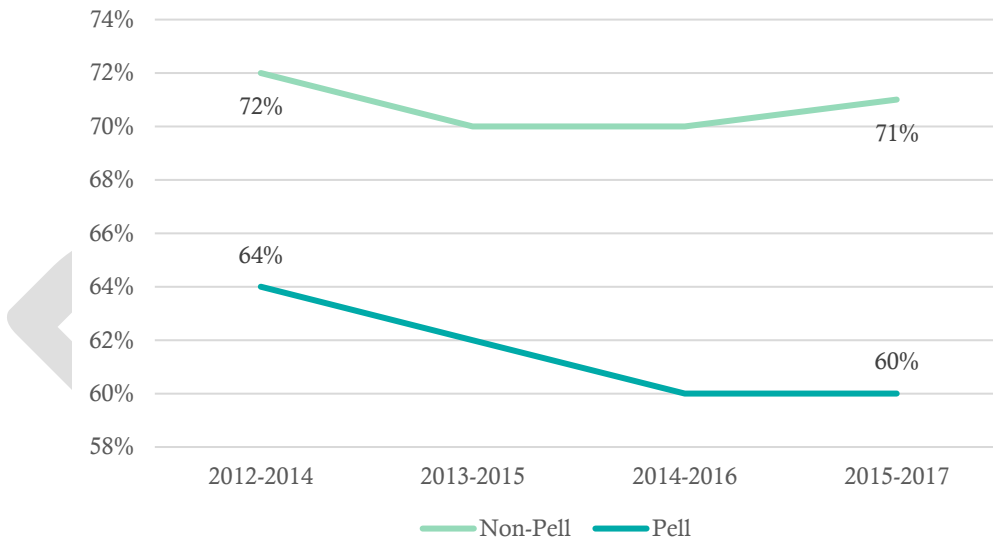
Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

**Figure 36. Bristol Community College, Six Year Success Rate by Race/Ethnicity**



Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

**Figure 37. Bristol Community College, Six Year Success Rates by Pell Eligibility Status**



Source: Massachusetts Department of Higher Education, Performance Measurement Reporting System

## Finance

As noted earlier concerning state funding for higher education, Bristol Community College has experienced the effects of state budget cuts that have displaced the costs of education onto families and students. Below represents the key insights regarding the institution's finances:

- In 2005, the Commonwealth of Massachusetts appropriated dollars that made up a little more than 36% of Bristol's total expenses in 2017 inflation-adjusted dollars;<sup>41</sup>
- While the Commonwealth has increased its investment in higher education in real dollars, it has not yet reached the pre-recession baseline of 36.7% in 2005;
- In 2017, the Commonwealth's dollars made up a total of 29% of Bristol's total expenses (see Figure 38). This has left a gap of approximately \$5 million in 2017 inflation-adjusted dollars;<sup>42</sup>
- As a result, the financial pressures of the recession has increased tuition and fees for Bristol Community College at an annualized rate of 2.9%, increasing from \$3,578 in 2009-2010 to \$4,776 in 2018-2019;<sup>43</sup>
- As students experience the need for financial aid, the College's endowment assets (per FTE) have largely kept up with the median for Massachusetts community colleges, slightly trailing it in recent years (see Figure 40);<sup>44</sup>

