

ACT Profile Report - State

Graduating Class 2013
Massachusetts



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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

46% 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: 16,058 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. 62% 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 1% of the cohort took less than three years of math courses. Of these students, 40% were college ready. 5% of the cohort reported taking a course sequence of Algebra I, Algebra II, and Geometry. 24% of these students were college ready. In comparison, 75% 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 4% of the cohort took less than three years of natural science courses. 30% of these students were college ready. In comparison, 56% 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 21% 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

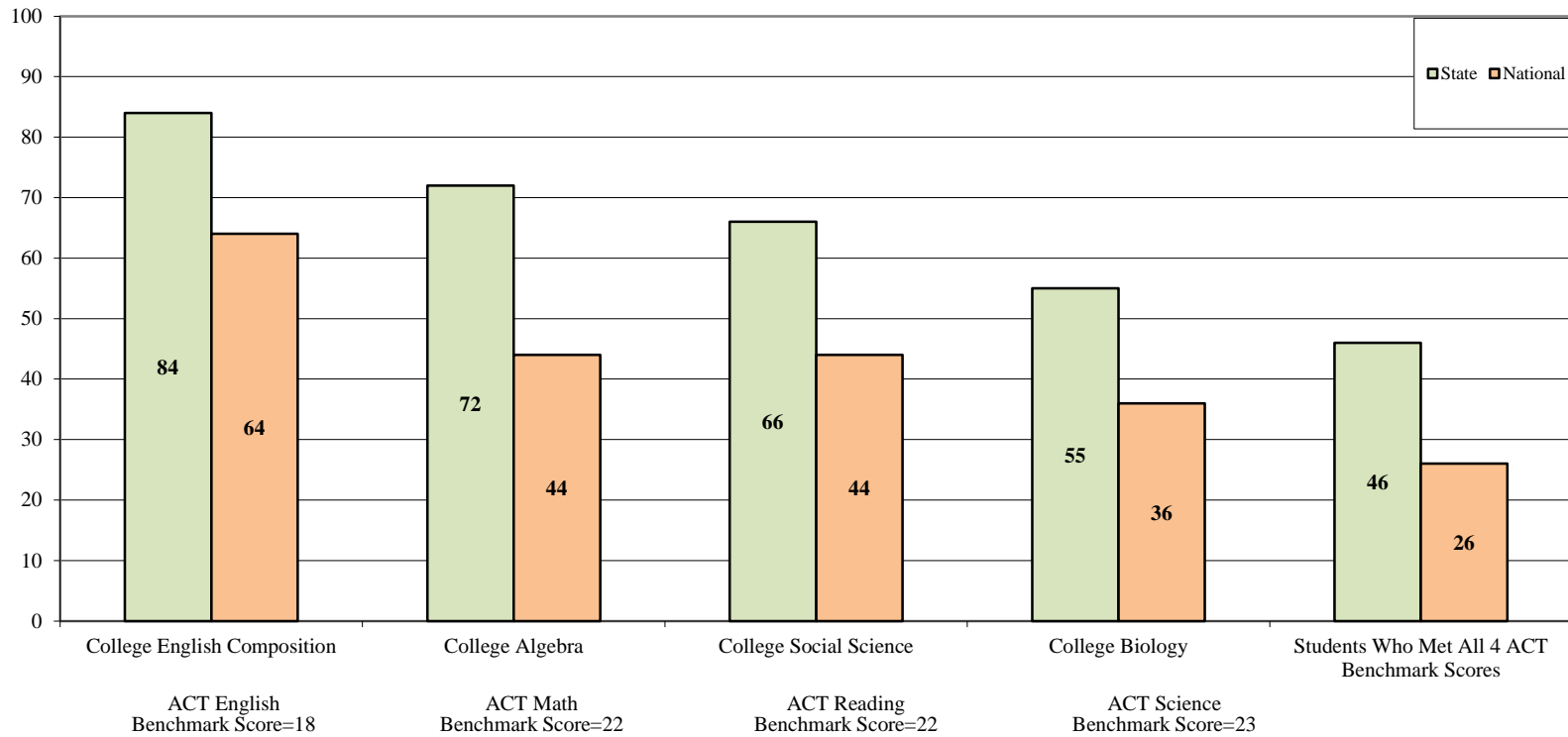
Executive Summary

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: 16,058

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

Year	Number of Students Tested		Percent Who Met Benchmarks									
	State	National	English		Mathematics		Reading		Science		Met All Four	
	State	National	State	National	State	National	State	National	State	National	State	National
2009	13,093	1,480,469	86	67	68	42	73	53	43	28	39	23
2010	14,736	1,568,835	86	66	70	43	71	52	46	29	41	24
2011	14,975	1,623,112	86	66	73	45	74	52	47	30	43	25
2012	15,398	1,666,017	86	67	73	46	72	52	48	31	44	25
2013	16,058	1,799,243	84	64	72	44	66	44	55	36	46	26

