

The Condition of College & Career Readiness 2018

Massachusetts Key Findings

Performance

- In the 2018 Massachusetts graduating class, 18,219 graduates (25 percent) took the ACT test with a Composite score average of 25.5. This compares to 16,651 (23 percent) with an average of 24.3 in 2014. Nationally, 55% of 2018 graduates took the ACT with an average Composite score of 20.8.
 - ~ There were 733 African American graduates from Massachusetts who took the ACT (4 percent) with an average Composite score of 20.6. This compares to 847 (4 percent) with an average of 21.2, and 688 (4 percent) with an average of 19.2, for the 2017 and 2014 graduating classes, respectively.
 - ~ There were 12,149 White graduates from Massachusetts who took the ACT (67 percent) with an average Composite score of 25.7. This compares to 14,253 (68 percent) with an average of 25.7, and 11,985 (72 percent) with an average of 24.6, for the 2017 and 2014 graduating classes, respectively.
 - ~ There were 1,268 Hispanic graduates from Massachusetts who took the ACT (7 percent) with an average Composite score of 22.8. This compares to 1,382 (7 percent) with an average of 22.6, and 953 (6 percent) with an average of 21.3, for the 2017 and 2014 graduating classes, respectively.
 - ~ There were 1,652 Asian graduates from Massachusetts who took the ACT (9 percent) with an average Composite score of 27.3. This compares to 1,841 (9 percent) with an average of 26.9, and 1,204 (7 percent) with an average of 25.4, for the 2017 and 2014 graduating classes, respectively.
- The 2018 Massachusetts graduating class average English score was 25.5. This compares to 25.4 and 24.0 in 2017 and 2014, respectively.
- The 2018 Massachusetts graduating class average math score was 25.2. This compares to 25.3 and 24.6 in 2017 and 2014, respectively.
- The 2018 Massachusetts graduating class average reading score was 25.9. This compares to 25.9 and 24.5 in 2017 and 2014, respectively.
- The 2018 Massachusetts graduating class average science score was 24.7. This compares to 24.7 and 23.5 in 2017 and 2014, respectively.
- In 2018, 56 percent of Massachusetts graduates met all four ACT College Readiness Benchmarks. This compares to 56 and 47 percent of 2017 and 2014 graduates, respectively.
 - ~ In 2018, 8 percent of Massachusetts graduates met zero ACT College Readiness Benchmarks. This compares to 8 and 11 percent of 2017 and 2014 graduates, respectively.
 - ~ In 2018, 88 percent of Massachusetts graduates met the ACT English College Readiness Benchmark. This compares to 88 and 85 percent of 2017 and 2014 graduates, respectively.
 - 2018 Massachusetts graduates taking more advanced English coursework demonstrated markedly higher average English scores than those who did not. In fact, 89 percent of Massachusetts 2018 graduates taking four or more years of English met the ACT English College Readiness Benchmark. This compares to 74 percent of students taking less than four years of English meeting the benchmark.

- ~ In 2018, 74 percent of Massachusetts graduates met the ACT Math College Readiness Benchmark. This compares to 75 and 72 percent of 2017 and 2014 graduates, respectively.
- ~ In 2018, 74 percent of Massachusetts graduates met the ACT Reading College Readiness Benchmark. This compares to 75 and 65 percent of 2017 and 2014 graduates, respectively.
- ~ In 2018, 66 percent of Massachusetts graduates met the ACT Science College Readiness Benchmark. This compares to 65 and 58 percent of 2017 and 2014 graduates, respectively.
- In 2018, 8 percent of Massachusetts graduates took the ACT with extended time. This compares to 7 and 5 percent of 2017 and 2014 graduates, respectively.
- 75 percent of 2018 Massachusetts graduates were Proficient or Above Proficient in understanding complex texts.

STEM

- The ACT is the only college admissions exam with a dedicated Science assessment. The ACT is a great fit for Massachusetts STEM Nexus initiative.
- In 2018, 9,024 Massachusetts graduates (50 percent) indicated having an interest in STEM majors and/or careers.
 - ~ Nationally, 45 percent of graduates indicated having an interest in STEM.
- Compared to a 2018 Massachusetts graduating class average ACT STEM score of 25.2, graduates in 2017 and 2014 had STEM averages of 25.3 and 24.3, respectively.
- Compared to 47 percent of 2018 Massachusetts graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2017 and 2014 had STEM Benchmark percentages of 48 and 40, respectively.
- 2018 graduates taking physics had an average science score of 25.2, compared to 22.3 for students not taking physics.
 - ~ 2018 Massachusetts graduates meeting the ACT STEM College Readiness Benchmark had an average science score of 29.3. This compares to 28.3 in 2014.
- 2018 Massachusetts graduates meeting the ACT STEM College Readiness Benchmark had an average math score of 29.7. This compares to 29.5 in 2014.