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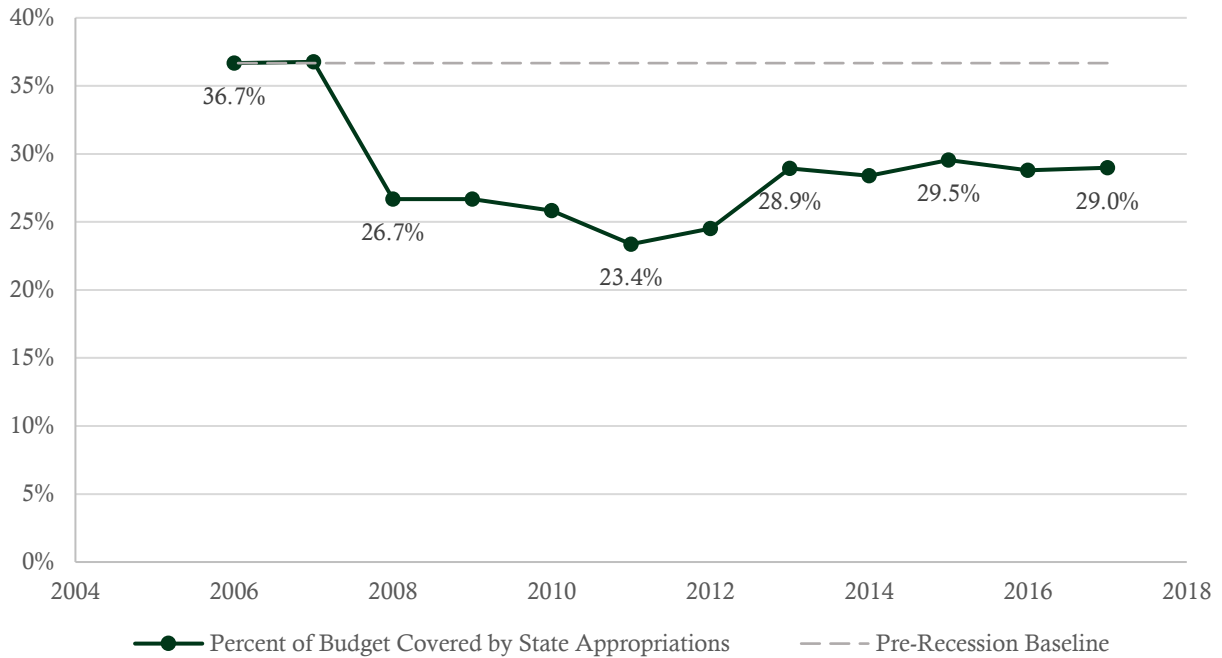
<sup>41</sup> Bristol Community College Financial Statements; IPEDS, 2017.

<sup>42</sup> Bristol Community College Financial Statements; IPEDS, 2017.

<sup>43</sup> IPEDS, 2017.

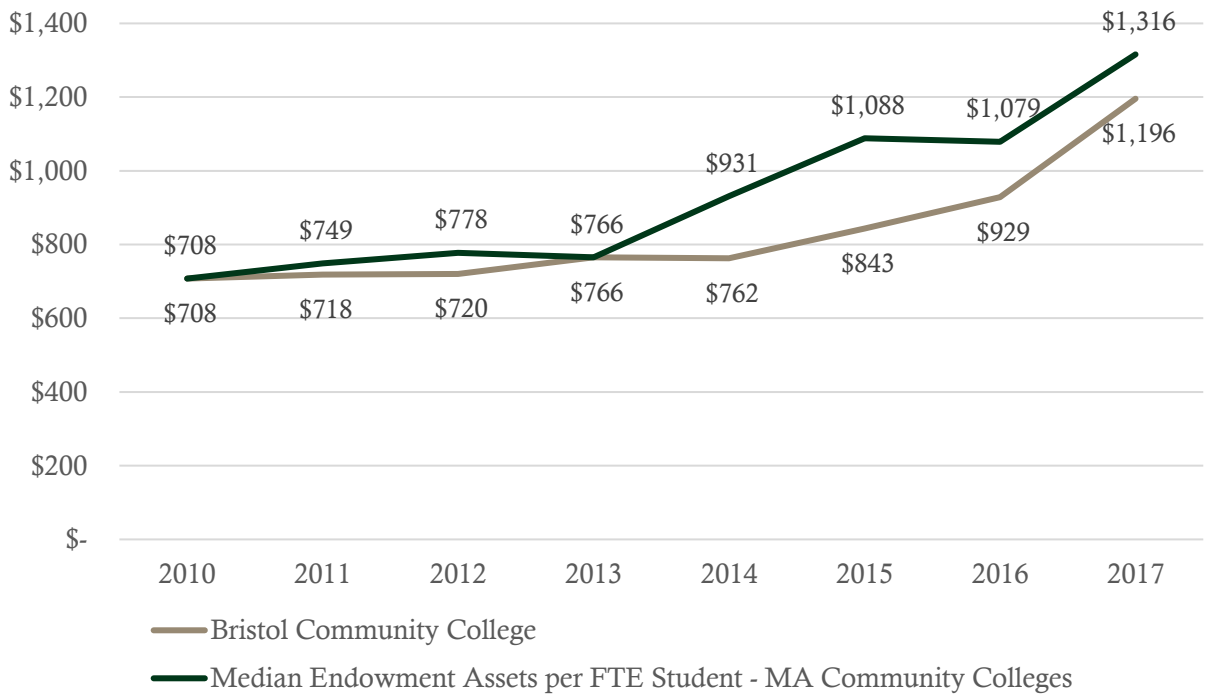
<sup>44</sup> IPEDS, 2017.