Table 1.2. Five Year Trends—Average ACT Scores

Year	Number of Students Tested		Average ACT Scores									
	State	National	English		Mathematics		Reading		Science		Composite	
	State	National	State	National	State	National	State	National	State	National	State	National
2009	13,093	1,480,469	23.9	20.6	24.3	21.0	24.3	21.4	22.8	20.9	23.9	21.1
2010	14,736	1,568,835	24.0	20.5	24.3	21.0	24.2	21.3	23.1	20.9	24.0	21.0
2011	14,975	1,623,112	24.1	20.6	24.6	21.1	24.4	21.3	23.2	20.9	24.2	21.1
2012	15,398	1,666,017	23.9	20.5	24.5	21.1	24.2	21.3	23.2	20.9	24.1	21.1
2013	16,058	1,799,243	23.8	20.2	24.4	20.9	24.4	21.1	23.2	20.7	24.1	20.9

Table 1.3. Five Year Trends—Average ACT Scores Nationwide

Year	Number of Students Tested		Average ACT Scores				
	State	National	English	Mathematics	Reading	Science	Composite
2009	13,093	1,480,469	23.9	24.3	24.3	22.8	23.9
2010	14,736	1,568,835	24.0	24.3	24.2	23.1	24.0
2011	14,975	1,623,112	24.1	24.6	24.4	23.2	24.2
2012	15,398	1,666,017	23.9	24.5	24.2	23.2	24.1
2013	16,058	1,799,243	23.8	24.4	24.4	23.2	24.1

Total Students in Report: 16,058

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

Year	Number of Students Tested		Percent ²		Average ACT Scores									
					English		Mathematics		Reading		Science		Composite	
	Core or More ¹	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	Core or More	Less than Core	Core or More	Less than Core
2009	8,310	4,490	63	34	24.1	23.8	24.3	24.3	24.5	24.0	22.9	22.8	24.1	23.9
2010	9,379	5,108	64	35	24.2	23.8	24.4	24.2	24.4	23.9	23.2	22.9	24.2	23.8
2011	9,685	5,076	65	34	24.2	24.1	24.6	24.7	24.5	24.4	23.3	23.2	24.3	24.2
2012	9,840	5,373	64	35	24.1	23.7	24.6	24.3	24.4	23.9	23.4	23.0	24.2	23.9
2013	9,979	5,708	62	36	24.1	23.3	24.6	24.3	24.7	24.0	23.4	23.0	24.3	23.8

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	13,093	100	23.9	14,736	100	24.0	14,975	100	24.2	15,398	100	24.1	16,058	100	24.1
Black/African American	462	4	19.1	604	4	19.2	573	4	19.4	651	4	19.2	691	4	19.0
American Indian/Alaska Native	21	0	23.8	33	0	22.5	23	0	23.8	34	0	22.3	25	0	22.9
White	10,008	76	24.1	11,308	77	24.3	11,460	77	24.5	11,296	73	24.3	11,633	72	24.5
Hispanic/Latino	360	3	21.2	503	3	20.7	675	5	21.1	819	5	21.4	844	5	21.0
Asian	593	5	25.2	788	5	25.3	836	6	25.5	1,016	7	25.1	1,054	7	25.0
Native Hawaiian/Other Pacific Islander	0	0	.	0	0	.	4	0	21.5	12	0	24.4	15	0	24.8
Two or more races	275	2	24.5	302	2	24.3	302	2	25.0	361	2	24.6	353	2	23.9
Prefer not to respond/No response	1,374	10	24.5	1,198	8	24.5	1,102	7	24.5	1,209	8	24.9	1,443	9	24.5

Total Students in Report: 16,058

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



Total Students in Report: 16,058

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	15,271	95	23.8	24.5	24.4	23.2	24.1
	Extended Time	787	5	22.4	22.9	24.7	22.9	23.4
	Total	16,058	100	23.8	24.4	24.4	23.2	24.1
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	85	72	66	55	47
	Extended Time	76	59	67	51	44
	Total	84	72	66	55	46
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: 16,058

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

ACT Scale Score	English		Mathematics		Reading		Science		Composite		ACT Scale Score
	N	CP	N	CP	N	CP	N	CP	N	CP	
36	113	100	162	100	330	100	164	100	15	100	36
35	335	99	240	99	127	98	187	99	137	100	35
34	538	97	456	97	551	97	171	98	235	99	34
33	611	94	317	95	715	94	157	97	317	98	33
32	441	90	411	93	663	89	333	96	482	96	32
31	551	87	367	90	993	85	377	94	585	93	31
30	540	84	605	88	699	79	502	91	730	89	30
29	603	81	683	84	676	75	526	88	853	84	29
28	758	77	1,083	80	729	70	628	85	945	79	28
27	662	72	1,250	73	673	66	678	81	984	73	27
26	958	68	1,436	65	674	62	933	77	1,166	67	26
25	1,010	62	1,411	56	763	57	1,523	71	1,155	60	25
24	1,176	56	1,245	48	1,168	53	1,542	62	1,210	53	24
23	1,145	48	1,051	40	786	45	1,059	52	1,218	45	23
22	916	41	784	33	1,043	41	1,349	45	1,065	38	22
21	1,123	36	744	28	994	34	1,487	37	1,011	31	21
20	993	29	388	24	846	28	922	28	818	25	20
19	636	22	653	21	689	23	957	22	766	20	19
18	445	18	574	17	688	18	644	16	610	15	18
17	394	16	820	14	427	14	431	12	509	11	17
16	483	13	741	9	471	11	462	9	382	8	16
15	483	10	416	4	448	8	290	6	328	5	15
14	323	7	133	1	271	6	210	5	221	3	14
13	196	5	53	1	274	4	166	3	153	2	13
12	163	4	14	1	152	2	123	2	81	1	12
11	139	3	9	1	94	1	89	1	51	1	11
10	125	2	5	1	54	1	68	1	23	1	10
9	83	1	2	1	33	1	39	1	3	1	9
8	65	1	1	1	6	1	16	1	4	1	8
7	35	1	0	1	8	1	10	1	1	1	7
6	10	1	2	1	7	1	7	1	0	1	6
5	3	1	0	1	3	1	4	1	0	1	5
4	1	1	2	1	1	1	0	1	0	1	4
3	0	1	0	1	0	1	2	1	0	1	3
2	1	1	0	1	1	1	0	1	0	1	2
1	0	1	0	1	1	1	2	1	0	1	1
Avg (SD)	23.8 (6.1)		24.4 (5.2)		24.4 (6.2)		23.2 (5.1)		24.1 (5.1)		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.

