The Condition of College & Career Readiness

This report looks at the achievement of the ACT®-tested 2017 graduating class relative to college and career readiness. A total of 60% of students in the 2017 US graduating class took the ACT® test, compared to 64% last year, 54% in 2013, and 42% in 2007. The growing percentage of the nation’s graduates taking the ACT® over the past decade has enhanced the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness.

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

• **Holistic view of readiness.** The ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, shows academic readiness is only one of multiple domains critical in determining an individual’s readiness for success in college and career. Social and emotional learning skills (SEL) are also vital. Behavioral skills, cross-cutting capabilities, and navigational skills should be measured and addressed. Together, these elements provide a comprehensive picture of student readiness for success after high school.

• **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 educational 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.

Minnesota Key Findings

**Performance**

- In the Minnesota graduating class of 2017, 61,101 graduates took the ACT® test, compared to 44,676 in 2013.
  - This was a decrease of 3,044 students tested last year. The number of White students tested decreased the greatest amount, at 2,697.
- Minnesota graduates of 2017 had an average Composite score of 21.5, compared to the national average of 21.0.
  - All student groups saw an increase in Composite scores, with African Americans, Hispanics, and Pacific Islanders each seeing a 0.5 point increase.
  - This is an increase of 0.4 point over last year and is the highest Composite score of states census testing their juniors.
- In 2017, 31 percent of Minnesota graduates met all four ACT College Readiness Benchmarks. This compares to 29 and 39 percent of 2016 and 2013 graduates, respectively.
  - The percentage of Minnesota students who met the ACT College Readiness Benchmarks exceeded the national percentages in all subjects, as well as in all reporting categories within each subject area.
  - In 2017, 30 percent of Minnesota graduates met zero ACT College Readiness Benchmarks. This compares to 33 and 16 percent of 2016 and 2013 graduates, respectively.

**STEM**

- In 2017, 27,269 Minnesota graduates (45 percent) indicated having an interest in STEM majors and/or careers.
- 24 percent of the 2017 graduating class met the ACT STEM College Readiness Benchmark (compared to 21 percent nationally), had an average math STEM score of 28.7, and had an average science STEM score of 28.5.
- 81 percent of the 2017 class indicated that they were taking three or more years of math, and 53 percent indicated they were taking physics.
- In Minnesota, 2017 graduates taking three or more years of math had an average math score of 22.2 compared to the average math score of 17.1 for students taking less than three years of math.
- In Minnesota, 2017 graduates taking physics had an average science score of 22.8, compared to the average science score of 20.6 for students not taking physics.

**Career Readiness**

- In 2017, 17,680 Minnesota graduates (29 percent) were likely to attain the Gold ACT WorkKeys® National Career Readiness Certificate® or higher based upon ACT Composite score, compared to 538,392 (27 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, 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.” For comparison, individual student score reports classify those who scored 12 to 13, 14 to 17, and 18 and higher as making progress toward Bronze, Silver, and Gold certificates.
Impact

- Based on the actual test volume and ACT score distributions of 2016 ACT-tested Minnesota high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2017 graduating class would result in:
  - 121 more students enrolling in college.
  - 146 more students persisting to year two.
  - 116 fewer students needing remedial English.
  - 192 fewer students needing remedial math.
  - 168 more students persisting to year four.
  - 187 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Minnesota, 2017 graduates taking the ACT two or more times had an average Composite score of 23.9, compared to 19.6 for single-time testers.
  - For White students who tested at least twice, 93.1 percent first tested in their junior year and increased their score by 1.2 points, and scored 3.6 points higher than 11th-grade White students who tested only once.
  - For Hispanic students who tested at least twice, 95.9 percent first tested in their junior year and increased their score by 0.7 point(s), and scored 4.2 point(s) higher than 11th-grade Hispanic students who tested only once.
  - For African American students who tested at least twice, 95.3 percent first tested in their junior year and increased their score by 0.5 point(s), and scored 3.5 point(s) higher than 11th-grade African American students who tested only once.
- For Minnesota’s 2017 ACT-tested graduates, the top five schools to which scores were sent were University of Minnesota-Twin Cities, University of Minnesota-Duluth, Minnesota State University-Mankato, St. Cloud State University, and North Dakota State University.
  - For Minnesota’s 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were North Dakota State University, University of North Dakota, and University of Wisconsin-Madison.
  - Compared to 73 percent of 2017 graduates nationally, 64 percent of Minnesota graduates opted into EOS.
  - Compared to 76 percent of American Indian students nationally, 67 percent of Minnesota American Indian 2017 graduates opted into EOS.
  - Compared to 83 percent of Hispanic students nationally, 73 percent of Minnesota Hispanic 2017 graduates opted into EOS.
  - Compared to 85 percent of African American students nationally, 75 percent of Minnesota African American 2017 graduates opted into EOS.
- Minnesota students sent 146,279 ACT score reports to colleges.
- ACT issued 6,992 ACT fee waivers to Minnesota students who qualify. However, 1,906 students (27 percent) did not take advantage of this opportunity to test for free. This compares to 656,061 issued nationally, of which 181,092 (28 percent) did not take advantage. Fee waivers represent a great opportunity for students with socio-economic challenges to retest without incurring any fees.
  - While African Americans represent 34 percent of fee waivers issued, they account for 18 percent of unused fee waivers. Similarly, Hispanic students represented 18 percent of fee waivers issued, and account for 17 percent of unused fee waivers.

