Tennessee Key Findings

Performance
- Tennessee has conducted census testing with the ACT test since 2009.
- Over the last five years, there has been an increase in the percent of students meeting all four of the ACT College Readiness Benchmarks.
- The percentage of Tennessee graduates meeting zero benchmarks remained the same at 38.6% in 2016.
- Relative to ACT Composite score and subject level scores:
  - Since 2012, the size of the state’s graduating class taking the ACT has grown, even as the average ACT Composite score has increased from 19.7 to 19.9. This is notable, as average scores tend to decrease with a broadening of the testing base.
  - The average state Composite score, 19.9, is slowly increasing each year, but currently lags behind the national average of 20.8. However, it is important to note that Tennessee’s average Composite score increased while the national Composite score decreased.

STEM
- Tennessee students 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.
- Tennessee’s average ACT STEM score of 19.8 was close to the national STEM score of 20.9, but only 13% of students met the ACT STEM Benchmark of 26, compared to 20% of students nationwide 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 Tennessee 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 Tennessee, 63% of ACT tested graduates are considered making progress towards at least a gold ACT NCRC level. This compares to 68% nationally.
Behaviors that Impact Access and Opportunity

- Testing patterns
  - Within the 2016 Tennessee graduating class, 46% of the graduates tested only one time, and about 12% of those waited till their senior year to test.
  - 5% of White and 7% of African American students tested for the first and only time as a senior.
  - Tennessee students who retest outperform their peers, regardless of the time of first testing.
- Below are the top five colleges and universities to which Tennessee graduates sent their ACT scores:
  - University of Tennessee—Knoxville
  - Middle Tennessee State University
  - University of Tennessee—Chattanooga
  - University of Memphis
  - Tennessee Tech University
- Mississippi State University is the out-of-state school that receives the most scores from Tennessee students; however, there are 22 other selections before an out-of-state school appears.
- ACT Educational Opportunity Service (EOS) opt-in rates
  - 73.9% of Tennessee students opted in to EOS, compared to the national rate of 73.1%. By opting in, students allow colleges and universities to communicate with them about various academic majors, scholarships, and student life opportunities.
- “Get Your Name in the Game” information: The “Get Your Name in the Game” initiative allows colleges and universities access to underserved students’ names free of charge.
  - In May, roughly 63,000 students graduated from high school in Tennessee. More than a quarter of them were African American or Hispanic/Latino. According to the Tennessee Higher Education Commission, only about half of them will enroll in college in the fall.
  - Twenty-one colleges and universities in Tennessee accessed 303,257 student names through the “Get Your Name in the Game” campaign. These colleges and universities communicated with underserved learners about academic programs, admission requirements, and scholarship opportunities.
- Fee Waiver Usage
  - In Tennessee, there were 15,939 fee waivers issued and 11,634 of those were used. This equates to a 73.0% usage rate. The national rate was 74.5%.
  - 57.5%, or 2,476, of the unused fee waivers were issued to African American students.
  - ACT provides students fee waivers to provide more access and opportunity for students.

Pipeline

- Colleges and universities received 171,514 ACT score reports from 2016 Tennessee graduates—the largest number of score reports sent by the graduating class cohort in Tennessee’s history.
- The largest planned educational majors reported by Tennessee graduates are Health Sciences and Technology (19%), No Response (17%), and Undecided (11%). The number of students that report “undecided” and “no response” continues to increase each year. You should consider adding ACT Profile to your personalized learning plans to get students more exposure to the ACT Interest Inventory.
- Only 4% of ACT-tested Tennessee 2016 graduates expressed an interest in pursuing education as a major or career. Those students earned an average ACT Composite score of 20.1, higher than the state average of 19.9.
- Aspirations matter. Students in Tennessee who aspire to a higher level of postsecondary education achieve higher ACT Composite scores. It is notable that 79% of Tennessee graduates would like to attend some type of postsecondary institution after graduating.
  - Graduates who aspire to a graduate degree earn an average Composite score of 23.5.
  - Graduates who aspire to a bachelor’s degree earn an average Composite score of 19.9.
  - Graduates who aspire to an associate’s degree earn an average Composite score of 16.3.

