

The Condition of College & Career Readiness 2019

Massachusetts Key Findings

Performance of 2019 Graduates

- In the 2019 Massachusetts graduating class, 15,713 graduates (an estimated 21 percent) took the ACT test with a Composite score average of 25.5. This compares to 19,617 (an estimated 28 percent) with an average of 24.4 in 2015. Nationally, an estimated 52 percent of 2019 graduates took the ACT with an average Composite score of 20.7.
 - There were 703 African American graduates from Massachusetts who took the ACT (4 percent) with an average Composite score of 20.6. This compares to 733 (4 percent) with an average of 20.6, and 820 (4 percent) with an average of 19.6, for the 2018 and 2015 graduating classes, respectively.
 - There were 10,251 White graduates from Massachusetts who took the ACT (65 percent) with an average Composite score of 25.8. This compares to 12,149 (67 percent) with an average of 25.7, and 13,833 (71 percent) with an average of 24.7, for the 2018 and 2015 graduating classes, respectively.
 - There were 1,082 Hispanic graduates from Massachusetts who took the ACT (7 percent) with an average Composite score of 23.1. This compares to 1,268 (7 percent) with an average of 22.8, and 1,173 (6 percent) with an average of 21.6, for the 2018 and 2015 graduating classes, respectively.
 - The 2019 Massachusetts graduating class average English score was 25.5. This compares to 25.5 and 24.2 in 2018 and 2015, respectively.
 - The 2019 Massachusetts graduating class average math score was 25.2. This compares to 25.2 and 24.6 in 2018 and 2015, respectively.
 - The 2019 Massachusetts graduating class average reading score was 26.1. This compares to 25.9 and 24.6 in 2018 and 2015, respectively.
 - The 2019 Massachusetts graduating class average science score was 24.8. This compares to 24.7 and 23.8 in 2018 and 2015, respectively.
- In 2019, 56 percent of Massachusetts graduates met all four ACT College Readiness Benchmarks. This compares to 56 and 51 percent of 2018 and 2015 graduates, respectively.
 - In 2019, 87 percent of Massachusetts graduates met the ACT English College Readiness Benchmark. This compares to 88 and 85 percent of 2018 and 2015 graduates, respectively.
 - In 2019, 73 percent of Massachusetts graduates met the ACT Math College Readiness Benchmark. This compares to 74 and 71 percent of 2018 and 2015 graduates, respectively.
 - In 2019, 74 percent of Massachusetts graduates met the ACT Reading College Readiness Benchmark. This compares to 74 and 67 percent of 2018 and 2015 graduates, respectively.
 - In 2019, 65 percent of Massachusetts graduates met the ACT Science College Readiness Benchmark. This compares to 66 and 61 percent of 2018 and 2015 graduates, respectively.
 - In 2019, 11,088 (71 percent) of Massachusetts graduates met three or four ACT College Readiness Benchmarks. This compares to 12,988 and 12,974 (71 and 66 percent) out of 2018 and 2015 graduates, respectively. For reference, the national percentage of 2019 graduates meeting three or four benchmarks was 37 percent.

STEM

- In 2019, 7,919 Massachusetts graduates (50 percent) indicated having an interest in STEM majors and/or careers.
 - Nationally, 43 percent of graduates indicated having an interest in STEM.
- Compared to a 2019 Massachusetts graduating class average ACT STEM score of 25.3, graduates in 2018 and 2015 had STEM averages of 25.2 and 24.4, respectively.
- Compared to 48 percent of 2019 Massachusetts graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2018 and 2015 had STEM Benchmark percentages of 47 and 42, respectively.
- In 2019, 13,104 Massachusetts graduates (83 percent) indicated taking physics. This compares to 84 and 83 percent for the 2018 and 2015 graduating classes, respectively.
- 2019 graduates taking physics had an average science score of 25.3, compared to 22.2 for students not taking physics.
 - 69 percent of 2019 Massachusetts graduates taking physics met the ACT Science College Readiness Benchmark, compared to 45 for students not taking physics.

Career Readiness Indicator

- In 2019, 11,704 Massachusetts graduates (74 percent) were likely to attain the Gold ACT WorkKeys National Career Readiness Certificate or higher based upon ACT Composite score, compared to 726,923 (41 percent) nationally.
 - The ACT Composite scores associated with a 50% chance of earning each ACT WorkKeys NCRC level or higher are: 13 for Bronze, 17 for Silver, 22 for Gold, and 27 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 21 as “Silver,” and 22 or above as “Gold or Higher.”

