

## The Condition of College and Career Readiness

This report looks at the progress of the 2016 ACT®-tested graduating class relative to college and career readiness.

This year's report shows that **64%** of students in the 2016 US graduating class took the ACT test, up from 59% in 2015 and 49% in 2011. The increased number of test takers over the past several years enhances the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness, as well as offering a glimpse at the emerging educational pipeline.

As a research-based nonprofit organization, ACT is committed to providing information and solutions to support the following:

- **Holistic view of readiness.** The 2014 ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, shows academic readiness is only one of four critical domains in determining an individual's readiness for success in college and career. Cross-cutting capabilities, behavioral skills, and the ability to navigate future pathways are also important factors to measure and address. Together, these elements define a clear picture of student readiness for postsecondary education.
- **Providing meaningful data for better decisions.** ACT is focused on providing better data to students, parents, schools, districts, and states so that all can make more informed decisions to improve outcomes. We accomplish this goal by taking a holistic view and using consistent and reliable historical information so that individuals and institutions have a better context to make critical decisions about the journey they have undertaken.

# The Condition of College & Career Readiness 2016

## Kentucky Key Findings

### Performance

- In Kentucky, 50,809 students in the 2016 graduating class took the ACT—an increase of 1,271 students over the 2015 class.
- Kentucky ranks 10th out of the 18 states that do census testing, with an average ACT Composite score of 20.0. Kentucky has trending scores comparable to the nation.
- ACT College Readiness Benchmarks
  - ~ 20% of Kentucky students taking the ACT achieved all four ACT College Readiness Benchmarks. While this is down 1% from last year, it is higher than 2012, 2013, and 2014.
  - ~ The percent of students meeting the reading Benchmark increased 1% from 2015 to 40% in 2016.
  - ~ Although the percent of students meeting the Benchmarks is slightly down from last year in mathematics, English, and science, the percent of students meeting or exceeding the Benchmarks in 2016 is equal to or has increased over the performance of Kentucky students in 2013 and 2014 for all three subjects.
- ACT Composite Score
  - ~ Female students' Composite scores are 0.6 point higher than male students.
  - ~ White students, who make up 72% of the students tested in Kentucky, scored 3.8 points higher than African American students, who make up 8% of the 2016 class. This is smaller than the national Composite score gap of 5.2 points between White and African American students.
- As one would expect, students taking more rigorous courses performed better:
  - ~ 21.2 average Composite score for students taking rigorous coursework and 18.4 average Composite score for students taking non-rigorous coursework.

### STEM

- Kentucky graduates who took advanced science and math courses show higher levels of achievement:
  - ~ Students who took physics earned significantly higher average ACT science scores and were more likely to meet or surpass the ACT College Readiness Benchmark in science than those who did not.
  - ~ Students who took a fourth year of math in high school, regardless of course, significantly outperformed those students who did not, in both ACT mathematics scores and in Benchmark attainment.
- STEM Benchmark achievement
  - ~ 14% of the 2016 Kentucky graduating class met the ACT STEM Benchmark—6% lower than the national percentage.
  - ~ However, the average ACT science score of Kentucky students who met the STEM Benchmark was 28.7, which is just above the national average ACT science score of 28.6 for students meeting the STEM Benchmark.

### Career Readiness

- This year, for the first time, ACT has provided an indicator of career readiness based on ACT composite scores. Table 3.4 in the state ACT Profile Report details how ACT-tested Kentucky graduates are progressing toward the ACT National Career Readiness Certificate™ (ACT NCRC®).
- Progress toward career readiness is based on research linking ACT Composite scores to ACT NCRC levels. The ACT Composite cut score for each ACT NCRC level corresponds to a 50% chance of obtaining that level. If a student's ACT Composite score surpassed the cut score for an ACT NCRC level, they are categorized as making progress towards the next higher ACT NCRC level. Attainment of ACT NCRC levels indicates workplace employability skills that are critical to job success.
- In Kentucky, 63% of ACT tested graduates are considered making progress towards at least a gold ACT NCRC level. This compares to 68% nationally.
- ACT Work Ready Communities make up 42% of the state.



