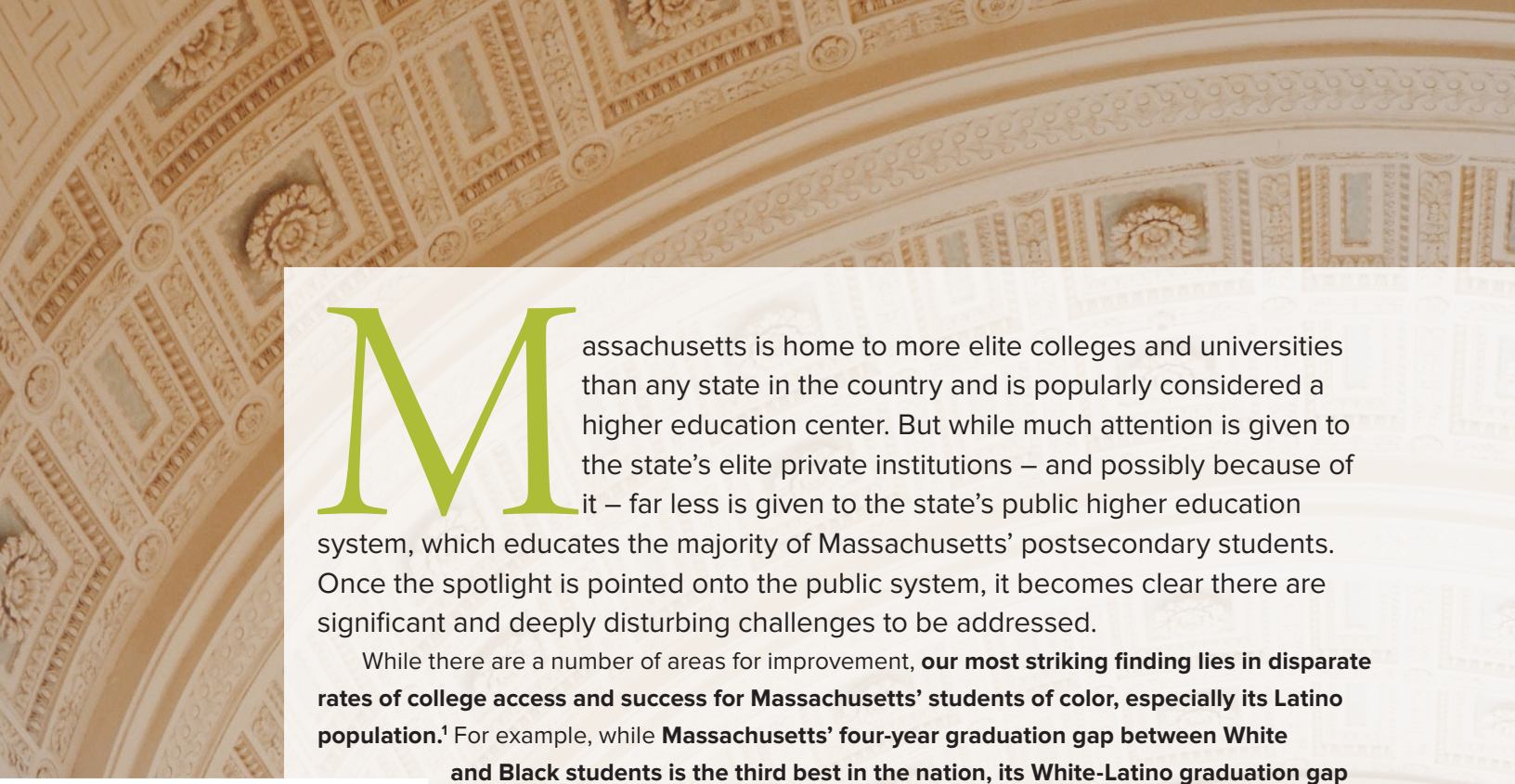


A woman with dark hair, wearing a bright yellow sweater, is shown in profile, looking upwards. Her right hand is raised to her forehead, with her fingers spread, suggesting a gesture of contemplation, stress, or looking for direction. The background is blurred, showing what appears to be an office or classroom setting with blue light sources.

NO COMMENCEMENT IN THE COMMONWEALTH:

*How Massachusetts' Higher Education System Undermines
Mobility for Latinos and Others & What We Can Do About It.*

By Michael Dannenberg & Konrad Mugglestone, Education Reform Now



Massachusetts is home to more elite colleges and universities than any state in the country and is popularly considered a higher education center. But while much attention is given to the state's elite private institutions – and possibly because of it – far less is given to the state's public higher education system, which educates the majority of Massachusetts' postsecondary students. Once the spotlight is pointed onto the public system, it becomes clear there are significant and deeply disturbing challenges to be addressed.

While there are a number of areas for improvement, **our most striking finding lies in disparate rates of college access and success for Massachusetts' students of color, especially its Latino population.**¹ For example, while **Massachusetts' four-year graduation gap between White and Black students is the third best in the nation, its White-Latino graduation gap is 37th worst out of all 50 states and the District of Columbia.** This is especially surprising, because Massachusetts' Latino students have *higher* K-12 achievement levels than Massachusetts' Black students and *higher* K-12 achievement levels than Latino students nationally.

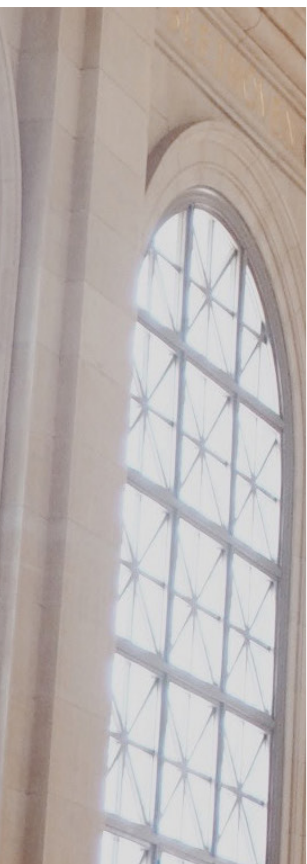
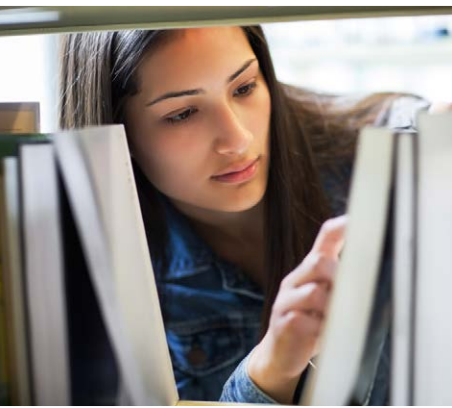
What is going on? What does the explanation suggest for non-Latino students in Massachusetts? And most importantly, what can the Commonwealth do to help *all* students afford and complete a college degree if they choose to pursue one?

Below, we provide an unvarnished assessment of the state of public higher education in Massachusetts by analyzing access and completion rates for students, disaggregating these results by racial subgroup, and examining the inputs affecting those outcomes — including the adequacy of high school academic preparation, college selection choices, college pricing, and institution of higher education performance compared to those in other states and to peer institutions educating similar students with similar academic characteristics.

We outline a comprehensive college promise plan for leaders to consider. It comes complete with components aimed at simultaneously closing completion gaps and addressing shortcomings in college preparation, access, affordability, and completion. While typical “college promise” initiatives limit themselves to community colleges or tuition and fee guarantees only to keep costs down, they regularly fail to leverage change in K-12 education or provide targeted support to students and colleges directed at improving completion rates. A new Commonwealth Promise could lead the nation in tackling these issues along with college affordability, which the data indicates is very much related. To address the higher costs for such a program, we provide a range of offsets to consider, including the dedication of one-quarter of the estimated Fair Share Tax generated resources toward a quality, college promise initiative.

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1 In this paper, the authors will predominantly use “Latino,” but may also use “Hispanic” interchangeably due to mixed nomenclature in data sources.



EXECUTIVE SUMMARY

Policymakers addressing college affordability in Massachusetts and nationwide should have one key goal: **reduce average time-to-degree.** For nearly half of all postsecondary education students, time-to-degree is endless – they never graduate. Even among first-time, full-time college students who do graduate and earn a bachelor’s degree, average time-to-degree is more than five years when it should be only four. Among students who earn an associate’s degree, average time to degree is over three years when it should only take two. If Massachusetts could boost completion and reduce average time-to-degree down to four and two years for bachelor and associate degree recipients, it would increase the rate of return on the higher education investment and cut college costs by 20 percent and 33 percent, respectively. Everyone would benefit, but no group would be helped more than students of color – especially Latino families.

Key findings:

GAPS IN HIGH SCHOOL ACADEMIC PREPARATION LEVELS AND CURRICULAR ACCESS

- While Massachusetts students overall and major racial and ethnic subgroups of students in Massachusetts have some of the best high school academic preparation levels in the nation as reflected in National Assessment of Educational Progress (NAEP) results, college preparation *gaps* between White students and students of color are larger in Massachusetts than in nearly all other states.
- Massachusetts’ White students are three times more likely to score “proficient” or “advanced” on the NAEP reading test than their Latino peers and nearly *four times* more likely to score as proficient or advanced on the mathematics test than their Black peers. Massachusetts’ advanced Latino students are less than half as likely to take an AP test as Latino students elsewhere in the nation, despite better overall preparation to do so.
- Massachusetts’ White students are over 50 percent more likely to have access to and complete a MassCore college preparatory curriculum than their Black and Latino peers. Of some 400 high schools in the Commonwealth, 31 have no MassCore students and another 32 have fewer than a quarter enrolled. Black students are over two and a half times more likely than White students, and Latino students are twice as likely as their White peers to attend a school where fewer than 25 percent of the students graduate with a MassCore diploma.

INEQUITIES IN WHERE MASSACHUSETTS' STUDENTS GO TO COLLEGE

- Massachusetts' Black and Latino high school graduates are much more likely to attend public colleges than their White peers, especially two-year community colleges. Among recent high school graduates, Massachusetts' Black graduates are nearly 50 percent more likely to attend a two-year institution as their White peers. Massachusetts' Latino graduates are *nearly twice* as likely to do the same.
- In fact, Massachusetts' Latino graduates are 20 percent more likely than the national average to go to two-year institutions, despite better academic preparation coming out of high school compared to Black students and other Latino students nationwide.

THE HIGH PRICE OF MASSACHUSETTS' PUBLIC INSTITUTIONS OF HIGHER EDUCATION

- Massachusetts has inordinately expensive public colleges. Average net price for total college costs (e.g. tuition, fees, books, room and board, supplies) is over *twenty-five percent higher* than the national average at four-year public institutions. At two-year institutions, costs are twelve percent higher than the national average.
- While Massachusetts is a state where families generally have higher incomes than the national median, high net price for college hits Massachusetts Latino families especially hard since they have much lower median family incomes than the Massachusetts median. Surprisingly, they also have lower family incomes than the median for Latino families nationally.

INSTITUTION OF HIGHER EDUCATION PRACTICES SIGNIFICANTLY IMPACT COLLEGE COMPLETION RATES

- Regarding public four-year colleges, Massachusetts performs slightly better than the national average in terms of degree completion. Black students who complete public colleges in Massachusetts at far higher rates than the national average drive Massachusetts' overall lead in public four-year college completion.
- In contrast, Latino students at public four-year colleges in Massachusetts complete at lower rates than the national average. The Commonwealth does not hold individual public or private institutions of higher education accountable for equity in outcomes for racial and ethnic subgroups.
- Across all subgroups, Massachusetts' community colleges are severely underperforming. A Massachusetts community college student is significantly less likely to complete an associate's degree program within three years from the date of initial enrollment than the national average. Compared to the national average, Massachusetts Black and Latino community college students fare especially poorly. Massachusetts Black community college student graduation rates are over 30 percent lower than the national average. Massachusetts Latino community college graduation rates are over 40 percent lower than the national average.
- Finally, colleges with similar median SAT scores, similar incoming student high school grade point averages, and similar student demographics often generate wildly different levels of student success as measured in degree completion and loan repayment rates. The University of Massachusetts at Amherst is among the highest performing institutions in its peer group nationally. UMass Dartmouth and UMass Boston rank among the lowest in their peer groups nationally.

RECOMMENDATIONS

1. Most important: Create a new, student responsibility-linked, statewide ‘free college’ promise that covers the total cost of attendance (after expected family contribution as currently defined in federal law) to any two-or four-year public college for talented, hard-working students (i.e. who have completed a MassCore track or equivalent, among other requirements) if they are from households making less than \$75,000 a year.



Why? – Americans overestimate the cost of college and underestimate financial aid.¹ An up-front promise of college affordability is demonstrated to boost high school academic preparation levels, markedly improve college access rates, and raise on-time completion rates.

Additional college expenses beyond tuition and fees may make some students feel like higher education is out of their reach and may dissuade the debt-averse from pursuing higher education altogether. Many who do attend college enroll in lower-priced community colleges where the likelihood of degree completion is much lower and many must work untenable hours or drop out of postsecondary institutions entirely – leaving all too many with the worst result of all — student loan debt and no degree. Students who fail to complete a certificate or degree program are four times more likely to default on their student loans than those who do.