Impact

- Based on the actual test volume and ACT score distributions of 2019 ACT-tested Massachusetts high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2019 graduating class would result in:
 - 29 more students enrolling in college.
 - 35 more students persisting to year two.
 - 18 fewer students needing remedial English.
 - 29 fewer students needing remedial math.
 - 42 more students persisting to year four.
 - 46 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Massachusetts, 5,702 of the 2019 graduates (36.3 percent) taking the ACT two or more times had an average Composite score of 27.3, compared to an average of 24.5 for 10,011 of the 2019 graduates (63.7 percent) who took the ACT only once.
- 10,002 score reports were sent to colleges by 2019 Massachusetts ACT-tested graduates.
 - 1,863 score reports were sent to in-state public colleges by 2019 Massachusetts ACT-tested graduates.
 - For Massachusetts’s 2019 ACT-tested graduates, the top five schools to which scores were sent were the University of Massachusetts Amherst, Northeastern University, Boston University, the University of Massachusetts Lowell, and Boston College.
 - For Massachusetts’s 2019 ACT-tested graduates, the top three out-of-state schools to which scores were sent were the University of New Hampshire, the University of Vermont, and the University of Connecticut.

- Compared to 66 percent of 2019 graduates nationally, 53 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.
 - Compared to 75 percent of African American students nationally, 71 percent of Massachusetts African American 2019 graduates opted into EOS.
 - Compared to 64 percent of White students nationally, 52 percent of Massachusetts White 2019 graduates opted into EOS.
 - Compared to 76 percent of Hispanic students nationally, 68 percent of Massachusetts Hispanic 2019 graduates opted into EOS.
- In the 2018-2019 academic year, ACT issued 2,320 ACT fee waivers to qualified Massachusetts students across all grades. However, 543 students (23.4 percent) did not take advantage of this opportunity to test for free. This compares to 487,749 waivers issued nationally, of which 135,569 (27.8 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.

