

ACT Profile Report - State

Graduating Class 2013
Michigan



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This report provides information about the performance of your 2013 graduating seniors who took the ACT as sophomores, juniors, or seniors; and self-reported at the time of testing that they were scheduled to graduate in 2013. Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included in the report.

This report focuses on:

Performance - student test performance in the context of college readiness

Access - number of your graduates exposed to college entrance testing and the percent of race/ethnicity participation

Course Selection - percent of students pursuing a core curriculum

Course Rigor - impact of rigorous coursework on achievement

College Readiness - percent of students meeting ACT College Readiness Benchmark Scores in each content area

Awareness - extent to which student aspirations match performance

Articulation - colleges and universities to which your students send test results

Each year, test data for a school, district, and the state represents a different cohort of students. ACT encourages educators to focus on trends (3, 5, 10 years), not year-to-year changes. Such changes can represent normal – even expected – fluctuations. On the other hand, trend lines offer more insight into what is happening in a school, district, or the state.

Furthermore, ACT encourages educators to measure student performance in the context of college readiness measures. The focus should be on the number and percentage of students who met or exceeded ACT's College Readiness Benchmark Scores, a measure that is much more meaningful and understandable than an average composite score for a group of students.

The ACT is a curriculum-based measure of college readiness. ACT components include:

- Tests of academic achievement in English, math, reading, science, and writing (optional)
- High school grade and course information
- Student Profile Section
- Career Interest Inventory

The ACT:

Every few years, ACT conducts the **ACT National Curriculum Survey** to ensure its curriculum-based assessment tools accurately measure the skills high school teachers teach and instructors of entry-level college courses expect. The ACT is the only college readiness test designed to reflect the results of such a survey.

ACT's **College Readiness Standards** are sets of statements intended to help students, parents and educators understand the meaning of test scores. The standards relate test scores to the types of skills needed for success in high school and beyond. They serve as a direct link between what students have learned and what they are ready to do next. The ACT is the only college readiness test for which scores can be tied directly to standards. *Connecting College Readiness Standards to the Classroom* interpretive guides can be found at www.act.org/standard/infoserv.html.

Only the ACT reports **College Readiness Benchmark Scores** – A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses, which include English Composition, Algebra, Social Science and Biology. These scores were empirically derived based on the actual performance of students in college. The College Readiness Benchmark Scores, updated for 2013, are:

College Course/Course Area	ACT Test	Benchmark Score
English Composition	English	18
Algebra	Mathematics	22
Social Sciences	Reading	22
Biology	Science	23

For more information, go to www.act.org

How to Improve Scores and Increase College Readiness

21% of your students met all four ACT College Readiness Benchmark Scores (Table 1.1). To improve students' scores and increase the percentage of students identified as college ready, ACT suggests:

PROVIDING ACCESS FOR ALL STUDENTS TO TAKE THE ACT: 120,451 of your students are included in this report (the 'cohort'). Increasing access insures that more students have the opportunity to consider college and allows the reader to use this report to evaluate how well courses and instructional programs are preparing students for college and work.

MAKING CORE CURRICULUM A PRIORITY: Emphasize the need for all students to develop college and work ready skills, regardless of postsecondary aspirations. 75% of the students in the cohort reported taking courses that would be considered 'Core or More' (Table 1.4).

MAKING SURE STUDENTS ARE TAKING THE RIGHT KINDS OF COURSES: Table 3.2 reports 4% of the cohort took less than three years of math courses. Of these students, 8% were college ready. 19% of the cohort reported taking a course sequence of Algebra I, Algebra II, and Geometry. 10% of these students were college ready. In comparison, 45% of the students who took 3 or more years of math beyond Algebra I, Algebra II, and Geometry were college ready. Getting more students ready for Algebra prior to 9th grade will increase the chances that students will be prepared for and take advanced-level math courses.

Similarly, Table 3.2 reports 7% of the cohort took less than three years of natural science courses. 21% of these students were college ready. In comparison, 35% of students who took at least three years of science coursework were college ready.

EVALUATING RIGOR OF COURSES: Table 2.6 reports the percentage of students falling in each of the ACT College Readiness Standards score ranges. For example, approximately 57% of the cohort fall into the lowest three Mathematics score ranges. To increase these students' achievement, identify the standards they should focus on next by accessing ACT's College Readiness Standards at www.act.org/standard.

PLAN GUIDANCE ACTIVITIES BASED ON STUDENTS' CAREER AND COLLEGE ASPIRATIONS: Data in Tables 4.1 and 4.2 enable the reader to determine if aspirations are consistent with academic performance and whether among students with similar aspirations, academic performance is consistent across racial/ethnic groups.

For more information on interpreting data in this report, or to learn how ACT can help your students improve their readiness for college and the workplace, contact ACT Customer Service at 319-337-1309 or customerservices@act.org.

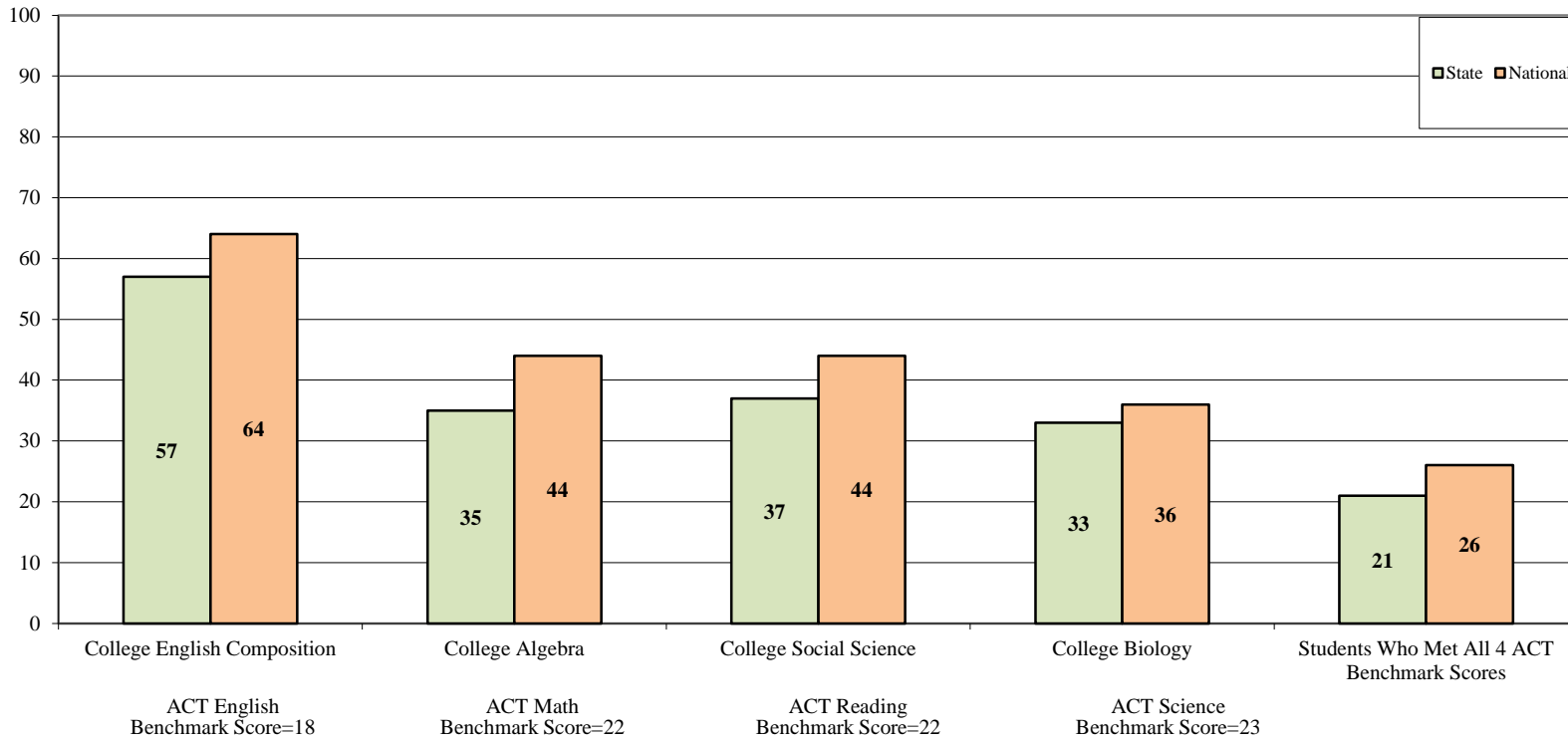
Section I

Executive Summary

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included. Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

To find the results of only standard time or extended time test takers, refer to Tables 1.7 and 1.8 on page 10.

