

# The Condition of College & Career Readiness 2018

## Maryland Key Findings

### Performance

- In the 2018 Maryland graduating class, 19,408 graduates (31 percent) took the ACT test with a Composite score average of 22.5. This compares to 14,080 (22 percent) with an average of 22.6 in 2014. Nationally, 55% of 2018 graduates took the ACT with an average Composite score of 20.8.
  - ~ There were 4,373 African American graduates from Maryland who took the ACT (23 percent) with an average Composite score of 18.4. This compares to 4,016 (23 percent) with an average of 19.1, and 3,602 (26 percent) with an average of 18.3, for the 2017 and 2014 graduating classes, respectively.
  - ~ There were 8,882 White graduates from Maryland who took the ACT (46 percent) with an average Composite score of 24.3. This compares to 7,960 (46 percent) with an average of 25.4, and 6,798 (48 percent) with an average of 24.6, for the 2017 and 2014 graduating classes, respectively.
  - ~ There were 1,801 Hispanic graduates from Maryland who took the ACT (9 percent) with an average Composite score of 20.6. This compares to 1,410 (8 percent) with an average of 21.8, and 1,084 (8 percent) with an average of 21.2, for the 2017 and 2014 graduating classes, respectively.
  - ~ There were 1,296 Asian graduates from Maryland who took the ACT (7 percent) with an average Composite score of 26.1. This compares to 1,374 (8 percent) with an average of 26.7, and 850 (6 percent) with an average of 25.3, for the 2017 and 2014 graduating classes, respectively.
- The 2018 Maryland graduating class average English score was 22.1. This compares to 23.3 and 22.1 in 2017 and 2014, respectively.
- The 2018 Maryland graduating class average math score was 22.0. This compares to 23.1 and 22.5 in 2017 and 2014, respectively.
- The 2018 Maryland graduating class average reading score was 23.1. This compares to 24.2 and 23.0 in 2017 and 2014, respectively.
- The 2018 Maryland graduating class average science score was 22.2. This compares to 23.2 and 22.2 in 2017 and 2014, respectively.
- In 2018, 37 percent of Maryland graduates met all four ACT College Readiness Benchmarks. This compares to 44 and 37 percent of 2017 and 2014 graduates, respectively.
  - ~ In 2018, 26 percent of Maryland graduates met zero ACT College Readiness Benchmarks. This compares to 19 and 22 percent of 2017 and 2014 graduates, respectively.
  - ~ In 2018, 69 percent of Maryland graduates met the ACT English College Readiness Benchmark. This compares to 77 and 73 percent of 2017 and 2014 graduates, respectively.
  - ~ In 2018, 50 percent of Maryland graduates met the ACT Math College Readiness Benchmark. This compares to 59 and 55 percent of 2017 and 2014 graduates, respectively.
    - 2018 Maryland graduates taking more advanced math coursework demonstrated markedly higher average math scores than those who did not. In fact, 53 percent of Maryland 2018 graduates taking three or more years of math met the ACT Math College Readiness Benchmark. This compares to 9 percent of students taking less than three years of math meeting the benchmark.

- ~ In 2018, 57 percent of Maryland graduates met the ACT Reading College Readiness Benchmark. This compares to 64 and 54 percent of 2017 and 2014 graduates, respectively.
- ~ In 2018, 47 percent of Maryland graduates met the ACT Science College Readiness Benchmark. This compares to 54 and 47 percent of 2017 and 2014 graduates, respectively.
- In 2018, 9,691 (50 percent) of Maryland graduates met three or four ACT College Readiness Benchmarks. This compares to 9,971 and 7,169 (58 and 51 percent) out of 2017 and 2014 graduates, respectively. For reference, the national percentage of 2018 graduates meeting three or four benchmarks was 38%.
- The data within this report reflect the impact of district-funded initiatives where 11th-grade students tested with the ACT in spring 2017. As a result, more than 2,000 additional Maryland students were provided access and opportunity to college and career readiness.