Postsecondary Aspirations

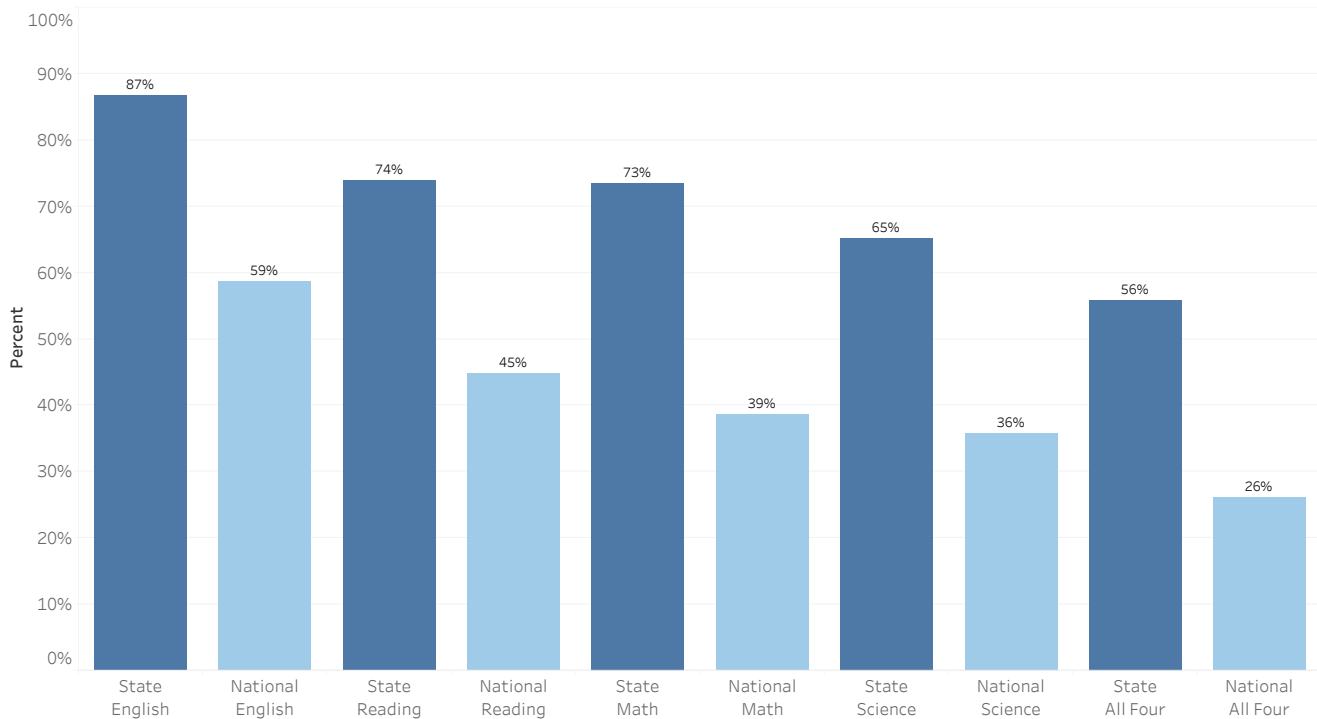
- Aspirations matter. Students who aspire to a higher level of postsecondary education typically achieve higher ACT Composite scores.
 - 7,993 students (51 percent) aspired to attain a graduate or professional degree. They had an average Composite score of 26.8.
 - 4,841 students (31 percent) aspired to attain a bachelor's degree. They had an average Composite score of 23.6.
 - 74 students (0 percent) aspired to attain a vocational/technical or associate's degree. They had an average Composite score of 20.1.
- In order of prevalence, the five most commonly indicated college majors of interest for 2019 Massachusetts graduates were: Undecided; Biology, General; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); and Business Administration and Management, General.
 - In the Massachusetts graduating class of 2019, 3,525 students (22 percent) indicated being undecided about their college major. They had an average Composite score of 26.2. Decision making regarding college major can be facilitated through activities included in ACT Aspire and PreACT testing experiences. In addition, the Student Score Report is a valuable tool for conversations using the College and Career Planning and Interest-Major Fit sections.
 - In the Massachusetts graduating class of 2019, 400 (3 percent) indicated planning on majoring in education. They had an average Composite score of 22.3.

Additional Points

- The Massachusetts ACT State Organization continues to grow in membership and in diversity, with more than 100 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. Each year, ACT hosts a state summit that brings together professionals representing each of these areas, providing a unique and diverse professional development opportunity.
- In 2019, ACT honored College and Career Readiness Champions in most states. The Massachusetts honorees were:
 - High school senior: Katelyn Malvese, Medfield High School; and postsecondary professional: Gretchen Heaton, The American Women's College at Bay Path University.

MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2019 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data From Graph Above