Figure 1.1. Percent of Your Students Ready for College-Level Coursework



A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college course.

Total Students in Report: 120,451

Table 1.1. Five Year Trends—Percent of Students Who Met College Readiness Benchmarks

Year	Number of Students Tested		Percent Who Met Benchmarks									
			English		Mathematics		Reading		Science		Met All Four	
	State	National	State	National	State	National	State	National	State	National	State	National
2009	121,982	1,480,469	54	67	31	42	40	53	24	28	18	23
2010	120,930	1,568,835	56	66	33	43	40	52	25	29	19	24
2011	116,823	1,623,112	58	66	35	45	44	52	26	30	20	25
2012	114,727	1,666,017	59	67	36	46	45	52	26	31	21	25
2013	120,451	1,799,243	57	64	35	44	37	44	33	36	21	26

Table 1.2. Five Year Trends—Average ACT Scores

Year	Number of Students Tested		Average ACT Scores									
			English		Mathematics		Reading		Science		Composite	
	State	National	State	National	State	National	State	National	State	National	State	National
2009	121,982	1,480,469	18.6	20.6	19.6	21.0	19.6	21.4	20.1	20.9	19.6	21.1
2010	120,930	1,568,835	18.9	20.5	19.7	21.0	19.7	21.3	19.9	20.9	19.7	21.0
2011	116,823	1,623,112	19.3	20.6	19.9	21.1	20.1	21.3	20.3	20.9	20.0	21.1
2012	114,727	1,666,017	19.3	20.5	20.1	21.1	20.0	21.3	20.4	20.9	20.1	21.1
2013	120,451	1,799,243	19.1	20.2	19.9	20.9	20.0	21.1	20.2	20.7	19.9	20.9

Table 1.3. Five Year Trends—Average ACT Scores Nationwide

Year	Number of Students Tested	Average ACT Scores				
		English	Mathematics	Reading	Science	Composite
2009	1,480,469	20.6	21.0	21.4	20.9	21.1
2010	1,568,835	20.5	21.0	21.3	20.9	21.0
2011	1,623,112	20.6	21.1	21.3	20.9	21.1
2012	1,666,017	20.5	21.1	21.3	20.9	21.1
2013	1,799,243	20.2	20.9	21.1	20.7	20.9

Total Students in Report: 120,451

Table 1.4. Five Year Trends—Average ACT Scores by Level of Preparation

Year	Number of Students Tested		Percent ²		Average ACT Scores									
	Core or More ¹	Less than Core	Core or More	Less than Core	English		Mathematics		Reading		Science		Composite	
					Core or More	Less than Core	Core or More	Less than Core	Core or More	Less than Core	Core or More	Less than Core	Core or More	Less than Core
2009	66,446	49,183	54	40	20.6	16.4	21.2	17.8	21.4	17.8	21.5	18.5	21.3	17.8
2010	70,256	44,258	58	37	20.6	16.7	21.2	17.9	21.2	17.9	21.4	18.1	21.2	17.8
2011	88,122	21,346	75	18	20.1	16.7	20.6	18.0	20.8	18.1	21.0	18.3	20.8	17.9
2012	88,554	19,416	77	17	20.1	16.7	20.7	18.1	20.7	17.9	21.0	18.5	20.7	17.9
2013	90,038	20,819	75	17	20.1	16.5	20.6	17.9	20.8	17.8	21.0	18.2	20.7	17.7

¹"Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.

²Percent of all students tested. Numbers will not add up to 100% due to student non-response.

Table 1.5. Five Year Trends—Percent and Average Composite Score by Race/Ethnicity

	2009			2010			2011			2012			2013		
	N	%	Avg	N	%	Avg	N	%	Avg	N	%	Avg	N	%	Avg
All Students	121,982	100	19.6	120,930	100	19.7	116,823	100	20.0	114,727	100	20.1	120,451	100	19.9
Black/African American	17,430	14	15.6	17,793	15	15.8	16,685	14	15.9	16,048	14	16.0	15,857	13	16.0
American Indian/Alaska Native	1,033	1	17.8	1,024	1	17.8	1,008	1	18.0	731	1	17.7	704	1	17.2
White	81,436	67	20.6	80,204	66	20.7	77,846	67	21.1	75,949	66	21.1	79,066	66	20.9
Hispanic/Latino	4,203	3	17.5	4,384	4	17.7	4,684	4	18.2	6,471	6	18.2	7,245	6	18.3
Asian	2,690	2	22.8	2,847	2	23.1	2,891	2	23.3	3,012	3	23.1	3,202	3	23.1
Native Hawaiian/Other Pacific Islander	0	0	.	0	0	.	16	0	20.0	179	0	19.4	128	0	18.7
Two or more races	3,023	2	18.8	3,860	3	18.7	3,986	3	19.2	4,117	4	19.5	4,700	4	19.5
Prefer not to respond/No response	12,167	10	18.8	10,818	9	18.8	9,707	8	19.1	8,220	7	19.4	9,549	8	19.3

Total Students in Report: 120,451

Table 1.6. Percent of Students in College Readiness Standards Score Ranges



Total Students in Report: 120,451

Table 1.7. Average ACT College Reportable Scores by Test Session Duration

Student Group	Test Session Duration	N	Percent	Average ACT Scores				
				English	Mathematics	Reading	Science	Composite
State	Standard Time	111,547	93	19.6	20.2	20.3	20.5	20.3
	Extended Time	8,904	7	13.9	16.2	16.0	16.4	15.7
	Total	120,451	100	19.1	19.9	20.0	20.2	19.9
National	Standard Time	1,727,041	96	20.4	21.0	21.3	20.9	21.0
	Extended Time	72,202	4	15.9	17.7	18.1	17.9	17.5
	Total	1,799,243	100	20.2	20.9	21.1	20.7	20.9

Table 1.8. Percent of Students Who Met College Readiness Benchmark Scores by Test Session Duration

Student Group	Test Session Duration	Percent of Students				Met All Four
		English	Mathematics	Reading	Science	
State	Standard Time	60	37	38	35	23
	Extended Time	20	9	15	10	5
	Total	57	35	37	33	21
National	Standard Time	65	45	45	37	27
	Extended Time	35	20	28	20	13
	Total	64	44	44	36	26

Section II

Academic Achievement

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included.

Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

Total Students in Report: 120,451

Table 2.1. ACT Score Distributions, Cumulative Percentages (CP¹), and Score Averages