## STEM

- In 2018, 9,098 Maryland graduates (47 percent) indicated having an interest in STEM majors and/or careers.
- Nationally, 45 percent of graduates indicated having an interest in STEM.
- Compared to 30 percent of 2018 Maryland graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2017 and 2014 had STEM Benchmark percentages of 36 and 31, respectively.
  - ~ 2018 graduates taking three or more years of math had an average math score of 22.4, compared to 16.3 for students taking less than three years of math.
  - ~ 53 percent of 2018 graduates taking three or more years of math met the ACT Math College Readiness Benchmark, compared to 9 percent for students taking less than three years of math.
- 2018 Maryland graduates meeting the ACT STEM College Readiness Benchmark had an average math score of 29.3. This compares to 29.1 in 2014.
- “

The US Bureau of Labor Statistics predicts that occupations related to STEM will add about 1 million new jobs between now and 2022. Efforts that help encourage students to pursue STEM careers is key. Physics is an important preparation for STEM. In 2018, 10,593 Maryland graduates (55 percent) indicated taking Physics. This compares to 67% in 2017 and 62% in 2014. In 2018, a smaller number of graduates met the ACT STEM College Readiness Benchmark of 26 (30%), compared to 36% of the 2017 graduating class who met the STEM benchmark.”

  - ~ 59 percent of 2018 Maryland graduates taking physics met the ACT Science College Readiness Benchmark, compared to 32 for students not taking physics.

## Career Readiness

- In 2018, 7,277 Maryland graduates (37 percent) were likely to attain the Gold ACT WorkKeys® National Career Readiness Certificate® or higher based upon ACT Composite score, compared to 499,653 (26 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.”

## Impact

- Based on the actual test volume and ACT score distributions of 2018 ACT-tested Maryland 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:
  - ~ 43 more students enrolling in college.
  - ~ 49 more students persisting to year two.
  - ~ 32 fewer students needing remedial English.
  - ~ 53 fewer students needing remedial math.
  - ~ 55 more students persisting to year four.
  - ~ 59 more students earning a postsecondary degree within six years.

## Behaviors that Impact Access and Opportunity

- In Maryland, 6,187 of the 2018 graduates (31.9%) taking the ACT two or more times had an average Composite score of 25.0, compared to an average of 21.3 for 13,221 of the 2018 graduates (68.1%) who took the ACT only once.
  - ~ 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.
- 27,277 score reports were sent to colleges by 2018 Maryland ACT-tested graduates.
  - ~ 11,075 score reports were sent to in-state public colleges by 2018 Maryland ACT-tested graduates.
  - ~ For Maryland's 2018 ACT-tested graduates, the top five schools to which scores were sent were University of Maryland College Park, Towson University, Salisbury University, University of Maryland Baltimore County, and Anne Arundel Community College.
  - ~ For Maryland's 2018 ACT-tested graduates, the top three out-of-state schools to which scores were sent were Penn State-University Park Campus, Howard University, and Virginia Tech.
- Compared to 68 percent of 2018 graduates nationally, 64 percent of Maryland 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 3,034 ACT fee waivers to qualified Maryland students. However, 921 students (30.4 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.
  - ~ While African American Maryland students represent 60 percent of fee waivers issued, they account for 67 percent of unused fee waivers. This compares to 31 and 33 nationally.