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	1,114	100	585	100	898	100	1,129	100	1,609	100	287	100	421	100	18
17	1,543	93	205	96	1,381	94	1,566	93	1,417	90	514	98	127	97	17
16	1,178	83	1,661	95	1,462	86	1,680	83	1,455	81	720	95	1,414	97	16
15	1,168	76	1,674	85	1,366	77	1,600	73	1,833	72	1,824	91	1,818	88	15
14	1,269	69	1,667	74	1,181	68	1,429	63	1,475	61	2,297	79	1,986	76	14
13	1,338	61	1,810	64	1,440	61	1,346	54	1,713	51	2,469	65	2,016	64	13
12	1,312	53	2,211	53	1,898	52	1,281	46	1,621	41	2,032	49	2,662	52	12
11	1,784	44	1,486	39	1,597	40	1,498	38	1,458	31	1,620	37	1,364	35	11
10	1,603	33	1,449	30	1,270	30	1,170	28	870	22	1,700	27	1,140	26	10
9	1,077	23	1,186	21	1,111	22	804	21	794	16	987	16	1,498	19	9
8	802	17	858	13	853	15	893	16	789	11	831	10	661	10	8
7	668	12	424	8	853	10	706	10	656	6	300	5	371	6	7
6	464	7	337	5	396	5	407	6	219	2	250	3	295	4	6
5	364	5	257	3	176	2	335	3	92	1	70	1	85	2	5
4	182	2	153	2	92	1	143	1	43	1	74	1	109	1	4
3	129	1	77	1	28	1	55	1	9	1	35	1	26	1	3
2	55	1	16	1	41	1	14	1	4	1	14	1	40	1	2
1	8	1	2	1	15	1	2	1	1	1	34	1	25	1	1
Avg (SD)	12.2 (3.7)		12.1 (3.2)		12.4 (3.5)		12.6 (3.6)		13.1 (3.3)		12.2 (2.8)		12.2 (2.9)		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)	28	28	30	26	28
Q2 (50th Percentile)	24	25	24	23	24
Q1 (25th Percentile)	20	21	20	20	21

Total Students in Report: 16,058

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	16,058	62	24.3	23.8
	Black/African American	691	52	19.6	18.4
	American Indian/Alaska Native	25	68	22.6	23.4
	White	11,633	64	24.5	24.4
	Hispanic/Latino	844	55	21.9	19.8
	Asian	1,054	56	25.4	24.5
	Native Hawaiian/Other Pac. Isl.	15	80	24.1	32.0
	Two or more races	353	62	24.2	23.5
	Prefer not/No Response	1,443	58	25.1	24.5
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	23.8	24.4	24.4	23.2	24.1
	Black/African American	18.0	19.7	19.3	18.6	19.0
	American Indian/Alaska Native	22.3	23.5	23.6	21.8	22.9
	White	24.3	24.6	24.8	23.5	24.5
	Hispanic/Latino	20.0	21.7	21.2	20.4	21.0
	Asian	23.8	27.1	24.2	24.3	25.0
	Native Hawaiian/Other Pac. Isl.	23.9	24.9	25.7	24.2	24.8
	Two or more races	23.7	23.9	24.2	23.2	23.9
	Prefer not/No Response	24.4	24.6	25.1	23.6	24.5
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: 16,058

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	1,597	10	1,175	7	1,723	11	679	4
	28 to 32	2,893	18	3,149	20	3,760	23	2,366	15
	24 to 27	3,806	24	5,342	33	3,278	20	4,676	29
	20 to 23	4,177	26	2,967	18	3,669	23	4,817	30
	16 to 19	1,958	12	2,788	17	2,275	14	2,494	16
	13 to 15	1,002	6	602	4	993	6	666	4
	01 to 12	625	4	35	0	360	2	360	2
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	7,148	45	23.5	25.1	24.3	23.9	24.3
	Females	8,910	55	24.0	23.8	24.4	22.7	23.8
	Missing	0	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	83	76	66	60	50
	Females	85	68	66	51	43
National	Males	62	47	43	40	29
	Females	67	41	45	33	24