ACT Score	English		Mathematics		Reading		Science		Composite		ACT Score
	N	CP	N	CP	N	CP	N	CP	N	CP	
36	308	100	393	100	712	100	395	100	77	100	36
35	1,215	100	595	100	761	99	474	100	309	100	35
34	1,179	99	784	99	710	99	506	99	535	100	34
33	1,364	98	950	99	1,716	98	681	99	849	99	33
32	1,355	97	950	98	2,011	97	1,061	98	1,158	99	32
31	1,469	95	872	97	3,762	95	1,222	97	1,565	98	31
30	1,686	94	1,173	96	2,517	92	1,595	96	1,950	96	30
29	2,399	93	2,045	95	2,754	90	1,838	95	2,340	95	29
28	2,191	91	2,764	94	2,706	88	2,250	94	2,996	93	28
27	3,143	89	4,248	91	3,078	85	2,687	92	3,696	90	27
26	3,827	86	4,192	88	3,241	83	5,100	89	4,179	87	26
25	4,172	83	5,876	84	3,522	80	5,593	85	4,852	84	25
24	5,858	80	6,708	79	4,840	77	8,130	81	5,877	80	24
23	5,078	75	5,353	74	6,511	73	8,463	74	6,324	75	23
22	6,313	71	5,266	69	5,401	68	6,861	67	6,946	70	22
21	8,705	65	5,755	65	8,340	63	11,139	61	7,681	64	21
20	7,592	58	3,420	60	5,982	56	11,266	52	7,955	57	20
19	5,415	52	6,246	57	8,363	51	7,386	42	8,234	51	19
18	5,223	47	9,492	52	5,909	44	7,336	36	8,349	44	18
17	5,177	43	11,582	44	8,706	40	5,967	30	8,211	37	17
16	7,175	39	16,514	35	5,484	32	5,927	25	7,987	30	16
15	7,697	33	14,472	21	5,690	28	5,547	20	7,882	24	15
14	7,001	26	6,303	9	8,767	23	5,062	16	7,383	17	14
13	3,733	21	3,567	4	5,128	16	4,974	12	6,718	11	13
12	4,789	18	549	1	6,755	11	3,413	7	4,411	5	12
11	5,569	14	296	1	4,456	6	2,471	5	1,584	2	11
10	4,228	9	22	1	1,233	2	2,071	3	289	1	10
9	3,469	5	36	1	696	1	619	1	74	1	9
8	1,953	3	16	1	375	1	243	1	21	1	8
7	796	1	0	1	104	1	109	1	12	1	7
6	288	1	7	1	135	1	34	1	3	1	6
5	47	1	0	1	55	1	7	1	4	1	5
4	22	1	2	1	12	1	14	1	0	1	4
3	8	1	0	1	6	1	5	1	0	1	3
2	6	1	0	1	8	1	0	1	0	1	2
1	1	1	3	1	5	1	5	1	0	1	1
Avg (SD)	19.1 (6.5)		19.9 (5.1)		20.0 (6.3)		20.2 (5.3)		19.9 (5.3)		Avg (SD)

¹CP is the cumulative percent of students at or below a score point.

Note: Shaded portions of columns identify the students who met/exceeded the ACT College Readiness Benchmark Scores.

Total Students in Report: 120,451

Table 2.2. ACT Subscore Distributions, Cumulative Percentages (CP¹), and Subscore Averages

ACT Scale Score	English				Reading				Mathematics						ACT Scale Score
	Usage/ Mechanics		Rhetorical Skills		Social Studies/ Sciences		Arts/ Literature		Pre/Elementary Algebra		Algebra/ Coordinate Geometry		Plane Geometry/ Trigonometry		
	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	
18	2,890	100	1,556	100	2,247	100	2,746	100	3,740	100	739	100	841	100	18
17	4,182	98	1,381	99	3,686	98	4,740	98	3,617	97	1,081	99	94	99	17
16	3,170	94	4,334	98	5,950	95	5,826	94	4,088	94	1,779	98	3,679	99	16
15	5,173	91	6,410	94	5,326	90	6,688	89	5,480	90	4,918	97	4,398	96	15
14	4,196	87	5,655	89	8,335	86	3,492	83	5,481	86	7,590	93	7,634	93	14
13	6,492	84	8,301	84	7,654	79	7,355	80	6,565	81	11,771	87	10,495	86	13
12	7,187	78	12,188	77	9,216	72	7,575	74	10,789	76	10,769	77	10,397	77	12
11	9,908	72	12,346	67	10,206	65	13,360	68	7,541	67	11,990	68	14,499	69	11
10	13,225	64	10,392	57	10,634	56	8,493	57	11,698	61	16,015	58	11,577	57	10
9	10,353	53	14,704	48	17,433	47	13,247	50	7,589	51	14,652	45	23,656	47	9
8	9,930	45	10,936	36	11,831	33	9,655	39	13,869	45	14,830	33	12,883	28	8
7	9,928	36	9,846	27	11,054	23	8,689	31	20,207	33	11,046	20	3,421	17	7
6	12,379	28	8,937	19	7,772	14	8,693	24	11,362	16	7,340	11	7,689	14	6
5	8,232	18	4,342	11	6,835	8	11,741	17	4,803	7	1,216	5	5,257	8	5
4	6,501	11	6,047	8	749	2	4,432	7	2,228	3	2,929	4	1,510	3	4
3	5,027	6	2,624	3	1,085	1	2,585	3	952	1	609	1	1,413	2	3
2	1,558	1	398	1	349	1	1,054	1	390	1	883	1	600	1	2
1	120	1	54	1	89	1	80	1	52	1	294	1	408	1	1
Avg (SD)	9.3 (3.9)		9.9 (3.5)		10.3 (3.5)		9.9 (3.9)		9.9 (3.6)		10.0 (3.0)		10.0 (3.1)		Avg (SD)

¹CP is the cumulative percent of students at or below a score point.

Table 2.3. ACT Score Quartile Values

Quartile	English	Mathematics	Reading	Science	Composite
Q3 (75th Percentile)	24	24	24	24	24
Q2 (50th Percentile)	19	18	19	20	19
Q1 (25th Percentile)	14	16	15	16	16

Total Students in Report: 120,451

Table 2.4. Average ACT Composite Scores for Race/Ethnicity by Level of Preparation

Student Group	Race/Ethnicity	Number of Students Tested	Percent Taking Core or More ¹	Average ACT Composite Score	
				Core or More	Less Than Core
State	All Students	120,451	75	20.7	17.7
	Black/African American	15,857	68	16.6	14.9
	American Indian/Alaska Native	704	67	17.9	16.2
	White	79,066	78	21.5	18.7
	Hispanic/Latino	7,245	71	19.0	16.7
	Asian	3,202	79	24.1	19.6
	Native Hawaiian/Other Pac. Isl.	128	63	20.1	17.4
	Two or more races	4,700	73	20.2	17.5
	Prefer not/No Response	9,549	62	20.6	16.9
National	All Students	1,799,243	74	21.7	18.7
	Black/African American	239,598	69	17.5	15.6
	American Indian/Alaska Native	14,217	62	19.1	16.5
	White	1,034,712	76	22.9	20.0
	Hispanic/Latino	259,741	72	19.5	17.2
	Asian	71,677	81	24.1	21.5
	Native Hawaiian/Other Pac. Isl.	4,772	71	20.5	17.5
	Two or more races	64,221	74	21.9	19.2
	Prefer not/No Response	110,305	58	22.4	18.4

¹"Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.

Table 2.5. Average ACT Scores by Race/Ethnicity

Student Group	Race/Ethnicity	English	Mathematics	Reading	Science	Composite
State	All Students	19.1	19.9	20.0	20.2	19.9
	Black/African American	14.8	16.3	15.9	16.5	16.0
	American Indian/Alaska Native	15.8	17.5	17.3	17.9	17.2
	White	20.2	20.7	21.0	21.1	20.9
	Hispanic/Latino	17.2	18.4	18.3	18.7	18.3
	Asian	22.0	24.6	22.1	23.0	23.1
	Native Hawaiian/Other Pac. Isl.	17.9	18.5	19.2	18.7	18.7
	Two or more races	18.7	19.2	19.7	19.8	19.5
	Prefer not/No Response	18.4	19.4	19.4	19.5	19.3
National	All Students	20.2	20.9	21.1	20.7	20.9
	Black/African American	15.7	17.2	17.0	16.9	16.9
	American Indian/Alaska Native	16.6	18.2	18.3	18.3	18.0
	White	21.8	21.9	22.6	22.0	22.2
	Hispanic/Latino	17.7	19.3	18.9	18.8	18.8
	Asian	22.5	25.0	22.9	23.1	23.5
	Native Hawaiian/Other Pac. Isl.	18.6	20.1	19.5	19.5	19.5
	Two or more races	20.6	20.9	21.6	20.9	21.1
	Prefer not/No Response	20.0	20.8	21.0	20.5	20.7

Total Students in Report: 120,451

Table 2.6. Percent of Students in College Readiness Standards (CRS) Score Ranges

Student Group	CRS Range	English		Mathematics		Reading		Science	
		N	%	N	%	N	%	N	%
State	33 to 36	4,066	3	2,722	2	3,899	3	2,056	2
	28 to 32	9,100	8	7,804	6	13,750	11	7,966	7
	24 to 27	17,000	14	21,024	17	14,681	12	21,510	18
	20 to 23	27,688	23	19,794	16	26,234	22	37,729	31
	16 to 19	22,990	19	43,834	36	28,462	24	26,616	22
	13 to 15	18,431	15	24,342	20	19,585	16	15,583	13
	01 to 12	21,176	18	931	1	13,840	11	8,991	7
National	33 to 36	81,846	5	51,648	3	89,731	5	36,033	2
	28 to 32	175,672	10	156,561	9	239,643	13	138,865	8
	24 to 27	291,095	16	385,102	21	277,723	15	364,600	20
	20 to 23	447,398	25	343,822	19	424,936	24	542,531	30
	16 to 19	327,718	18	590,816	33	384,706	21	413,107	23
	13 to 15	242,064	13	258,384	14	240,069	13	183,840	10
	01 to 12	233,450	13	12,910	1	142,435	8	120,267	7