## Pipeline

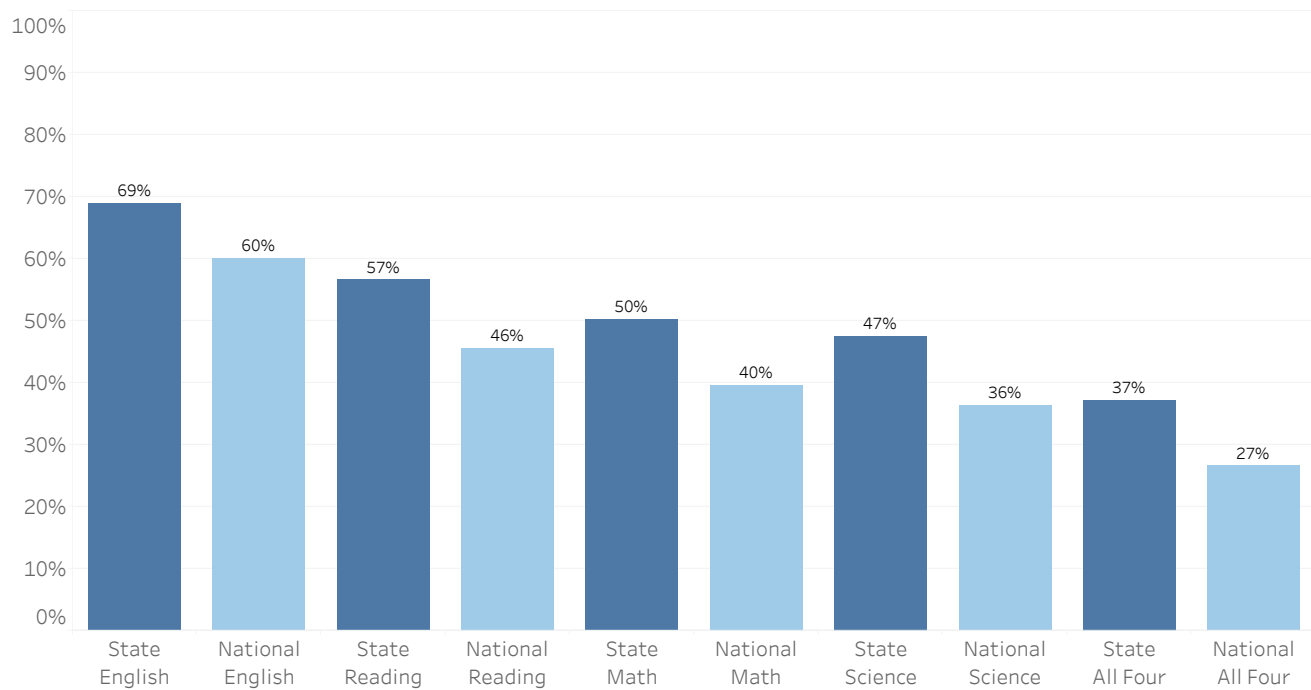
- Aspirations matter. Students who aspire to a higher level of postsecondary education typically achieve higher ACT Composite scores.
  - ~ 8,531 students (44 percent) aspired to attain a graduate or professional degree. They had an average Composite score of 24.7.
- In the Maryland graduating class of 2018, 1,590 students (8 percent) had parents who did not attend college.
- In order of prevalence, the five most commonly indicated college majors of interest for 2018 Maryland graduates were: Undecided; Medicine (Pre-Medicine); Biology, General; Business Administration and Management, General; and Nursing, Registered (BS/RN).
  - ~ In the Maryland graduating class of 2018, 483 (2 percent) indicated planning on majoring in education. They had an average Composite score of 20.6.
- There is good news in that 77% of Maryland's 2018 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 87% of Maryland's 2017 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 86% who actually did enroll. If we fully closed the aspirational gap, an additional 274 of the 2017 ACT-tested graduates from Maryland would have enrolled in postsecondary education.

## Additional Points

- According to the US Department of Labor's Bureau of Labor Statistics, the fastest-growing careers in Maryland requiring education beyond high school are: Computer Systems Analysts, Preschool Teachers, Home Health and Personal Care Aides, and Market Research Analysts.
- The ACT College and Career Readiness Champions are individuals across the country who support ACT's mission of education and workplace success. Congratulations to the Maryland Champion, Jalaysia Weems (High School Senior).