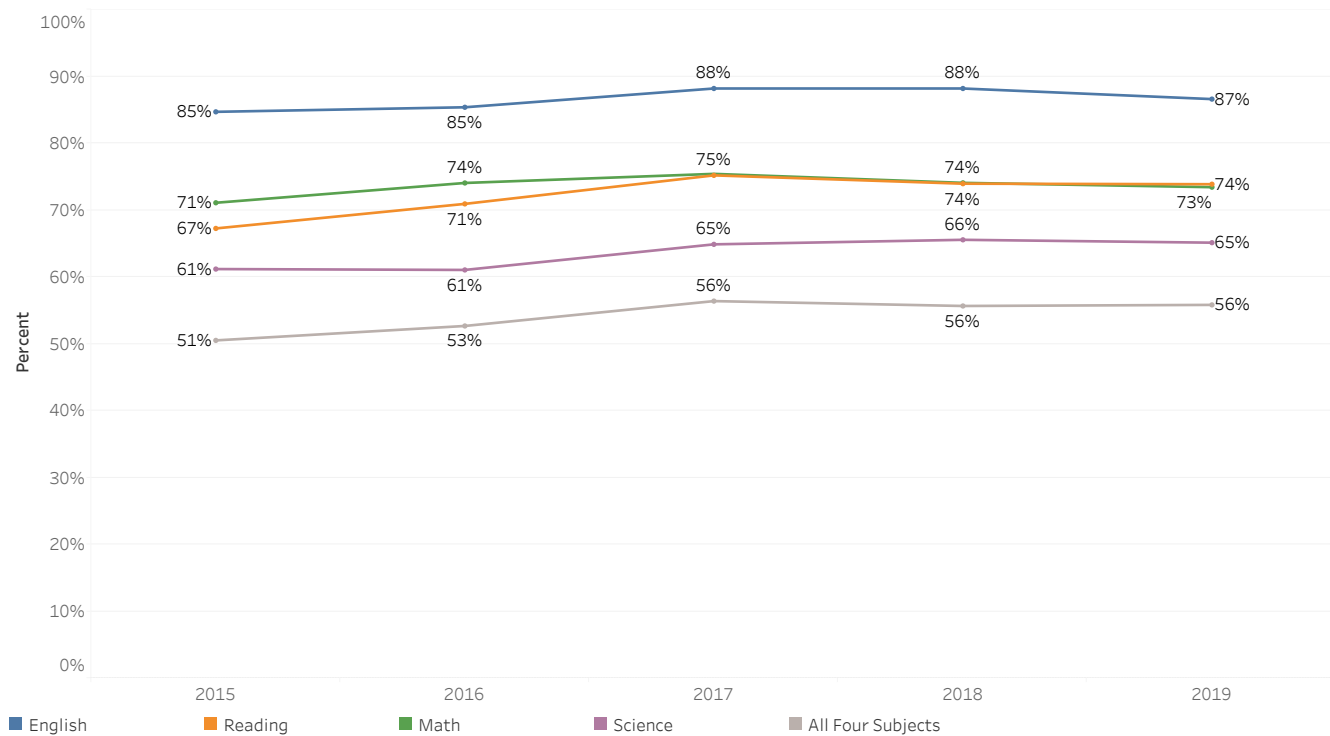
State English	National English	State Reading	National Reading	State Math	National Math	State Science	National Science	State All Four	National All Four
87%	59%	74%	45%	73%	39%	65%	36%	56%	26%

*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 2015–2019 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



Data From Graph Above

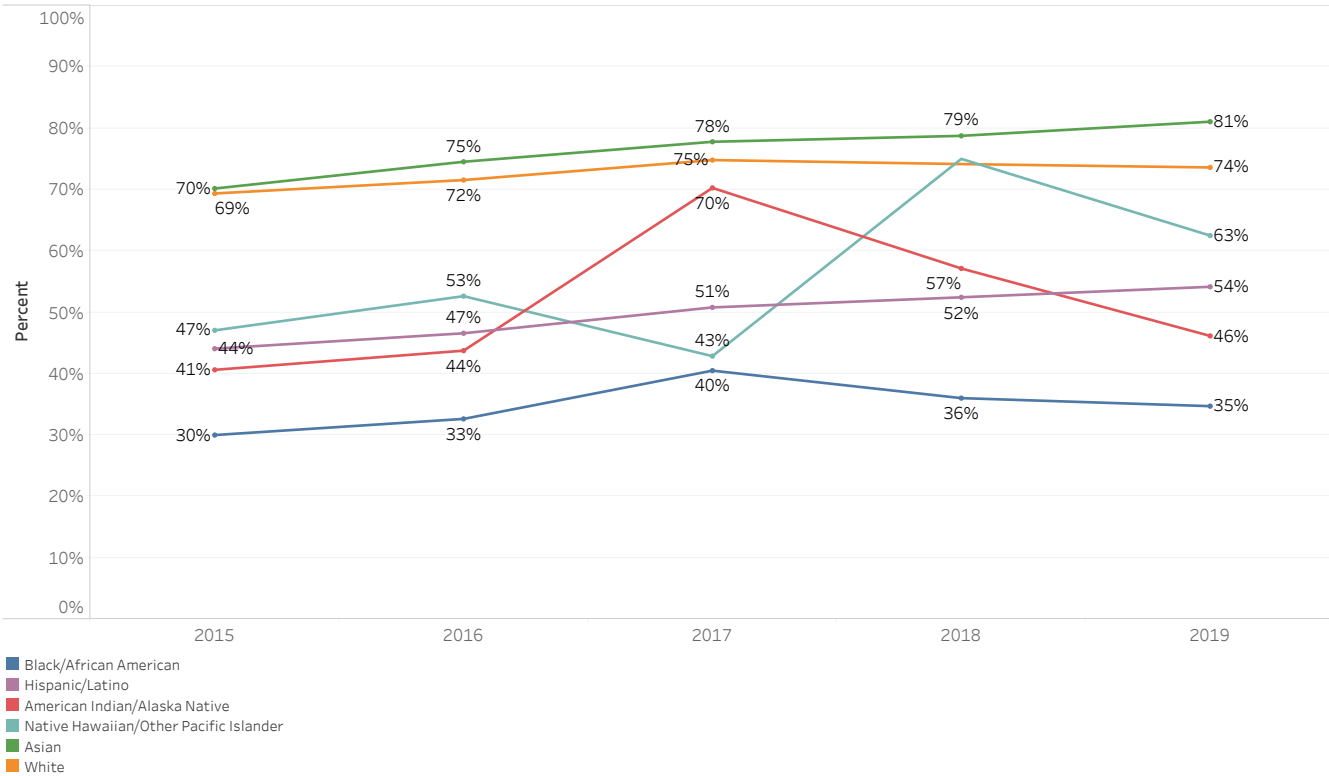
	English	Reading	Math	Science	All Four Subjects
2015	85%	67%	71%	61%	51%
2016	85%	71%	74%	61%	53%
2017	88%	75%	75%	65%	56%
2018	88%	74%	74%	66%	56%
2019	87%	74%	73%	65%	56%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2015-2019 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity



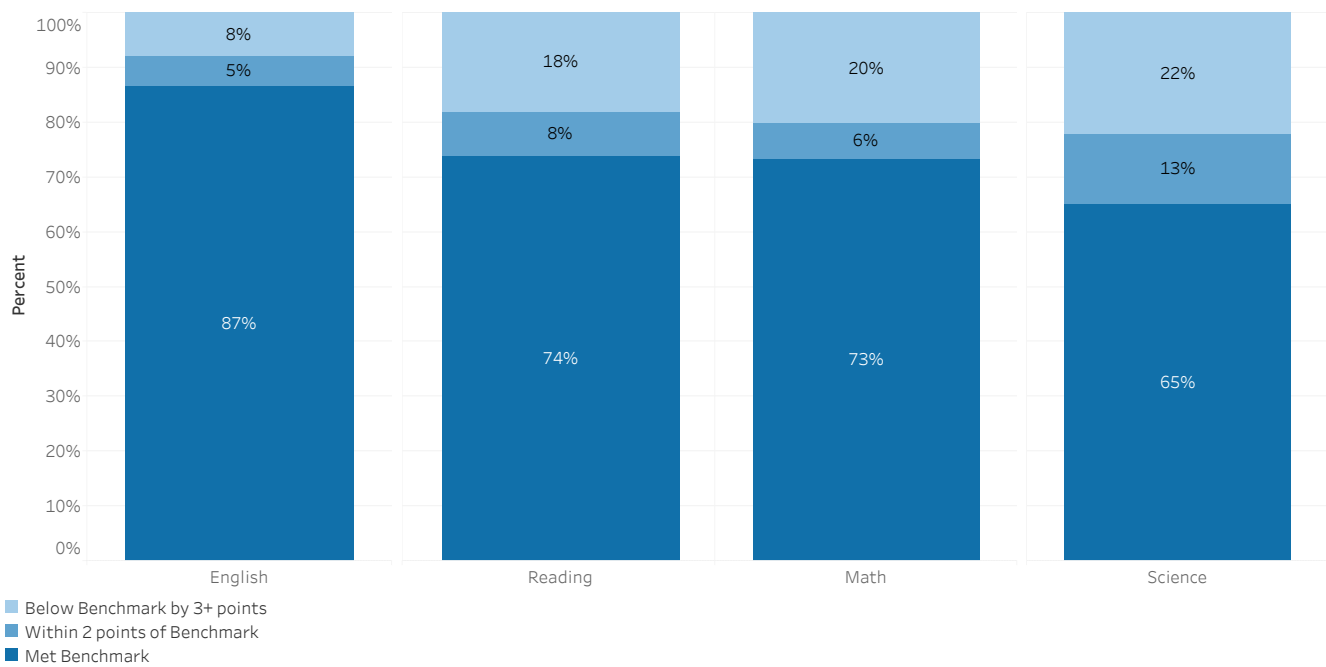
Data From Graph Above

	Black/African American	Hispanic/Latino	American Indian/Alaska Native	Native Hawaiian/Other Pacific Islander	Asian	White
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%
2019	35%	54%	46%	63%	81%	74%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2019 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