Table 2.7. Average ACT Scores by Gender

Student Group	Gender	N	Percent	Average ACT Scores				
				English	Mathematics	Reading	Science	Composite
State	Males	59,574	49	18.5	20.2	19.6	20.4	19.8
	Females	59,318	49	19.8	19.6	20.4	20.0	20.1
	Missing	1,559	1	18.0	19.0	19.1	19.4	19.0
National	Males	835,431	46	19.8	21.4	20.9	21.2	20.9
	Females	954,919	53	20.6	20.5	21.4	20.4	20.9
	Missing	8,893	0	16.1	18.2	17.6	17.7	17.5

Table 2.8. Percent of Students Who Met College Readiness Benchmark Scores by Gender

Student Group	Gender	Percent of Students				Met All Four
		English	Mathematics	Reading	Science	
State	Males	53	37	35	36	22
	Females	61	33	39	31	21
National	Males	62	47	43	40	29
	Females	67	41	45	33	24

Total Students in Report: 120,451

Table 2.9. College Readiness Benchmark (CRB) Percent and Average ACT Scores by Overall High School Curriculum

Student Group	Curriculum Taken ¹	N	English		Mathematics		Reading		Science		Composite	
			CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB % ⁴	Avg
State	Core or More ²	90,038	63	20.1	40	20.6	42	20.8	38	21.0	25	20.7
	Less than Core	20,819	39	16.5	20	17.9	23	17.8	19	18.2	10	17.7
	Missing ³	9,594	35	16.0	18	17.6	21	17.3	18	17.8	10	17.3
National	Core or More	1,322,739	71	21.2	50	21.7	50	22.0	42	21.5	31	21.7
	Less than Core	396,592	48	17.8	27	18.9	30	19.0	22	18.8	14	18.7
	Missing	79,912	36	16.0	19	17.8	24	17.5	17	17.7	10	17.4

¹ "Curriculum Taken" reflects overall high school curriculum in this table.

² "Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.

³ Zero years or no coursework information reported in one or more content areas.

⁴ Composite CRB% results reflect students who met all four subject-area benchmarks.

Table 2.10. College Readiness Benchmark (CRB) Percent and Average ACT Scores by Content-Specific Curriculum

Student Group	Curriculum Taken ¹	English			Mathematics			Reading			Science		
		N	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg
State	Core or More ²	100,859	61	19.8	107,294	37	20.2	104,662	39	20.5	102,953	35	20.6
	Less than Core	11,329	34	15.7	4,589	8	16.3	7,030	15	16.4	8,571	21	18.4
	Missing ³	8,263	37	16.3	8,568	19	17.8	8,759	22	17.5	8,927	18	17.9
National	Core or More	1,646,286	67	20.6	1,648,697	46	21.3	1,554,990	46	21.5	1,506,965	40	21.3
	Less than Core	84,048	36	15.9	77,906	7	16.3	171,617	32	19.1	218,267	17	18.0
	Missing	68,909	38	16.4	72,640	20	17.9	72,636	25	17.7	74,011	18	17.8

¹ "Curriculum Taken" reflects content-specific curriculum in this table.

² "Core or More" results correspond to students taking four or more years of English or three or more years of math, social studies, or natural science, respectively.

For instance, Reading "Core or More" results correspond to students taking three or more years of social studies, regardless of courses taken in other content areas.

³ Zero years or no coursework information reported in the specified content area.

Section III

College Readiness and the Impact of Course Rigor

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included.

Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

Figure 3.1. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: ENGLISH

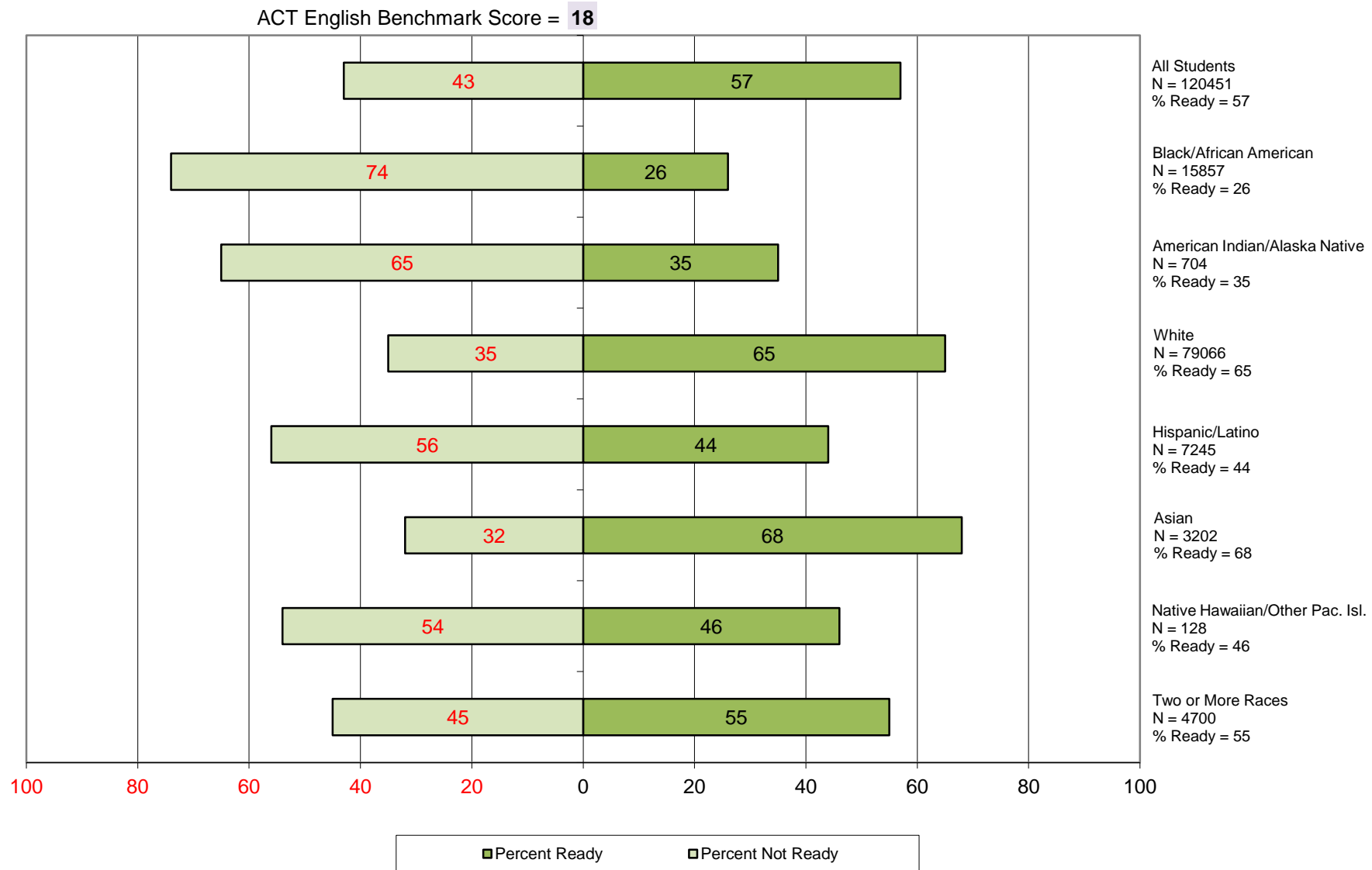


Figure 3.2. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: MATHEMATICS

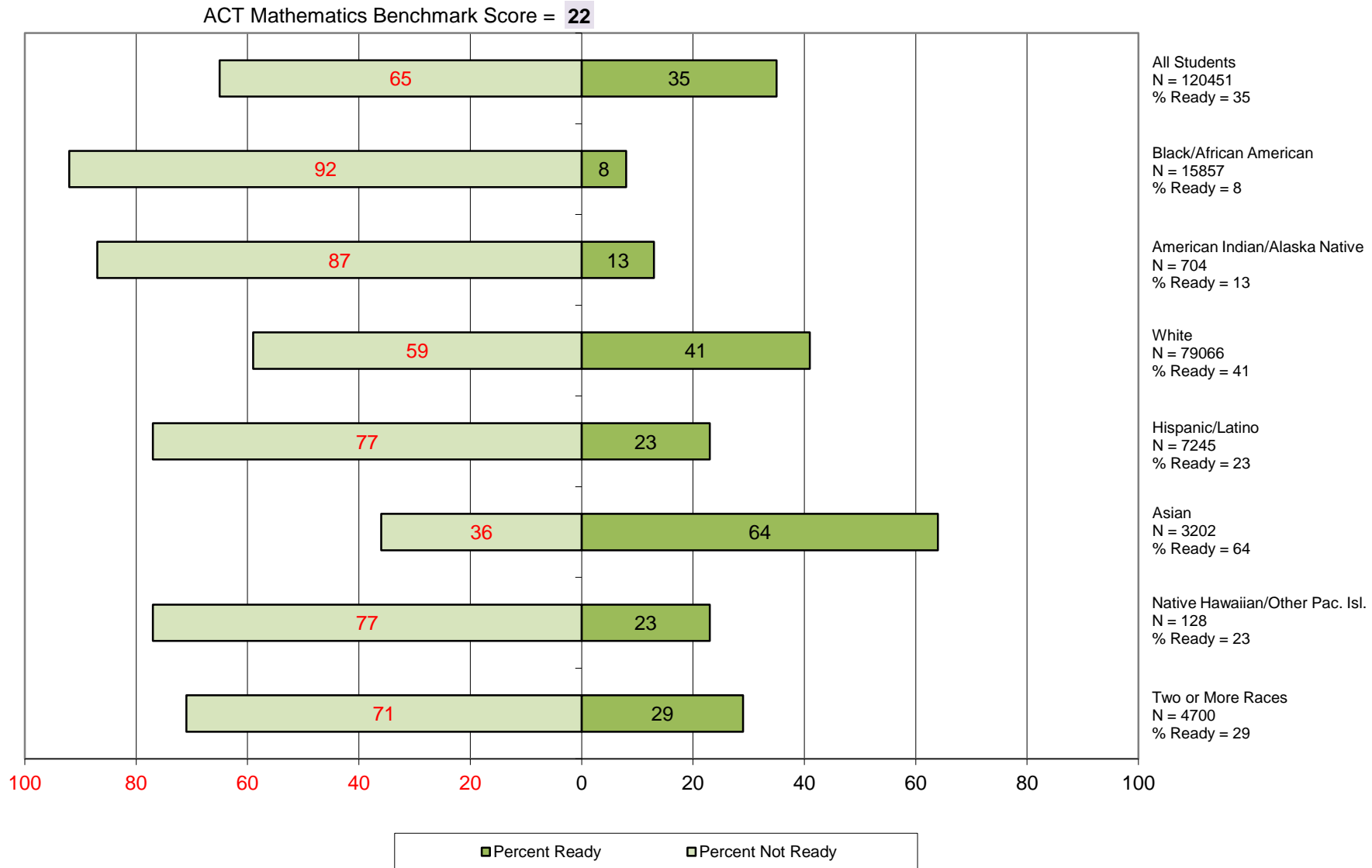


Figure 3.3. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: READING

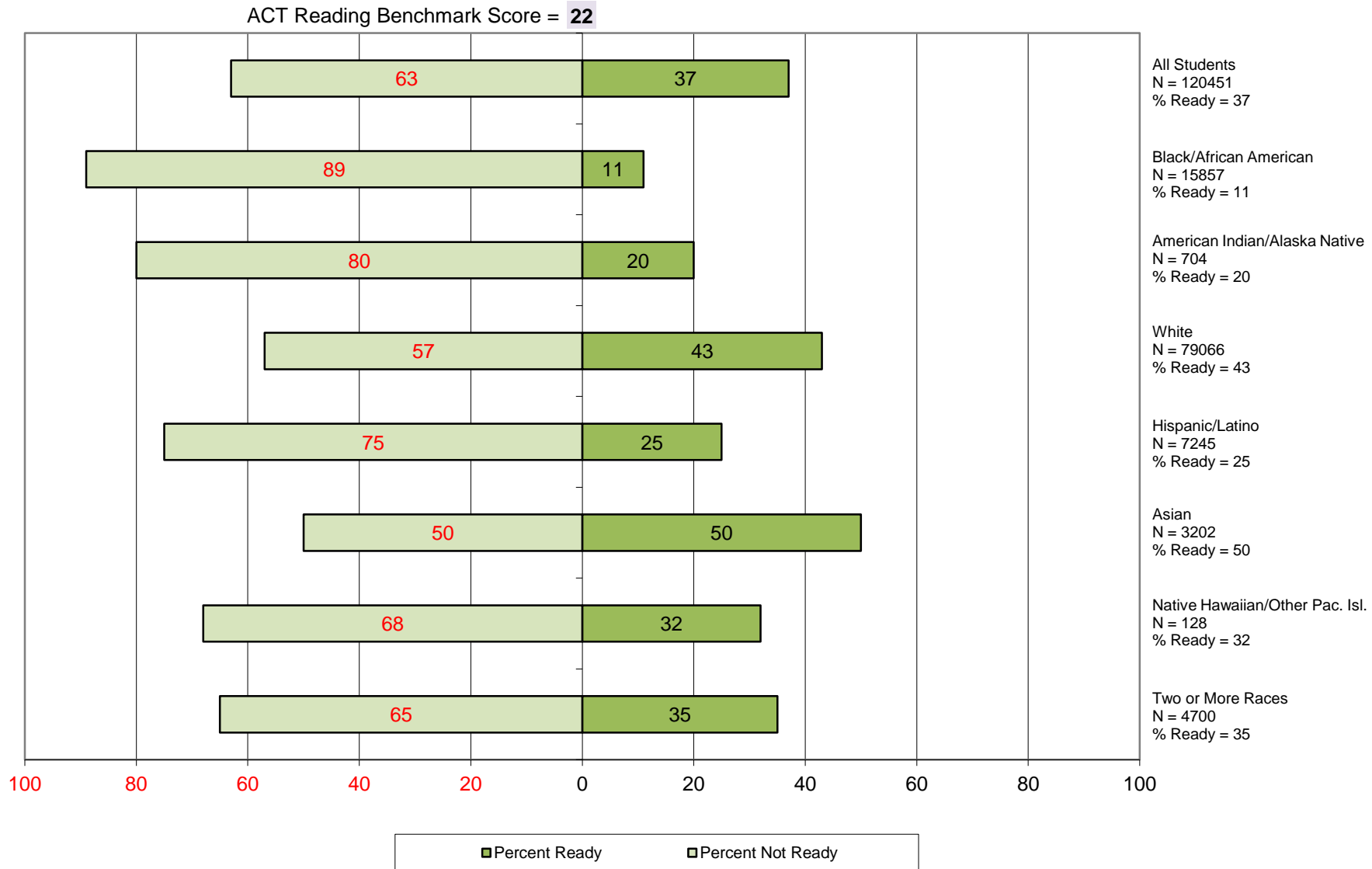