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	9,979	87	24.1	73	24.6	68	24.7	56	23.4	47	24.3
	Less than Core	5,708	81	23.3	70	24.3	64	24.0	53	23.0	45	23.8
	Missing ³	371	70	21.1	50	21.6	54	22.5	43	21.8	34	21.9
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	15,491	85	23.9	15,548	72	24.5	10,414	67	24.6	15,085	56	23.4
	Less than Core	212	68	20.8	147	40	20.0	5,284	65	24.2	611	30	20.2
	Missing ³	355	70	21.2	363	50	21.6	360	54	22.6	362	43	21.9
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

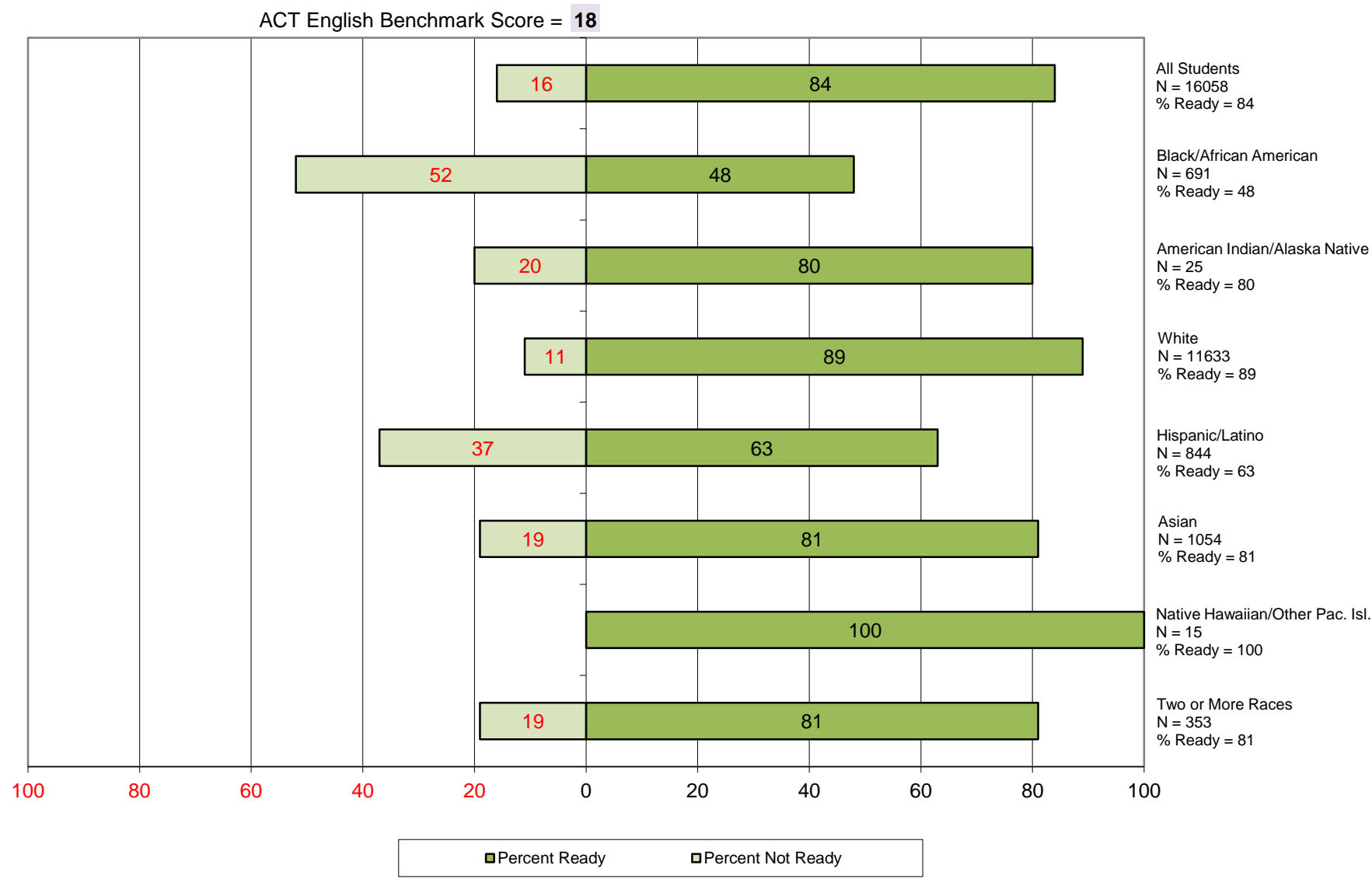
College Readiness and the Impact of Course Rigor

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.