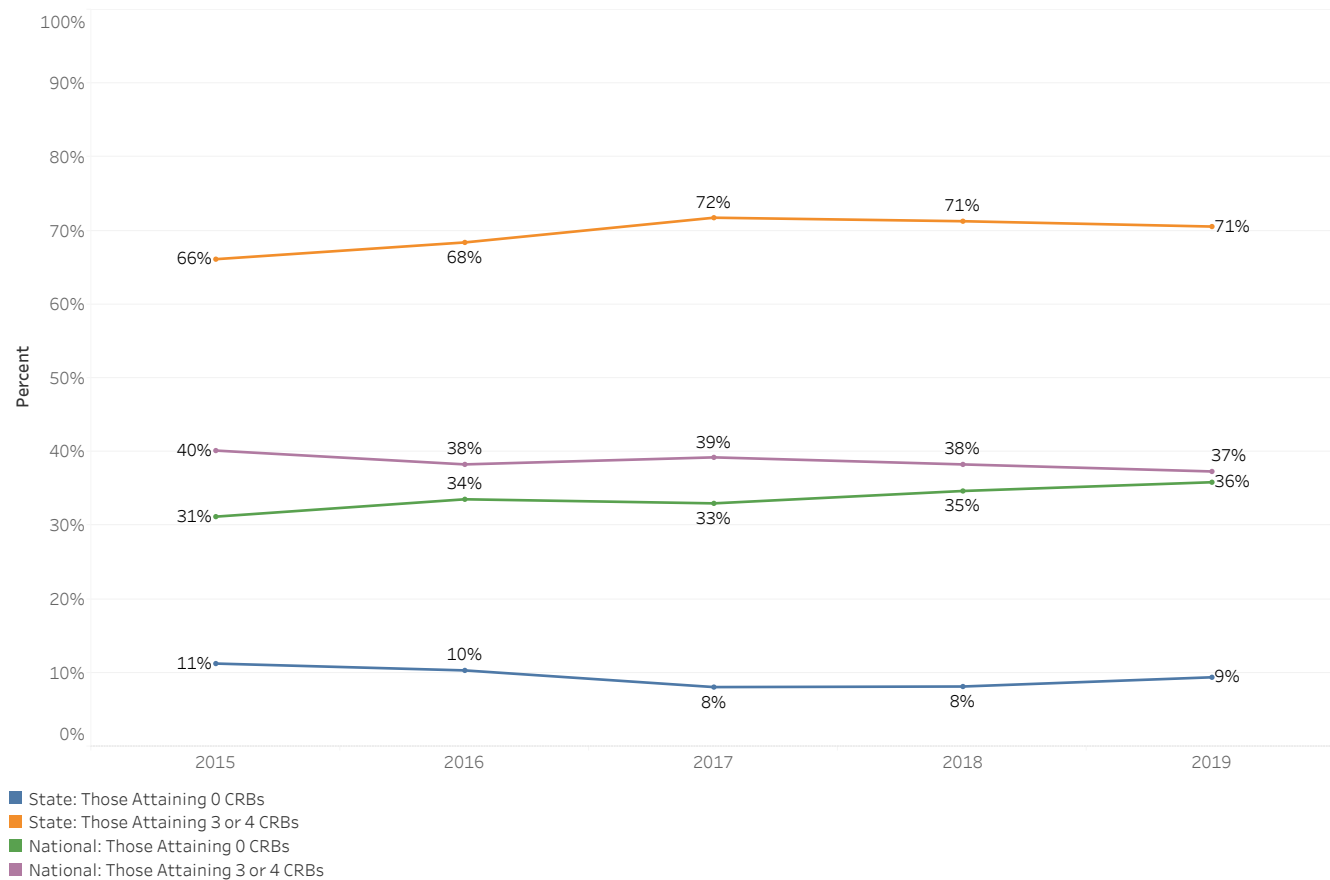
Data From Graph Above

	Below Benchmark by 3+ points	Within 2 points of Benchmark	Met Benchmark
English	8%	5%	87%
Math	20%	6%	73%
Reading	18%	8%	74%
Science	22%	13%	65%