Career Readiness

- In 2018, 17,269 Massachusetts graduates (95 percent) were likely to attain the Silver ACT WorkKeys® National Career Readiness Certificate® or higher based upon ACT Composite score, compared to 1,393,517 (73 percent) nationally.
 - ~ The ACT Composite scores associated with a 50% chance of earning each NCRC® level or higher are: 13 for Bronze, 17 for Silver, 25 for Gold, and 35 for Platinum. Based on those cut scores, students who earned an ACT Composite score of less than 13 would be classified as “Needs Improvement,” 13 to 16 as “Bronze,” 17 to 24 as “Silver,” and 25 or above as “Gold or Higher.”
- ACT has formed a partnership with the Massachusetts Executive Office of Labor and Workforce Development to offer ACT WorkKeys at 100 test centers statewide.

Impact

- Based on the actual test volume and ACT score distributions of 2018 ACT-tested Massachusetts high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2018 graduating class would result in:
 - ~ 34 more students enrolling in college.
 - ~ 41 more students persisting to year two.
 - ~ 21 fewer students needing remedial English.
 - ~ 35 fewer students needing remedial math.
 - ~ 49 more students persisting to year four.
 - ~ 54 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Massachusetts, 7,147 of the 2018 graduates (39.2%) taking the ACT two or more times had an average Composite score of 27.1, compared to an average of 24.4 for 11,072 of the 2018 graduates (60.8%) who took the ACT only once.
- 12,038 score reports were sent to colleges by 2018 Massachusetts ACT-tested graduates.
 - ~ 2,240 score reports were sent to in-state public colleges by 2018 Massachusetts ACT-tested graduates.
 - ~ Nationwide, 847,940 of the 2018 graduates (44.3%) taking the ACT two or more times had an average Composite score of 22.7, compared to an average of 19.3 for 1,066,877 of the 2018 graduates (55.7%) who took the ACT only once.
 - ~ For Massachusetts's 2018 ACT-tested graduates, the top five schools to which scores were sent were University of Massachusetts Amherst, Northeastern University, Boston University, University of Massachusetts Lowell, and Boston College.
- Compared to 68 percent of 2018 graduates nationally, 54 percent of Massachusetts graduates opted into the ACT Educational Opportunity Service (EOS). EOS is a free service that allows students to gain exposure to recruitment, scholarship agencies, colleges, and universities that students may not have accessed on their own. The ACT Get Your Name in the Game initiative encourages colleges and universities to recruit underserved EOS participants to increase access and opportunity for all.
- In the 2017-2018 academic year, ACT issued 2,504 ACT fee waivers to qualified Massachusetts students. However, 671 students (26.8 percent) did not take advantage of this opportunity to test for free. This compares to 542,506 waivers issued nationally, of which 152,227 (28.1 percent) students did not take advantage. This represents a great opportunity for high schools within the state to increase the socioeconomic diversity of its students tested. Note: this is the number of fee waivers issued for the state, not specific to this graduating class.

