This user guide provides an overview of ACT’s Grad Class Data Tableau Dashboard, including the types of views provided, how to navigate them, and the dropdown menus you can use to refine the information provided via the dashboard. Currently, the dashboard houses information on the ACT-tested high school graduating classes of 2011 through 2020, and can be accessed at act.org/gradclass2020.

For information about accessing this dashboard using a keyboard, please see Tableau’s help page for keyboard navigation.

Views

There are three views, or data visualization options, in the dashboard. Users can move between the views using the tabs provided at the top.

- **Class Composition/Makeup**: distributional trends—percentages—of students falling into specific subgroups, which the user selects
- **Class Averages and Benchmark Percents**: student achievement over time, by user-selected characteristics and subgroup populations
- **Score Distributions**: number and cumulative percent of student scores on the ACT, with options to examine the distribution of average ACT Composite scores, STEM and ELA scores, and scores on each subject test

Each view allows the user to select one or more states to compare against another one or more states; the default view shows the national population.

Because interpretation of graduating class composition and achievement levels are impacted by the percentage of graduates taking the ACT, a “WICHE-Estimated Overall Percent Tested” bar is included below the first two views.

Class Composition/Makeup view

The first view provides a comparison of students in two geographic areas by percent tested with a selected characteristic, with the ability to break out by all students, STEM-interested students, or non-STEM-interested students.

The default view shows the percentage of students nationally (twice) by Number of Benchmarks Met. You are able to select one state to compare to the nation, or you can select a group of states in a region to compare to a single state or another group of states. You can also change the Student Characteristic to examine the ACT-tested population broken out by race/ethnicity, by post-secondary aspirations, by whether or not they reported taking a core curriculum, and more.
You can hover over any point on the chart to see more information about the indicated population. The screenshot provides an example of the gender of test-takers, comparing the state of Iowa to the nation.

Class Averages and Benchmark Percents view

The second view provides a comparison of students in two geographic areas by Academic Achievement disaggregated by a Student Characteristic, with the option to break out a Student Subgroup by all students, STEM-interested students, or non-STEM-interested students.

The default view shows the average ACT Composite score for students nationally (twice) overall. You are able to select one state to compare to the nation, or you can select a group of states in a region to compare to a single state or another group of states. You can change the Academic Achievement indicator to any ACT subject score, the percent meeting specified Benchmarks, or the student-reported high school GPA. You can also change the Student Characteristic to examine the ACT-tested population broken out by race/ethnicity, by post-secondary aspirations, by whether or not they reported taking a core curriculum, and more.

You can hover over any point on the chart to see more information about the indicated population. The screenshot provides an example of the percent of test-takers meeting 3 or 4 Benchmarks by family income, comparing North Carolina to Tennessee.
Score Distributions view

The third view provides tables comparing students in two geographic areas by Academic Achievement.

The default view shows the N count and Cumulative Percent of ACT Composite scores for students nationally (twice). You are able to select one state to compare to the nation, or you can select a group of states in a region to compare to a single state or another group of states. You can change the Academic Achievement indicator to any ACT subject or Composite score.

The screenshot provides an example of the number of students achieving each possible ACT STEM score as well as their cumulative percentages, comparing the state of Ohio to the nation.
Refining your information

The student classifications, apart from states, available in this dashboard are organized into three different themes: Student Characteristic, Student Subgroup, and Academic Achievement.

1. **Student Characteristic**
   - Race/Ethnicity
   - Minority Status
   - Highest Parental Education Level
   - First-Generation Status
   - Family Income
   - Low-Income Status
   - Underserved Status
   - Number of Underserved Criteria Met
   - Gender
   - Postsecondary Aspirations
   - College Preparatory Core Coursework
   - Met English-Specific Core
   - Met Math-Specific Core
   - Met Social Science-Specific Core
   - Met Natural Science-Specific Core
   - English Courses Taken/Planned
• Math Courses Taken/Planned
• Social Science Courses Taken/Planned
• Natural Science Courses Taken/Planned
• Number of Benchmarks Met
• Number of Times Tested
• Extended Time

2. Student Subgroup
• All Students
• STEM-Interested Students
• Not STEM-Interested Students

3. Academic Achievement
• Average ACT English
• Average ACT Math
• Average ACT Reading
• Average ACT Science
• Average ACT Composite
• Average ACT STEM
• Average ACT ELA
• Average ACT Writing
• Percent Meeting English Benchmark
• Percent Meeting Math Benchmark
• Percent Meeting Reading Benchmark
• Percent Meeting Science Benchmark
• Percent Meeting 3 or 4 Benchmarks
• Percent Meeting All 4 Benchmarks
• High School GPA

Because interpretation of graduating class composition and achievement levels are impacted by the percentage of
graduates taking the ACT, a “WICHE-Estimated Overall Percent Tested” bar is included below the first two views.
This represents the percentage of high school graduates (based on commonly used estimates from the Western
Interstate Commission for Higher Education) in that geographic entity who took the ACT at least once during
high school. Note that abrupt changes in ACT test rates over time can result in abrupt changes to the trend line
for a particular student characteristic. In particular, geographic entities with smaller shares of students taking the
ACT tend to be less representative of high school graduates in that area, whereas geographic entities with larger
shares of students taking the ACT tend to be more representative of high school graduates in that area.

The dashboard will be pre-populated with particular information by default. For example, the charts and tables
will present information for the national ACT-tested population twice by default unless some other student
population is chosen. Use the dropdown menus to the left of the charts to help refine the information presented
in the dashboard.
Group 1/2 State Selection(s): The dropdown menus for Group 1 and Group 2 (as shown below) will allow you to limit the data provided to include only those students who reside within the states chosen. Options to choose from include All (national) and any combination of the fifty states or the District of Columbia. To choose state(s) from the menu, click on the downward arrow on the right side of the box, and click on the state(s) of interest. Information in the respective Group 1 or 2 chart or table will update to reflect your selection(s). If you are selecting one state or a subset of states, you may find it easier to deselect “(All)” and then re-select your state(s) of interest. You can scroll through the list, or type a state name in the box to be taken directly to that state.

Student Characteristic: This dropdown menu (as shown below) allows you to change the student characteristic by which the data are broken out. To choose a characteristic from the menu, click on the downward arrow on the right side of the box, and then click on the characteristic of interest. Information in the charts will update to reflect your change. Only one student characteristic can be selected at a time. On the second view, you may select “Overall/No Disaggregation” to show all students without breaking out by characteristic.
Student Subgroup: This dropdown menu (as shown below) lets you further refine the data by selecting a subgroup of students based on STEM interest. You can choose to see data for all students, or those interested or not interested in STEM majors or careers (expressed or measured by the ACT Interest Inventory). To select a subgroup, click on the downward arrow on the right side of the box, and then click on the subgroup of interest. Information in the charts will update to reflect your change.

Academic Achievement: This dropdown menu (as shown below for the second, left, and third views) allows you to change the academic achievement indicator displayed in the data. To choose an achievement indicator from the menu, click on the downward arrow on the right side of the box, and then click on the indicator of interest. Information in the charts or tables will update to reflect your change. Only one academic achievement indicator can be selected at a time.