## Behaviors that Impact Access and Opportunity

- Testing patterns
  - ~ 44.0% of White students, 50.9% of Hispanic students, and 47.3% of African American students who took the ACT in the 2016 graduating class tested only one time.
  - ~ The average score for all groups of students who took the ACT more than one time increased. Hispanic students who took the test at least twice scored 3.4 points higher on average than those who tested only once; African American students who took the test at least twice scored 2.9 points higher; and White students who took the test at least twice scored 4.3 points higher.
- Below are the top five universities to which Kentucky students sent their ACT scores:
  1. University of Kentucky
  2. University of Louisville
  3. Western Kentucky University
  4. Eastern Kentucky University
  5. Morehead State University
- ~ The top out-of-state school to which Kentucky graduates sent their ACT scores was the University of Cincinnati, which ranked 12th overall.
- ACT Educational Opportunity Service (EOS) opt-in rates
  - ~ EOS is a free service that allows students to learn about educational, scholarship, career, and financial aid opportunities from colleges, universities, financial aid and scholarship agencies, and other organizations that offer educational programs. In the 2016 Kentucky graduating class, the opt-in rate was 76.4%, compared with the national opt-in rate of 73.1%.
- “Get Your Name in the Game” information
  - ~ The “Get Your Name in the Game” initiative provides colleges and universities an opportunity to find students who are traditionally underserved. Nine colleges and universities in Kentucky utilized this free initiative to promote options to underserved learners—up from seven schools in 2015.
- Fee Waiver Usage
  - ~ In Kentucky, there were 13,171 fee waivers issued and 9,371 of those were used. This equates to a 71.2% usage rate. The national rate was 74.5%.
  - ~ ACT provides students fee waivers to provide more access and opportunity for students.

## Pipeline

- The most dominant career interest for Kentucky students is Health Sciences and Technologies, meaning that Kentucky STEM initiatives are working to generate student interest.
- Only 5% of students wish to enter the educational field.
- 10% of Kentucky students listed “Undecided” as their planned educational major—lower than the national average of 13%. This is a great opportunity to expose students to the ACT Interest Inventory at an earlier age with ACT Profile and PreACT™, allowing students starting at age 13 to see the connection between their personal characteristics and potential majors/ careers.
- Aspirations matter:
  - ~ 73.4% state that they wish to receive a bachelor’s degree, graduate degree, or professional level degree.
  - ~ Students who aspire to a higher level of postsecondary education achieve higher ACT Composite scores:
    - 10.9% of graduates aspiring to a graduate degree earn an average Composite score of 23.3, which is 3.3 points higher than the state average of 20.0.
    - 43.5% of graduates aspiring to a bachelor’s degree earn an average Composite score of 20.0.

## ACT Footprint

ACT Aspire® Summative	ACT Aspire® Periodic	ACT Engage®	ACT QualityCore®	PreACT™	ACT WorkKeys®
14,991	12,737	1,888	1,745	352*	75,676

\* PreACT refers to preorders for FY17.

*These are the number of each of these assessments delivered in the state and not reflective of the 2016 ACT-tested graduating class.*

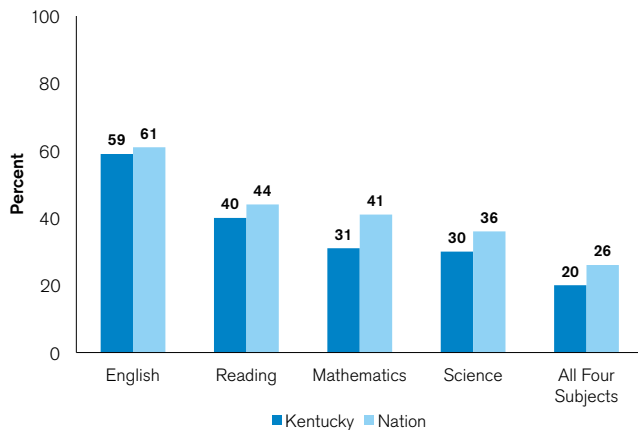
## Special State Talking Points

- The Kentucky Council on Postsecondary education set Kentucky Benchmarks of 18 for English, 19 for mathematics, and 20 for reading. No Benchmark for science was set. 59% of Kentucky students achieved the Benchmark in English, 43% achieved in the Benchmark in mathematics, and 52% achieved the Benchmark in reading.