Pipeline

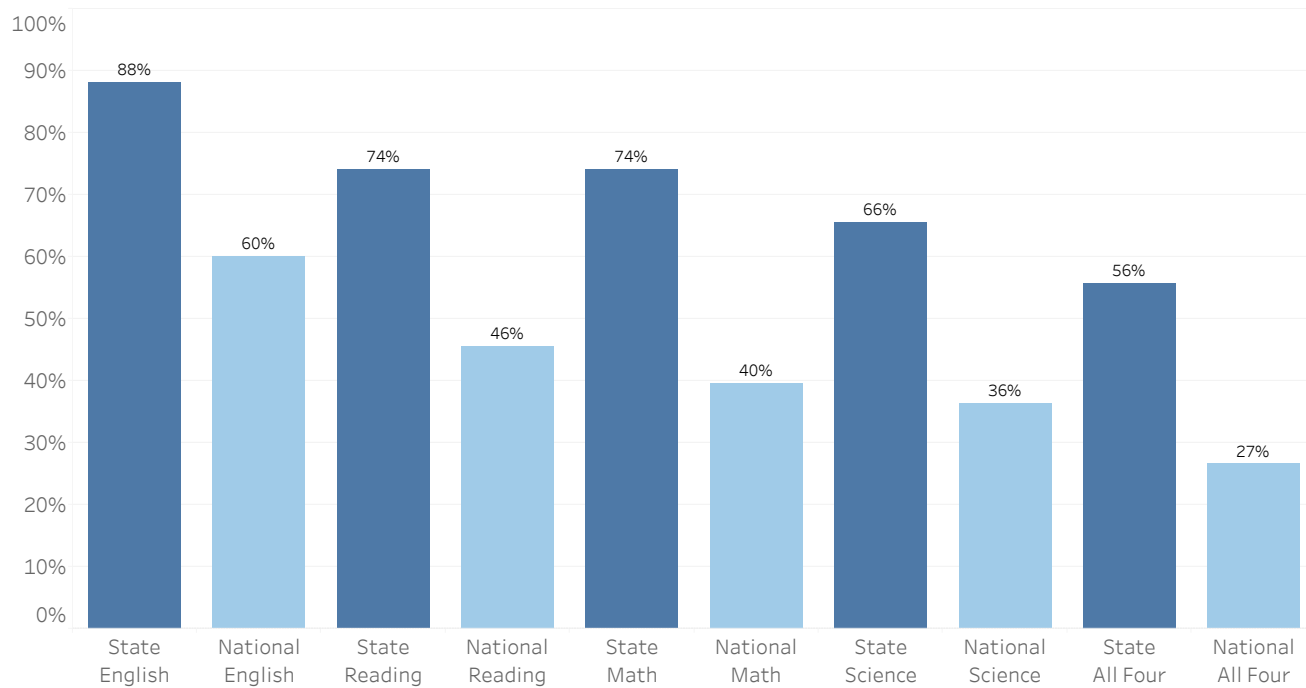
- Aspirations matter. Students who aspire to a higher level of postsecondary education typically achieve higher ACT Composite scores.
 - ~ 9,310 students (51 percent) aspired to attain a graduate or professional degree. They had an average Composite score of 26.8.
 - ~ 5,718 students (31 percent) aspired to attain a bachelor's degree. They had an average Composite score of 23.5.
 - ~ 80 students (0 percent) aspired to attain a vocational/technical or associate's degree. They had an average Composite score of 21.7.
- In the Massachusetts graduating class of 2018, 857 students (5 percent) had parents who did not attend college.
- In order of prevalence, the five most commonly indicated college majors of interest for 2018 Massachusetts graduates were: Undecided; Medicine (Pre-Medicine); Nursing, Registered (BS/RN); Business Administration and Management, General; and Biology, General.
 - ~ In the Massachusetts graduating class of 2018, 473 (3 percent) indicated planning on majoring in education. They had an average Composite score of 22.8.
- There is good news in that 83% of Massachusetts's 2018 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 83% of Massachusetts's 2017 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 86% who actually did enroll. A positive note is that more 2017 Massachusetts ACT-tested graduates enrolled in postsecondary education than initially aspired to do so.

Additional Points

- The Massachusetts ACT State Organization continues to grow in membership and in diversity, with more than 80 members from across the state. The membership includes educators from state agencies, K-12, access, and postsecondary institutions, as well as members involved in workforce development.
- The ACT College and Career Readiness Champions are individuals across the country who support ACT's mission of education and workplace success. They are high school seniors, K-12, postsecondary, and workforce professionals who have demonstrated exemplary behavior and contributions in support of college and career readiness in their respective communities. Congratulations to the Massachusetts Champions: Rebecca McCue (High School Senior) and Albert Mercado (K-12 Professional).

MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2018 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data From Graph Above