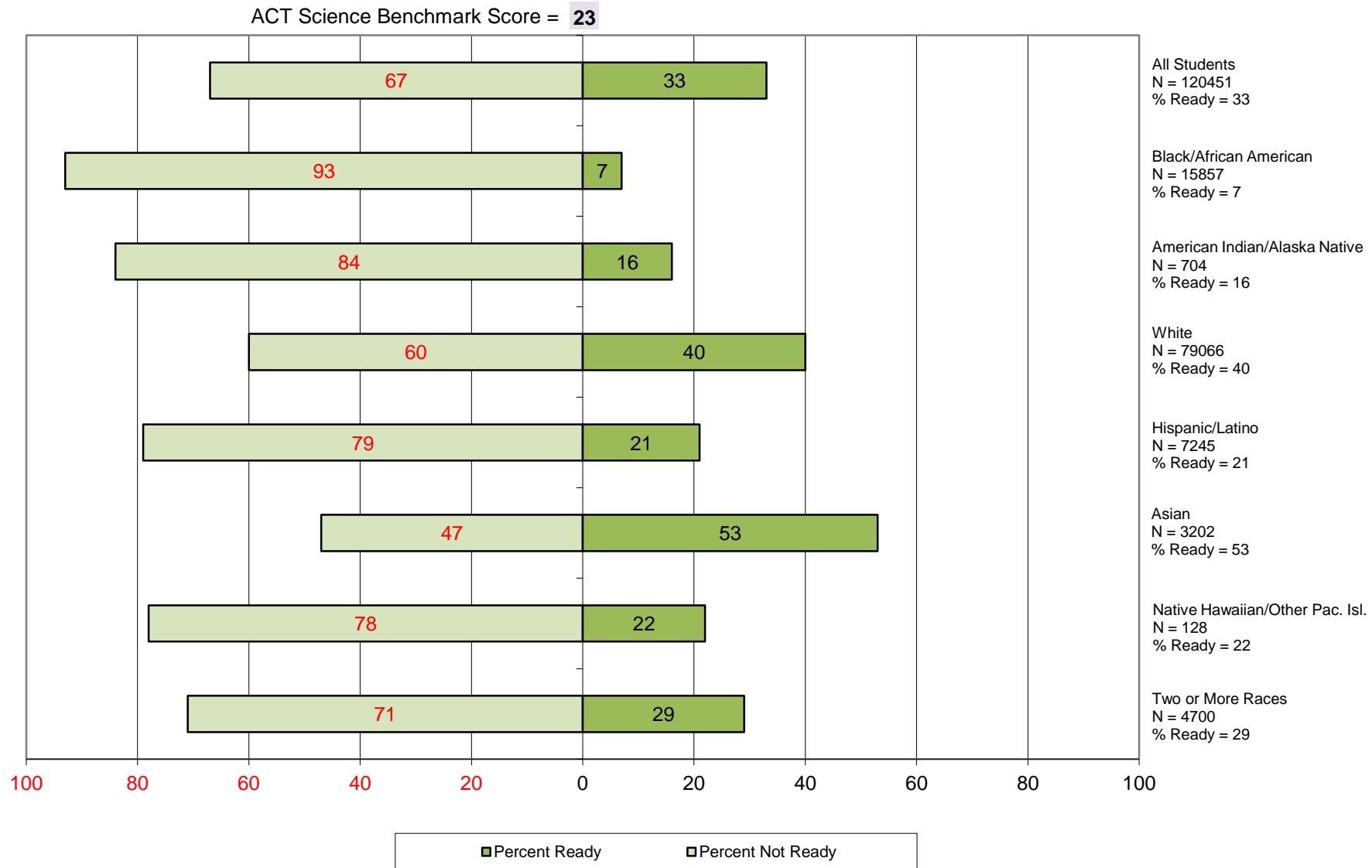
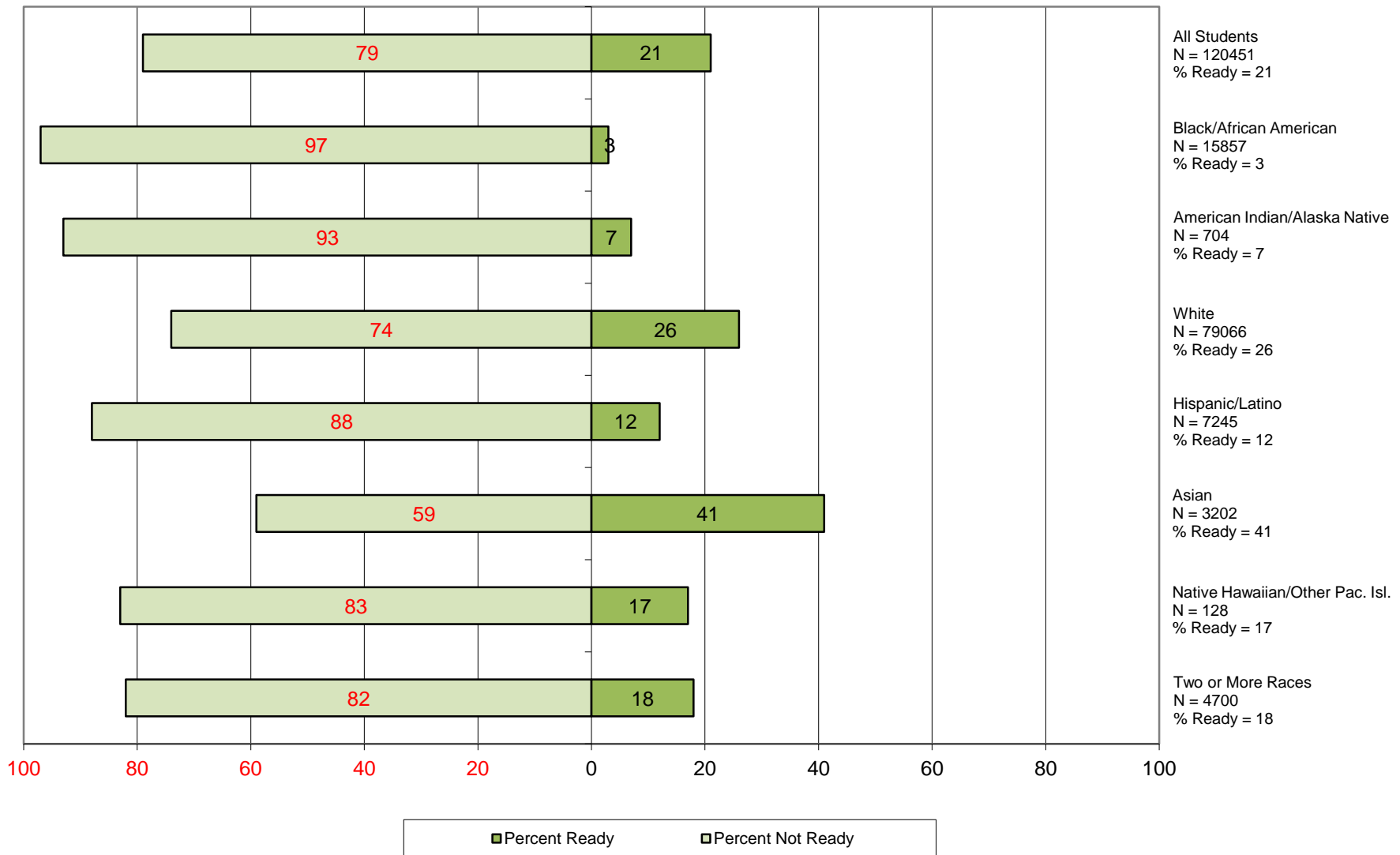


Figure 3.4. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: SCIENCE



Total Students in Report: 120,451

Figure 3.5. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: ALL FOUR



Total Students in Report: 120,451

Table 3.1. Average ACT Scores and Average ACT Score Changes by Common Course Patterns

