

# The Condition of College & Career Readiness 2019

## Pennsylvania Key Findings

### Performance of 2019 Graduates

- In the 2019 Pennsylvania graduating class, 23,855 graduates (an estimated 17 percent) took the ACT test with a Composite score average of 23.6. This compares to 29,776 (an estimated 22 percent) with an average of 22.9 in 2015. Nationally, an estimated 52 percent of 2019 graduates took the ACT with an average Composite score of 20.7.
  - There were 2,048 African American graduates from Pennsylvania who took the ACT (9 percent) with an average Composite score of 17.5. This compares to 2,473 (9 percent) with an average of 17.8, and 2,887 (10 percent) with an average of 17.1, for the 2018 and 2015 graduating classes, respectively.
  - There were 16,484 White graduates from Pennsylvania who took the ACT (69 percent) with an average Composite score of 24.3. This compares to 19,645 (71 percent) with an average of 24.2, and 21,164 (71 percent) with an average of 23.7, for the 2018 and 2015 graduating classes, respectively.
  - There were 1,307 Hispanic graduates from Pennsylvania who took the ACT (5 percent) with an average Composite score of 21.6. This compares to 1,394 (5 percent) with an average of 21.6, and 1,462 (5 percent) with an average of 20.2, for the 2018 and 2015 graduating classes, respectively.
  - The 2019 Pennsylvania graduating class average English score was 23.3. This compares to 23.3 and 22.5 in 2018 and 2015, respectively.
  - The 2019 Pennsylvania graduating class average math score was 23.1. This compares to 23.2 and 22.8 in 2018 and 2015, respectively.
  - The 2019 Pennsylvania graduating class average reading score was 24.1. This compares to 24.0 and 23.2 in 2018 and 2015, respectively.
  - The 2019 Pennsylvania graduating class average science score was 23.2. This compares to 23.1 and 22.5 in 2018 and 2015, respectively.
- In 2019, 44 percent of Pennsylvania graduates met all four ACT College Readiness Benchmarks. This compares to 43 and 40 percent of 2018 and 2015 graduates, respectively.
  - In 2019, 78 percent of Pennsylvania graduates met the ACT English College Readiness Benchmark. This compares to 80 and 76 percent of 2018 and 2015 graduates, respectively.
  - In 2019, 59 percent of Pennsylvania graduates met the ACT Math College Readiness Benchmark. This compares to 60 and 58 percent of 2018 and 2015 graduates, respectively.
  - In 2019, 64 percent of Pennsylvania graduates met the ACT Reading College Readiness Benchmark. This compares to 64 and 59 percent of 2018 and 2015 graduates, respectively.
  - In 2019, 55 percent of Pennsylvania graduates met the ACT Science College Readiness Benchmark. This compares to 55 and 51 percent of 2018 and 2015 graduates, respectively.
  - In 2019, 13,902 (58 percent) of Pennsylvania graduates met three or four ACT College Readiness Benchmarks. This compares to 16,235 and 16,433 (59 and 55 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, 13,472 Pennsylvania graduates (56 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 Pennsylvania graduating class average ACT STEM score of 23.4, graduates in 2018 and 2015 had STEM averages of 23.4 and 22.9, respectively.
- Compared to 35 percent of 2019 Pennsylvania graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2018 and 2015 had STEM Benchmark percentages of 35 and 31, respectively.
- In 2019, 17,881 Pennsylvania graduates (75 percent) indicated taking physics. This compares to 75 and 76 percent for the 2018 and 2015 graduating classes, respectively.
  - 2019 graduates taking physics had an average science score of 24.0, compared to 20.6 for students not taking physics.
  - 61 percent of 2019 Pennsylvania graduates taking physics met the ACT Science College Readiness Benchmark, compared to 35 for students not taking physics.

## Career Readiness Indicator

- In 2019, 14,935 Pennsylvania graduates (63 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 Pennsylvania 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:
  - 50 more students enrolling in college.
  - 58 more students persisting to year two.
  - 36 fewer students needing remedial English.
  - 59 fewer students needing remedial math.
  - 67 more students persisting to year four.
  - 73 more students earning a postsecondary degree within six years.