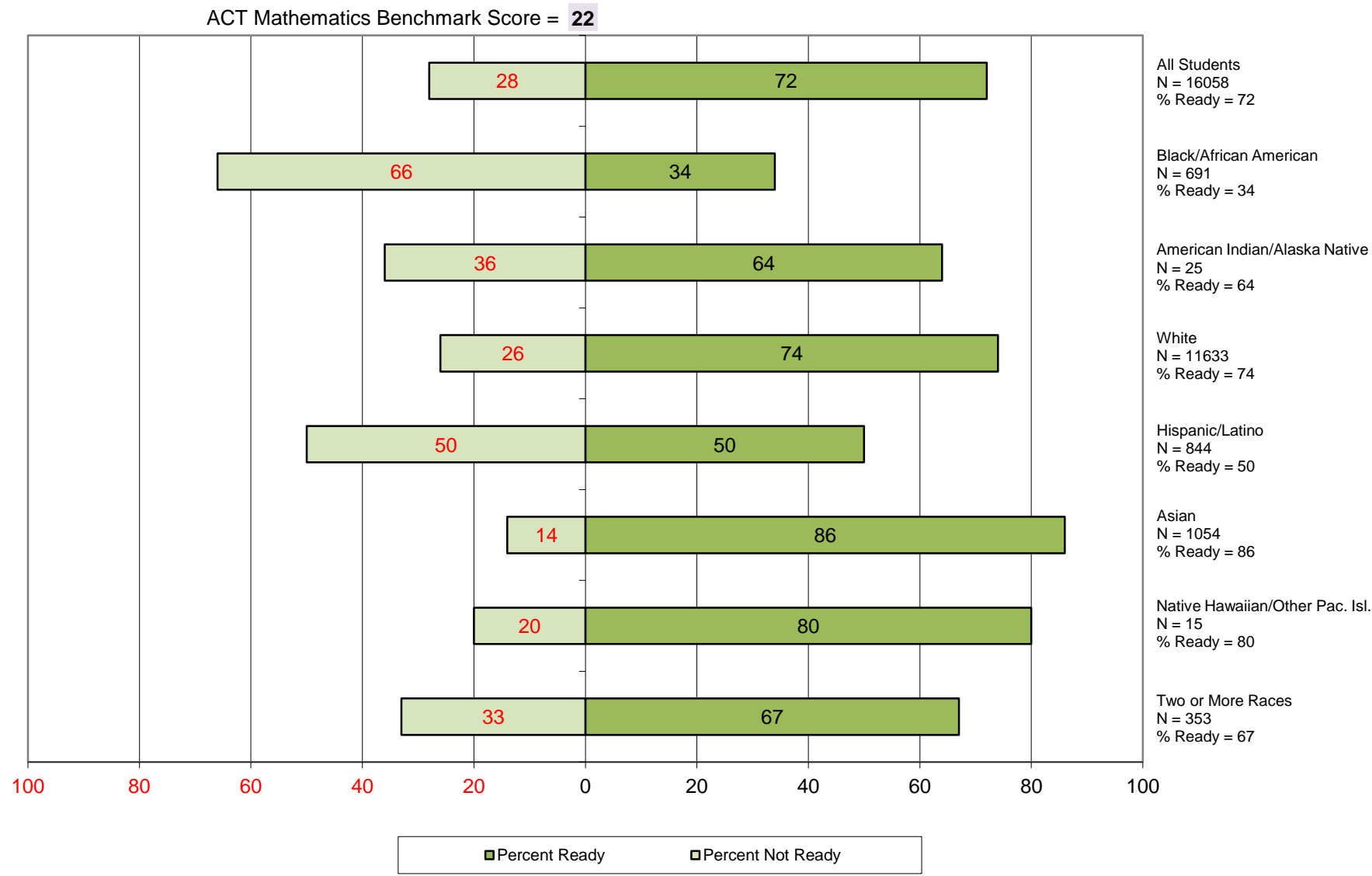
Total Students in Report: 16,058

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



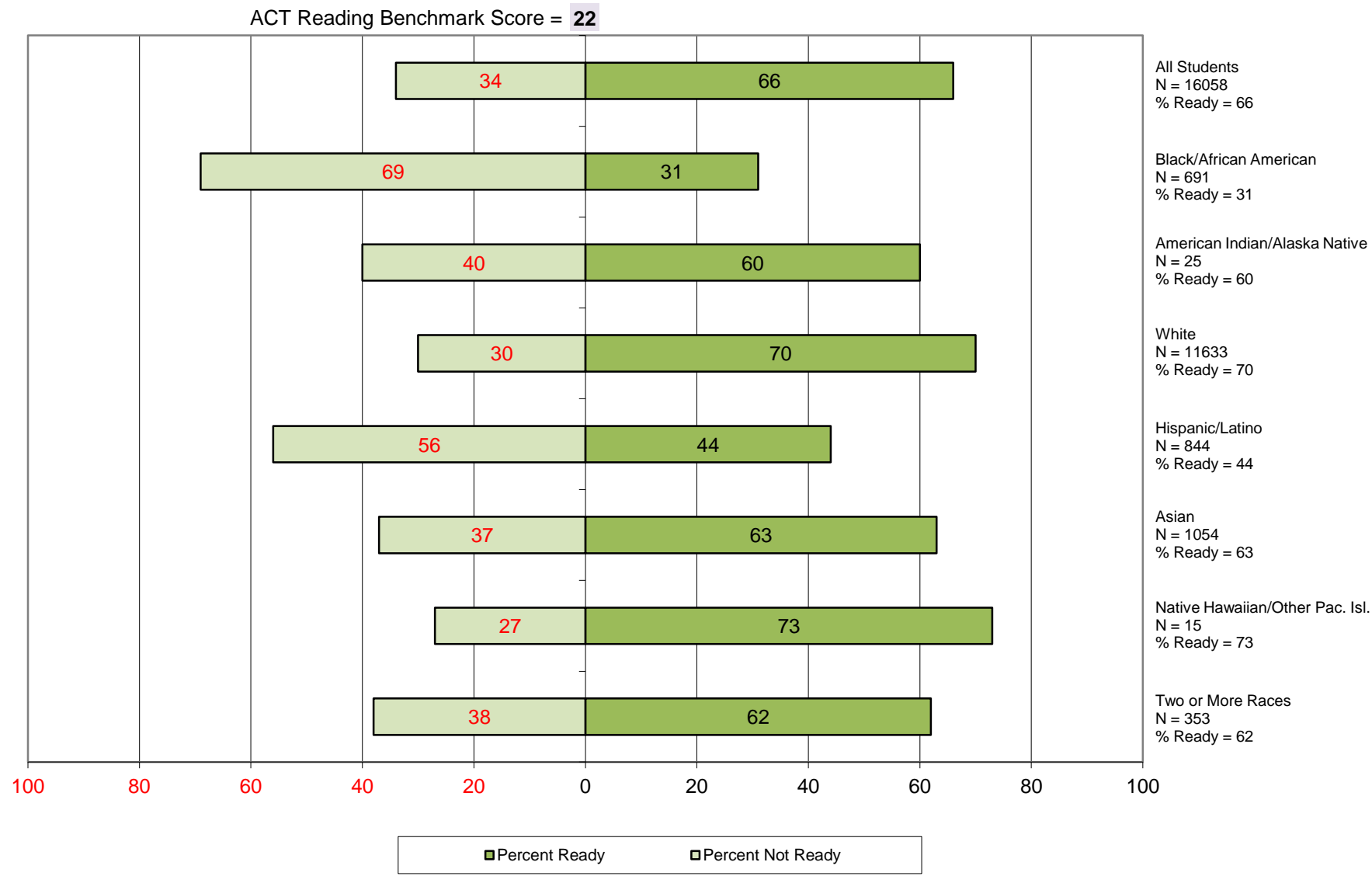
Total Students in Report: 16,058

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



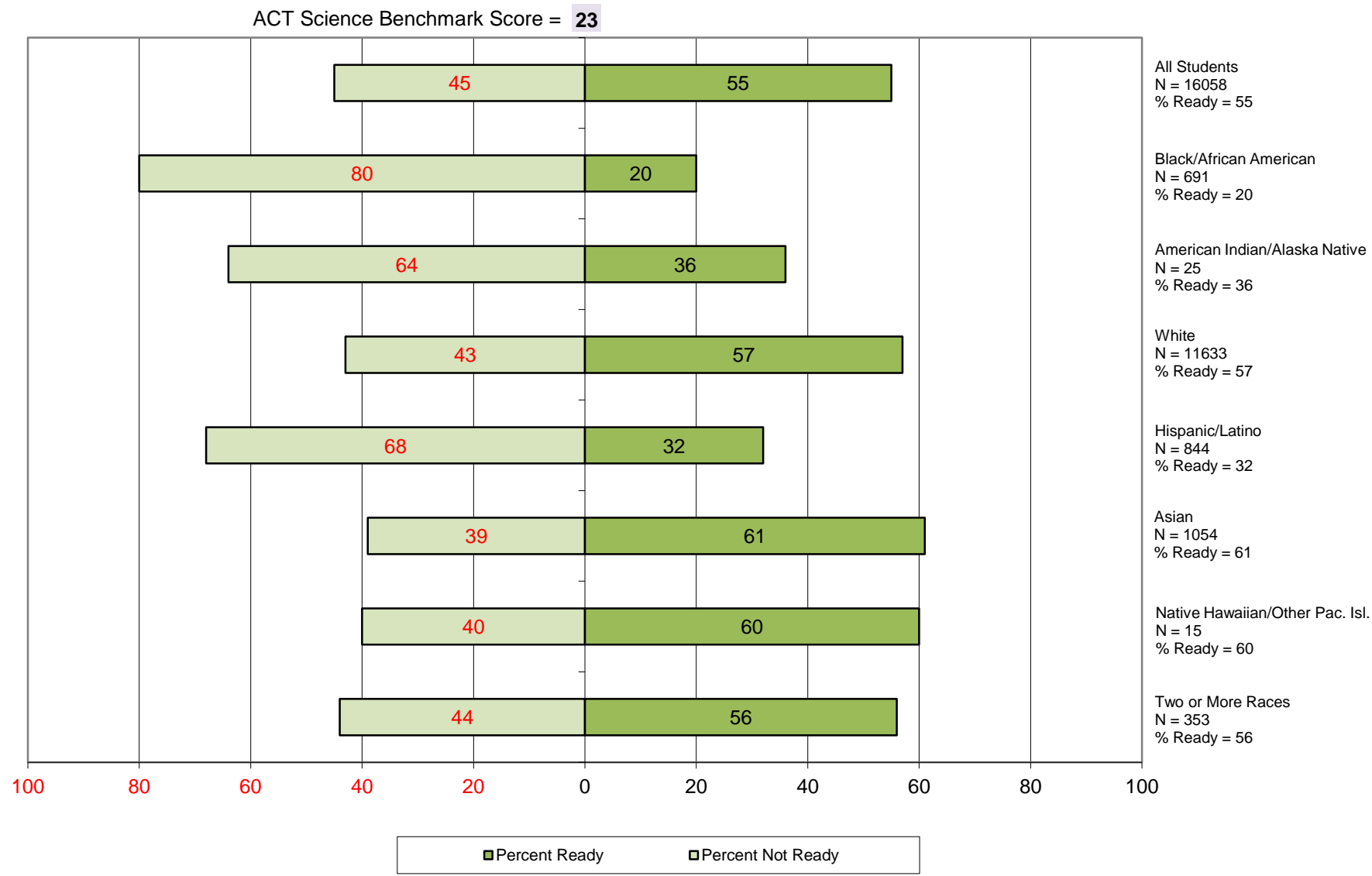
Total Students in Report: 16,058

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



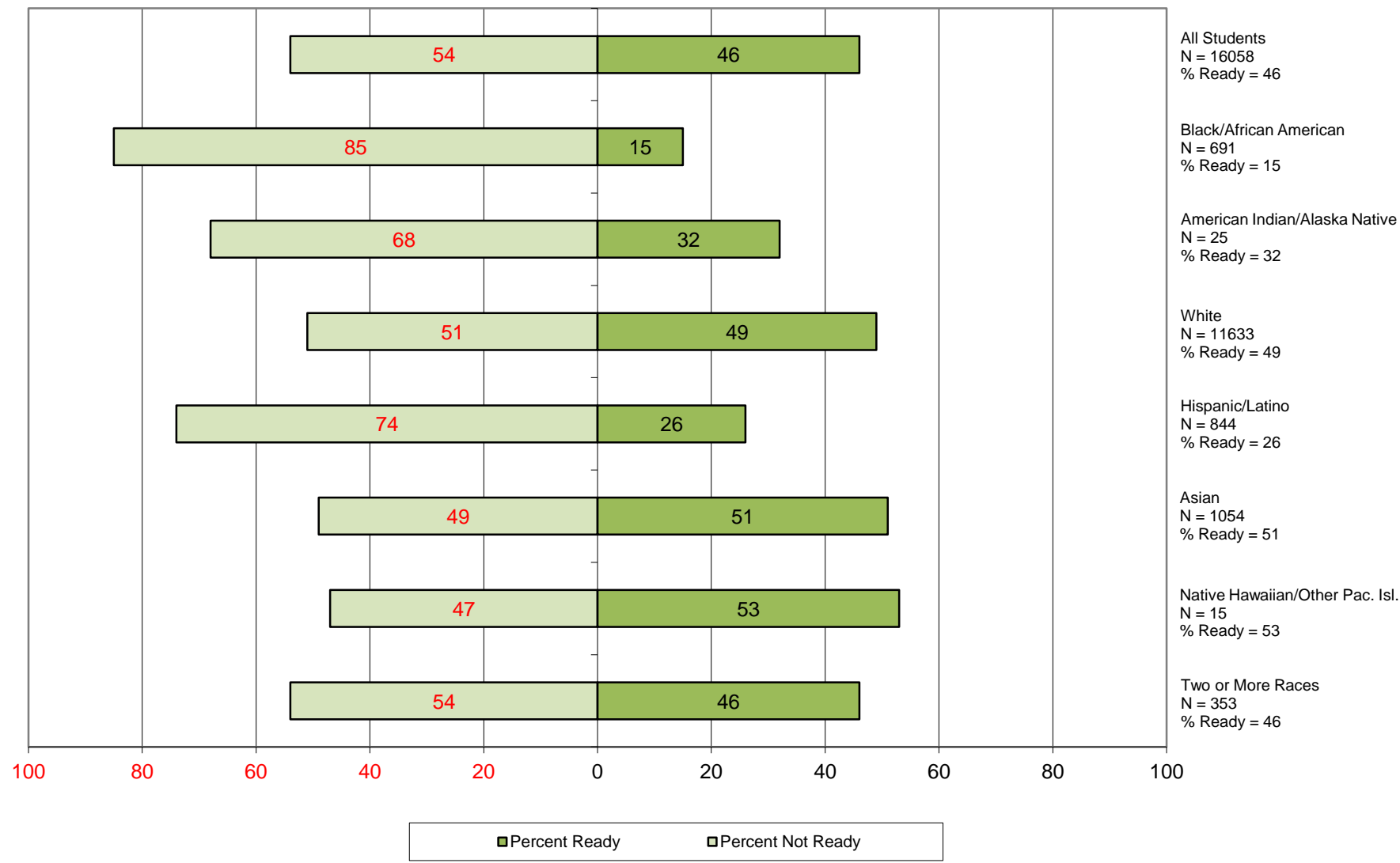
Total Students in Report: 16,058

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



Total Students in Report: 16,058

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



Total Students in Report: 16,058

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	3,994	25	24.2	3.4	1,659	23	23.8	2.9	2,335	26	24.5	3.8
Eng 9, Eng 10, Eng 11, Eng 12	11,497	72	23.8	3.0	5,179	72	23.6	2.7	6,318	71	23.9	3.2
Less than 4 years of English	212	1	20.8	-	104	1	20.9	-	108	1	20.7	-
Zero years / no English courses reported	355	2	21.2	-	206	3	21.1	-	149	2	21.4	-
MATHEMATICS COURSE PATTERN												
	N	Percent	ACT Math	Course Value Added ¹	N	Percent	ACT Math	Course Value Added ¹	N	Percent	ACT Math	Course Value Added ¹