**Figure 38. Bristol Community College, Percentage of State Appropriation Dollars to Total College Expenses (in 2017 Dollars)**



Source: Bristol Community College Audited Financial Statements; IPEDS; CampusWorks analysis

**Figure 39. Bristol Community College, Endowment Assets per FTE Student, 2010-2017**



Source: IPEDS, 2017

## Human Resources

One of the most significant resources for any college is its workforce and employees, the strength of which continues to have outsized impacts on the institution's ability to meet the uncertainties that external environmental factors bring. The following represent key insights regarding Bristol's internal HR structure:

- In 2018, the College was staffed with 1,289 employees, including 402 total full-time employees and 887 part-time employees;<sup>45</sup>
- Bristol Community College employed 19.8% full-time faculty members, which is near the benchmark for Massachusetts Community Colleges of 23.5% full-time faculty members;<sup>46</sup>
- Bristol Community College, compared to all other community colleges in MA, is right at the median (.169) for the proportion of total faculty/staff FTE to total student FTE. This measure determines how many faculty and staff members are dedicated to serving students (see Figure 40); and
- As the College pursues its equity agenda, measuring the representation of non-white faculty and staff compared to non-white students is an important metric to determine how far the College must proceed to meet equity benchmarks.<sup>47</sup> In 2017, the ratio was .39, suggesting that only .39 non-white staff/faculty FTE is available for every 1 non-white student (see Figure 41).

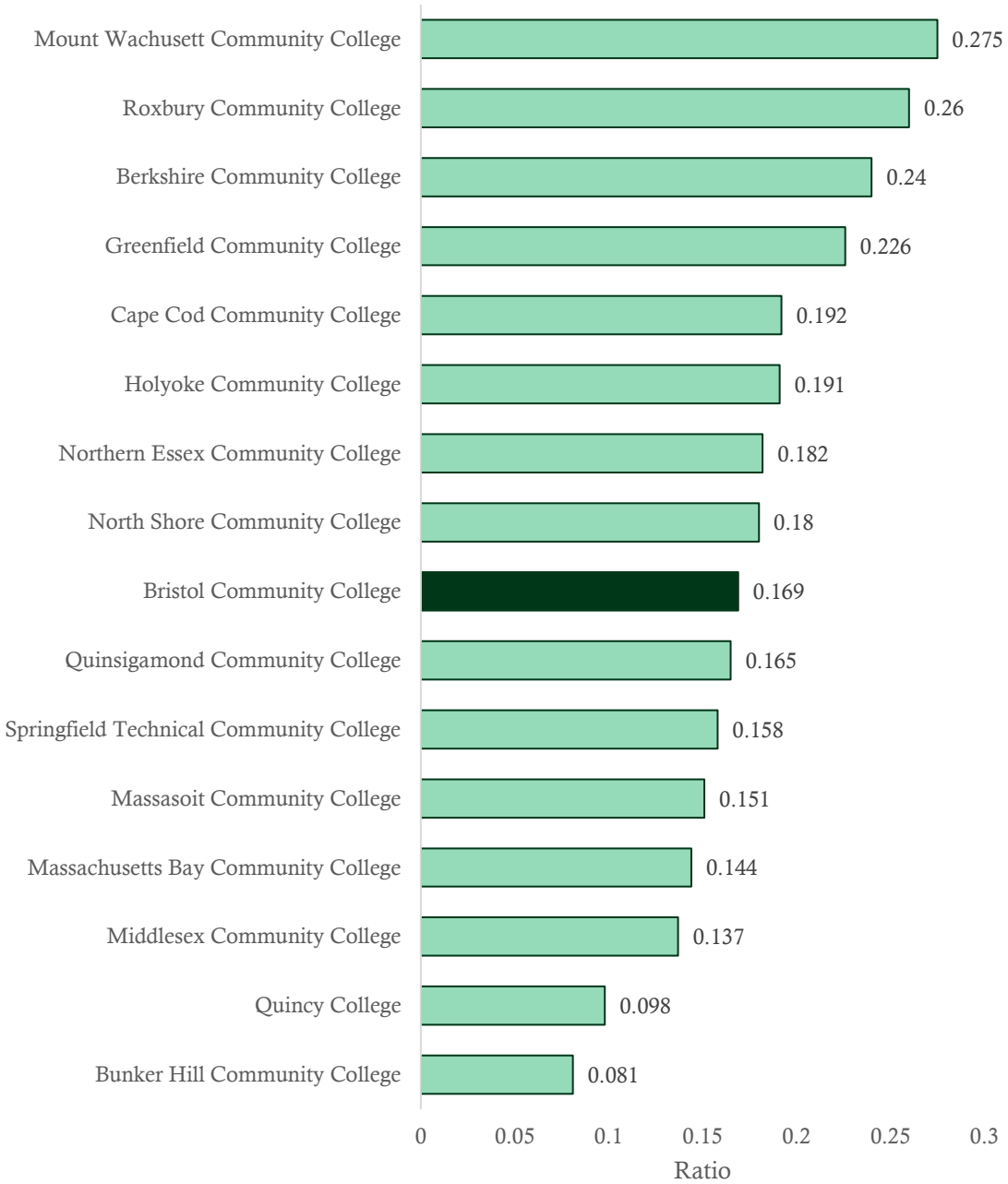
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<sup>45</sup> Bristol Community College, Interim 5-Year Report, NECHE, Human Resources, pg. 149.