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Percent of 2015–2019 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



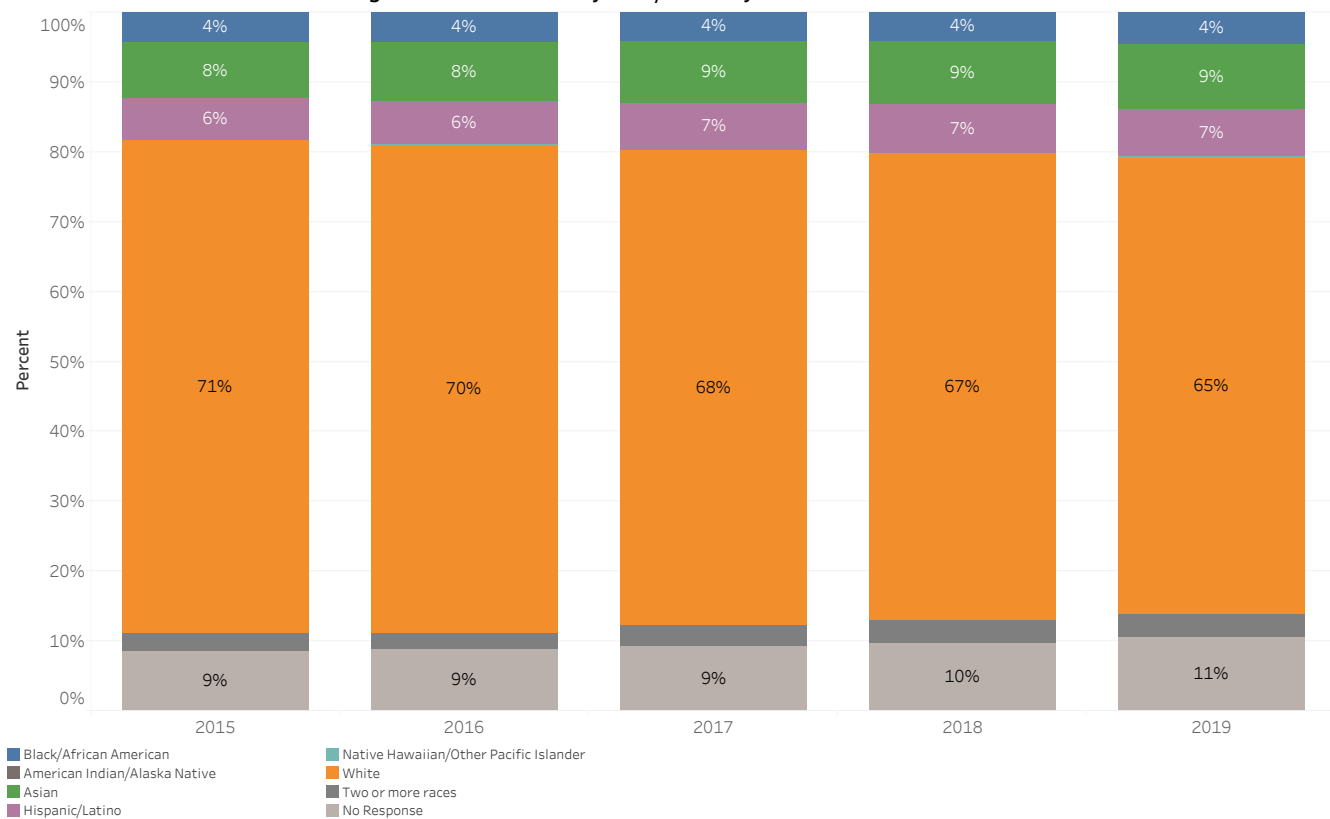
Data from Graph Above

	State: Those Attaining 0 CRBs	State: Those Attaining 3 or 4 CRBs	National: Those Attaining 0 CRBs	National: Those Attaining 3 or 4 CRBs
2015	11%	66%	31%	40%
2016	10%	68%	34%	38%
2017	8%	72%	33%	39%
2018	8%	71%	35%	38%
2019	9%	71%	36%	37%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2015-2019 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
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%
2019	4%	0%	9%	7%	0%	65%	3%	11%