2. Make MassCore available at all schools and the default academic track for all students.

Why? – Because high school curricular rigor is the number one indicator of college completion – more influential than race, family income, or parent education nationwide — we need to make sure quality high school academic preparation is available to everyone. Making MassCore fully available and the default track for all students will serve as a “nudge” to better prepare students and their families for the college selection process. Parents know that with support, their kids can meet high standards.

Moreover, completion of the MassCore or equivalent college preparatory curricular track is required for entry into every Massachusetts’ public four-year college. Students who fail to participate in and complete even one high school course on the MassCore track are relegated to community colleges if they wish to remain in-state. Finally, the high schools with very-low- or no-MassCore graduates have disproportionately non-white demographics. Increasing college preparation for these students is essential to their long-term success.

3. Provide competitive aid to school districts and non-profit organizations for high school student academic support services.

Why? – In order to help students finish a rigorous college preparation track in high school, expanded curricular access and additional support services are needed. Tutoring, study groups, and additional test preparation practice all have been proven to be helpful in bringing disadvantaged students up to the academic standards needed for college.

4. Provide competitive aid to non-profit organizations and school districts to fund counseling on college selection, application, and finance.

Why? – Many disadvantaged students are uninformed or under informed while engaged in the college application and selection process, resulting in unintentional under matching and failure to take full advantage of financial aid opportunities. A few “soft touch” interventions and college assistance programs have proven themselves to be successful at matching students with colleges, assisting in the financial aid application process, and guiding students through college to degree completion.

5. Provide targeted direct aid to colleges and universities for institution-based efforts to boost completion.

Why? – Some colleges outperform otherwise comparable institutions with similar students on degree completion and other student success measures (such as post-exit earnings), and many colleges have shown *improvement* when college leaders make student outcomes a priority.

Over the past several decades, **Georgia State University**, for example, has altered course availability and other program elements based on predictive analytics to generate a 22-percentage point rise in graduation rates. **Florida State University** does much the same and has eliminated the graduation gap between White students and students of color. The **University of Maryland** redesigned introductory lecture-based mathematics courses into technology-driven, problem set-based courses where the same content is delivered but faculty work as coaches rather than sages on a stage. As a result of this change, they saw a 15 percent greater course pass rate at a 70 percent lower cost. **Fort Worth Community College** partners with local Catholic Charities to connect students with non-academic social services, ranging from housing to transportation assistance, to keep students on track toward graduation. The likelihood of a student receiving an associate’s degree increased by 16 percentage points at a cost of only \$1,880 per student, per year.

BUDGET ESTIMATES AND OFFSETS

We have prepared detailed budget estimates and cite model programs for each proposed step in our recommended college promise plan for Massachusetts. We estimate our total plan would cost approximately \$535 million a year but have identified offsets and revenue sources totaling over \$631 million a year. Offsets include state higher education grant and tax benefit programs that are not means-tested, reducing state-level aid to some of the wealthiest institutions of higher education in the world, and a portion of the Massachusetts’ millionaires’ tax initiative if it passes this November.

I. INTRODUCTION

The next governor of Massachusetts, regardless of party, will need to address college affordability. Current cost trajectories are unsustainable for middle class and low-income families: Massachusetts' public four-year institutions charge the 8th highest tuition and fees in the nation.² These costs have risen by 12 percent in just the past five years.³ Indeed, college costs are rising everywhere while median family income growth is largely stagnant; making efforts to address college affordability increasingly popular. Some 78 percent of the public favors a policy agenda that ensures all students can graduate from two- and four-year colleges debt free. This includes 87 percent of Democrats and 68 percent of Republicans.⁴ Among individuals most likely to face

college payments (people under 30), support for debt-free college rises to 90 percent. Given the need and this level of support, it is time to develop and embrace a real college promise plan to increase college affordability.

Policymakers addressing college affordability in Massachusetts and nationwide should have one key goal: reduce average time to degree. For nearly half of all postsecondary education students, time to degree is endless – they never graduate. Even among first-time, full-time college students who do graduate and earn a bachelor's degree, average time to degree is more than five years when it should be only four. Among students who earn an associate's degree, average time to degree is over three years when it should only take two. Boosting completion and reducing the average time to

completion for bachelor and associate degree recipients would increase the rate of return on the higher education investment and cut average college costs by 20 percent and 33 percent, respectively.

Fortunately, the research on college completion is clear. Degree completion depends on academic preparation prior to postsecondary enrollment, college selection, academic intensity, as well as leadership and student support services at the college level. But even in Massachusetts, which boasts some of the best academic preparation levels in the nation, there are multiple challenges to be addressed. Most distressing are gaps between White students and students of color, and even worse, the college graduation gap between White students and their Latino peers in particular.



II. THE STATE OF MASSACHUSETTS’ HIGHER EDUCATION

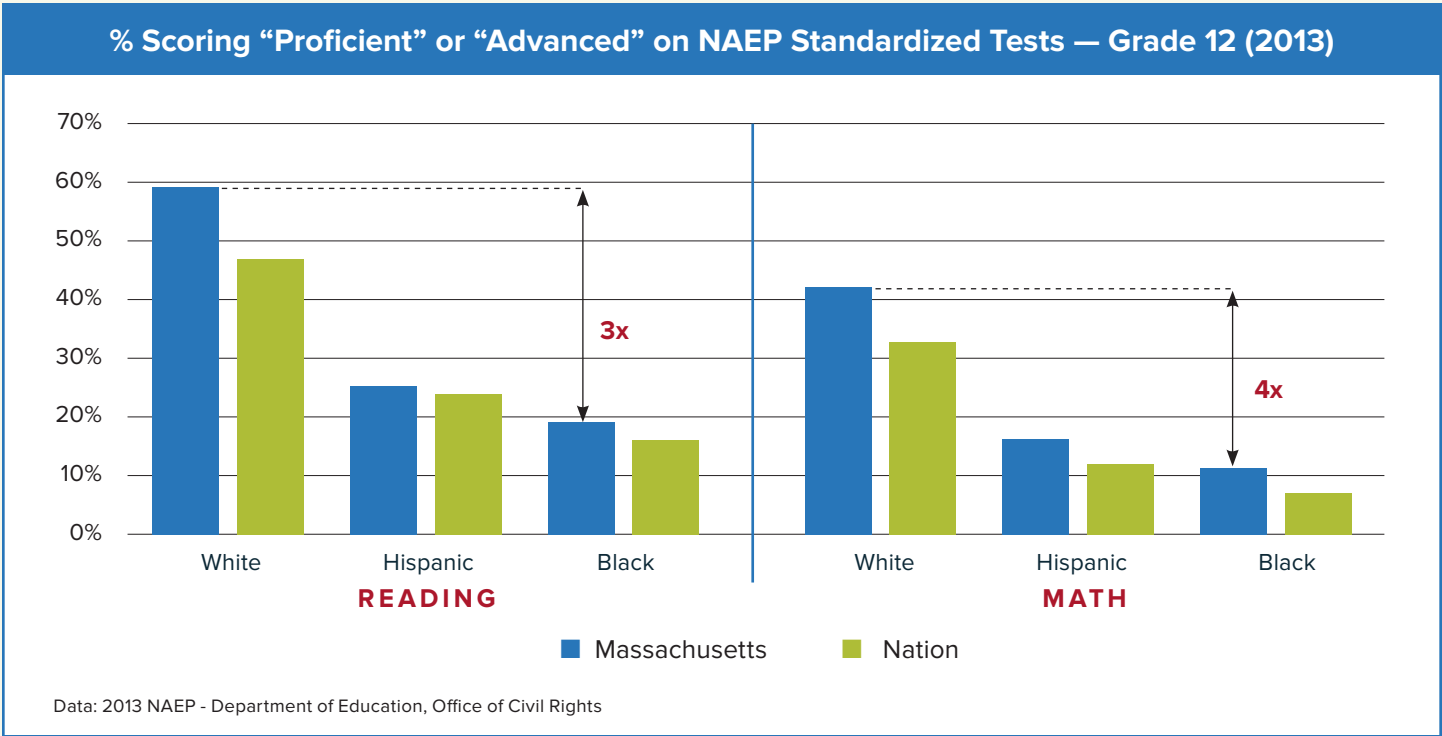
1. Gaps in High School Academic Preparation Levels and Curricular Access in Massachusetts

High school academic preparation is the number one predictor of college completion. It has significantly more predictive power than income, race, or the education level of a student’s parents. In fact, predictive modeling finds that variables such as curricular rigor, test scores, and GPA combined account for 78 percent of the difference between degree completers and non-completers.⁵ Of these, high school curricular rigor (i.e. taking a college preparatory course track) has by far the largest predictive value (41 percent). Simply completing high school is not a recipe for collegiate success. Instead, students need to meet a college and career ready standard before college entry in order to avoid remediation at the postsecondary level and complete their degree programs on time.⁶

In Massachusetts, high school seniors are more likely than those in the rest of the nation to score “proficient” or “advanced” in reading and mathematics on the National Assessment of Educational Progress (NAEP) – the gold-

standard test of elementary and secondary school student achievement. The same holds when examining only the performance of racial and ethnic minorities in Massachusetts as compared to their peers nationwide. But despite these results, Massachusetts’ high school academic preparation results are still in need of improvement. Among Massachusetts high school graduates attending a Massachusetts public college or university in the fall immediately after high school graduation, one in three is required to enroll in at least one remedial course at the postsecondary level – a phenomenon that delays time to degree and is associated with a markedly higher college dropout rate (74 percent higher nationally).⁷

Further, Massachusetts faces a serious equity problem. College preparation gaps between White students and students of color are significantly larger in Massachusetts than the national average. In Massachusetts, White 12th graders are three times more likely to score a proficient or advanced on the NAEP reading test, and nearly four times more likely to score a proficient or advanced on the mathematics test than their Black peers.⁸

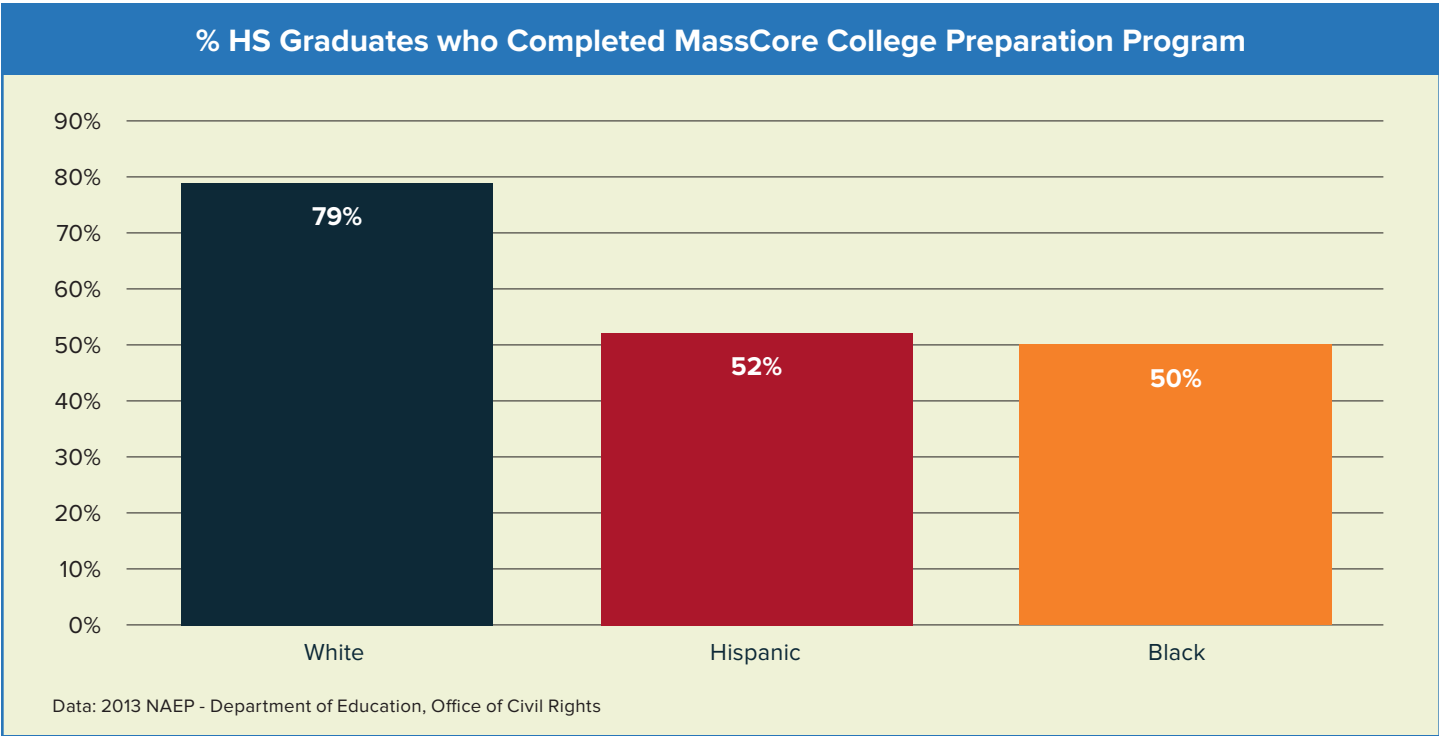


Massachusetts' gaps in educating talented students of color are even more disturbing when examining Advanced Placement (AP) test scores. Class of 2013 data shows that Massachusetts' students overall are nearly 20 percent more likely to take an AP test than the national average, and the percentage of these AP test-takers scoring 3-5 (the scores typically accepted for college credit) is nearly 40 percent higher in Massachusetts than other states (27.9 percent in MA, against 20.2 percent nationwide). But again, despite this overall success, Massachusetts' Black and Latino students are getting left behind. Massachusetts' Latino students are less than half as likely to take an AP test in Massachusetts as Latino students elsewhere in the nation, and a much smaller percentage of those test-takers score between 3 and 5 as other Latino students nationwide.⁹

The sizable high school achievement gap in Massachusetts between White students and students of color is, in part, a function of racial gaps in access to and participation in college-preparation level coursework while in high school. Massachusetts' academic content standards are the same for all students, but participation in Massachusetts' college preparation curricular track, MassCore, is not.¹⁰ MassCore is essentially a group of courses designed (and required) for entry into a Massachusetts public four-year college.¹¹ It demands four years of English, four years of mathematics,

three years of lab-based science, three years of history, and two years of the same foreign language, alongside other core electives.