## Behaviors that Impact Access and Opportunity

- In Pennsylvania, 7,696 of the 2019 graduates (32.3 percent) taking the ACT two or more times had an average Composite score of 25.0, compared to an average of 22.8 for 16,159 of the 2019 graduates (67.7 percent) who took the ACT only once.
- 27,848 score reports were sent to colleges by 2019 Pennsylvania ACT-tested graduates.
  - 7,145 score reports were sent to in-state public colleges by 2019 Pennsylvania ACT-tested graduates.
  - For Pennsylvania's 2019 ACT-tested graduates, the top five schools to which scores were sent were Penn State - University Park Campus, the University of Pittsburgh, Temple University, West Chester University of Pennsylvania, and Drexel University.
  - For Pennsylvania's 2019 ACT-tested graduates, the top three out-of-state schools to which scores were sent were West Virginia University, the University of Delaware, and The Ohio State University.
- Compared to 66 percent of 2019 graduates nationally, 62 percent of Pennsylvania 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, 78 percent of Pennsylvania African American 2019 graduates opted into EOS.
  - Compared to 64 percent of White students nationally, 60 percent of Pennsylvania White 2019 graduates opted into EOS.
  - Compared to 76 percent of Hispanic students nationally, 77 percent of Pennsylvania Hispanic 2019 graduates opted into EOS.
- In the 2018-2019 academic year, ACT issued 6,246 ACT fee waivers to qualified Pennsylvania students across all grades. However, 1,934 students (31.0 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

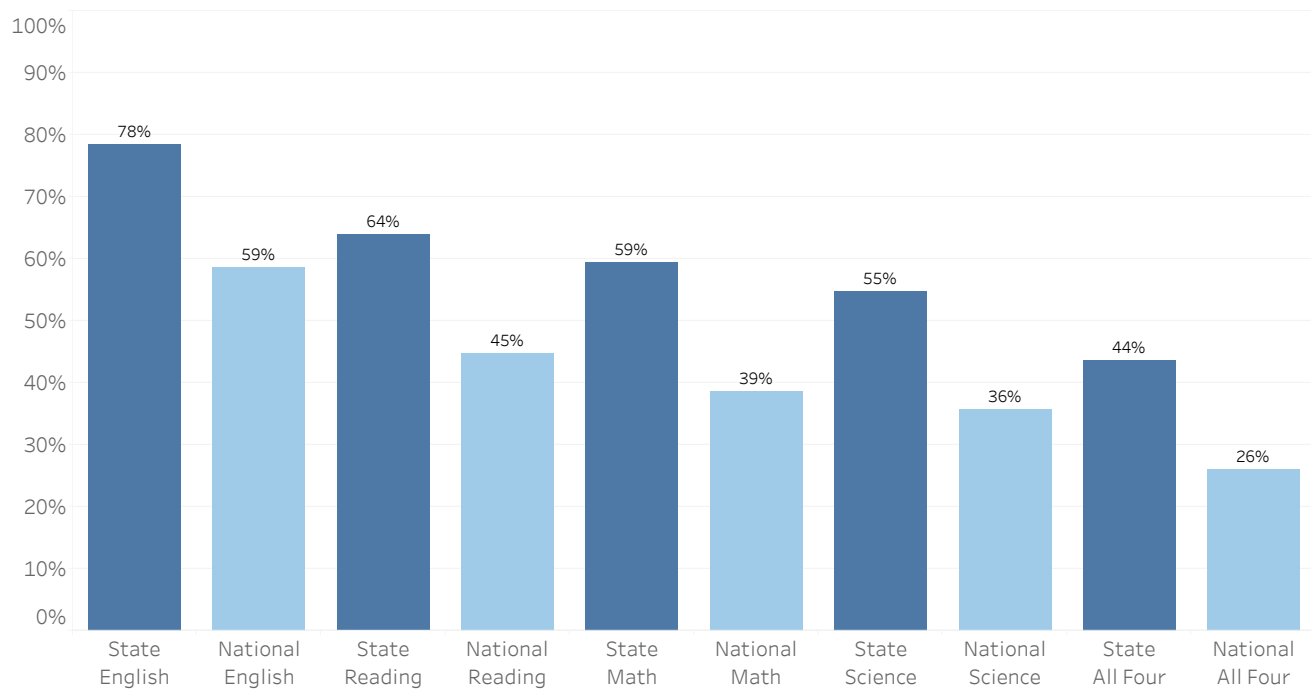
- Aspirations matter. Students who aspire to a higher level of postsecondary education typically achieve higher ACT Composite scores.
  - 11,329 students (47 percent) aspired to attain a graduate or professional degree. They had an average Composite score of 25.4.
  - 9,454 students (40 percent) aspired to attain a bachelor's degree. They had an average Composite score of 22.1.
  - 309 students (1 percent) aspired to attain a vocational/technical or associate's degree. They had an average Composite score of 16.9.
- In order of prevalence, the five most commonly indicated college majors of interest for 2019 Pennsylvania graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Biology, General; and Business Administration and Management, General.
  - In the Pennsylvania graduating class of 2019, 4,045 students (17 percent) indicated being undecided about their college major. They had an average Composite score of 23.0. 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 Pennsylvania graduating class of 2019, 854 (4 percent) indicated planning on majoring in education. They had an average Composite score of 21.2.