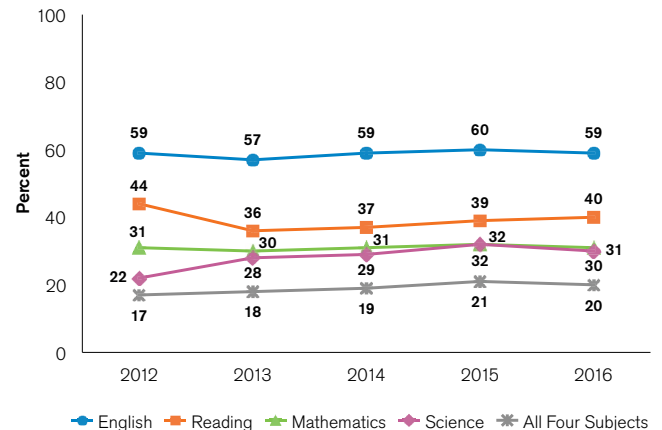
# Your State College and Career Readiness Attainment, Participation, and Opportunity

## Kentucky

Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Percent of 2012–2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks\*



Note: Percents in this report may not sum to 100% due to rounding.

\* ACT College Readiness Benchmarks in reading and science were revised in 2013.

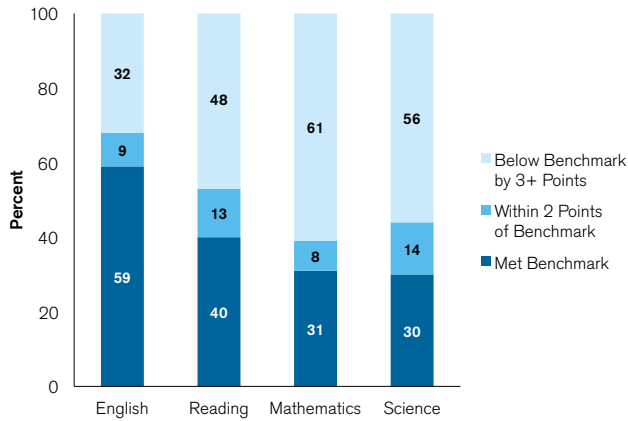
## Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Kentucky increased by 9.8%.

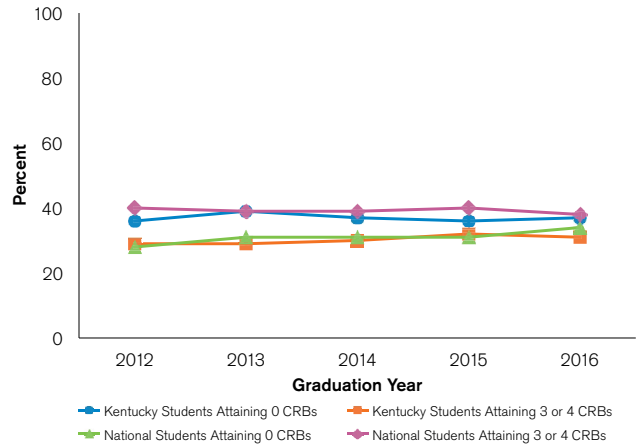
Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	Kentucky	100%	100%	100%	100%	100%
	Nation	52%	54%	57%	59%	64%
N Tested	Kentucky	46,289	49,551	48,845	49,538	50,809
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	Kentucky	19.5	19.2	19.4	19.5	19.7
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	Kentucky	20.2	19.9	20.3	20.3	20.6
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	Kentucky	19.4	19.2	19.4	19.5	19.3
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	Kentucky	19.8	19.7	20	20.1	19.9
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	Kentucky	19.8	19.6	19.9	20	20
	Nation	21.1	20.9	21	21	20.8