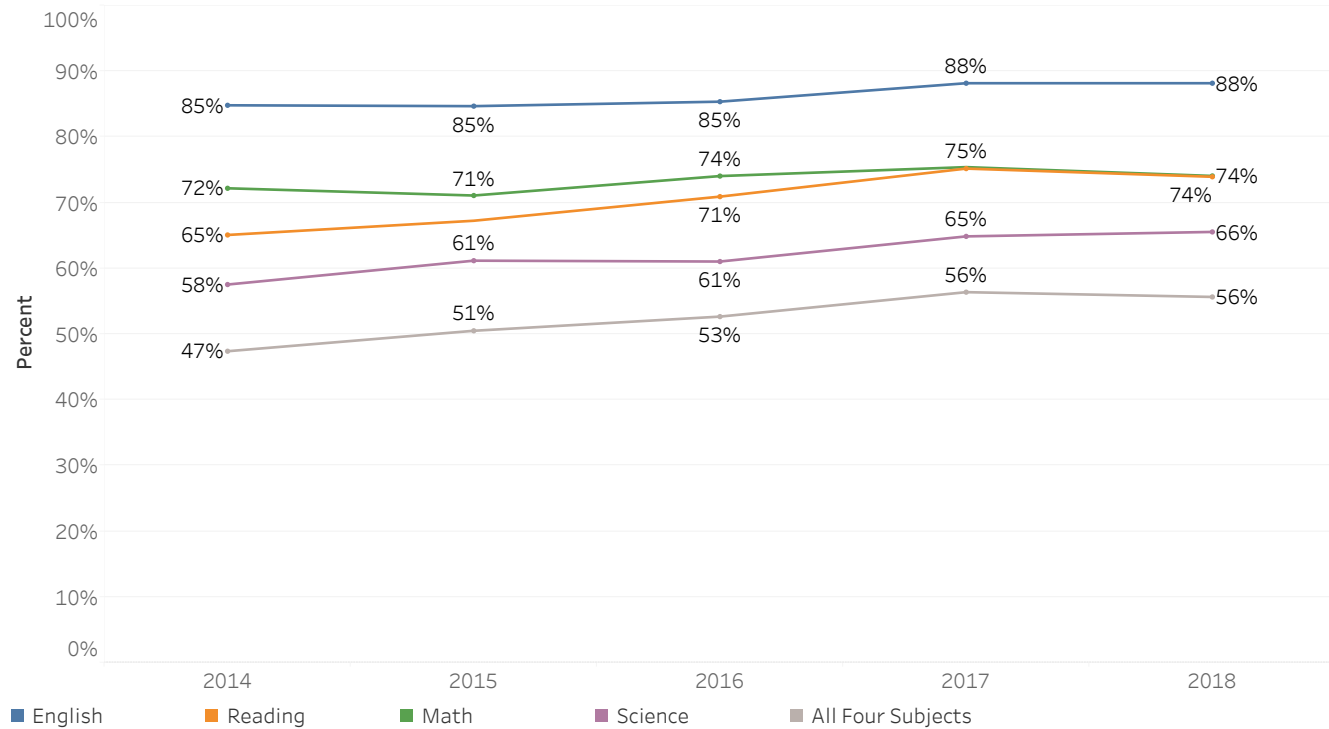
State English	National English	State Reading	National Reading	State Math	National Math	State Science	National Science	State All Four	National All Four
88%	60%	74%	46%	74%	40%	66%	36%	56%	27%

* The ACT College Readiness Benchmarks are scores on the ACT subject area tests that represent the level of achievement required for students to have a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. Throughout this report, benchmark attainment corresponds with students meeting or exceeding 18 in English, 22 in Reading, 22 in Math and 23 in Science.

Note, missing data points in tables and graphs reflect insufficient data for reporting.

MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014–2018 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