Pipeline

- In the Minnesota graduating class of 2017, 6,610 (11 percent) had parents who did not attend college.
  - In the Minnesota graduating class of 2017, 8,786 (14 percent) aspirated to attain a professional degree. They had an average Composite score of 24.5.
  - In the Minnesota graduating class of 2017, 7,055 (12 percent) aspirated to attain a graduate degree. They had an average Composite score of 24.9.
  - In the Minnesota graduating class of 2017, 25,319 (41 percent) aspirated to attain a bachelor’s degree. They had an average Composite score of 21.6.
  - In the Minnesota graduating class of 2017, 3,824 (6 percent) aspirated to attain an associate’s degree. They had an average Composite score of 17.3.
  - In order of prevalence, the five most commonly indicated college majors of interest for 2017 Minnesota graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Engineering (Pre-Engineering), General.
  - In the Minnesota graduating class of 2017, 7,412 (12 percent) indicated being undecided about their college major. They had an average Composite score of 22.4.
  - In the Minnesota graduating class of 2017, 2,550 (4 percent) indicated planning on majoring in education. They had an average Composite score of 21.4.

ACT Footprint

- Number of administrations:
  - ACT Aspire® Summative: 21,214
  - ACT Aspire Periodic: 4,522
  - ACT Engage®: 1,378
  - PreACT®: 17,295
  - ACT WorkKeys: 18,790

Additional Points

- The Minnesota ACT State Organization continues to grow in membership and in diversity, with more than 250 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 conference that brings together professionals representing each of these areas, providing a unique and diverse professional development opportunity.
  - 275 people attended the annual ACT State Organization Conference in February.
  - Eight ACT College and Career Readiness Workshops were conducted across the state in the fall.
  - 79 students scored a 36 Composite score on the ACT, compared to 67 in 2016.
Minnesota College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject

Percent of 2013-2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks

Data from graph above:

<table>
<thead>
<tr>
<th>State / Nation</th>
<th>English (18)</th>
<th>Reading (22)</th>
<th>Math (22)</th>
<th>Science (23)</th>
<th>All Four Subjects</th>
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<tbody>
<tr>
<td>Minnesota</td>
<td>63</td>
<td>50</td>
<td>48</td>
<td>42</td>
<td>31</td>
</tr>
<tr>
<td>Nation</td>
<td>61</td>
<td>47</td>
<td>41</td>
<td>37</td>
<td>27</td>
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Data from graph above:

<table>
<thead>
<tr>
<th>Subject</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tr>
<td>Reading</td>
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<td>Math</td>
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<tr>
<td>Science</td>
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<td>53</td>
<td>53</td>
<td>40</td>
<td>42</td>
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<tr>
<td>All Four Subjects</td>
<td>39</td>
<td>39</td>
<td>39</td>
<td>29</td>
<td>31</td>
</tr>
</tbody>
</table>

* 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 score values in parentheses ( ).
Percent of 2013-2017 ACT-Tested High School Graduates Meeting Three or More ACT College Readiness Benchmarks by Race/Ethnicity*

<table>
<thead>
<tr>
<th>Race</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>16</td>
<td>17</td>
<td>17</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>American Indian</td>
<td>29</td>
<td>29</td>
<td>24</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Asian American</td>
<td>36</td>
<td>36</td>
<td>37</td>
<td>33</td>
<td>35</td>
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<tr>
<td>Hispanic</td>
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<td>30</td>
<td>31</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>34</td>
<td>35</td>
<td>38</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>White</td>
<td>61</td>
<td>62</td>
<td>62</td>
<td>49</td>
<td>53</td>
</tr>
</tbody>
</table>

Percent of 2017 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject

Note: Percentages for groups with insufficient counts will be missing.