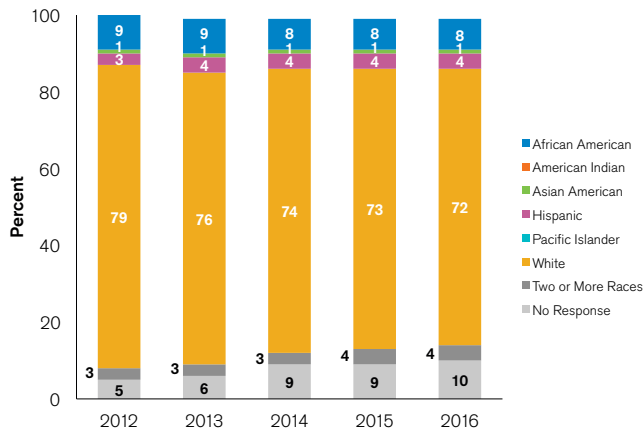
**Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject**



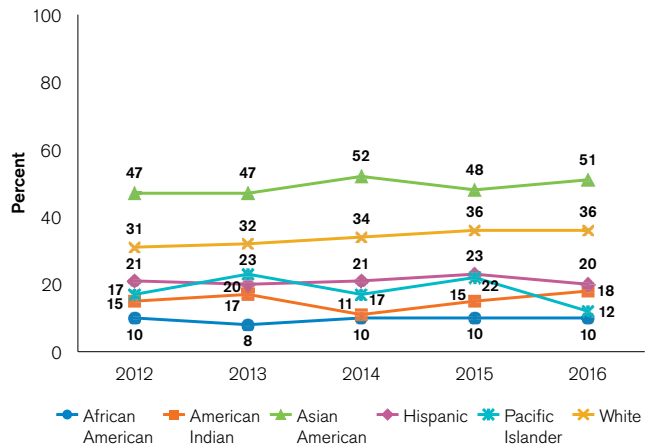
**Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained**



**Percent of 2012–2016 ACT-Tested High School Graduates by Race/Ethnicity**

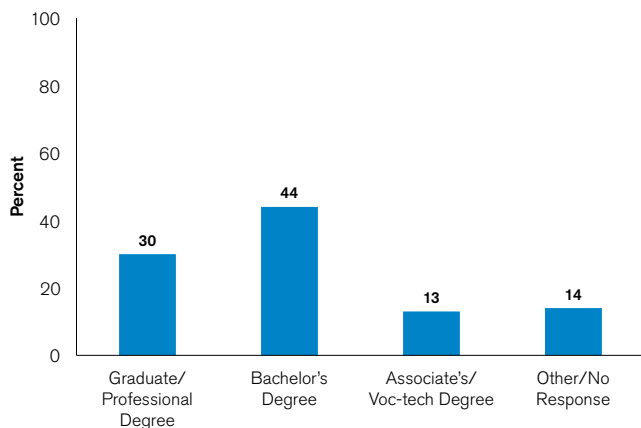


**Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity**



Note: Values less than 0.5% will not appear.

**Percent of 2016 ACT-Tested High School Graduates by Educational Aspirations**



There is good news in that 86% of Kentucky's 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 88% of Kentucky's 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 53% who actually did enroll. If we fully closed the aspirational gap, an additional 17,057 of the 2015 ACT-tested graduates from Kentucky would have enrolled in postsecondary education.

## What You Need to Know

At ACT, we are inspired every day to make a positive difference. Here are a few ways we are making an impact each day in the lives of students, teachers, education, policy makers, and workforce leaders.

### The ACT<sup>®</sup>

- Enhancements to ACT Score Reports starting in September 2016
- Introduction of ACT Kaplan Online Prep Live in September 2016
- New Score Reports

### Pre ACT<sup>™</sup>

- Affordable cost—\$12 per student tested for schools, districts, and states
- Flexible administration—Schools, districts, and/or states may administer on any date between September 1, 2016 and June 1, 2017
- Structured test environment—Similar to what the student will experience when taking the ACT test

### Online Prep Live

#### ACT<sup>®</sup> KAPLAN

- A virtual classroom experience that delivers all the benefits of ACT Online Prep, plus an interactive teaching experience
- Live learning experiences available at no cost to students who register for the ACT using a fee waiver
- Recorded sessions available on demand to provide maximum flexibility to students