In 2016, out of the approximately four hundred public high schools in Massachusetts, 31 had zero MassCore graduates, and another 32 had fewer than 25 percent of their student body enrolled in MassCore's course of study.¹² Black students were more than two and a half times more likely, and Latino students were twice as likely to attend one of these high schools relative to their White peers.¹³ While 72.3 percent of high school graduates in Massachusetts' Class of 2015 completed the MassCore college preparatory track, the rates for Latino and Black students were far below the state average. Some 79 percent of White students completed MassCore, but only 52 percent of Latino students and 50.2 percent of Black students did the same (see figure below). In other words, White students are more than 50 percent more likely to complete a MassCore college preparatory curriculum than their Black and Latino peers – a phenomenon that has significant implications for college enrollment (two-year vs. four-year college) and subsequent degree attainment.



2. Inequities in Where Massachusetts' Students Go to College

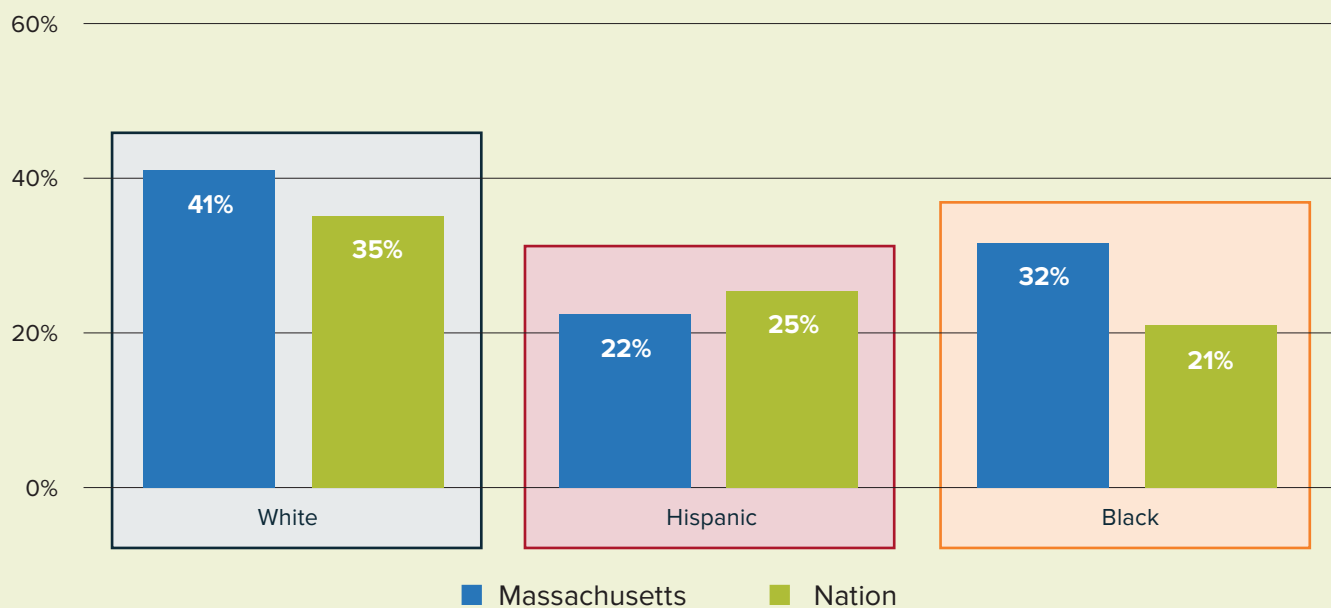
Recent college affordability and college promise plans have focused on free or low-cost access to community colleges — largely as a cost-saving measure.¹⁴ Policymakers operate under the assumption that bachelor degree-seeking students can start their higher education at a community college and then transfer to a four-year institution after taking the first two years of coursework — supposedly saving everyone money. It is a misguided approach.

The reality is that public community colleges spend much less per student than their public four-year counterparts — and it shows in the results.¹⁵ Research suggests beginning at a two-year college with the intention of completing a four-year degree *decreases* the likelihood a student will complete a four-year degree by around 30 percentage points.¹⁶ Even if students transfer successfully from a two-year to a four-year institution and do not drop out, they lose an average of 22 percent of previously earned college credits in the transfer process.¹⁷ Losing nearly a quarter of the credits for a two-year degree equates to losing nearly an entire semester. The impact

is enormous: only 14 percent of bachelor's degree-seeking students who begin full-time at a community college go on to earn a four-year degree within six years of initial enrollment.¹⁸ Like all completion figures, the percentage for part-time students is markedly worse.

In Massachusetts, reflective of the significant imbalances in college preparation, there are major racial and ethnic inequities in the type of postsecondary institution students attend after high school — if they are able to attend postsecondary institutions at all. Massachusetts' White college-bound high school graduates are far more likely to attend a four-year institution instead of a two-year school — 68 percent versus 32 percent.¹⁹ This rate is higher than the national average, where only 59 percent of White college-bound graduates attend a four-year institution. Again though, as with MassCore participation, there are sizable gaps among racial groups when it comes to public four-year college enrollment. Massachusetts' Black students are four-fifths as likely, and Latino students are only slightly over half as likely to attend a public four-year college as their White counterparts.

Enrollment of Recent Graduates into Public 4-Year Colleges



Data: 2015 Massachusetts Department of Education Statewide Data Reports - Data reflects only college attendees choosing to stay in Massachusetts IHEs. National data from 2012 Beginning Postsecondary Student Survey.

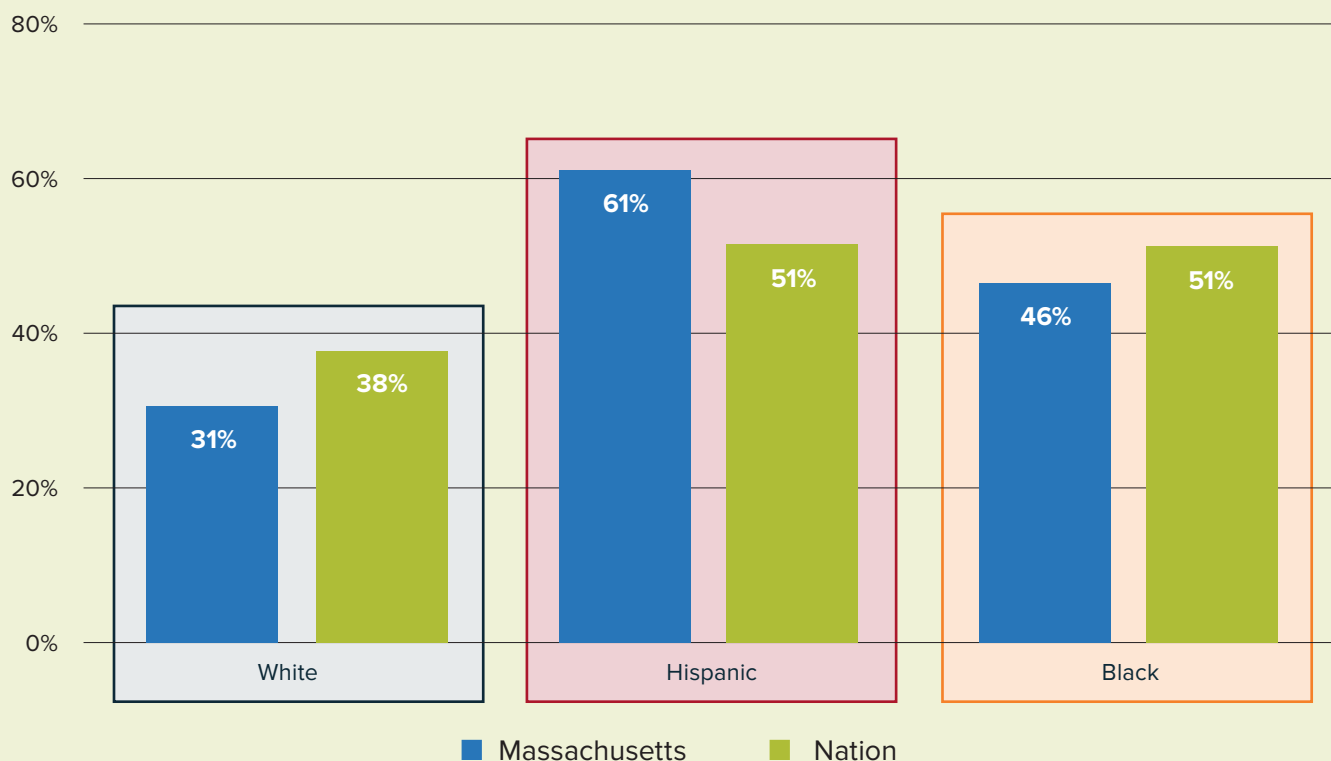
In stark contrast are the rates at which Massachusetts' students of color attend two-year institutions. Massachusetts' Black students are nearly 50 percent more likely, and Massachusetts' Latino students are twice as likely as their White peers to attend a two-year institution. In fact, Massachusetts Latino students are *20 percent more likely than the national average* to go to two-year institutions.

The concentration of Massachusetts Latino postsecondary students in public community colleges is particularly striking, as Latino students in Massachusetts (and across the nation) consistently outperform Black students on college preparation metrics – suggesting that Massachusetts Latino students are far more likely to be “under matching” (i.e. when students with high academic qualifications attend less selective institutions) into two-year programs than their peers. That is, many are academically capable and qualified to attend a four-year institution but are attending a two-year community college instead. This is an especially disturbing phenomenon, because

under-matched students complete at a rate that is approximately 30 percentage points lower than their peers who attend more rigorous four-year institutions.²⁰

There is at least one silver lining in the Massachusetts postsecondary student enrollment data. Students in Massachusetts, especially students of color, are not utilizing for-profit institutions, which tend to underperform and overcharge for their services. Fewer than one percent of college-bound students of color in Massachusetts attend for-profit institutions. Instead, students of color in Massachusetts rely on public institutions much more than their national counterparts. Among Massachusetts' recent high school graduates, 83 percent of Latino students and 76 percent of Black students utilized a public institution.²¹ The reliance of Massachusetts' students of color on public institutions illustrates how essential it is from an equity standpoint to focus resources on making these institutions more affordable and improving their completion rates.

Enrollment of Recent Graduates into Public 2-Year Colleges



Data: 2015 Massachusetts Department of Education Statewide Data Reports - Data reflects only college attendees choosing to stay in Massachusetts IHEs. National data from 2012 Beginning Postsecondary Student Survey.

3. The High Price of Massachusetts' Public Institutions of Higher Education

Many recently enacted 'free' college promise and college affordability initiatives cover only tuition and/or fees, despite the reality that attending college entails costs far beyond tuition and fees. Nationwide, average room, board, living expenses, books, and supplies together cost more than combined tuition and fees.²² Unfortunately, when these additional costs are unmet, students end up working longer hours at out-of-school jobs — which reduces college attendance intensity and decreases academic performance — and/or end up borrowing large sums in student loans. If the student's out-of-school work level becomes too demanding, it may force him or her to reduce college attendance to part time. If this happens, the student is *nearly five times more likely to drop out* as compared to a full-time student.²³

If a student chooses to borrow additional money to make up for unmet financial need, they face long-term economic risks. Student loan borrowers who fail to complete their degrees are four times more likely to default on loans that can almost never be discharged in bankruptcy.²⁴ Because employers increasingly check credit reports on prospective employees, default can significantly damage a borrower's likelihood of getting a job, not to mention marrying, or owning a home.²⁵ In part because of

these risks, high net price (the total cost of attendance minus grant and scholarship aid) tends to have disparate racial and ethnic impacts. A number of racial and ethnic groups have economic and cultural perspectives that make them disproportionately skeptical of taking on debt to fill the unmet need gap. For instance, Latino students often come from debt averse families, which in turn results in heightened part-time enrollment, full-time work, and a higher likelihood of dropping out.²⁶ In other words, college debt, while a good investment for some, is often too risky and dampens or eliminates the socioeconomic benefits of higher education.