## Additional Points

- The Pennsylvania ACT State Organization continues to grow in membership and in diversity, with more than 130 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 Pennsylvania honorees were:
  - High school senior: Cindy Chau, Philadelphia High School for Girls; and K-12 professional: Amy Keller, Career Education Counselor, Quaker Valley School.

# PENNSYLVANIA 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

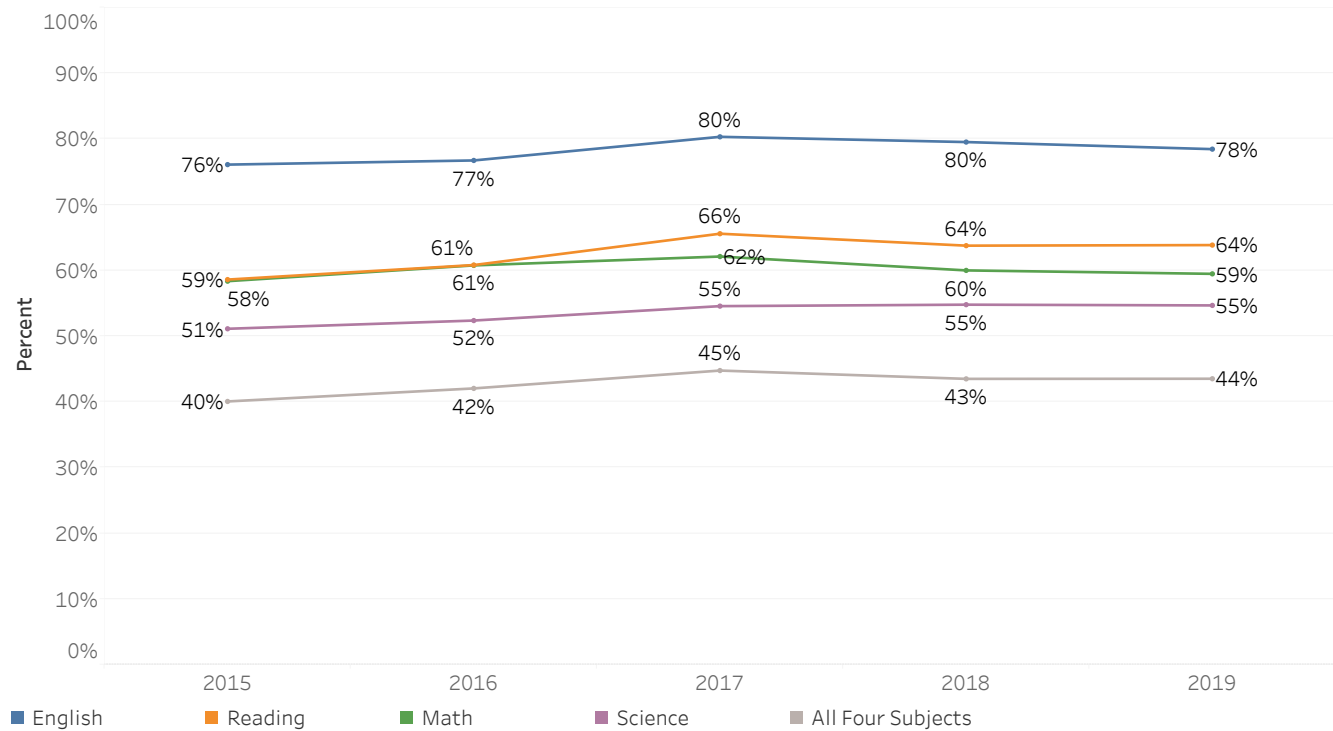
State English	National English	State Reading	National Reading	State Math	National Math	State Science	National Science	State All Four	National All Four
78%	59%	64%	45%	59%	39%	55%	36%	44%	26%