# MARYLAND 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

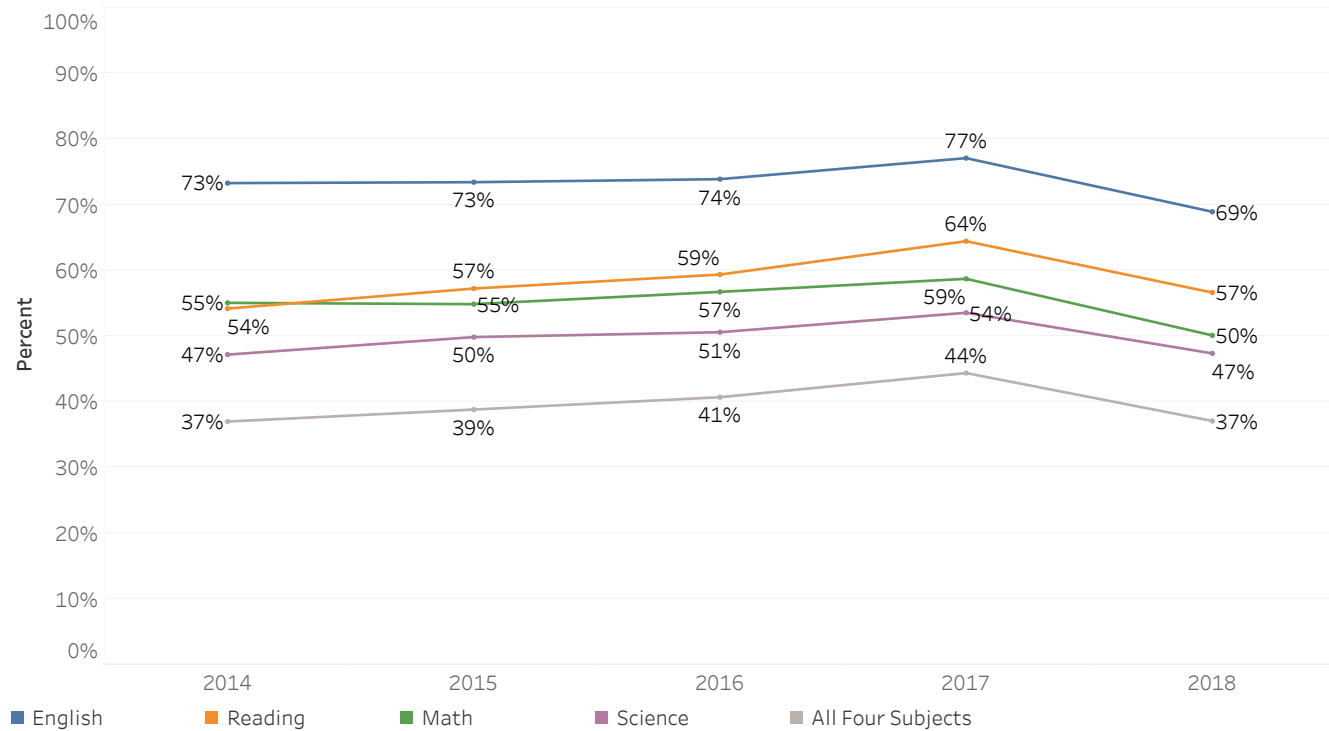
State English	National English	State Reading	National Reading	State Math	National Math	State Science	National Science	State All Four	National All Four
69%	60%	57%	46%	50%	40%	47%	36%	37%	27%

\* 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.

# MARYLAND 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

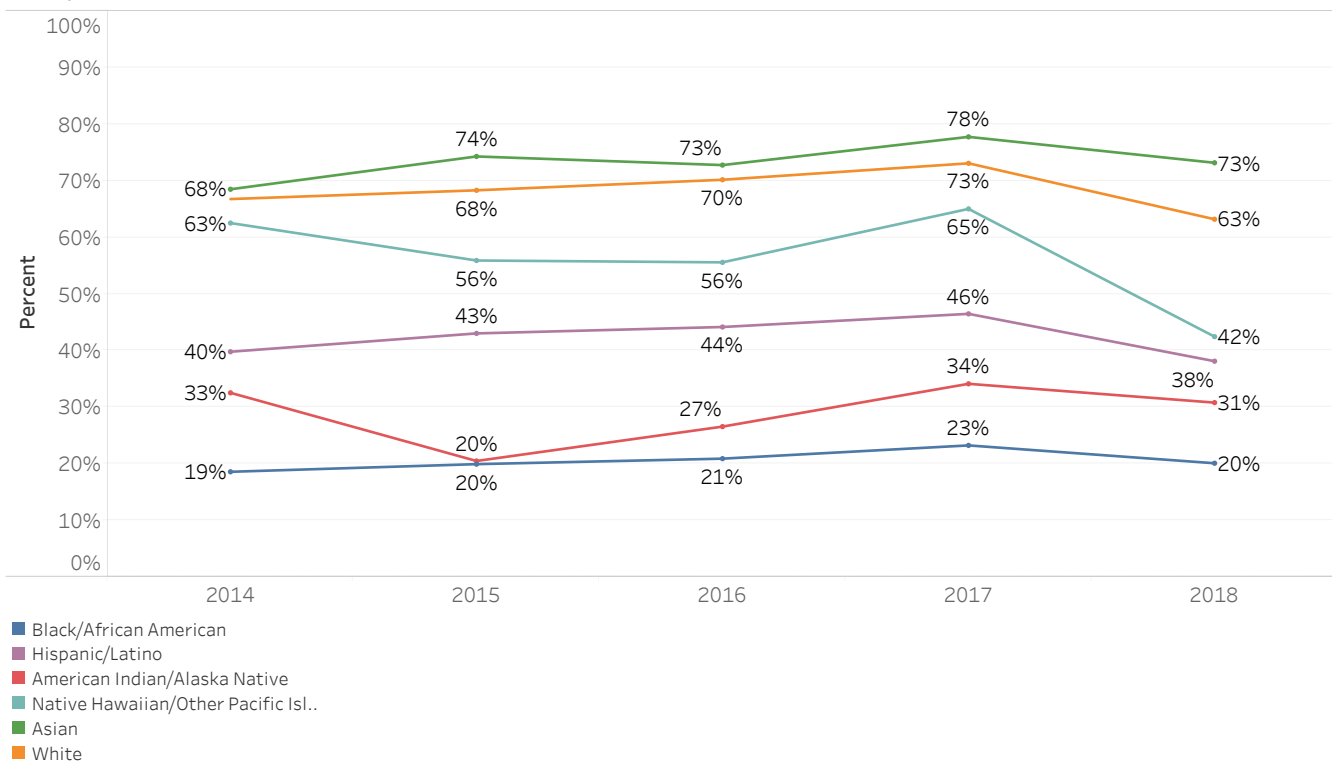
	English	Reading	Math	Science	All Four Subjects
2014	73%	54%	55%	47%	37%
2015	73%	57%	55%	50%	39%
2016	74%	59%	57%	51%	41%
2017	77%	64%	59%	54%	44%
2018	69%	57%	50%	47%	37%