One explanation for the high levels of under-matching seen among Massachusetts' Latino college students is the especially high price of public colleges in the Commonwealth as compared to public colleges in other states. Massachusetts' public institutions — especially four-year institutions — have net

prices for (i.e. total cost of attendance after grant aid) that are much higher than the national average. In fact, **Massachusetts' public four-year colleges have an average net price that is twenty five percent higher than the national average.**²⁷

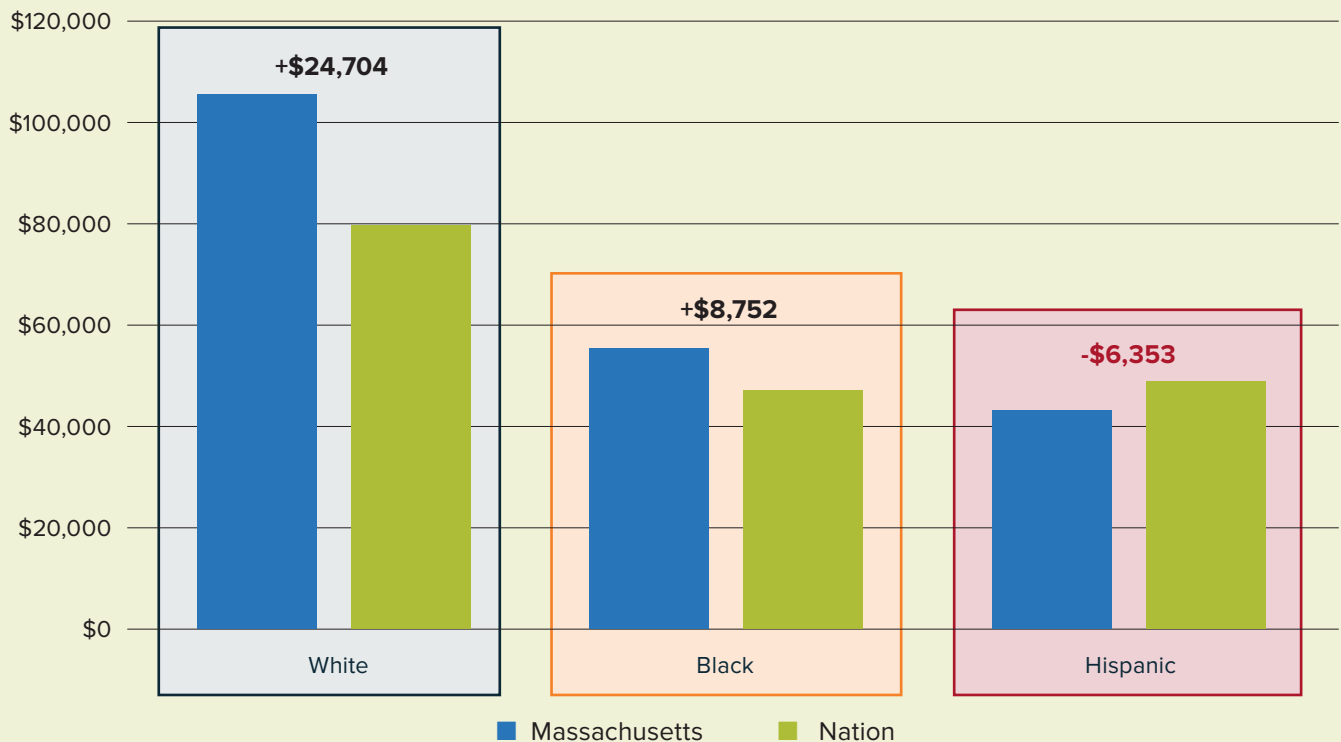
Why are Massachusetts' postsecondary institutions so expensive? First, while tuition is low, required fees are very high in the state. Average fees at a Massachusetts' public four-year institution total approximately \$9,400 per year, which is over \$1,000 more than the national average. On top, average room and board for a four-year college in Massachusetts is \$10,985 per year, which is approximately \$500 more per year than the national average. This makes a free-tuition promise model particularly poorly suited for the state, as it will only cover a small percentage of the overall cost students need to cover.



Further, Massachusetts does not provide much in the way of state student financial aid to public college students as compared to nearby states. For Massachusetts' four-year public college students, average state and local grant aid is only \$1,252 per year. For two-year community college students, it is approximately \$500 per year. In contrast, nearby New York State gives its four-year students 77 percent more in grant aid per year, and its two-year students more than three times as much in additional grant aid per year as Massachusetts. New Jersey gives its four-year students nearly \$2,000 per year in state grant aid, and its two-year students nearly 25 percent more in grant aid than Massachusetts.²⁸

High net price hits Massachusetts' Latino families particularly hard. In 2016, the median income for White families in Massachusetts was nearly \$25,000 more than the national median for White Americans — \$104,993 compared to \$80,289. For Massachusetts Black families, median income was nearly \$9,000 higher than the national Black family median income — \$55,628 compared to \$47,056. But for Massachusetts Latino families, median income was less than half the income of their White counterparts and also over \$6,000 less than national Latino median family income — \$43,186 compared to \$49,539.²⁹ These income inequities make Massachusetts' colleges, *especially four-year institutions*, prohibitively expensive for large sectors of the population and will have an especially large impact on the Latino population — one which is already more debt averse than other groups on average, when it comes to college selection.³⁰

Median Household Income by Race/Ethnicity



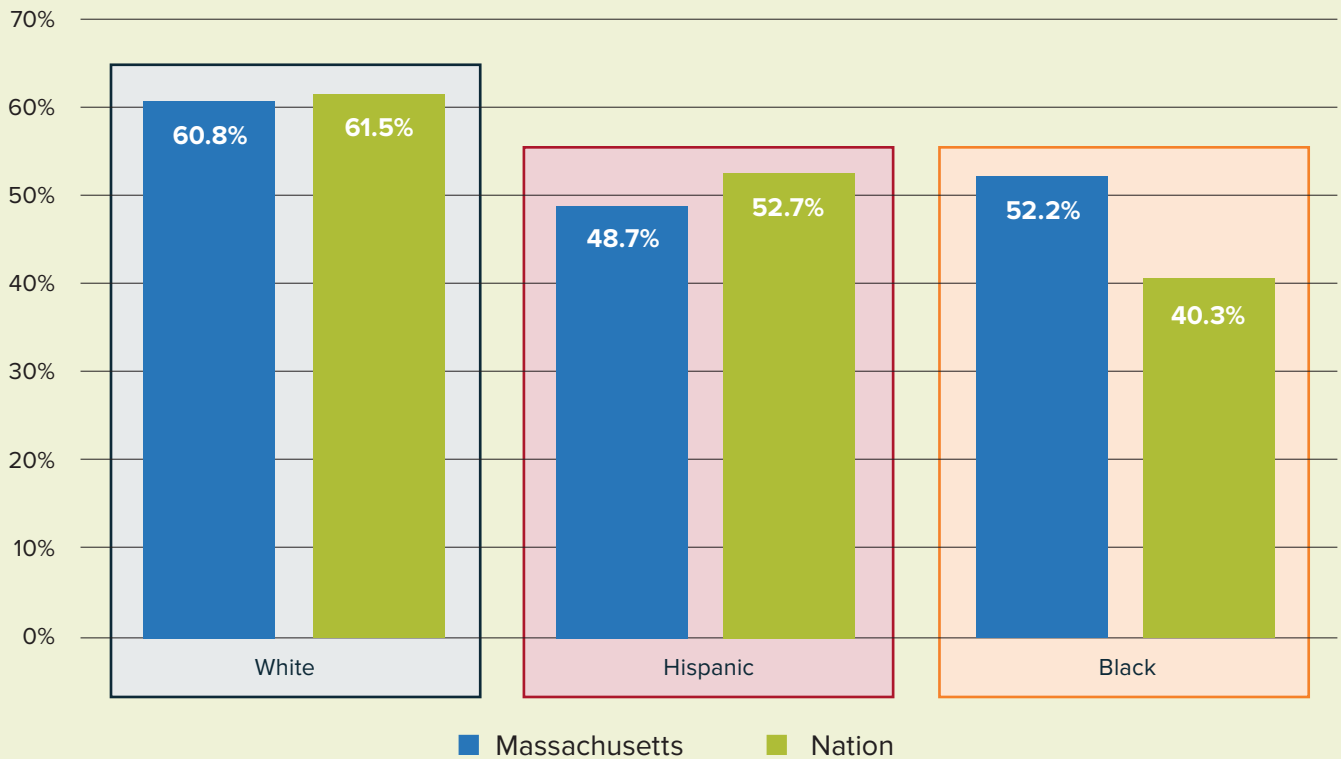
Data: 2016 American Community Survey Data

4. College Completion in Massachusetts

Reflective of academic preparation levels and college selection, there is a mix of good and bad news when it comes to degree completion in Massachusetts. *Our most striking finding, however, is that Massachusetts has one of the largest White-Latino public college graduation gaps in the country – ranking 37th worst in the nation out of the 50 states plus Washington D.C. For perspective, the White-Black graduation gap in Massachusetts ranks as 3rd best in the nation.* There are a number of possible explanations, but first, consider the data.

Massachusetts' four-year public colleges generate overall completion rates slightly higher than the national average (figures below). This is driven largely by Black students, who earn bachelor's degrees at Massachusetts' public four-year colleges at a far higher rate than the national average – 20 percent higher. In contrast, Massachusetts' Latino students complete public four-year colleges at a rate four-percentage points lower than the national average. What is more notable, however, is that Massachusetts' Latino students graduate at a rate 20 percent lower than their White peers.

Graduation Rates at 4-Year Colleges (150% Regular Time)

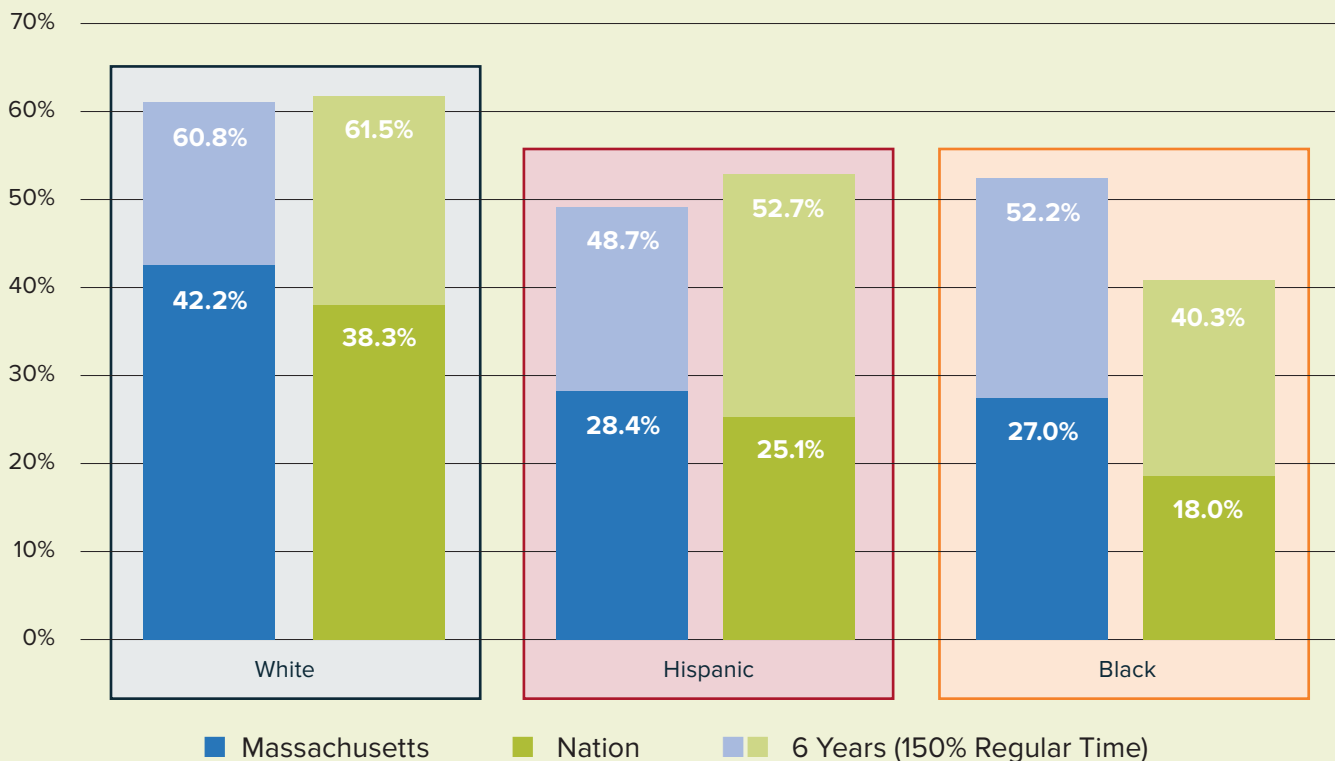


Data: 2015 IPEDS - Department of Education. Public, 4-year, Full Time, First Enrollment, Bachelor's Degree Seeking Cohort Only.