\* 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.

# PENNSYLVANIA 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

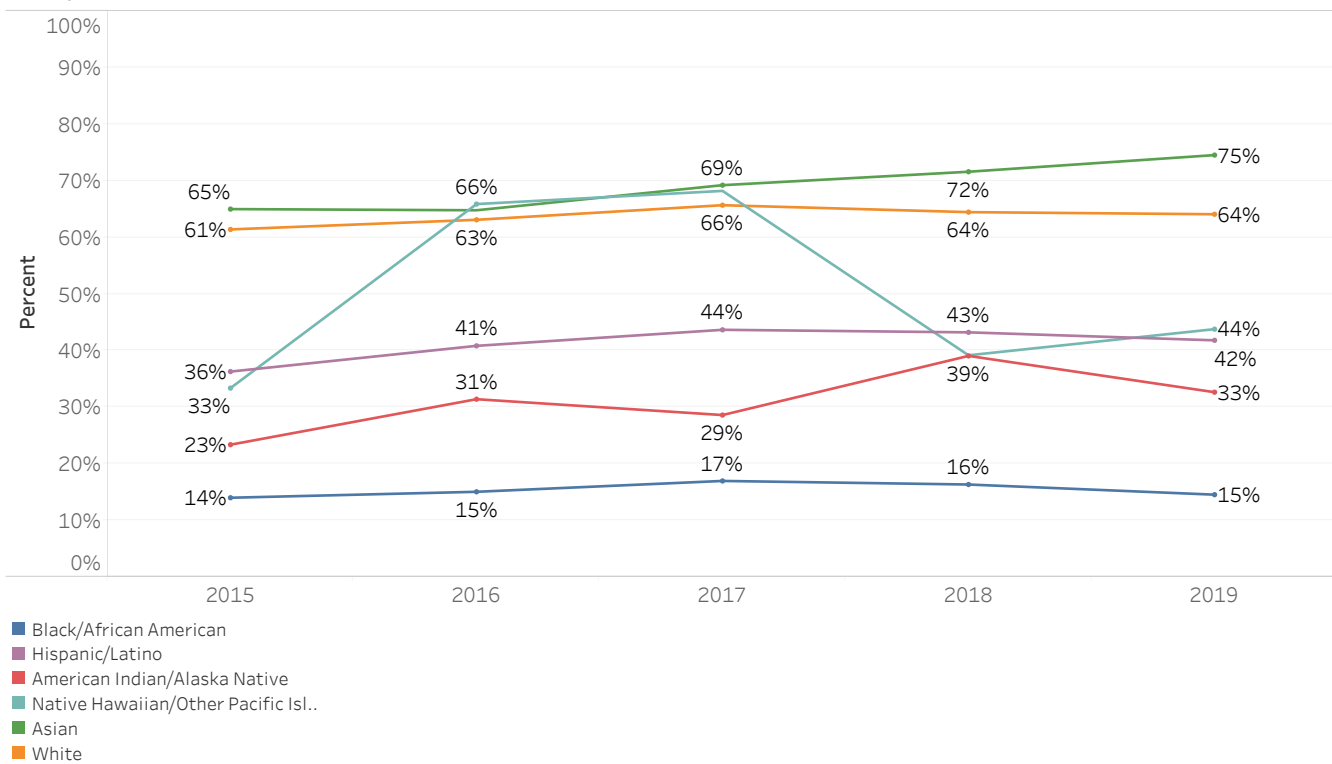
	English	Reading	Math	Science	All Four Subjects
2015	76%	59%	58%	51%	40%
2016	77%	61%	61%	52%	42%
2017	80%	66%	62%	55%	45%
2018	80%	64%	60%	55%	43%
2019	78%	64%	59%	55%	44%