Data from graph above:

<table>
<thead>
<tr>
<th>Race</th>
<th>Met Benchmark</th>
<th>Within 2 Points of Benchmark</th>
<th>Below Benchmark by 3+ Points</th>
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<tbody>
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<td>African American</td>
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<tr>
<td>American Indian</td>
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<td>Asian American</td>
<td>28</td>
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<td>Pacific Islander</td>
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<td>43</td>
</tr>
<tr>
<td>White</td>
<td>61</td>
<td>62</td>
<td>62</td>
</tr>
</tbody>
</table>

* Percentages for groups with insufficient counts will be missing.
Minnesota The Condition of College & Career Readiness 2017

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

Data from graph above:

<table>
<thead>
<tr>
<th>Attainment</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota Students Attaining 0 CRBs</td>
<td>16</td>
<td>17</td>
<td>20</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td>Minnesota Students Attaining 3 or 4 CRBs</td>
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<td>55</td>
<td>54</td>
<td>42</td>
<td>44</td>
</tr>
<tr>
<td>National Students Attaining 0 CRBs</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td>National Students Attaining 3 or 4 CRBs</td>
<td>39</td>
<td>39</td>
<td>40</td>
<td>38</td>
<td>39</td>
</tr>
</tbody>
</table>

Percent of 2013–2017 ACT-Tested High School Graduates by Race/Ethnicity

Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.

Data from graph above:

<table>
<thead>
<tr>
<th>Race</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
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<td>6</td>
<td>6</td>
<td>6</td>
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<tr>
<td>American Indian</td>
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<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Asian American</td>
<td>6</td>
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<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Hispanic</td>
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<td>5</td>
<td>5</td>
<td>7</td>
<td>7</td>
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<tr>
<td>Pacific Islander</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>White</td>
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<td>75</td>
<td>72</td>
<td>66</td>
<td>65</td>
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<tr>
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<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
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<td>4</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>
**Minnesota:** Between 2013 and 2017, the number of students taking the ACT in Minnesota increased by 16,425 students (37 percent).

### Student Data Trends: 2013–2017, State vs. Nation

#### Outcome | Cohort | 2013 | 2014 | 2015 | 2016 | 2017
--- | --- | --- | --- | --- | --- | ---
Percent Tested | Minnesota | 74 | 76 | 78 | 100 | 100
   | Nation | 54 | 57 | 59 | 64 | 60
N Tested | Minnesota | 44,676 | 45,305 | 46,862 | 64,145 | 61,101
   | Nation | 1,799,243 | 1,845,787 | 1,924,436 | 2,090,342 | 2,030,038
Average English Score | Minnesota | 22.2 | 22.1 | 21.8 | 20.0 | 20.4
   | Nation | 20.2 | 20.3 | 20.4 | 20.1 | 20.3
Average Reading Score | Minnesota | 23.1 | 23.1 | 23.0 | 21.3 | 21.8
   | Nation | 21.1 | 21.3 | 21.4 | 21.3 | 21.4
Average Math Score | Minnesota | 23.1 | 23.0 | 22.8 | 21.2 | 21.5
   | Nation | 20.9 | 20.9 | 20.8 | 20.6 | 20.7
Average Science Score | Minnesota | 22.9 | 22.9 | 22.7 | 21.3 | 21.6
   | Nation | 20.7 | 20.8 | 20.9 | 20.8 | 21.0
Average Composite Score | Minnesota | 23.0 | 22.9 | 22.7 | 21.1 | 21.5
   | Nation | 20.9 | 21.0 | 21.0 | 20.8 | 21.0

### Percent of 2017 ACT-Tested High School Graduates by Educational Aspirations

There is good news in that 76% of Minnesota's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 83% of Minnesota's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 50% who actually did enroll. If we fully closed the aspirational gap, an additional 21,263 of the 2016 ACT-tested graduates from Minnesota would have enrolled in postsecondary education.