OUR MOST STRIKING FINDING, HOWEVER, IS THAT MASSACHUSETTS HAS ONE OF THE LARGEST WHITE-LATINO PUBLIC COLLEGE GRADUATION GAPS IN THE COUNTRY – RANKING 37TH WORST IN THE NATION OUT OF THE 50 STATES PLUS WASHINGTON D.C. FOR PERSPECTIVE, THE WHITE-BLACK GRADUATION GAP IN MASSACHUSETTS RANKS AS 3RD BEST IN THE NATION.

As shown below superimposed under six-year graduation rates, on-time graduation rates (i.e. graduation in four years) at Massachusetts' four-year public colleges are also better than the national average. Approximately one third of Massachusetts' four-year college graduates graduate in their fifth or sixth year of enrollment.

Graduation Rates at 4-Year Colleges (100% Regular Time)

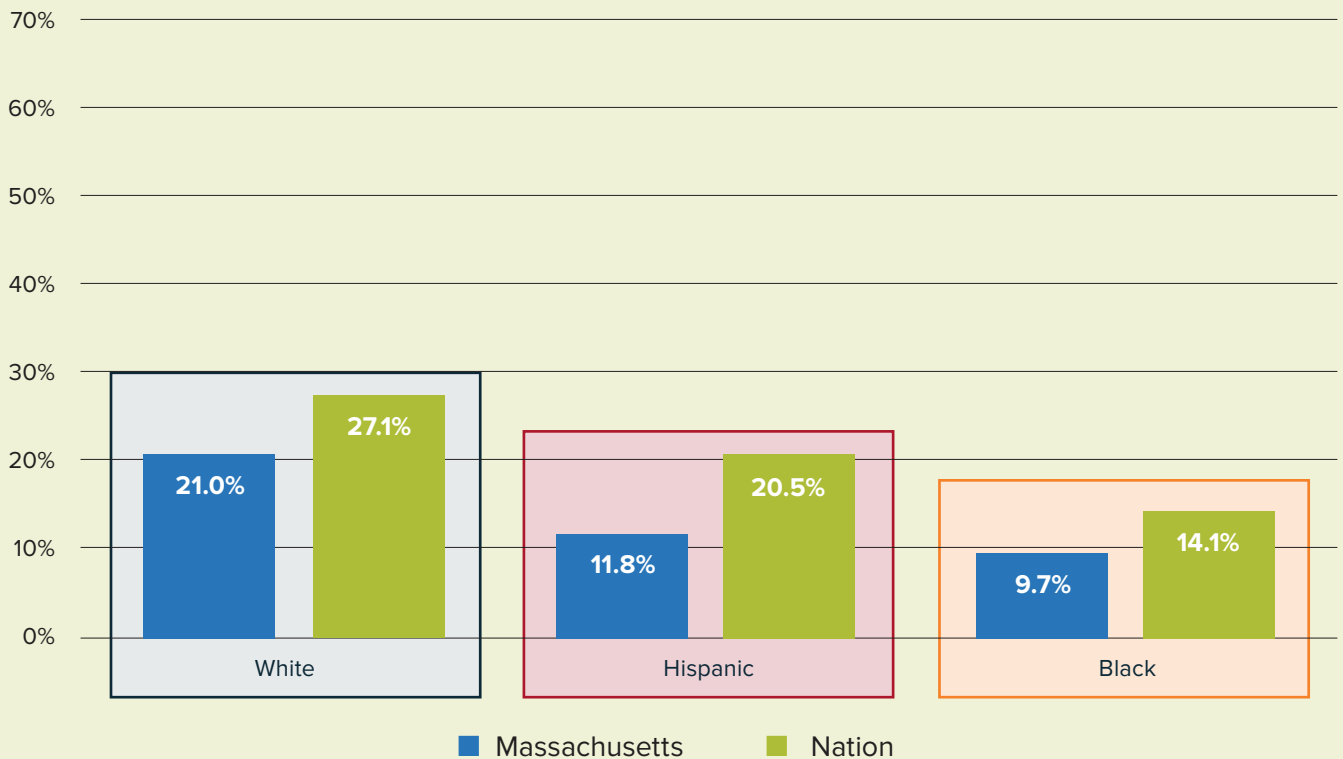


Data: 2015 IPEDS - Department of Education. Public, 4-year, Full Time, First Enrollment, Bachelor's Degree Seeking Cohort Only.

Most disconcerting is how low community college graduation rates are — extraordinarily so for racial and ethnic minorities (see figure below). Over 80 percent of first-time, full-time associate's degree seeking Massachusetts' community college students will not earn a degree within three years of initial enrollment. In fact, a first-time, full-time Massachusetts community college student is significantly less likely to complete his or her associate's degree within three years of initial enrollment relative to the national average. While it is worth recognizing that community colleges tend to serve more non-traditional, working, transfer, and part-time students, these rates are still lower than the national average for first-time, full-time students in two-year institutions. Also, keep in mind that first-time, full-time student completion rates are three times higher than part-time student completion rates, so it is likely the overall Massachusetts community college completion rates are even worse.³¹

The Massachusetts community college completion gap is particularly shocking for students of color who disproportionately attend those institutions. **Compared to the national average, Massachusetts' Black students graduate at a rate 31.4% lower than other community college students nationally. For Massachusetts Latino students, the community college graduation rate is an appalling 42.6% lower than the national average.** This is especially concerning given the disproportionate rate at which Latino students attend two-year institutions.

Graduation Rates at 2-Year Colleges (150% Regular Time)

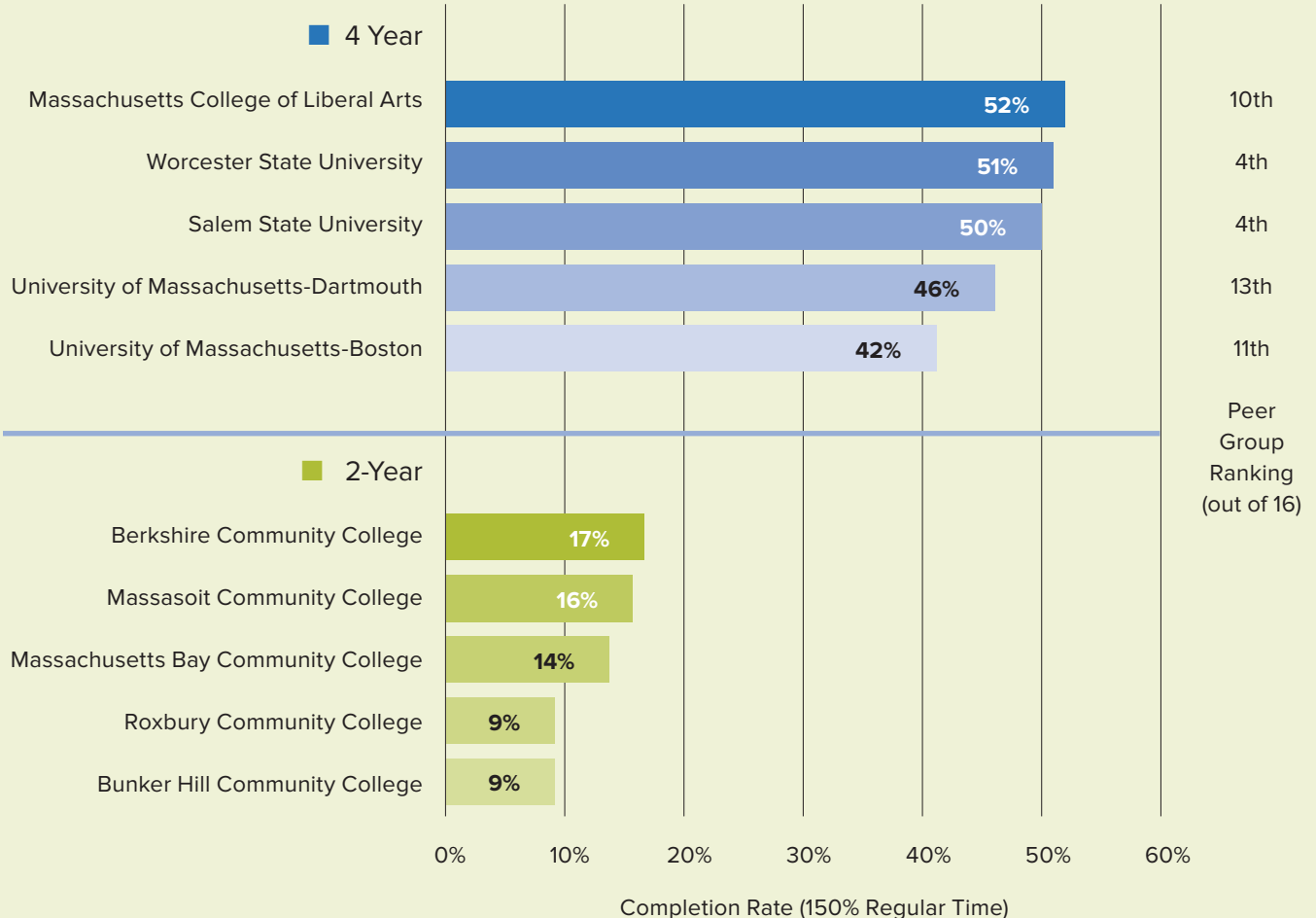


Data: 2015 IPEDS - Department of Education. Public, Full Time, First Enrollment

To be clear, we do not intend to suggest all community colleges or public universities in Massachusetts are bad actors. Colleges serving similar student bodies can generate wildly different results. For instance, the University of Massachusetts at Amherst and the University of Tennessee have similar student bodies. They have similar percentages of underrepresented minorities, and similar academic performance among their incoming freshmen in terms of GPA and SAT score. Yet, the University of Massachusetts at Amherst has a six-year graduation rate that is nearly 10 percent higher than the University of Tennessee, and is the highest performing public institution in the Commonwealth.³²

Below, we list the five worst two-year and the five worst four-year institutions by completion rate. For each of the four-year institutions, we list a ranking among sixteen peer institutions, determined by similarities across a number of factors including the student body served. Institutions like UMass-Boston and UMass-Dartmouth fare poorly among their national peer groups, ranking in the bottom third of their respective groupings. Both institutions have six-year graduation rates below 50 percent.

The Worst Massachusetts Colleges for Completion (150% Regular Time)



Data: 2015 IPEDS - Department of Education. Public, 4-year, Full Time, First Enrollment, Bachelor's Degree Seeking Cohort Only for 4-year colleges. Peer Group Rankings from College Results Online.

5. Massachusetts Aid for the Wealthy

Higher education is an engine of economic mobility and overall tremendous vehicle for closing income and employment gaps. If a person holds an associate's degree, they are over 50 percent more likely to earn over \$60,000 per year by age 35 than a similar person holding only a high school diploma. If the same person holds a bachelor's degree, they are over 250 percent more likely than a high school graduate to be making \$60,000 a year by age 35.³³ Furthermore, the value of higher education has trended upward over the past half century.³⁴

Unfortunately, despite Massachusetts' high median incomes and above average overall graduation rates, some subgroups of students in Massachusetts are being left behind – especially Latino students, who face especially tough economic circumstances in the Commonwealth. If the Commonwealth wishes to close education opportunity, degree completion, and income gaps, it would be prudent to either increase its overall resource commitment to college affordability and completion for underserved youth or redirect existing resources from grant and tax aid programs that primarily benefit wealthy individuals into programs designed to close education inequities.

What are some existing programs that could be better targeted? Consider the John and Abigail Adams Scholarship program, a “merit-based” scholarship allowing for a tuition waiver for up to eight semesters of undergraduate education at Massachusetts' state colleges or universities. To get this scholarship a student has to meet high Massachusetts Comprehensive Assessment System (MCAS) benchmarks and have combined MCAS scores placing them in the top 25 percent of students in the graduating class in their district.³⁵ Unfortunately, studies have shown that so-called merit-based grants disproportionately benefit White and upper-income students. Furthermore, merit-based scholarships do little to increase graduation rates, because the students who get merit-based scholarships are statistically more likely to graduate regardless.^{36,37} In fact, some researchers suggest that the Adams scholarship, in particular, actually decreases graduation rates because students will choose lower quality institutions in order to receive the additional scholarship funding.³⁸

Likewise, education tax benefits often disproportionately help the wealthy. For instance, in Massachusetts, students or (if the student is a dependent) their families, are allowed to claim a tax deduction based on tuition and mandatory fee payments, minus any scholarships, grants, or financial aid. Recipients are allowed to take deductions equal to the amount by which tuition payments exceed 25 percent of the taxpayer's adjusted gross income (AGI). Tax deductions such as these scale with the price of college – therefore, it is more likely to benefit people who attend high priced private schools.³⁹ The Tax Policy Center found that half of the benefits from the federal tuition deduction go to individuals earning more than \$100,000.⁴⁰

Or consider that Massachusetts' provides a supplemental tax deduction of up to \$2,000 to any owner of a 529 savings account, regardless of income.⁴¹ The Commonwealth's deduction supplements the tax benefit – tax-free interest on earnings - that already applies to all 529-account investments withdrawn for educational purposes. These represent a pair of benefits that accrue predominantly, albeit not exclusively, to relatively wealthy families. Estimates suggest that 75 percent of government expenditures on 529s go to families earning above \$100,000.⁴² In contrast, only 17 percent of families making below the poverty level utilize 529s. For families making between \$35K-\$110K, only 30 percent utilize such an account.