Data From Graph Above

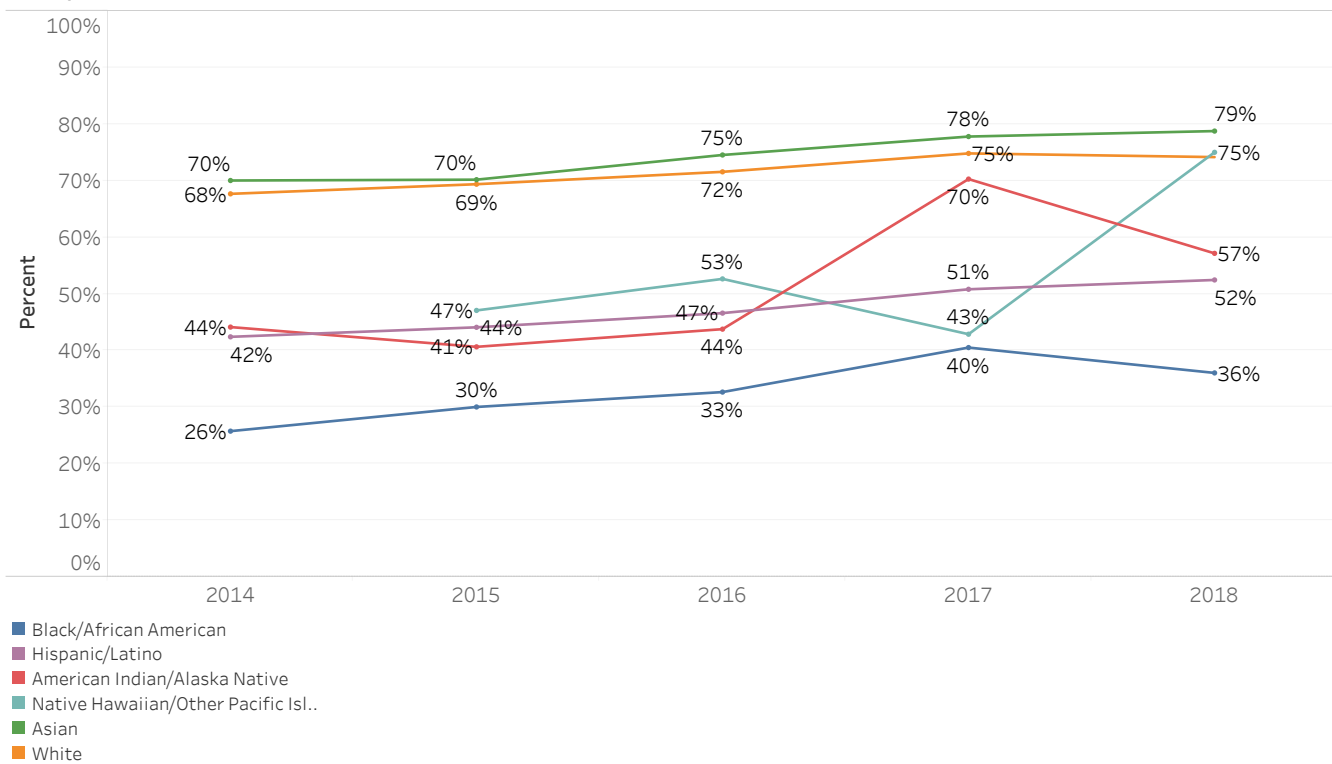
	English	Reading	Math	Science	All Four Subjects
2014	85%	65%	72%	58%	47%
2015	85%	67%	71%	61%	51%
2016	85%	71%	74%	61%	53%
2017	88%	75%	75%	65%	56%
2018	88%	74%	74%	66%	56%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014-2018 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity