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# PENNSYLVANIA 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



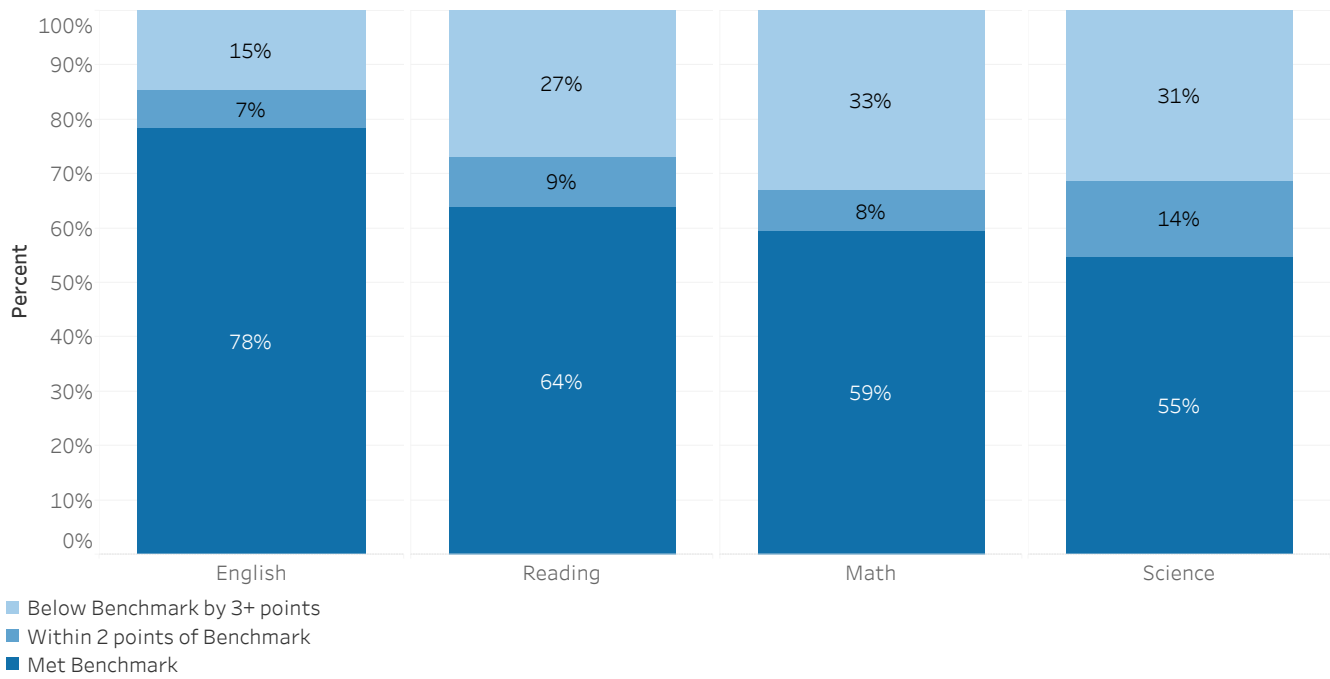
## Data From Graph Above

	Black/African American	Hispanic/Latino	American Indian/Alaska Native	Native Hawaiian/Other Pacific Islander	Asian	White
2015	14%	36%	23%	33%	65%	61%
2016	15%	41%	31%	66%	65%	63%
2017	17%	44%	29%	68%	69%	66%
2018	16%	43%	39%	39%	72%	64%
2019	15%	42%	33%	44%	75%	64%

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# PENNSYLVANIA 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