These kinds of grant and tax aid programs do not target resources to the people who need them most. In our proposals, we look to reform programs like these to better serve the populations who need the most help.

III. A REAL COLLEGE PROMISE PLAN FOR MASSACHUSETTS

To address the challenges facing Massachusetts' higher education system, we recommend a comprehensive plan designed to improve academic preparation in high school, public college selection, affordability, and completion. Below is a five-part plan and suggested revenue sources to finance it.

RECOMMENDATION 1: Student Loan Debt-Free Public Higher Education — A real college promise plan should cover the total cost of attendance (after expected family contribution as defined in federal law) to any public four-year or two-year institution of higher education in Massachusetts for talented, hard-working students (that have completed a MassCore track or equivalent) who come from households making less than \$75,000 a year.

Massachusetts' public colleges are extremely expensive relative to those in other states. Indeed, rising net price after all grant and scholarship aid has made the cost of college untenable for many low- and middle-income families, forcing them to spend massive portions of their incomes or borrow enormous sums to pay for college. Compounding the problem, some disadvantaged groups — in particular, the Latino population — are more likely to be debt averse than others. The high cost of college attendance is decreasing their likelihood of pursuing higher education, channeling them to two-year schools even when they are prepared for four-year institutions, and leading them to take on heavy out-of-school workloads. This is, in turn, heightens their likelihood of dropping out and worsens inequality.

This unsustainable pattern should be addressed by providing a real debt-free college promise targeted to the students who need it most — those coming from disadvantaged backgrounds, low-income, and hard-pressed middle-income families. We recommend a student responsibility preparation stipulation to make sure that the resources are spent on the students who are most likely to succeed, maximizing the return on investment. Guaranteeing debt-free college, as opposed to the easier and less expensive tuition-free college guarantee, better ensures the Commonwealth is increasing true college access and reducing the financial burden and economic risk associated with higher education that is otherwise placed on students.

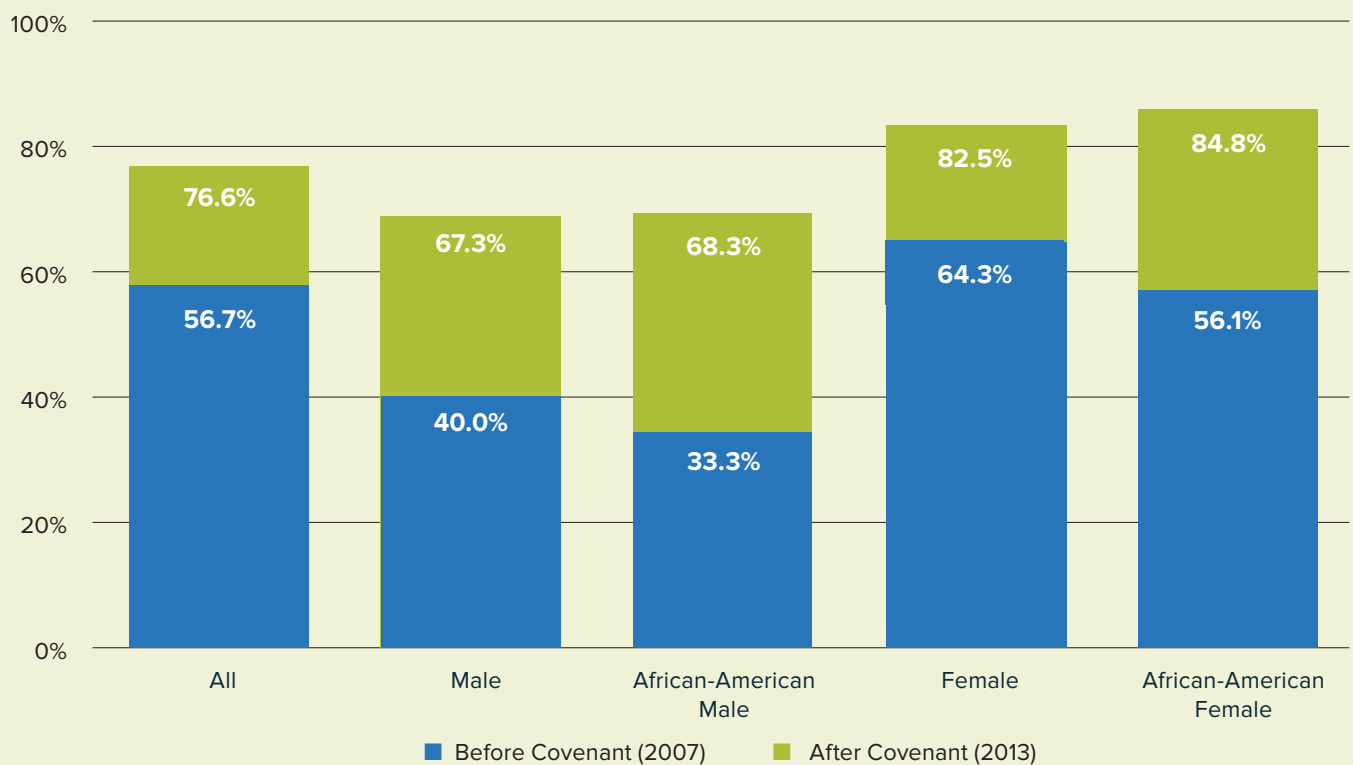
The evidence shows that a debt-free promise works, particularly for students of color. In 1990, for example, **Indiana** started its 21st Century Scholar program guaranteeing full cost college scholarships to low-income students as early as sixth grade. Since that time, Indiana has seen its college participation rate for low-income students increase by 23 percentage points — seventh highest in the nation. **Tennessee's** relatively recent statewide community college promise initiative already has

produced a near 50 percent increase in applications for federal student aid. State leaders estimate an additional 50,000 students will attend community college this fall. **Kalamazoo, Michigan's** promise initiative has resulted in an increase of 0.7 in the GPAs of African American high school students. Imagine the impact on high school students of going from a 2.3 to a 3.0 GPA in terms of college aspiration, selection, and success.

Most interesting is the **University of North Carolina's** "Carolina Covenant," a debt-free promise for disadvantaged students that is also supplemented with additional student supports at the postsecondary level. Since the start of this program in 2003, the Black male student on-time graduation rate *has more than doubled* from 33.3 percent to 68.3 percent. Overall, the gap in four-year graduation rates between those that are eligible for the Covenant and those who were not has shrunk from 17.7 percentage points to 3.6 percentage points.⁴³ We rarely see interventions that have such a positive impact on racial and ethnic minority male students.

Estimated Cost in Massachusetts: Varies depending on offset options, but universal coverage with no offsets would cost approximately \$560 million. With targeting to hard-pressed middle- and low-income families, the cost is approximately \$460 million and we recommend a series of potential additional offsets.

**The Carolina Covenant: Rise in Four-Year Graduation Rates
Comparing Before and After Covenant (2007 vs. 2013)**



RECOMMENDATION 2: A College Prep Track for All — Make the MassCore track of college prep courses available at all schools and make it the default curricular track for all students.

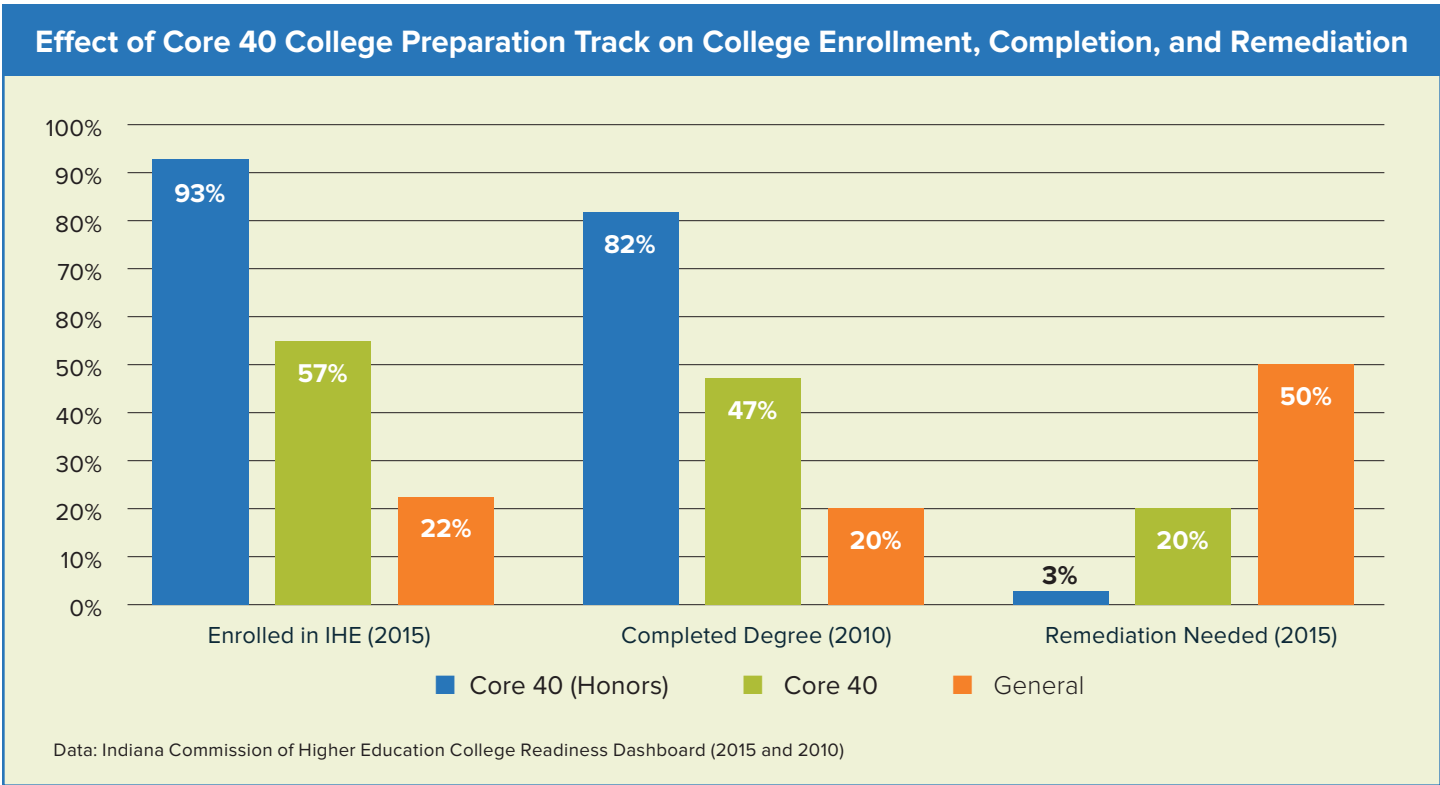
MassCore is a college and career ready diploma track that meets the minimum admissions requirements for Massachusetts’ public four-year universities, but there are entire public high schools in Massachusetts that have no MassCore enrolled students, do not even offer a MassCore track. By failing to offer or encourage the MassCore program, these schools essentially lock out their students from Massachusetts’ four-year institutions of higher education.

We assert the MassCore program should be made accessible to all students with attendant support services, such as extra tutoring (see Recommendation #3), and furthermore, it should be the *default track* that students are put on, with an opt-out (where parents must sign off) if a student wishes to leave the track. By making MassCore the default track, policymakers would “nudge” students to pursue better academic preparation in high school and empower them to have a greater choice among colleges. Parents are unlikely to opt their children out of stronger academic programs when offered the opportunity.⁴⁴

In fact, Massachusetts’ students at all achievement levels have proven that when challenged with higher content standards, they achieve at higher levels.

This type of college preparatory default track initiative has worked in Indiana with its Core 40 program (shown below). Indiana requires students who wish to drop to a less rigorous track to undergo counseling with their families in order to understand the implications of dropping out of the college prep program. As a result of the Core 40 default, Indiana students have persisted with more rigorous high school curricula and, when coupled with additional higher education aid as we recommend here, experienced a strong increase in enrollment at four-year institutions.⁴⁵ Among those who complete the Core 40 with Honors, an even more rigorous curricular track, 93 percent enroll in college and 82 percent complete their degrees within six years. For the basic Core 40, 57 percent enroll in college and 47 percent complete in six years. Finally, for those who opt out, only 22 percent enrolled in college, and a little over 20 percent completed within six years. As an added bonus, Core 40 students are far less likely to require remedial courses in college, saving students, the state, and institutions additional resources.

Estimated Cost in Massachusetts: \$46.4 million⁴⁶



RECOMMENDATION 3: Extra, Individualized Teaching for Underprepared High Schools Students — Provide aid to local school districts and community-based organizations for supplemental MassCore academic support services (i.e. extra teaching directed at helping disadvantaged students on a college preparatory track) and general high school improvement.

