ACT Grad Class Data Tableau Dashboard User Guide

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 <u>Tableau's help page for keyboard</u> <u>navigation</u>.

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.

- <u>Class Composition/Makeup</u>: distributional trends—percentages—of students falling into specific subgroups, which the user selects
- <u>Class Averages and Benchmark Percents</u>: student achievement over time, by user-selected characteristics and subgroup populations
- <u>Score Distributions</u>: 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.



NOTE: Missing information within tables and charts indicates insufficient data available.

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.

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	mposition/	'Makeup Cl	ass Averag	es and Benchmar	Score Distributions				
roup 1 S	tate Selectio	on(s)	Group 1			Group 2			
Ohio 💌			Ohio ACT-Tested Graduates - All Students			All ACT-Te	All ACT-Tested Graduates - All Students		
roup 2 S	tate Selectio	on(s)	ACT STE	M		ACT STEN	1		
AII)		•		N	Cumulative Percent		N	Cumulative Percent	
cademic	Achievemer	nt	36 35 34	416 708 931	100 99	36 35 34	8,719 13,611 15,797	100 99 99	
CT STEN	1	•	33	1,093	98	33	18,870	98	
			32 31 30 29	1,289 1,689 1,941 2,305	97 96 95 93	32 31 30 29 28	21,539 25,966 29,995 35,335 42,233	97 95 94 92	
			27	3,660	89	27	53,236	87	
			26	4,569	86	26	67,576 77,993	84 80	
			25	5,322	78	24	82,816	75	
			23	5,749	73	23	82,610	70	
			22	5,903	69	21	90,722	60	
			20	7,139	58	20	100,247	55	
			19	8,036	52	19	126 351	49	
			18	9,140	46	17	135,576	35	
Þ	V - Group 1	N - Group 2	16	9,946	30	16	133,961	27	
0.4.4			15	9,580	22	14	89,630	12	
011	92,313	1,623,112	14	5,159	14	13	58,966	6	
012	92,121	1,666,017	12	2,793	3	12	30,607	3	
013	92.813	1 799 243	11	935	1	10	3,141	1	
014	01,010	1,705,245	9	232	1	9	1,142	1	
014	91,089	1,845,787	8	26	1	~ 7	266	1	
015	91,607	1,924,436	7	12	1	6	177	ī	
016	93.659	2.090.342	5	5	1	5	70	1	
017	02.674	2 020 020	4	ĭ	i	3	35	1	
017	92,074	2,030,038	3	2	1	2	13	1	
018	127,392	1,914,817	2	1	1	1	4	Ţ	
019	126,983	1,782,820	Avg	41.8		Avg	38.9		
020	121,250	1.670.497	30	75.561		50	40.745		

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 Meting 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.

<u>Group 1/2 State Selection(s)</u>: 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.

All)	•
✓ (AII)	
✓ Alabama	
✓ Alaska	
✓ Arizona	
✓ Arkansas	
✓ California	
🗸 Colorado	
✓ Connecticut	
✓ Delaware	
✓ District of Columbia	
✔ Florida	
✔ Georgia	
✓ Hawaii	
✓ Idaho	
✓ Illinois	
✓ Indiana	
🗸 lowa	
🗸 Kansas	
🗸 Kentucky	
🗸 Louisiana	

<u>Student Characteristic</u>: 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.

Number of Benchmarks Met • 80	96
Race Ethnicity	1
Minority Status	
Highest Parental Education Level	
First Generation Status	6
Family Income	
Low Income Status	
Underserved Status	
Number of Underserved Criteria Met	6
Gender	Ĩ
Post-Secondary Aspirations	
College Preparatory Core Coursework	
Met English-Specific Core	6
Met Math-Specific Core	Ĩ I
Met Social Science-Specific Core	
Met Natural Science-Specific Core	
English Courses Taken/Planned	6
Math Courses Taken/Planned	1.1
Social Science Courses Taken/Planned	
Natural Science Courses Taken/Planned	
Number of Benchmarks Met	
Number of times tested	r1C
Extended Time	

<u>Student Subgroup</u>: 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.

All Students	•
All Students	
STEM Interested Stud	dents
Not STEM Interested	Students

<u>Academic Achievement</u>: 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.

Academic Achievement

Average ACT Composite 🔹	30
Average ACT English]
Average ACT Math	
Average ACT Reading	
Average ACT Science	
Average ACT Composite	br
Average ACT STEM	F)
Average ACT ELA	
Average ACT Writing	
Percent Meeting English Benchmark	
Percent Meeting Math Benchmark	
Percent Meeting Reading Benchmark	10
Percent Meeting Science Benchmark	
Percent Meeting 3 or 4 Benchmarks	
Percent Meeting All 4 Benchmarks	
High School GPA	
N - GROUD I	

Academic Achievement

ACT Composite 🔹
ACT English
ACT Math
ACT Reading
ACT Science
ACT Composite
ACT STEM
ACT ELA
ACT Writing