ACT Footprint

<table>
<thead>
<tr>
<th>ACT Aspire® Summative</th>
<th>ACT Aspire® Periodic</th>
<th>ACT Engage®</th>
<th>ACT QualityCore®</th>
<th>PreACT™</th>
<th>ACT WorkKeys®</th>
</tr>
</thead>
<tbody>
<tr>
<td>31,253</td>
<td>9,617</td>
<td>6,005</td>
<td>–</td>
<td>251*</td>
<td>20,752</td>
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</table>

* 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

- In 2016, ACT honored exemplars in 41 states as part of our College & Career Readiness Campaign.
- In Tennessee, these honorees include:
  - Student—Christine Garcia from Lenoir City High School
  - High School—The Soulsville Charter School
  - Two-Year School—Tennessee College of Applied Technology—Jackson
  - Career/Workforce—Chemours Johnsonville Plant
- ACT initiatives in support of Tennessee Department of Education strategic goals to increase average ACT score to 21 by 2020 and to increase the number of students graduating with a postsecondary diploma, certificate or degree by 2020:
  - “Get Your Name in the Game”
  - Senior Retake Project
  - ACT test score report enhancements with Interest-Major Fit and Career Readiness Fit Score Level
### Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Tennessee increased by 5.6%.

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

<table>
<thead>
<tr>
<th>Subject</th>
<th>Tennessee</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>58%</td>
<td>61%</td>
</tr>
<tr>
<td>Reading</td>
<td>38%</td>
<td>44%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Science</td>
<td>36%</td>
<td>26%</td>
</tr>
<tr>
<td>All Four Subjects</td>
<td>20%</td>
<td>20%</td>
</tr>
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</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>English</th>
<th>Reading</th>
<th>Mathematics</th>
<th>Science</th>
<th>All Four Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>59%</td>
<td>43%</td>
<td>29%</td>
<td>30%</td>
<td>16%</td>
</tr>
<tr>
<td>2013</td>
<td>58%</td>
<td>36%</td>
<td>27%</td>
<td>28%</td>
<td>18%</td>
</tr>
<tr>
<td>2014</td>
<td>59%</td>
<td>37%</td>
<td>30%</td>
<td>29%</td>
<td>19%</td>
</tr>
<tr>
<td>2015</td>
<td>58%</td>
<td>38%</td>
<td>30%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>2016</td>
<td>58%</td>
<td>38%</td>
<td>30%</td>
<td>30%</td>
<td>20%</td>
</tr>
</tbody>
</table>

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.

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

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Cohort</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>Percent Tested</td>
<td>Tennessee</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td></td>
<td>Nation</td>
<td>52%</td>
<td>54%</td>
<td>57%</td>
<td>59%</td>
<td>64%</td>
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<td>N Tested</td>
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<tr>
<td>Average English Score</td>
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<td>19.6</td>
<td>19.3</td>
<td>19.6</td>
<td>19.5</td>
<td>19.6</td>
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<td></td>
<td>Nation</td>
<td>20.5</td>
<td>20.2</td>
<td>20.3</td>
<td>20.4</td>
<td>20.1</td>
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<tr>
<td>Average Reading Score</td>
<td>Tennessee</td>
<td>19.9</td>
<td>19.8</td>
<td>20.1</td>
<td>20.1</td>
<td>20.3</td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>21.3</td>
<td>21.1</td>
<td>21.3</td>
<td>21.4</td>
<td>21.3</td>
</tr>
<tr>
<td>Average Mathematics Score</td>
<td>Tennessee</td>
<td>19.1</td>
<td>19.1</td>
<td>19.2</td>
<td>19.3</td>
<td>19.2</td>
</tr>
<tr>
<td></td>
<td>Nation</td>
<td>21.1</td>
<td>20.9</td>
<td>20.9</td>
<td>20.8</td>
<td>20.6</td>
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<td>Average Science Score</td>
<td>Tennessee</td>
<td>19.6</td>
<td>19.4</td>
<td>19.6</td>
<td>19.9</td>
<td>19.9</td>
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<tr>
<td></td>
<td>Nation</td>
<td>20.9</td>
<td>20.7</td>
<td>20.8</td>
<td>20.9</td>
<td>20.8</td>
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<tr>
<td>Average Composite Score</td>
<td>Tennessee</td>
<td>19.7</td>
<td>19.5</td>
<td>19.8</td>
<td>19.8</td>
<td>19.9</td>
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<tr>
<td></td>
<td>Nation</td>
<td>21.1</td>
<td>20.9</td>
<td>21</td>
<td>21</td>
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Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject

There is good news in that 80% of Tennessee’s 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 84% of Tennessee’s 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 60% who actually did enroll. If we fully closed the aspirational gap, an additional 15,985 of the 2015 ACT-tested graduates from Tennessee 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**

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

**Pre ACT**

- 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**

- 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 Aspire**

- 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 Engage**

- 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 WorkKeys**

- 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.”