There are a number of examples of successful academic support programs for low-income high school students nationwide with different levels of investment required for each. A promising intensive model is that of the California-based College Track program, founded by Laurene Powell Jobs. It provides

low-income high school students with additional support preparing for college entrance exams, one-on-one and small group tutoring, structured study groups, and assistance with college and career goal setting. College Track reports 94 percent of served students are accepted to four-year colleges, and those students graduate at a rate more than four times the average rate for low-income, first generation students nationally. However, the program costs \$6,263 per enrolled high school student, per year.⁴⁷

A less expensive option is to model support services as per the Match/SAGA program. It is a proven tutorial program designed to remediate students' skill deficits. Match/SAGA students participate in a daily two-on-one tutoring session during normal school hours with frequent assessments and benchmarks to track progress.⁴⁸ Tested in low-income neighborhoods in Chicago, these kinds of tutoring programs showed remarkable capacity to close racial achievement gaps on NAEP tests by approximately one-third. Or, put into a GPA scale, the program improved

math grades by about 0.58, or more than half a letter grade on average. To an admissions committee, the difference between a C student and a B- student is meaningful. Better yet, a Brookings Institute analysis of this program estimates it costs approximately \$2,500 per student at scale.⁴⁹

Finally, at the very minimum, Massachusetts can allow schools more latitude to make decisions in the interest of their students by embracing further development of school innovation zones. These zones give authority to schools and local districts to operate more like public charter schools – to make decisions on curriculum, staffing, scheduling, and resource allocation in order to meet the distinctive needs of their different student bodies. This type of zone has been piloted in Massachusetts in Springfield beginning in 2014, but it is too early to document progress. However, in other parts of the country, school districts with a longer history of embracing innovation zones have shown encouraging growth. For example, in Chicago's Academy for Urban School Leadership (AUSL) program, three quarters of the schools scored in "good standing" in 2016, up from only 41 percent two years previously.⁵⁰ The good news is the Massachusetts legislature is presently considering House Bill 304, which makes the formation of these zones much easier.⁵¹ The passage of this legislation would be instrumental in giving schools the capacity to serve their students better.

Estimated Cost if supplied to all low-income high school students in Massachusetts: \$105 million on the low end to \$270 million for a College Track-like initiative on the high end.⁵²



RECOMMENDATION 4: A College Advising Corps for Smart School Selection – Install a full-time, professional college advising caseworker devoted exclusively to college counseling in every high school supplemented by recent college graduates working as Teach for America-like members helping students on the path to and through college.

Better academic preparation and an increase in college aid are essential to improving college completion and affordability, but “soft interventions” like college advising also have a marked effect on both for only a small investment. We recommend a new, full-time college counselor be added to every high school supplemented by a recent college graduate to help ensure every student develops a post-high school plan, navigate the college application, selection, and financing process, and follow up in guiding students through postsecondary completion. The addition of a counselor devoted exclusively to post-high school guidance should free up traditional school guidance counselors to do the social work they are specially trained to do.

Examples of successful programs are the “KIPP Through College” program at KIPP schools and similar efforts in the Washington, DC Public Schools system. KIPP created a program that equips each high school with a counselor who ensures SAT/ACT preparation and participation, provides assistance in applying for federal and private financial aid, provides students with individualized “smart lists” of colleges where they should consider applying, and provides support services after a student enrolls into a higher education institution. In 2013, only 10 percent of KIPP seniors applied to six or more colleges. By 2016, that rate was up to 54 percent.⁵³ Despite the economic disadvantages of their students, KIPP’s alumni are nearly 50 percent more likely than the national average to enroll in college and are on par with the national average across all income levels in their likelihood of graduating with a bachelor’s degree.⁵⁴

A helpful resource for prospective and new college students are peers and near peers who have recently been through the process successfully. Consider the independent, non-profit College Advising Corps (CAC) that trains and places recent college graduates in high schools to work as full-time college advisors. Students advised by CAC members are 30 percent more likely to apply to college, 24 percent more likely to be accepted, and 26 percent more likely to submit an application for federal student aid.⁵⁵ Bloomberg Philanthropies has invested millions into the program, expanding its capacity to reach students both through traditional means as well as e-Advising.^{56, 57}

We envision targeted aid to local school districts, non-profit organizations, and other community-based organizations engaged in high school student mentoring and advising with regard to college preparation, selection, finance, and completion. Our proposal of one additional professional counselor, and one College Advising Corps member at each public high school (808 new counselors in total) will reduce the student to counselor ratio in Massachusetts from approximately 420-to-1 down to approximately 310-to-1. While this still falls short of the American School Counselor Association’s recommended ratio of 250-to-1, it will still provide much more counseling access to students than the national average (student-to-counselor ratio of nearly 500 to 1).⁵⁸

Estimated Cost for Professional Counselors: \$42.8 million⁵⁹

Estimated Cost for College Advising Corps Counselors: \$15 million⁶⁰

RECOMMENDATION 5: Direct Aid to Massachusetts' Public Colleges and Universities – Recommended is dedicated financial support for institution of higher education-generated and institution of higher education-based efforts to boost completion. Accountability standards should be built in for institutions that fail to meet basic improvement benchmarks.

If two schools serving similar student bodies are getting extremely different graduation rates, then the potential is there for the lower performing institution to bring itself up to the level of its peers. A quality college promise plan should provide dedicated resources to institutions with low completion rates, like UMass Dartmouth or UMass Boston, in order to invest in efforts targeted at boosting completion.

Models of colleges that have improved completion rates and closed gaps between racial and ethnic minority and non-minority students abound. Over the past several decades, Georgia State University, for example, has devised and used predictive analytics to work out early warning signs for students at risk of failing out. With over 700 red flags, the school provides automated interventions like text messages to students, face-to-face interventions, course prioritization, and small amounts of

emergency financial aid to make sure students stay on track. The result has been a 22-percentage point rise in graduation rates in ten years.⁶¹

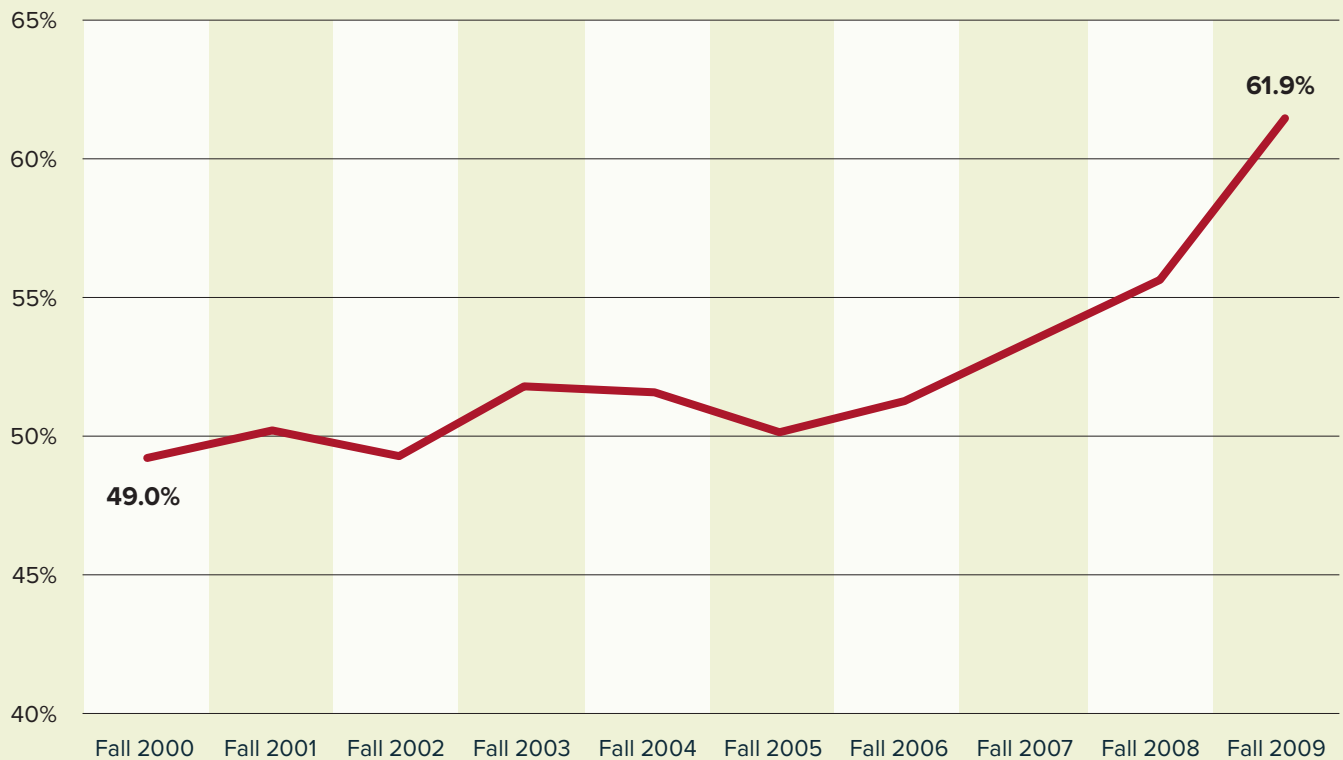
The City University of New York is using another successful approach. Their Accelerated Study to Associate Program (ASAP) ensures students receive sufficient financial aid to attend full-time, get individually tailored mentoring and college advising, emergency aid for unexpected family needs, transportation aid, books, special registration priority, community interaction, and enhanced career supports. An MRDC study finds that ASAP has nearly doubled the three-year graduation rate for associate's degree seekers.⁶² It is being expanded in New York as well as Ohio.

Cheaper than ASAP, but also generating

positive results at the community college level is Fort Worth, Texas' *Stay the Course* program. This program assigns each student a trained social worker, called a "navigator," that helps develop a comprehensive social services and academic support plan designed to help the student achieve his or her education goals. Caseloads are kept to less than 35 students per navigator. Individual plans are reviewed and updated every 90 days, building a bond between the social worker and the student. Students are provided referrals to off-campus social services, such as housing and food assistance, and supplied mentoring, academic coaching, and emergency financial assistance, as needed. Navigators help students access everything from transportation assistance to childcare. A recent National Bureau of Economic Research published study estimates the intervention increases the likelihood of a student receiving an associate's degree by a massive 16 percentage points — all at a cost of only \$1,880 per student, per year.⁶³ Similar approaches to all of these programs have been taken by California State University – Fullerton and illustrated marked potential (next page).



Graduation/Retention Rates for First-Time-Full Freshman Cohorts — California State University Fullerton



Data: 2015 IPEDS - Department of Education. Public, Full Time, First Enrollment

We propose direct aid to implement these types of institution of higher education-based completion programs at under resourced public colleges in Massachusetts – especially those institutions that serve large numbers of low income or disadvantaged students (i.e. where Pell Grant recipient enrollment is 33 percent or higher).⁶⁴ However, in return for additional funds, we submit institutions need to have some “skin in the game” and be held accountable for their completion rates – especially for disadvantaged low-income students as well as students of color. Benchmarks for on-time graduation rate improvements and other outcomes, such as employment or continued education, should to be set for institutions to hit within five years. Institutions that fail to meet these benchmarks should be required to change leadership or risk completion and outcome improvement funding removed. Invest in institution reform and insist on results. Schools that do not want that bargain can forgo up-front direct aid.

Estimated cost: \$50.6 million - \$152 million⁶⁵

IV. PAYING FOR A “REAL COLLEGE PROMISE”

We recognize a real debt-free college promise plan is not inexpensive. In order to make sure it is targeted to the students who need it most, we propose a series of design elements that limit cost. First, we suggest that the promise be only made to students from families making under \$75,000 a year. We estimate that such a program in Massachusetts would cost approximately \$460M per year. For additional savings, we suggest any Massachusetts debt-free promise program include a student-responsibility work requirement equal to an average of 10 hours per week, where half of earnings are dedicated to college costs. Students who work a modest amount – 10 to 15 hours a week – while enrolled full-time, on average do better academically than those who do not work outside of school at all.⁶⁶ The former take their studies more seriously and manage their time better. However, too much outside-of-school work – the tipping point is between 15 and 20 hours a week – dramatically undermines academic success. We estimate savings associated with a minimum work requirement to total \$138.6M per year.⁶⁷ Finally, we suggest a Massachusetts’ promise program be limited to only those from Massachusetts’ resident families. We estimate those savings to be \$45.8M per year.

Regardless of design options selected, ensuring a debt-free college plan, as opposed to a tuition-free college plan or one limited to community colleges, is the keystone of a quality college promise. It should be non-negotiable.

SUMMARY OF FULL COLLEGE PROMISE COSTS FOR MASSACHUSETTS

Program(s)	Current Expenditures
Implement MassCore college prep track for all.	\$46.4M
Assistance to school districts and community-based organizations for additional academic support services.	\$105M
Additional Full-Time Counselors	\$42.8M
Additional College Advising Corps counselors	\$15M
Providing Debt Free College to students from families making <\$75K per year.	\$460M
• Offset savings: Student Responsibility 10hr/week work requirement with 50% contributions to college costs.	-\$138.6M
• Offset savings: Limit only to MA residents	-\$45.8M
Direct Aid to Under Resourced Public Colleges	\$50.6M – \$152M
HIGH END TOTAL ESTIMATE	\$821.2M
LOW END TOTAL ESTIMATE	\$535.4M

Our plan, if fully implemented, is projected to cost between \$535 million and \$820 million per year. In order to raise that level of capital, we propose cuts and alterations to existing programs that would save nearly \$160 million in current investments. And we recommend using one-quarter of resources generated from the Fair Share Tax Amendment initiative, commonly known as “the millionaires’ tax” to make up the rest. The following section outlines offsets that could be embraced in whole or part in order to help provide resources for a comprehensive debt-free college promise program in Massachusetts.