Alg 1, Alg 2, Geom, Trig, & Calc	1,905	12	26.4	6.4	799	11	26.9	6.3	1,106	12	26.0	6.5
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	1,210	8	23.4	3.4	446	6	23.9	3.3	764	9	23.1	3.6
Alg 1, Alg 2, Geom, & Trig	696	4	21.3	1.3	269	4	21.7	1.1	427	5	21.0	1.5
Alg 1, Alg 2, Geom, & Other Adv Math	2,022	13	21.2	1.2	657	9	21.5	0.9	1,365	15	21.1	1.6
Other comb of 4 or more years of Math	8,035	50	26.0	6.0	3,991	56	26.6	6.0	4,044	45	25.4	5.9
Alg 1, Alg 2, & Geom	730	5	18.7	-1.3	280	4	19.1	-1.5	450	5	18.4	-1.1
Other comb of 3 or 3.5 years of Math	950	6	23.3	3.3	430	6	23.1	2.5	520	6	23.4	3.9
Less than 3 years of Math	147	1	20.0	-	69	1	20.6	-	78	1	19.5	-
Zero years / no Math courses reported	363	2	21.6	-	207	3	22.0	-	156	2	21.0	-
SOCIAL SCIENCE COURSE PATTERN												
	N	Percent	ACT Reading	Course Value Added ¹	N	Percent	ACT Reading	Course Value Added ¹	N	Percent	ACT Reading	Course Value Added ¹
US Hist, World Hist, Am Gov, & Other Hist	812	5	25.4	1.2	436	6	25.1	0.8	376	4	25.8	1.7
Other comb of 4 or more years Social Science	4,437	28	24.3	0.1	2,198	31	24.2	-0.1	2,239	25	24.3	0.2
US Hist, World Hist, & Am Gov	620	4	24.5	0.3	291	4	24.4	0.1	329	4	24.6	0.5
Other comb of 3 or 3.5 years of Social Science	4,545	28	24.7	0.5	1,887	26	24.6	0.3	2,658	30	24.7	0.6