Course Pattern	All Students				Males				Females			
	N	Percent	ACT English	Course Value Added ¹	N	Percent	ACT English	Course Value Added ¹	N	Percent	ACT English	Course Value Added ¹
ENGLISH COURSE PATTERN												
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	25,115	21	21.5	5.8	10,534	18	20.7	5.4	14,345	24	22.0	5.6
Eng 9, Eng 10, Eng 11, Eng 12	75,744	63	19.2	3.5	38,487	65	18.8	3.5	36,450	61	19.6	3.2
Less than 4 years of English	11,329	9	15.7	-	6,207	10	15.3	-	4,887	8	16.4	-
Zero years / no English courses reported	8,263	7	16.3	-	4,346	7	15.6	-	3,636	6	17.0	-
MATHEMATICS COURSE PATTERN												
Alg 1, Alg 2, Geom, Trig, & Calc	6,208	5	22.3	6.0	2,977	5	22.9	6.6	3,172	5	21.7	5.5
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	8,252	7	21.7	5.4	3,402	6	22.1	5.8	4,783	8	21.4	5.2
Alg 1, Alg 2, Geom, & Trig	7,765	6	19.2	2.9	3,825	6	19.5	3.2	3,876	7	18.9	2.7
Alg 1, Alg 2, Geom, & Other Adv Math	20,048	17	19.4	3.1	8,587	14	19.7	3.4	11,249	19	19.3	3.1
Other comb of 4 or more years of Math	34,634	29	22.7	6.4	17,908	30	23.3	7.0	16,437	28	22.1	5.9
Alg 1, Alg 2, & Geom	22,447	19	17.0	0.7	11,707	20	17.1	0.8	10,380	17	16.8	0.6
Other comb of 3 or 3.5 years of Math	7,940	7	18.2	1.9	4,111	7	18.5	2.2	3,696	6	17.8	1.6
Less than 3 years of Math	4,589	4	16.3	-	2,524	4	16.3	-	1,978	3	16.2	-
Zero years / no Math courses reported	8,568	7	17.8	-	4,533	8	17.9	-	3,747	6	17.6	-
SOCIAL SCIENCE COURSE PATTERN												
US Hist, World Hist, Am Gov, & Other Hist	740	1	21.0	4.6	464	1	21.1	4.8	272	0	20.9	4.3
Other comb of 4 or more years Social Science	66,010	55	21.1	4.7	29,935	50	20.8	4.5	35,435	60	21.4	4.8
US Hist, World Hist, & Am Gov	2,511	2	18.1	1.7	1,460	2	17.8	1.5	1,018	2	18.4	1.8
Other comb of 3 or 3.5 years of Social Science	35,401	29	19.4	3.0	19,025	32	19.2	2.9	15,913	27	19.7	3.1
Less than 3 years of Social Science	7,030	6	16.4	-	4,050	7	16.3	-	2,859	5	16.6	-
Zero years / no Social Science courses reported	8,759	7	17.5	-	4,640	8	17.1	-	3,821	6	18.0	-
NATURAL SCIENCE COURSE PATTERN												
Gen Sci ² , Bio, Chem, & Phys	47,573	39	21.0	2.6	24,524	41	21.5	3.4	22,595	38	20.6	1.9
Bio, Chem, Phys	11,582	10	22.2	3.8	6,041	10	22.7	4.6	5,458	9	21.7	3.0
Gen Sci ² , Bio, Chem	36,859	31	19.7	1.3	16,105	27	19.6	1.5	20,225	34	19.9	1.2
Other comb of 3 years of Natural Science	6,939	6	19.1	0.7	3,945	7	19.4	1.3	2,933	5	18.6	-0.1
Less than 3 years of Natural Science	8,571	7	18.4	-	4,249	7	18.1	-	4,188	7	18.7	-
Zero years / no Natural Science courses reported	8,927	7	17.9	-	4,710	8	17.9	-	3,919	7	17.9	-

¹Course value added is defined as the average ACT score change compared to course sequences in which students took less than four years of English or less than three years of Mathematics, Social Science or Natural Science.

²Includes General, Physical and Earth Sciences.

Total Students in Report: 120,451

Table 3.2. College Readiness Percents by Common Course Patterns

Course Pattern	State				National			
	N	Percent Taking Pattern	Avg ACT English	Percent Who Met Benchmark	N	Percent Taking Pattern	Avg ACT English	Percent Who Met Benchmark
ENGLISH COURSE PATTERN								
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	25,115	21	21.5	72	380,375	21	21.6	73
Eng 9, Eng 10, Eng 11, Eng 12	75,744	63	19.2	57	1,265,911	70	20.3	65
Less than 4 years of English	11,329	9	15.7	34	84,048	5	15.9	36
Zero years / no English courses reported	8,263	7	16.3	37	68,909	4	16.4	38
MATHEMATICS COURSE PATTERN								
Alg 1, Alg 2, Geom, Trig, & Calc	6,208	5	22.3	55	113,999	6	23.8	68
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	8,252	7	21.7	54	155,095	9	21.9	56
Alg 1, Alg 2, Geom, & Trig	7,765	6	19.2	30	119,993	7	19.4	32
Alg 1, Alg 2, Geom, & Other Adv Math	20,048	17	19.4	31	336,291	19	19.6	32
Other comb of 4 or more years of Math	34,634	29	22.7	58	610,720	34	23.6	65
Alg 1, Alg 2, & Geom	22,447	19	17.0	10	223,733	12	17.2	11
Other comb of 3 or 3.5 years of Math	7,940	7	18.2	20	88,866	5	19.7	34
Less than 3 years of Math	4,589	4	16.3	8	77,906	4	16.3	7
Zero years / no Math courses reported	8,568	7	17.8	19	72,640	4	17.9	20
SOCIAL SCIENCE COURSE PATTERN								
US Hist, World Hist, Am Gov, & Other Hist	740	1	21.0	44	50,989	3	22.2	51
Other comb of 4 or more years Social Science	66,010	55	21.1	44	908,394	50	22.0	50
US Hist, World Hist, & Am Gov	2,511	2	18.1	25	106,021	6	19.5	34
Other comb of 3 or 3.5 years of Social Science	35,401	29	19.4	32	489,586	27	21.0	43
Less than 3 years of Social Science	7,030	6	16.4	15	171,617	10	19.1	32
Zero years / no Social Science courses reported	8,759	7	17.5	22	72,636	4	17.7	25
NATURAL SCIENCE COURSE PATTERN								
Gen Sci ¹ , Bio, Chem, & Phys	47,573	39	21.0	40	767,293	43	21.9	46
Bio, Chem, Phys	11,582	10	22.2	49	183,685	10	23.0	54
Gen Sci ¹ , Bio, Chem	36,859	31	19.7	28	504,165	28	19.9	28
Other comb of 3 years of Natural Science	6,939	6	19.1	24	51,822	3	19.1	25
Less than 3 years of Natural Science	8,571	7	18.4	21	218,267	12	18.0	17
Zero years / no Natural Science courses reported	8,927	7	17.9	18	74,011	4	17.8	18

¹Includes General, Physical and Earth Sciences.

Section IV

Career and Educational Aspirations

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included.

Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

Total Students in Report: 120,451

Table 4.1. Distribution of Planned Educational Majors for All Students by College Plans

Planned Educational Major	All Students			Plan on 2 Years or Less of College			Plan on 4 Years or More of College		
	N ¹	Percent ²	Avg ACT Comp	N	Percent ²	Avg ACT Comp	N	Percent ²	Avg ACT Comp
Agriculture & Natural Resources Conservation	1,731	1	18.6	402	3	16.4	1,208	1	19.6
Architecture	1,127	1	20.4	100	1	15.6	976	1	21.0
Area, Ethnic, & Multidisciplinary Studies	148	0	21.1	23	0	15.7	114	0	22.5
Arts: Visual & Performing	10,910	9	19.3	1,621	13	16.3	8,529	9	19.9
Business	9,567	8	20.4	973	8	16.3	8,205	9	21.0
Communications	2,140	2	20.7	159	1	16.3	1,896	2	21.1
Community, Family, & Personal Services	6,656	6	17.7	1,452	12	16.1	4,745	5	18.3
Computer Science & Mathematics	2,876	2	21.8	301	2	17.7	2,442	3	22.4
Education	5,365	4	20.2	295	2	15.9	4,877	5	20.6
Engineering	7,487	6	22.2	689	6	16.0	6,479	7	23.0
Engineering Technology & Drafting	2,582	2	19.0	535	4	16.1	1,920	2	20.0
English & Foreign Languages	1,407	1	23.0	98	1	17.9	1,243	1	23.5
Health Administration & Assisting	2,934	2	17.7	379	3	15.8	2,428	3	18.0
Health Sciences & Technologies	23,622	20	20.7	1,173	10	16.3	21,685	24	21.0
Philosophy, Religion, & Theology	568	0	21.8	43	0	16.7	489	1	22.2
Repair, Production, & Construction	2,878	2	17.1	1,370	11	16.4	1,253	1	18.0
Sciences: Biological & Physical	5,103	4	23.4	117	1	16.9	4,788	5	23.6
Social Sciences & Law	9,113	8	21.1	348	3	16.3	8,409	9	21.3
Undecided	9,664	8	20.7	1,035	8	15.9	7,492	8	21.7
No Response	13,913	12	16.8	948	8	14.2	1,572	2	15.9

¹2-Year and 4-Year "N" counts do not reflect "Missing" and "Other" college plans, therefore they may not add up to the N count for All Students.