THE PRIMARY PAY-FOR: The Fair Share Tax Amendment

On the Massachusetts’ ballot in 2018 will include the Fair Share Tax Amendment (the so-called millionaire’s tax). This proposal is projected to raise \$2 billion per year by raising taxes on incomes over \$1 million by 4 percent.⁶⁸ *Already, expected to be generated funds are earmarked for unspecified education and infrastructure spending.* We propose that approximately 25 percent of expected to be generated resources be dedicated to funding a debt-free college promise in Massachusetts. This potential massive influx of resources into education associated with the millionaire’s tax presents an optimal opportunity to develop and implement an ambitious and comprehensive college promise plan.

Estimated value: ~\$475 million

ADDITIONAL OFFSET #1: End Massachusetts’ non-means tested tax deduction for 529 plan contributions

As highlighted earlier, Massachusetts’ provides a supplemental tax deduction of up to \$2,000 to any owner of a 529 savings account, regardless of income.⁶⁹ These types of accounts disproportionately benefit upper-income families who have the knowledge and resources to put into them.⁷⁰ A 2016 study conducted by Fidelity Investments and the Massachusetts Educational Financing Authority found that 46 percent of Massachusetts’ families report owning a 529 savings account.⁷¹ Massachusetts has approximately 1.6 million families.⁷² This would suggest that approximately 750,000 families are taking a deduction. If the supplemental Massachusetts deduction were capped by income to apply only to households with \$100,000 in taxable earnings or less, we estimate approximately \$5.6 million could be saved annually. Further, 529s can be spent at any college, nationwide – meaning that Massachusetts is subsidizing money that may potentially end up in another state’s coffers. If the deduction were eliminated entirely in the context of a guaranteed free public two or four-year college education for all, approximately \$7.5 million could be saved annually. We recommend limiting the tax deduction to only apply to families making less than \$100,000 per year.

Estimated Savings: \$5.6 million+



ADDITIONAL OFFSET #2: Restrict Public Aid to Massachusetts’ Wealthiest Private Colleges

Last year, Massachusetts spent approximately \$96 million on need-based student aid programs through the MassGrant and Gilbert Grant financial aid programs. Nearly one-third of that sum went to Massachusetts’ private colleges, including approximately \$8.6 million that went to 13 private four-year colleges and universities in Massachusetts, such as Harvard and MIT, with endowments of over \$500 million.⁷³ It seems unreasonable to send over \$8.6 million in taxpayer funds for student aid to institutions that have endowments over \$500 million, including over \$600,000 to Harvard – an institution with the largest endowment in the world, valued at over \$36 billion.⁷⁴ These wealthy institutions should fund student aid out of their own resources rather than rely on the public.

Estimated Savings: ~\$8.6 million.

ADDITIONAL OFFSET #3: Eliminate the Massachusetts College Tuition & Fees Tax Deduction

As already highlighted, the Massachusetts College Tuition and Fees Tax Deduction overwhelmingly benefits upper-income families. Eliminating this deduction will stop subsidizing wealthy students whose families can afford to subsidize their postsecondary education, and free up resources for Massachusetts' public institutions and the students with the most financial need.

Estimated value: \$42 million
(FY 2018 estimate)⁷⁵

ADDITIONAL OFFSET #4: End Capital Gains Tax Exemption to Massachusetts' Wealthiest Schools

When non-profits originally were provided tax-exempt status, it was because they provide a public good that the government has a vested interest in supporting.⁷⁶ Some of the nation's wealthiest institutions of higher education no longer need tax-exempt status to continue providing a public good, and in fact, many have accrued large endowments and investment funds.

The 13 colleges in Massachusetts with endowments over \$500 million have stockpiled a combined \$65 billion.⁷⁷ Where most private entities such as businesses and corporations with assets and investments are taxed on the increasing value of those assets, universities until recently have not been and in the future will only be taxed at 1.4 percent. The average annual growth of these endowments between 2010 and 2015 was over 40% percent, over \$4 billion annually.⁷⁸ By exempting these capital gains from state taxation that average citizens pay, Massachusetts is giving these ultra-wealthy institutions an enormous tax break. We propose ending the capital gains tax break for institutions with endowments over \$500 million, raising an estimated \$100 million or more for a college promise program designed to truly provide a public good.^{79, 80}

Estimated Value: \$100+ million

In total, these proposals value over \$631 million – enough to cover our proposed college promise program. The table below provides a basic summary of each.

SUMMARY OF FUNDING SOURCES FOR MASSACHUSETTS' COLLEGE PROMISE

Program(s)	Current Expenditures	Recommended Change	Savings/Income from Changes
Fair Share Tax Amendment	n/a	Allot 25 percent of Massachusetts' Millionaires' Tax to College Promise.	~\$475M
529 College Savings Plan Tax Breaks	\$7.5M+	Eliminate	\$5.6M+
Restrict Public Aid from Ultra-Wealthy Private Institutions	\$31M	Restrict aid for private institutions with endowments of more than \$500M.	\$8.6M
MA Tuition & Fees Tax Deduction	\$42M	Eliminate	\$42M
Eliminate Capital Gains Tax Breaks for Ultra-Wealthy Institutions	\$115 M	Remove tax breaks for institutions with endowments of more than \$500M.	~\$100M
Total	\$195.5M	—	~\$631.2M

V. THE RETURN ON MASSACHUSETTS' INVESTMENT

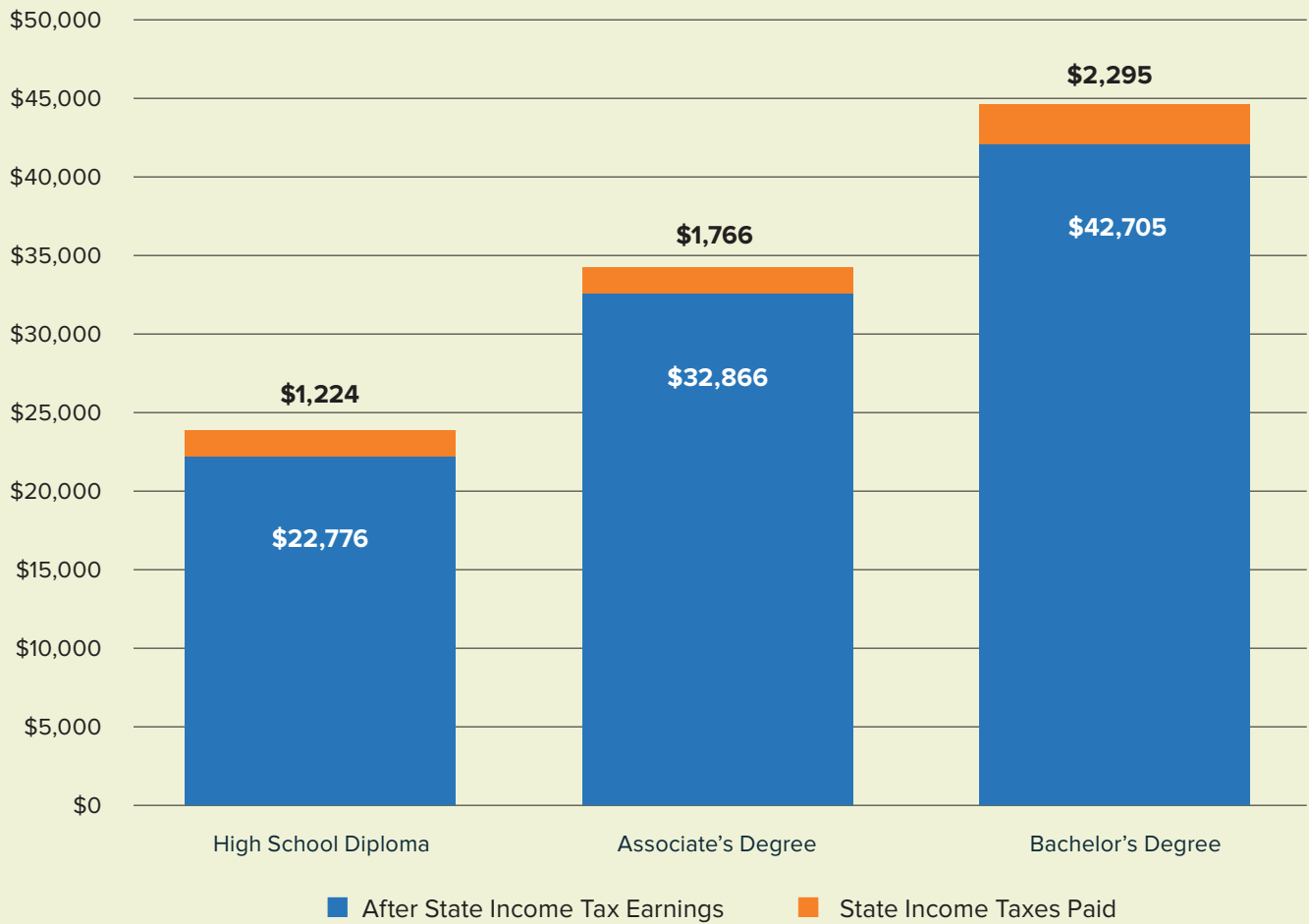
The sticker price investment for a quality college promise plan is high, but we also expect that the investment will prove worth it. First, as modeled other, less comprehensive college promise programs, like the Kalamazoo Promise, we expect degree attainment to increase. Indeed, the Kalamazoo Promise has seen increased bachelor's degree attainment of 12-percentage points. With an even more comprehensive plan, it would not be unreasonable to expect a 20-percentage point increase in overall completion rates.



Massachusetts can expect significant economic benefits to be associated with higher degree attainment rates. For instance, a 20-percentage point increase in completion could result in approximately 650 fewer student loan defaults per graduating class in the state.⁸¹ Median earnings for 24-35-year old bachelor's degree holders in Massachusetts are \$21,000 per year higher than those individuals with only a high school diploma. For associate's degree holders in the same age range, the median earnings are \$10,632 per year higher than high school graduates.⁸² If one utilizes the University of Massachusetts-Amherst's estimate of 80 percent of graduates staying in state that represents a massive increase in the potential tax base.⁸³ Indeed, assuming a very conservative three percent annual wage growth each year, and a standard forty-year career, then each additional associate's degree represents nearly \$41,000 in additional lifetime income tax, and

over \$82,000 in additional total state taxes, if no other changes are made to the tax code. A bachelor's degree is worth nearly \$81,000 in lifetime income taxes, and over \$163,000 in total state taxes. This makes a 20-percentage point increase in the graduation rates of both associate's and bachelor's degrees worth over \$570 million in lifetime tax benefits, per graduating cohort.

Median Earnings and State Income Tax Obligation by Education in Massachusetts (2017)



Source: 2017 Current Population Survey — 24-35 year-old personal earnings

This does not include increased GDP growth in the state, or other quality of life benefits that citizens get from additional education. For instance, bachelor's degree holders are 24 percentage points more likely to exercise at least once a week and are less likely to smoke or be of an unhealthy weight.⁸⁴ This means that higher education reduces health care burdens on the state. Bachelor's degree holders are more than twice as likely to volunteer, and more than twice as likely to vote, which is beneficial for the entire community.⁸⁵ Overall, the benefits of a quality college promise program dramatically outweigh the costs.

VI. CONCLUSION

Overall, Massachusetts' K-12 system is strong but still produces major gaps between White students and students of color. The Commonwealth's college graduation gap between White students and those from Latino families is particularly appalling given that Massachusetts Hispanic students graduate from high school more prepared for college than other historically disadvantaged students in Massachusetts and nationwide. Compared to other states, very high public college costs after financial aid and the spectra of student debt are undermining completion for all students in Massachusetts, but especially those from Latino families.

Students are under-matching into cheaper, less successful colleges. Disparate college preparation levels and high net price disproportionately drive Latino students to community colleges where the likelihood of degree attainment is substantially lower, even though many are qualified to attend public four-year institutions. Even among similar colleges in terms of price, admissions standards, and student characteristics, there are wildly different student outcomes.

This year there is a *significant opportunity for Massachusetts to address all of these issues* and develop the most advanced, sophisticated, and comprehensive statewide college promise plan in the nation. Most statewide plans have taken the college promise ball only a short distance, covering only two-year colleges, only covering tuition and fees, or failing to leverage change in K-12 education and provide additional student supports at the postsecondary level to improve completion. With the Fair Share Tax Amendment, there is a one-time opportunity to bolster higher education funding in an unprecedented manner. Voters and policymakers can ensure that their children and their children's children will be assured of high quality, affordable, higher education, and in return the state will see incredible economic returns as a progressive knowledge center. This is a real college promise.

ENDNOTES

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