Less than 3 years of Social Science	5,284	33	24.2	-	2,128	30	24.3	-	3,156	35	24.1	-
Zero years / no Social Science courses reported	360	2	22.6	-	208	3	22.8	-	152	2	22.3	-
NATURAL SCIENCE COURSE PATTERN												
	N	Percent	ACT Science	Course Value Added ¹	N	Percent	ACT Science	Course Value Added ¹	N	Percent	ACT Science	Course Value Added ¹
Gen Sci ² , Bio, Chem, & Phys	10,042	63	23.7	3.5	4,721	66	24.3	4.0	5,321	60	23.2	3.1
Bio, Chem, Phys	2,868	18	23.8	3.6	1,293	18	24.6	4.3	1,575	18	23.2	3.1
Gen Sci ² , Bio, Chem	2,001	12	21.1	0.9	632	9	21.2	0.9	1,369	15	21.1	1.0
Other comb of 3 years of Natural Science	174	1	21.2	1.0	89	1	21.9	1.6	85	1	20.5	0.4
Less than 3 years of Natural Science	611	4	20.2	-	205	3	20.3	-	406	5	20.1	-
Zero years / no Natural Science courses reported	362	2	21.9	-	208	3	22.3	-	154	2	21.3	-

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: 16,058

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	3,994	25	24.2	86	380,375	21	21.6	73
Eng 9, Eng 10, Eng 11, Eng 12	11,497	72	23.8	85	1,265,911	70	20.3	65
Less than 4 years of English	212	1	20.8	68	84,048	5	15.9	36
Zero years / no English courses reported	355	2	21.2	70	68,909	4	16.4	38