\* 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.

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# MARYLAND 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



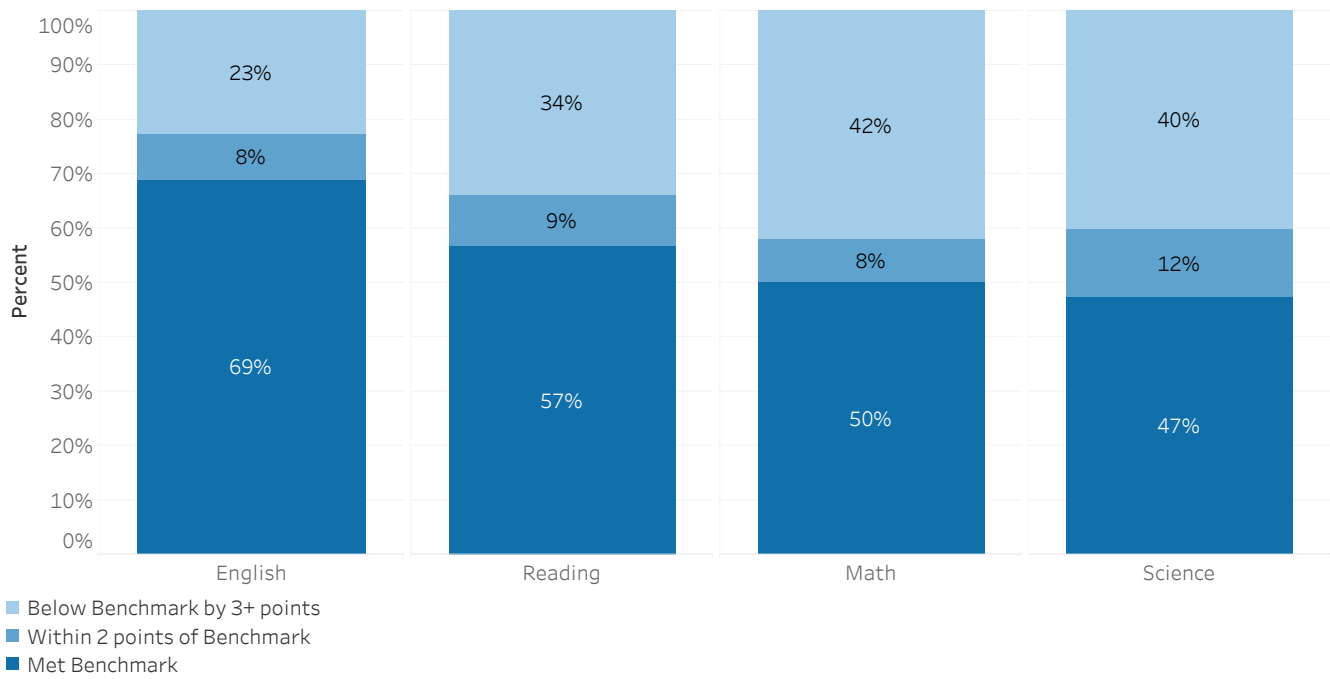
### Data From Graph Above

	Black/African American	Hispanic/Latino	American Indian/Alaska Native	Native Hawaiian/Other Pacific Islander	Asian	White
2014	19%	40%	33%	63%	68%	67%
2015	20%	43%	20%	56%	74%	68%
2016	21%	44%	27%	56%	73%	70%
2017	23%	46%	34%	65%	78%	73%
2018	20%	38%	31%	42%	73%	63%