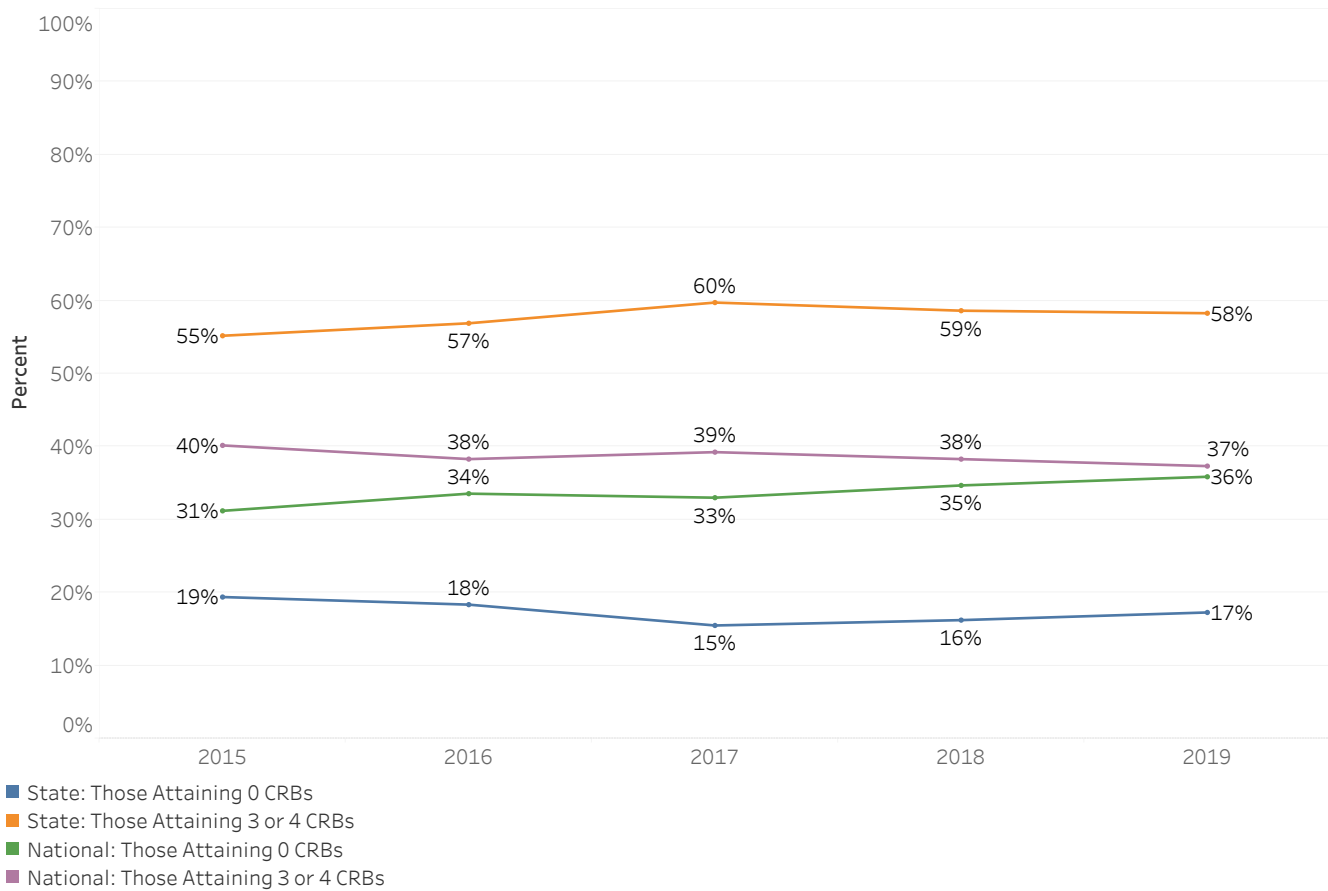
	Below Benchmark by 3+ points	Within 2 points of Benchmark	Met Benchmark
English	15%	7%	78%
Math	33%	8%	59%
Reading	27%	9%	64%
Science	31%	14%	55%