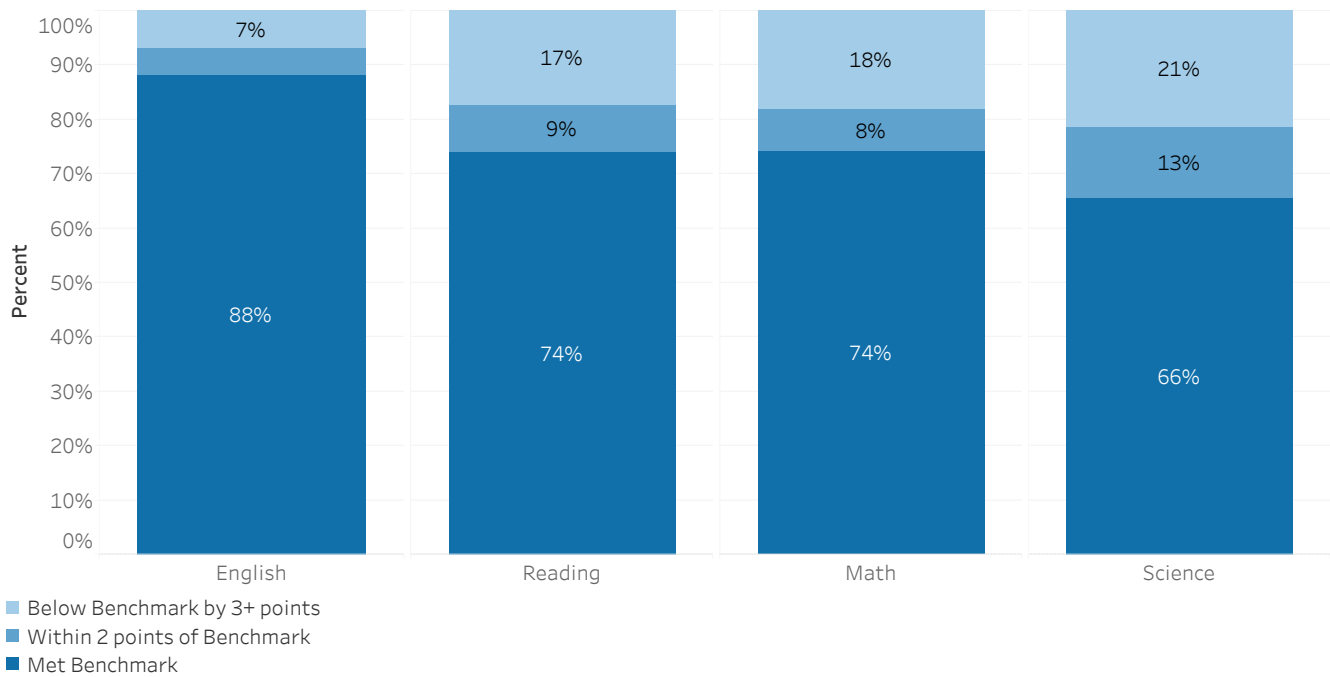
Data From Graph Above

	Black/African American	Hispanic/Latino	American Indian/Alaska Native	Native Hawaiian/Other Pacific Islander	Asian	White
2014	26%	42%	44%	47%	70%	68%
2015	30%	44%	41%	47%	70%	69%
2016	33%	47%	44%	53%	75%	72%
2017	40%	51%	70%	43%	78%	75%
2018	36%	52%	57%	75%	79%	74%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2018 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



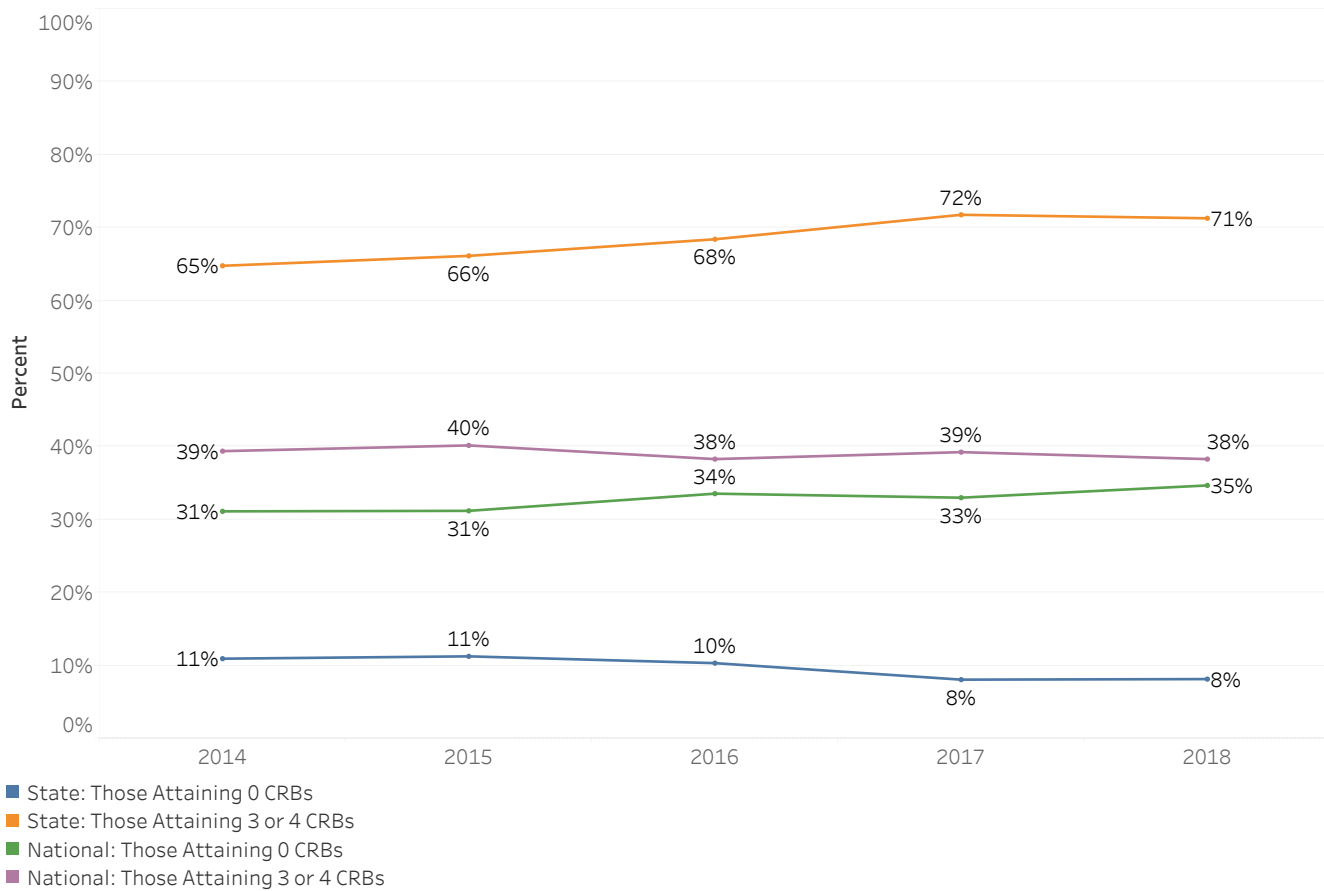
Data From Graph Above

	Below Benchmark by 3+ points	Within 2 points of Benchmark	Met Benchmark
English	7%	5%	88%
Math	18%	8%	74%
Reading	17%	9%	74%
Science	21%	13%	66%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014–2018 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