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

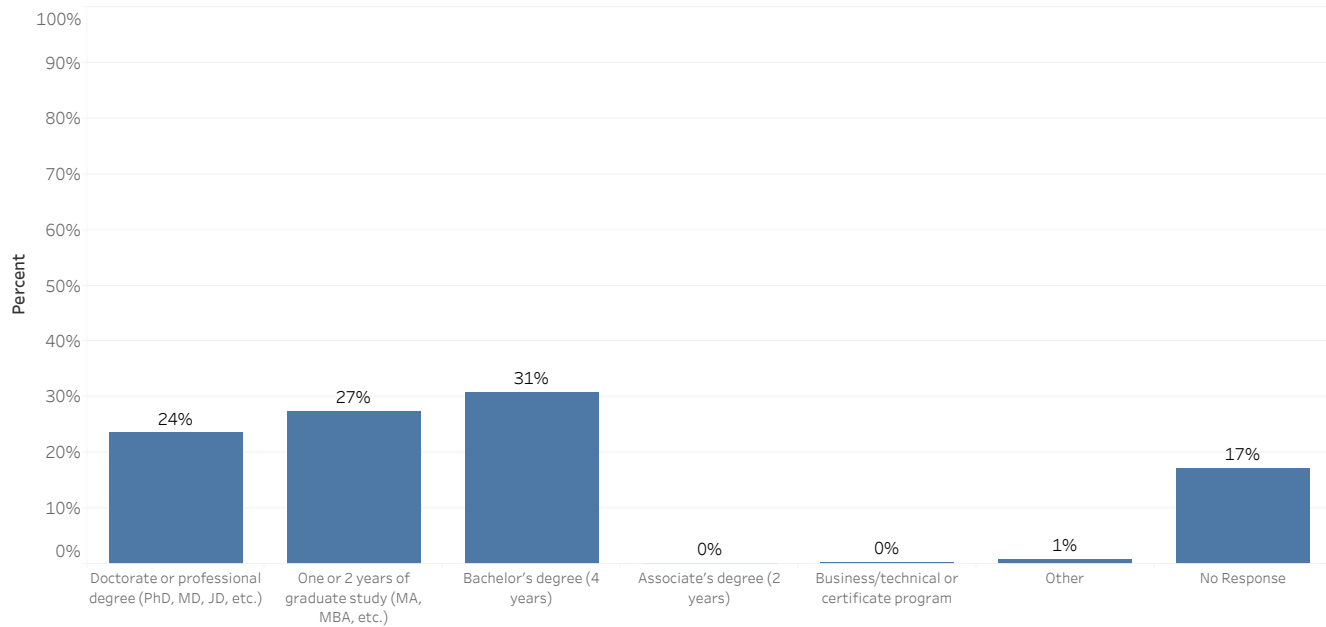
Student Data Trends: 2015-2019, State vs. Nation

	2015	2016	2017	2018	2019
State N-count	19,617	20,298	20,935	18,219	15,713
National N-count	1,924,436	2,090,342	2,030,038	1,914,817	1,782,820
Average ACT English Score - State	24.2	24.4	25.4	25.5	25.5
Average ACT English Score - National	20.4	20.1	20.3	20.2	20.1
Average ACT Reading Score - State	24.6	25.3	25.9	25.9	26.1
Average ACT Reading Score - National	21.4	21.3	21.4	21.3	21.2
Average ACT Math Score - State	24.6	24.9	25.3	25.2	25.2
Average ACT Math Score - National	20.8	20.6	20.7	20.5	20.4
Average ACT Science Score - State	23.8	24.1	24.7	24.7	24.8
Average ACT Science Score - National	20.9	20.8	21.0	20.7	20.6
Average ACT Composite Score - State	24.4	24.8	25.4	25.5	25.5
Average ACT Composite Score - National	21.0	20.8	21.0	20.8	20.7

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MASSACHUSETTS College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2019 ACT-Tested High School Graduates by Educational Aspirations



Data From Graph Above

	% of Graduates
Doctorate or professional degree (PhD, MD, JD, etc.)	24%
One or 2 years of graduate study (MA, MBA, etc.)	27%
Bachelor's degree (4 years)	31%
Associate's degree (2 years)	0%
Business/technical or certificate program	0%
Other	1%
No Response	17%

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