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

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



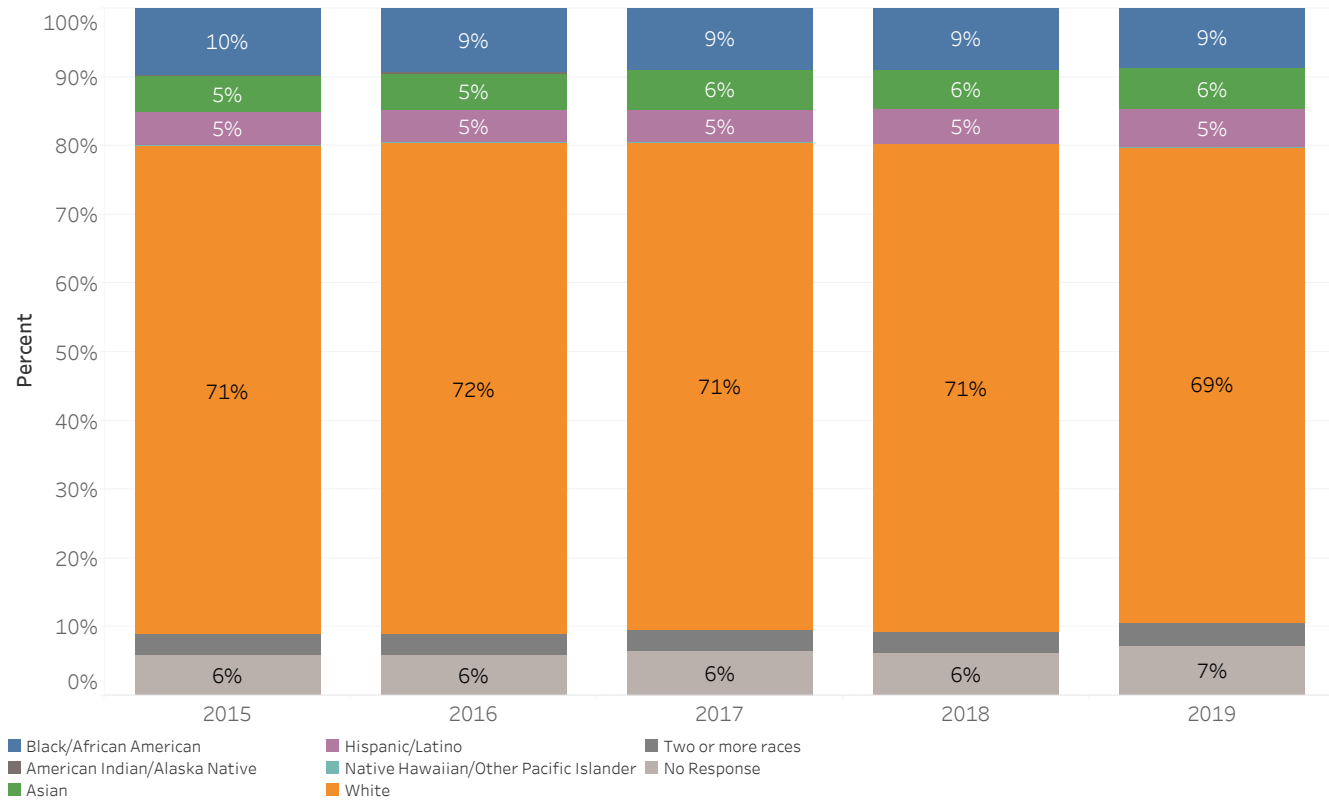
## Data from Graph Above

	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	19%	55%	31%	40%
2016	18%	57%	34%	38%
2017	15%	60%	33%	39%
2018	16%	59%	35%	38%
2019	17%	58%	36%	37%

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# PENNSYLVANIA 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	10%	0%	5%	5%	0%	71%	3%	6%
2016	9%	0%	5%	5%	0%	72%	3%	6%
2017	9%	0%	6%	5%	0%	71%	3%	6%
2018	9%	0%	6%	5%	0%	71%	3%	6%
2019	9%	0%	6%	5%	0%	69%	3%	7%