²Percent of students tested within College Plan groups (All Students, 2-Year, 4-Year).

Total Students in Report: 120,451

Table 4.2. Average ACT Composite Scores for Racial/Ethnic Groups by Post-Secondary Educational Aspirations

Educational Degree Aspirations	All Racial/Ethnic Groups Combined		Black/African American		American Indian/ Alaska Native		White		Hispanic/Latino	
	N	Average	N	Average	N	Average	N	Average	N	Average
Voc-Tech	3,276	15.8	459	13.6	41	14.2	2,079	16.5	234	15.1
2-yr College Degree	9,006	16.2	1,333	14.0	80	15.0	5,789	16.8	689	15.3
Bachelors Degree	50,552	19.6	6,458	15.8	277	18.2	35,001	20.5	2,978	18.2
Graduate Study	15,568	22.7	1,619	17.8	43	20.1	10,982	23.6	799	20.6
Prof. Level Degree	24,996	22.4	3,341	17.8	97	19.5	15,713	23.3	1,492	20.5
Other	3,270	16.9	348	14.6	41	15.3	2,047	17.3	222	16.0
No Response	13,783	17.8	2,299	14.5	125	15.5	7,455	18.8	831	16.4

Educational Degree Aspirations	All Racial/Ethnic Groups Combined		Asian		Native Hawaiian/ Other Pacific Islander		Two or more races		Prefer not to respond/ No Response	
	N	Average	N	Average	N	Average	N	Average	N	Average
Voc-Tech	3,276	15.8	46	16.0	6	16.2	112	15.6	299	15.2
2-yr College Degree	9,006	16.2	96	15.3	6	16.2	357	16.5	656	15.5
Bachelors Degree	50,552	19.6	900	20.2	44	18.4	1,831	19.0	3,063	18.8
Graduate Study	15,568	22.7	554	24.8	19	20.0	510	21.6	1,042	22.2
Prof. Level Degree	24,996	22.4	1,244	26.2	30	22.0	1,189	21.7	1,890	22.4
Other	3,270	16.9	76	17.9	5	15.2	150	17.5	381	17.0
No Response	13,783	17.8	286	20.3	18	15.3	551	18.0	2,218	18.1

Total Students in Report: 120,451

Table 4.3. Students' Score Report Preferences at Time of Testing

Name	State	Number of Students			Percent of Students in College Readiness Standards Ranges						
		Total	1st Choice	2nd-6th Choice	01-12	13-15	16-19	20-23	24-27	28-32	33-36
MICHIGAN STATE UNIVERSITY	Michigan	31,936	12,134	19,802	2	11	21	29	24	12	2
CENTRAL MICHIGAN UNIVERSITY	Michigan	21,337	5,835	15,502	2	13	30	33	17	5	0
UNIVERSITY OF MICHIGAN-ANN ARBOR	Michigan	19,438	7,633	11,805	2	7	15	23	27	23	4
GRAND VALLEY STATE UNIVERSITY	Michigan	17,733	4,391	13,342	1	9	24	33	23	9	1
WESTERN MICHIGAN UNIVERSITY	Michigan	16,554	3,461	13,093	2	13	30	32	17	6	0
FERRIS STATE UNIVERSITY	Michigan	12,442	3,452	8,990	3	16	34	29	13	4	0
STATE-COLLEGE/NO REPORTS NOW	Iowa	12,075	12,071	4	10	28	29	18	8	5	2
WAYNE STATE UNIVERSITY	Michigan	11,092	2,777	8,315	5	21	30	24	14	6	1
EASTERN MICHIGAN UNIVERSITY	Michigan	10,431	2,594	7,837	4	20	32	26	13	4	0
OAKLAND UNIVERSITY	Michigan	9,376	2,306	7,070	3	14	29	30	17	7	0
SAGINAW VALLEY STATE UNIVERSITY	Michigan	6,723	1,604	5,119	3	17	33	28	14	4	0
GRAND RAPIDS COMMUNITY COLLEGE	Michigan	4,890	1,780	3,110	6	22	35	25	10	2	0
NORTHERN MICHIGAN UNIVERSITY	Michigan	4,839	1,543	3,296	2	11	30	32	18	6	0
MICHIGAN TECHNOLOGICAL UNIVERSITY	Michigan	4,150	1,122	3,028	2	11	20	25	24	16	3
UNIVERSITY OF MICHIGAN-DEARBORN	Michigan	3,842	821	3,021	3	13	26	28	21	9	1
NCAA ELIGIBILITY CENTER	Indiana	3,660	1,526	2,134	3	14	27	29	18	7	1
OAKLAND COMMUNITY COLLEGE	Michigan	3,588	1,129	2,459	7	28	36	21	7	1	0
UNIVERSITY OF DETROIT MERCY	Michigan	3,297	690	2,607	5	21	31	24	13	5	1
LANSING COMMUNITY COLLEGE	Michigan	2,798	1,021	1,777	6	25	36	23	9	2	0
UNIVERSITY OF MICHIGAN-FLINT	Michigan	2,620	625	1,995	3	14	30	29	17	7	1
MACOMB COMMUNITY COLLEGE	Michigan	2,603	983	1,620	8	30	36	19	6	1	0
KALAMAZOO VALLEY COMMUNITY COLLEGE	Michigan	2,513	957	1,556	6	26	35	22	9	2	0
HENRY FORD COMMUNITY COLLEGE	Michigan	2,433	779	1,654	10	36	34	15	4	1	0
DELTA COLLEGE	Michigan	2,395	1,103	1,292	6	24	34	24	10	2	0
HOPE COLLEGE	Michigan	2,314	555	1,759	1	6	14	27	30	20	3
LAKE SUPERIOR STATE UNIVERSITY	Michigan	2,064	553	1,511	2	14	33	30	16	5	0
STATE-NO COLLEGE PLANS	Iowa	2,060	2,060	0	21	39	28	10	2	0	0
SCHOOLCRAFT COLLEGE	Michigan	2,042	716	1,326	5	25	36	23	10	2	0
DAVENPORT UNIVERSITY	Michigan	2,036	464	1,572	3	19	35	27	11	4	0
MICHIGAN HIGHER EDUC ASST AUTHORITY	Michigan	1,727	669	1,058	6	18	25	24	17	9	1
All Other Institutions		121,781	30,528	91,253	5	19	27	22	15	9	2
Total		346,789	107,882	238,907	4	17	27	26	16	8	1

Section V

Optional Writing Test Results

Beginning with the Graduating Class of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included. Also beginning with the 2013 Graduating Class data, College Readiness Benchmarks for Reading and Science were updated to reflect the most recent college coursework research.

Total Students in Report: 120,451

Table 5.1. Average ACT English and Writing Scores by Race/Ethnicity and Gender for students who took ACT Writing

	N		Average ACT Scores					
	State	National	English		Essay		English/Writing Combined	
			State	National	State	National	State	National
All Students	103,643	942,769	18.8	21.3	6.7	7.0	18.4	20.5
Black/African American	13,778	114,751	14.5	16.3	5.8	6.1	14.5	16.0
American Indian/Alaska Native	649	6,031	15.5	16.8	5.8	6.1	15.1	16.4
White	67,356	518,407	19.9	22.9	6.9	7.2	19.4	21.9
Hispanic/Latino	6,507	151,504	16.9	18.6	6.5	6.8	16.9	18.3
Asian	2,789	54,580	22.3	23.5	7.3	7.6	21.5	22.7
Native Hawaiian/Other Pac. Isl.	112	2,812	17.8	19.5	6.5	6.9	17.5	19.2
Two or more races	4,172	35,355	18.5	21.5	6.6	7.0	18.1	20.6
Prefer not/No Response	8,280	59,329	18.2	21.8	6.5	7.1	17.8	20.9
Males	51,838	423,104	18.2	21.0	6.4	6.7	17.7	20.1
Females	50,252	513,945	19.5	21.6	7.0	7.2	19.2	20.9
Missing	1,553	5,720	18.0	16.6	6.7	6.3	17.9	16.5