<sup>46</sup> IPEDS, 2017.

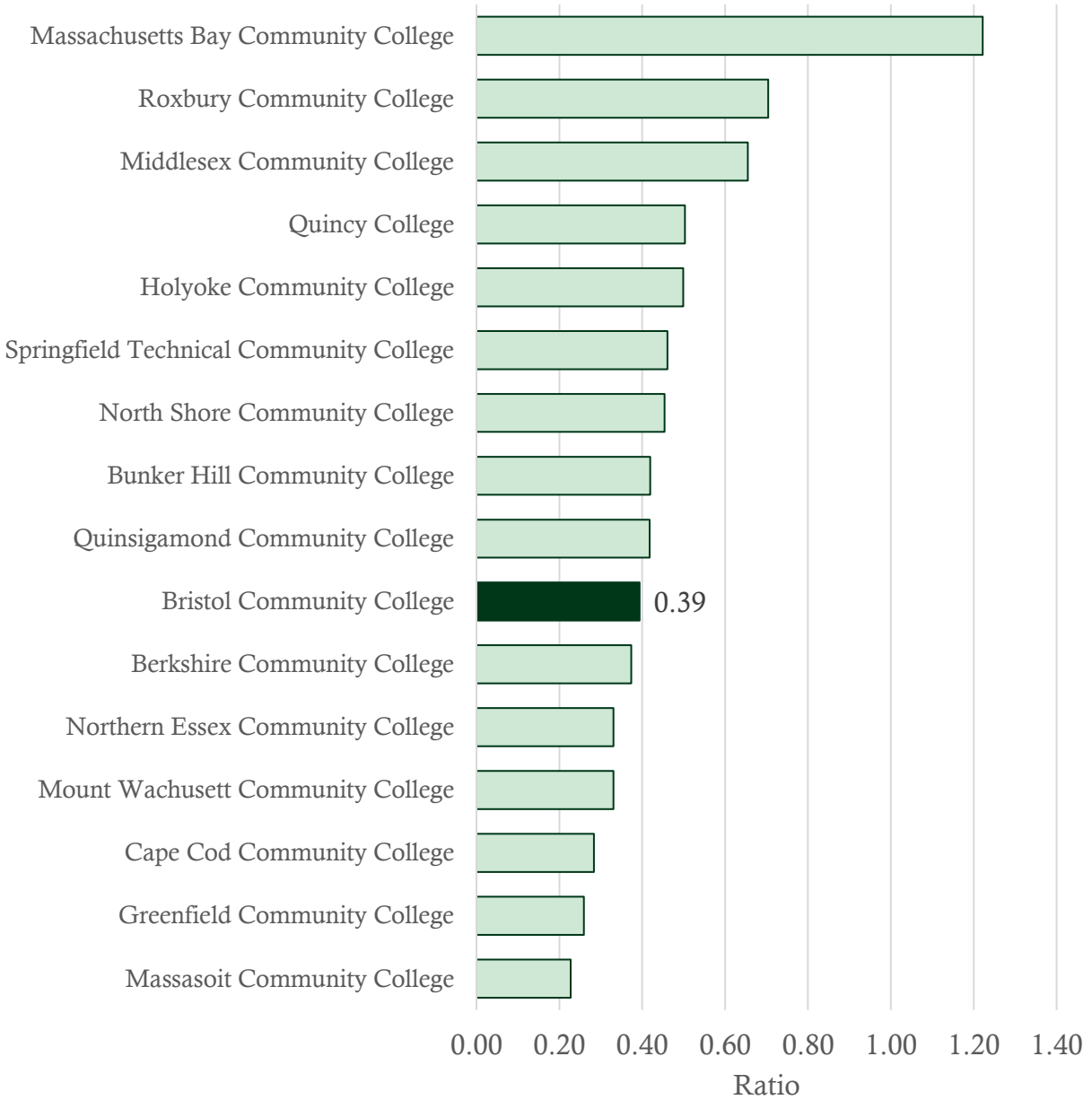
<sup>47</sup> While this metric does not specifically state which racial or ethnic groups are underrepresented, it does provide overall context that there is indeed an equity gap between the total college workforce and students.