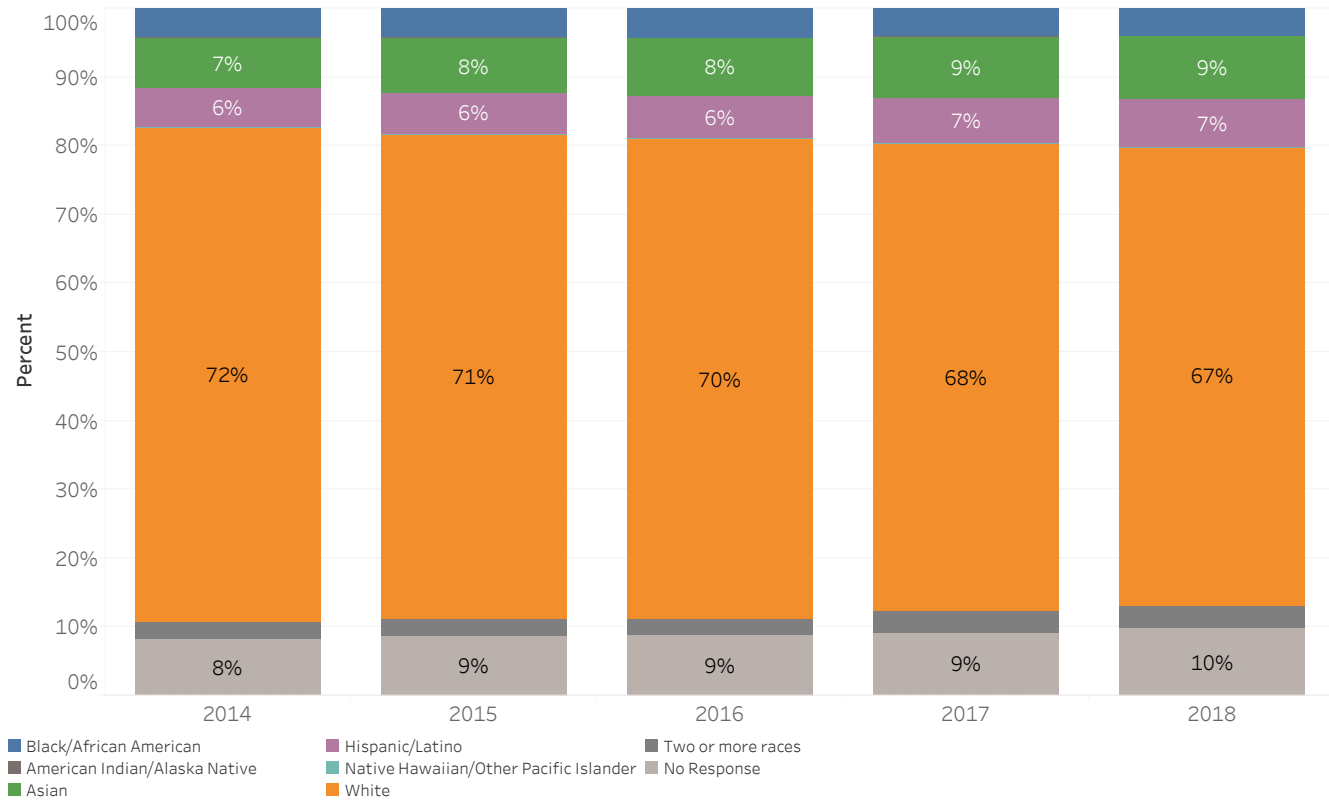
Data from Graph Above

	State: Those Attaining 0 CRBs	State: Those Attaining 3 or 4 CRBs	National: Those Attaining 0 CRBs	National: Those Attaining 3 or 4 CRBs
2014	11%	65%	31%	39%
2015	11%	66%	31%	40%
2016	10%	68%	34%	38%
2017	8%	72%	33%	39%
2018	8%	71%	35%	38%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014-2018 ACT-Tested High School Graduates by Race/Ethnicity