#### Data from graph

<table>
<thead>
<tr>
<th>Aspiration</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate / Professional Degree</td>
<td>26</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>41</td>
</tr>
<tr>
<td>Associate's / Voc-tech Degree</td>
<td>8</td>
</tr>
<tr>
<td>Other / No Response</td>
<td>24</td>
</tr>
</tbody>
</table>
Minnesota State Exemplar
2017 ACT College and Career Readiness Campaign

Wyatt Tauber
Nevis Public School, ISD 308

“As I look back on my efforts, I now understand that while obstacles seem to hinder at first glance, many are great opportunities. I took advantage of the lack of computer services in my area to develop a successful business.”

Wyatt took the challenge of trying to develop his interest and ability in computer science despite living in an isolated location without high-quality telecommunications services, and turned it into a source of income and a personal challenge to grow in his abilities.

He plans to attend Worcester Polytechnic Institute and earn a bachelor’s degree in computer science and a master’s in computer security while interning with multiple technology companies. Wyatt will be well prepared for the challenges of college after earning an associate’s degree from Alexandria Technical College in his senior year of high school.

Information and products for further review

We are more than just the ACT test. ACT products and services encompass a variety of research- and assessment-based solutions.

As research leaders, we continue to innovate education and workforce solutions to help guide individuals to education and career success.

Find out more at www.act.org.
Key ACT Research

As students navigate their education and career journeys, it is critical for them to be ready for college and career success. College and career readiness is supported by the ACT Holistic Framework, a research-based, multidimensional model for understanding the essential knowledge and skills needed for success, and the solutions that can meet students’ navigation needs. Visit act.org/condition2017 to access key reports listed below.

- Serving students’ navigation needs from kindergarten to career requires a holistic approach:
  - Beyond Academics: A Holistic Framework for Enhancing Education and Workplace Success
  - The Importance of Behavioral Skills and Navigation Factors for Education and Workforce Success
- The ACT Holistic Framework is supported by prolific research:
  - Core Academic Skills:
    - 2017 State and National Condition Reports
    - Profiles of STEM Students:Persisters, Joiners, Changers, and Departers
    - ACT Composite Score by Parental Education Level, 2012–2016
    - Comparisons of Student Achievement Levels by District Performance and Poverty
  - Behavioral Skills (also called Social and Emotional Learning):
    - The Development of Behavioral Performance Level Descriptors
  - Cross-Cutting Capabilities:
    - ACT National Curriculum Survey 2016
  - Student journeys continue into postsecondary education and careers:
    - Higher Education Research Digest
    - Predicted Attainment of ACT National Career Readiness Certificates for the 2016 ACT-tested High School Cohort

Recommendations

1. Use a holistic assessment model for school accountability that measures student readiness for college and career across multiple domains. While it is essential to measure students’ academic achievement in assessing college and career readiness, it is not enough. Social and emotional learning skills are important and measurable, and they can be impacted. Assessment models should take into account core academic skills, behavioral skills, cross-cutting capabilities, and education and career navigation skills to provide an integrated picture of college and work readiness.

2. Make special efforts to ensure that underrepresented students have equal access and opportunity to pursue postsecondary education. According to ACT research, most underrepresented students want to continue their education after high school, but they face many barriers. Ensuring they have access to the same rigorous core curriculum as others is just one step. Many also lack the resources, information, and familial and peer support they need to prepare for success after high school. Special efforts must be made to level the playing field for underrepresented students so they have equal opportunity to succeed.

3. Increase emphasis on STEM readiness initiatives, measures, and programs. With technology advancing rapidly, the importance of STEM readiness is only increasing. The threat of robotic and computer-assisted technologies eliminating jobs is growing while the remaining and emerging jobs will likely require higher-level skills. ACT data continue to show that many graduates are not ready. Without improvement in STEM readiness, far too many will be ill-prepared for the future workforce.

4. Focus on fewer, higher, and clearer learning standards in K–12 schools. Far too many students continue to graduate from high school without all of the core skills they will need to ably succeed at the next level. Many will struggle, and many will likely fail to realize their aspirations. The push toward raising the bar on learning standards and focusing on the essential skills necessary for success must continue.

5. Begin assessing learning and implementing intervention strategies early. Early assessment and intervention are critical to improving educational outcomes. If students are not on track for college and career readiness by the time they reach middle school, it may be too late. Assessing learning and implementing intervention strategies to help students get on the right path for college and career readiness must begin in elementary school.