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# MARYLAND 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

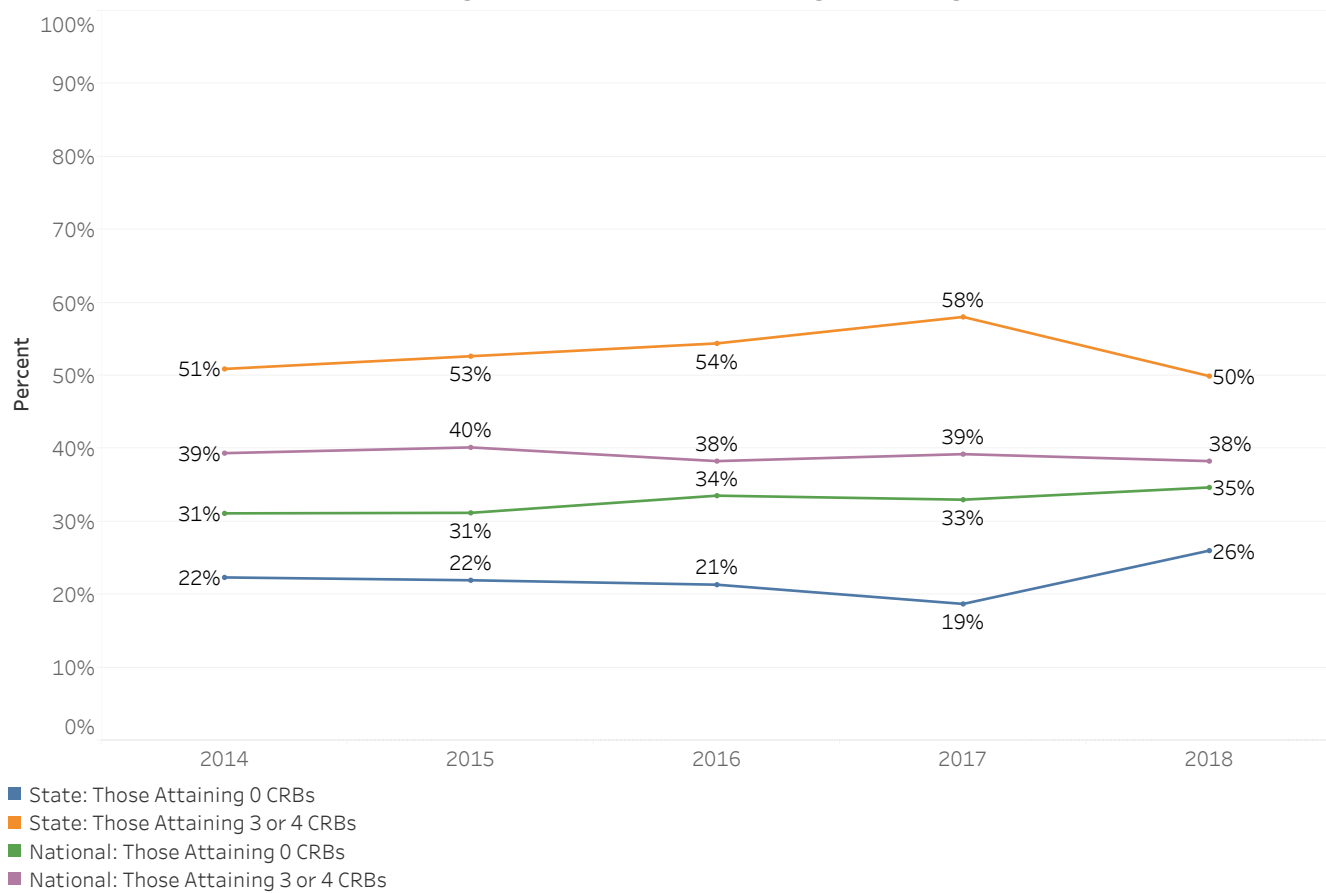
	Below Benchmark by 3+ points	Within 2 points of Benchmark	Met Benchmark
English	23%	8%	69%
Math	42%	8%	50%
Reading	34%	9%	57%
Science	40%	12%	47%