### ACT<sup>®</sup> Aspire<sup>®</sup>

- New Performance Level Descriptors coming in August 2016
- More than 5 million ACT Aspire online assessments administered to US students since January 2016, a major milestone for the program and up by more than 130% compared to the previous year
- New Score Reports

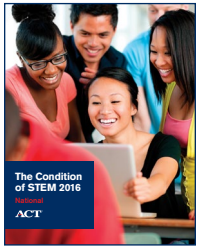
### ACT<sup>®</sup> Engage<sup>®</sup>

- Helps schools face the challenge of preparing students for success after high school. Read the latest white paper, *Identifying Skills to Succeed in School, at Work, and in the "Real World."*
- New Score Reports

### ACT<sup>®</sup> WorkKeys<sup>®</sup>

- Updated versions of the ACT National Career Readiness Certificate (ACT NCRC) assessments and credential coming in summer 2017
- Fully updated ACT WorkKeys curriculum and test prep available in summer 2017 to support the updated ACT NCRC assessments
- Will include a new test delivery platform that will introduce features and functionality important to ACT WorkKeys customers

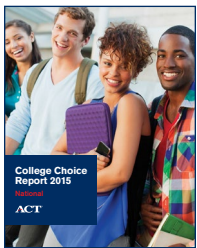
## Key ACT Research



### **The Condition of STEM 2016— Releasing November 2016**

This report provides national and state data about the 2016 graduating class in

the context of STEM-related fields (Science, Technology, Engineering, Mathematics) to determine student interest levels in specific STEM fields and, more importantly, readiness in math and science of those interested in STEM careers.



### **College Choice Report 2015**

This report follows the ACT-tested high school graduating class of 2015, focusing on specific testing behaviors that

may expand college opportunities available to students. This is an important topic for enrollment managers and admissions officers to consider, as students' participation in these testing behaviors have implications for colleges' chances to recruit, advise, and place these prospective students.

## Recommendations

### **1. Create an assessment model that measures a variety of skill domains and competencies required for college and career success.**

Historically, college and career readiness assessments have focused only on academic skills. ACT research has clearly established areas of competency important for college and career readiness success. While our research shows that ACT solutions independently measure key components of college AND career readiness, we and others have begun to realize that no single solution can measure the full breadth of this readiness, nor should it. Simply put, the ACT alone is not enough to measure the full breadth of career readiness. A more holistic assessment model, incorporating multiple domains and specific skills associated with career clusters or occupations, will typically be most appropriate for describing and evaluating student readiness for college and career.

### **2. Optimize opportunities to influence awareness and engagement of underserved learners.**

Initiatives designed to aid underserved learners are only as effective as they are visible. We must inform advocates and ALL underserved learners about the available and effective programs designed for this purpose. For example, in the 2015–2016 academic year, approximately 730,000 students registered to take the ACT using fee waivers valued at more than \$36 million. Yet, not all eligible students took advantage of this offer. Similarly, institutions must use data to inform intervention strategies if they are going to help underserved students be prepared for postsecondary success.

### **3. Take the guesswork out of STEM.**

It is critically important to align STEM initiatives to capitalize on performance, measured interest, and expressed interest. Essential to this effort is expanding and nurturing interest in STEM, which will impact the emerging pipeline of STEM majors, teachers, and workers. This requires capturing a wider range of students and employing concrete measures to inform intervention and programming. To do so, states and districts must look for partnering opportunities from K–12 to postsecondary education to the workplace.

### **4. Focus on the implementation of fewer, higher, clearer, standards in K–12 classrooms to raise the bar for all students.**

No matter the adopted standards, proper implementation must focus on the most critical component for increasing readiness—effective, high-quality teaching. This requires investment in postsecondary teaching programs, professional development, and state-level collaboration among K–12 and higher education.

### **5. Don't over test students.**

When states, schools, and districts build an assessment strategy that recognizes the limits and promise of test scores, they will reduce the likelihood of over testing. Used ethically and appropriately, assessments can inform decisions at individual and institutional levels. Misunderstood, misused, or abused, assessments cause confusion, can be perceived as punitive, or result in ill-conceived strategies. To quote ACT founder E.F. Lindquist, "Assessment is valuable to the extent it bridges teaching and learning."