Data From Graph Above

	Black/African American	American Indian/Alaska Native	Asian	Hispanic/Latino	Native Hawaiian/Other Pacific Islander	White	Two or more races	No Response
2014	4%	0%	7%	6%	0%	72%	2%	8%
2015	4%	0%	8%	6%	0%	71%	2%	9%
2016	4%	0%	8%	6%	0%	70%	2%	9%
2017	4%	0%	9%	7%	0%	68%	3%	9%
2018	4%	0%	9%	7%	0%	67%	3%	10%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

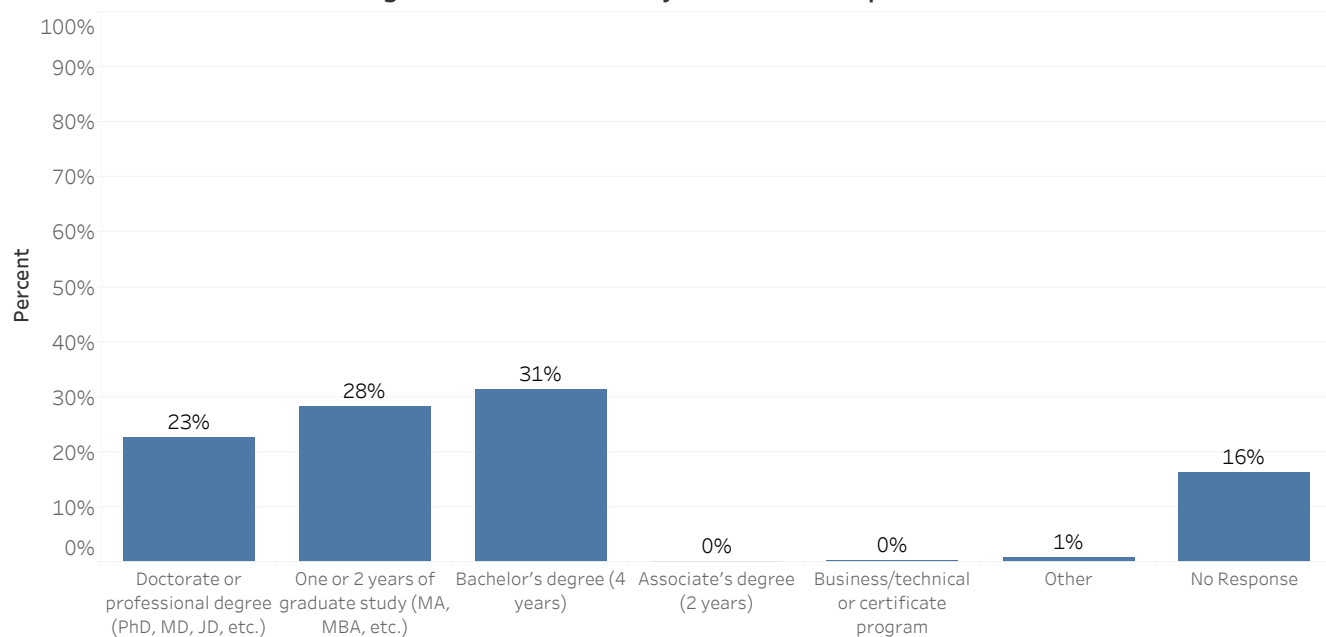
Student Data Trends: 2014-2018, State vs. Nation

	2014	2015	2016	2017	2018
State N-count	16,651	19,617	20,298	20,935	18,219
National N-count	1,845,787	1,924,436	2,090,342	2,030,038	1,914,817
Average ACT English Score - State	24.0	24.2	24.4	25.4	25.5
Average ACT English Score - National	20.3	20.4	20.1	20.3	20.2
Average ACT Reading Score - State	24.5	24.6	25.3	25.9	25.9
Average ACT Reading Score - National	21.3	21.4	21.3	21.4	21.3
Average ACT Math Score - State	24.6	24.6	24.9	25.3	25.2
Average ACT Math Score - National	20.9	20.8	20.6	20.7	20.5
Average ACT Science Score - State	23.5	23.8	24.1	24.7	24.7
Average ACT Science Score - National	20.8	20.9	20.8	21.0	20.7
Average ACT Composite Score - State	24.3	24.4	24.8	25.4	25.5
Average ACT Composite Score - National	21.0	21.0	20.8	21.0	20.8

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2018 ACT-Tested High School Graduates by Educational Aspirations



Data From Graph Above

	% of Graduates
Doctorate or professional degree (PhD, MD, JD, etc.)	23%
One or 2 years of graduate study (MA, MBA, etc.)	28%
Bachelor's degree (4 years)	31%
Associate's degree (2 years)	0%
Business/technical or certificate program	0%
Other	1%
No Response	16%

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