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# MARYLAND College and Career Readiness Attainment, Participation, and Opportunity

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



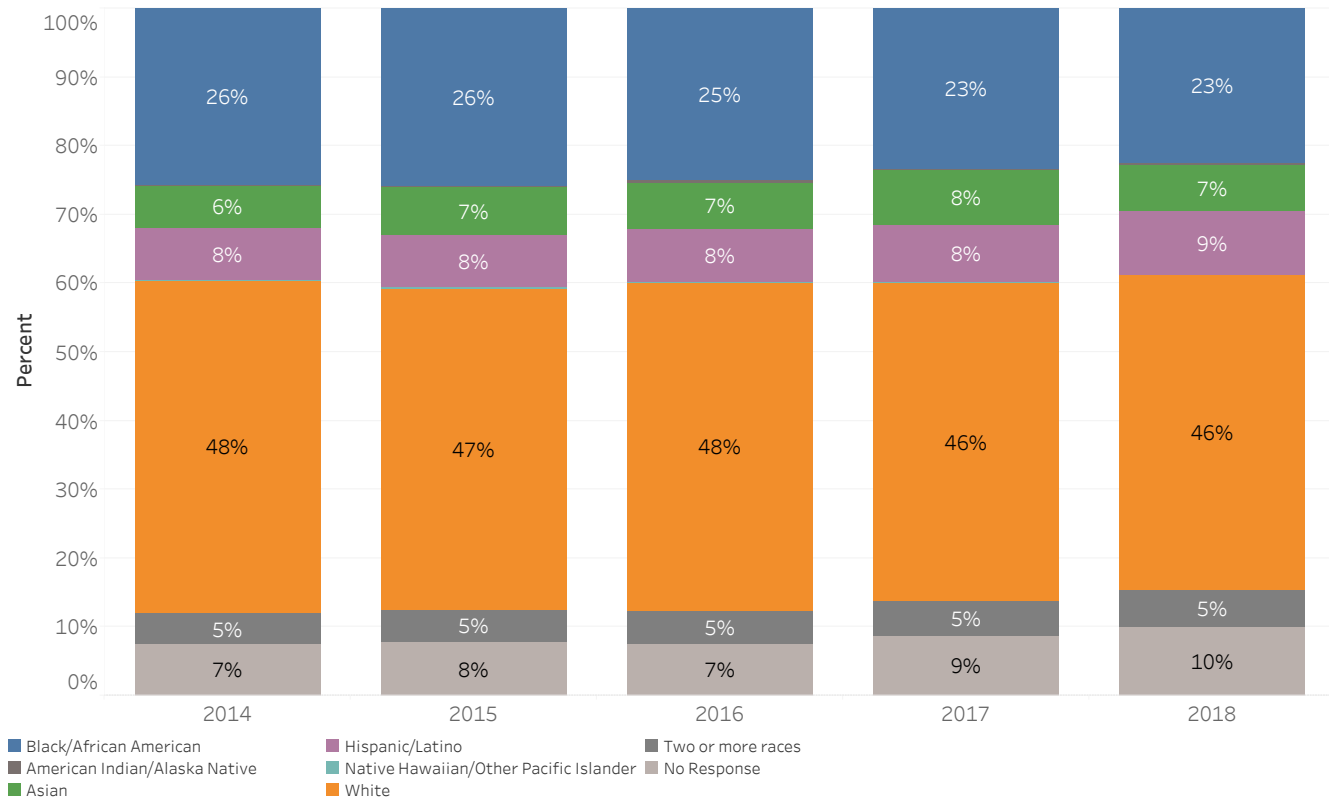
## Data from Graph Above

	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	22%	51%	31%	39%
2015	22%	53%	31%	40%
2016	21%	54%	34%	38%
2017	19%	58%	33%	39%
2018	26%	50%	35%	38%