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

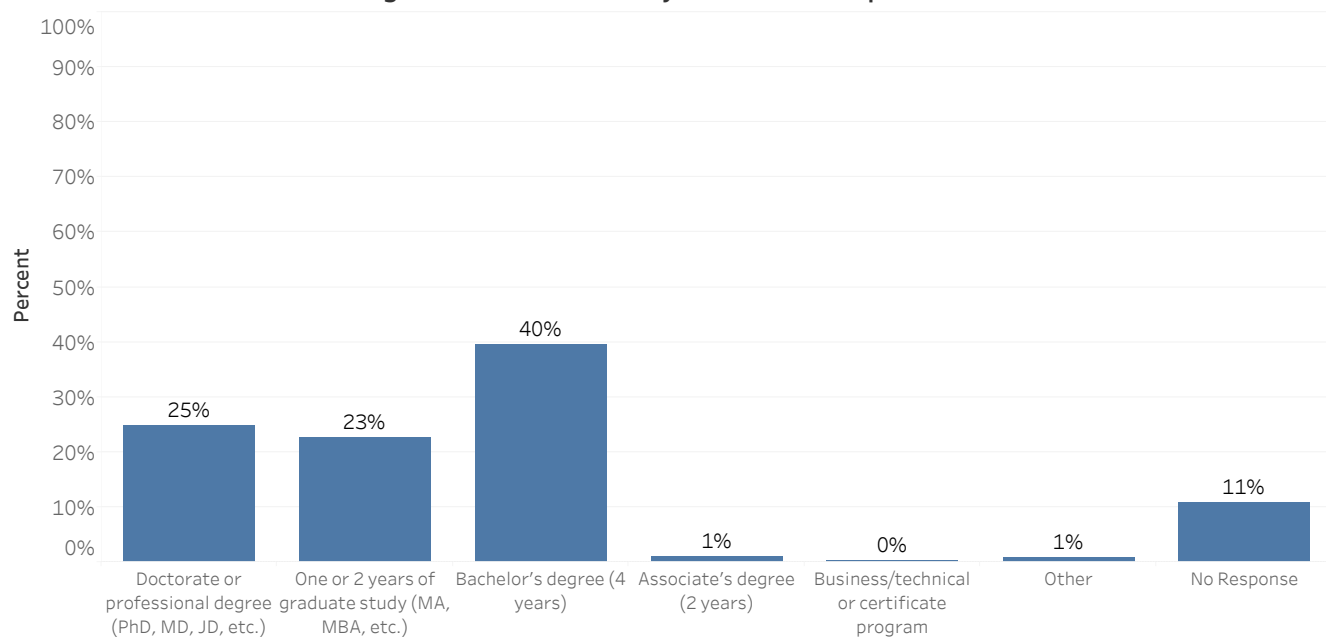
## Student Data Trends: 2015-2019, State vs. Nation

	2015	2016	2017	2018	2019
State N-count	29,776	31,342	30,987	27,694	23,855
National N-count	1,924,436	2,090,342	2,030,038	1,914,817	1,782,820
Average ACT English Score - State	22.5	22.6	23.4	23.3	23.3
Average ACT English Score - National	20.4	20.1	20.3	20.2	20.1
Average ACT Reading Score - State	23.2	23.6	24.2	24.0	24.1
Average ACT Reading Score - National	21.4	21.3	21.4	21.3	21.2
Average ACT Math Score - State	22.8	23.0	23.4	23.2	23.1
Average ACT Math Score - National	20.8	20.6	20.7	20.5	20.4
Average ACT Science Score - State	22.5	22.8	23.3	23.1	23.2
Average ACT Science Score - National	20.9	20.8	21.0	20.7	20.6
Average ACT Composite Score - State	22.9	23.1	23.7	23.5	23.6
Average ACT Composite Score - National	21.0	20.8	21.0	20.8	20.7

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

# PENNSYLVANIA 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.)	25%
One or 2 years of graduate study (MA, MBA, etc.)	23%
Bachelor's degree (4 years)	40%
Associate's degree (2 years)	1%
Business/technical or certificate program	0%
Other	1%
No Response	11%

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