**Figure 40. Bristol Community College, Faculty/Staff FTE to Student FTE Ratios, 2017**



Source: IPEDS; CampusWorks analysis

**Figure 41. Bristol Community College, Ratio of Minority Faculty/Staff to Minority Students**



Source: IPEDS; CampusWorks analysis



## Conclusion

As Bristol contemplates its strategic direction and future, there will be key assumptions that will be central as part of the overall planning process. The demand for higher education will continue. Bristol County will need to increase its educational attainment rate to match the national and state averages in addition to national calls to increase attainment. This means that an emphasis on retention and completion will continue to be key factors in programmatic vitality and financial stability; part of this emphasis will include helping to close equity gaps among racial/ethnic minorities and low-income students.

Closing the equity gap will be crucial, as the makeup of nearly all of the region's growth by 2025 will come from foreign-born immigrants. That fact will be reflected in stagnating income and social mobility of Bristol's students even through 2030, which will challenge institutions to generate revenue such as fundraising efforts and new lines of auxiliary revenue that can support instruction and relieve the burden that state budget cuts have laid at the feet of Bristol's students and their families. These sources of funding will be especially needed as colleges continue to grapple with increased costs and must reengineer finances in the face of tenuous state budget cuts that may come with future recessions. The threat of a recession, while a boon to the community college's counter-cyclical enrollment, may put stress on the future of college finances and strain institutions even further as states try to optimize and balance budgets—which may affect pensions, healthcare costs, taxes, and financial aid.

As income, poverty, and affordability all intersect, the toll is taken on students' schedules, which are cramped with work and family responsibilities. Colleges will need to build programs and mechanisms that support “on ramps” and “off ramps” for lifelong learners, including milestones such as micro-credentials and certificates to stack in affordable and flexible ways. They may need to consider pathways that meet individual needs and help create learning experiences that connect to, rather than distinguish themselves from, students' working lives. This will require, in some ways, a paradigm shift for institutions and precision in scheduling and course offerings.

In response to global and societal changes, higher education, experiential learning and education programs will continue to prepare students for life, work, and citizenship in the 21st century. The economy, technology, and the nature of business is accelerating. The success of colleges and universities will rely on how fast they can keep up; businesses have demonstrated most recently that they are willing to—with grit and ingenuity—build their own training programs to cope with the significant labor demands that their work requires. They are not willing to forgo or sacrifice

productivity or profit to wait for the establishment of academic programs that will provide graduates that meet their needs. Institutions that can respond quickly, efficiently, and offer a great deal of quality will become destinations for marketplace-responsive academic programs. Moreover, the threat of automation will continue to accelerate replacing jobs that don't employ higher cognitive functions. Creating graduates that can not only fulfill the immediate needs of the workforce, but who can think broadly, holistically, creatively, and critically will make a significant difference. It will position Bristol Community College to reach out and bring forward the next horizon in the region, lifting the quality of life and success of all to new aspirations.

DRAFT