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# MARYLAND 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	26%	0%	6%	8%	0%	48%	5%	7%
2015	26%	0%	7%	8%	0%	47%	5%	8%
2016	25%	0%	7%	8%	0%	48%	5%	7%
2017	23%	0%	8%	8%	0%	46%	5%	9%
2018	23%	0%	7%	9%	0%	46%	5%	10%

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# MARYLAND College and Career Readiness Attainment, Participation, and Opportunity

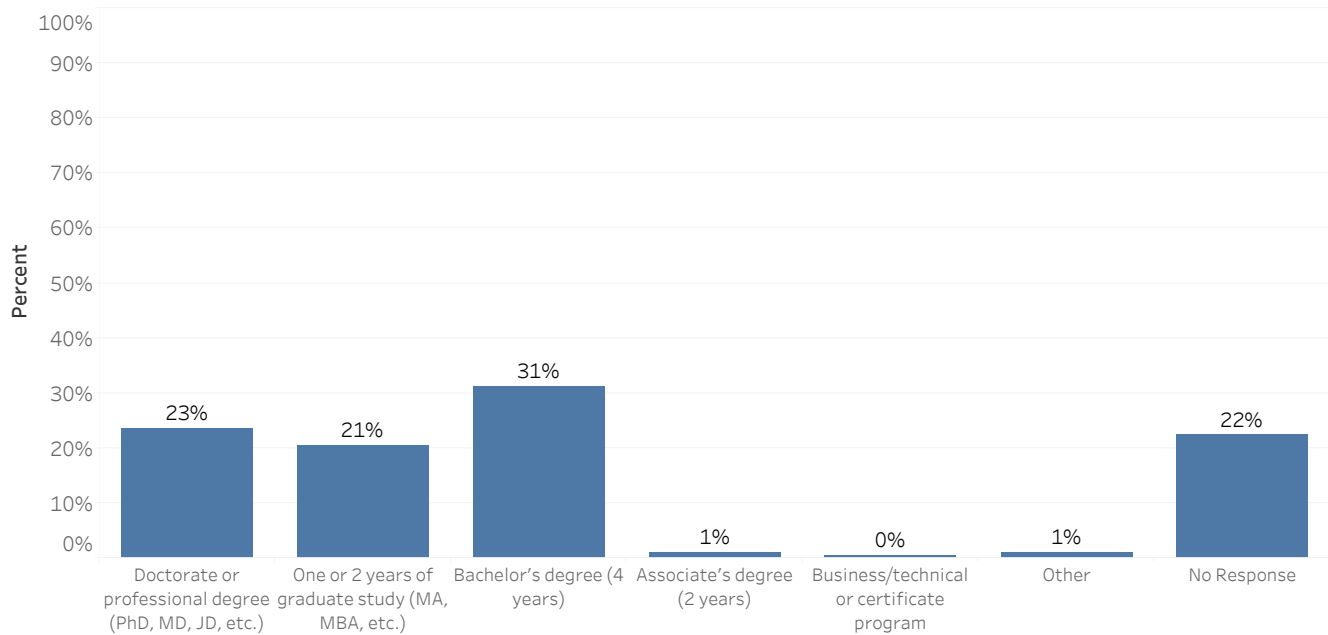
## Student Data Trends: 2014-2018, State vs. Nation

	2014	2015	2016	2017	2018
State N-count	14,080	15,753	16,769	17,179	19,408
National N-count	1,845,787	1,924,436	2,090,342	2,030,038	1,914,817
Average ACT English Score - State	22.1	22.3	22.6	23.3	22.1
Average ACT English Score - National	20.3	20.4	20.1	20.3	20.2
Average ACT Reading Score - State	23.0	23.2	23.6	24.2	23.1
Average ACT Reading Score - National	21.3	21.4	21.3	21.4	21.3
Average ACT Math Score - State	22.5	22.5	22.7	23.1	22.0
Average ACT Math Score - National	20.9	20.8	20.6	20.7	20.5
Average ACT Science Score - State	22.2	22.5	22.8	23.2	22.2
Average ACT Science Score - National	20.8	20.9	20.8	21.0	20.7
Average ACT Composite Score - State	22.6	22.7	23.0	23.6	22.5
Average ACT Composite Score - National	21.0	21.0	20.8	21.0	20.8

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# MARYLAND 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.)	21%
Bachelor's degree (4 years)	31%
Associate's degree (2 years)	1%
Business/technical or certificate program	0%
Other	1%
No Response	22%

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