MATHEMATICS COURSE PATTERN								
	N	Percent Taking Pattern	Avg ACT Math	Percent Who Met Benchmark	N	Percent Taking Pattern	Avg ACT Math	Percent Who Met Benchmark
Alg 1, Alg 2, Geom, Trig, & Calc	1,905	12	26.4	87	113,999	6	23.8	68
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	1,210	8	23.4	69	155,095	9	21.9	56
Alg 1, Alg 2, Geom, & Trig	696	4	21.3	48	119,993	7	19.4	32
Alg 1, Alg 2, Geom, & Other Adv Math	2,022	13	21.2	48	336,291	19	19.6	32
Other comb of 4 or more years of Math	8,035	50	26.0	83	610,720	34	23.6	65
Alg 1, Alg 2, & Geom	730	5	18.7	24	223,733	12	17.2	11
Other comb of 3 or 3.5 years of Math	950	6	23.3	66	88,866	5	19.7	34
Less than 3 years of Math	147	1	20.0	40	77,906	4	16.3	7
Zero years / no Math courses reported	363	2	21.6	50	72,640	4	17.9	20
SOCIAL SCIENCE COURSE PATTERN								
	N	Percent Taking Pattern	Avg ACT Reading	Percent Who Met Benchmark	N	Percent Taking Pattern	Avg ACT Reading	Percent Who Met Benchmark
US Hist, World Hist, Am Gov, & Other Hist	812	5	25.4	72	50,989	3	22.2	51
Other comb of 4 or more years Social Science	4,437	28	24.3	65	908,394	50	22.0	50
US Hist, World Hist, & Am Gov	620	4	24.5	65	106,021	6	19.5	34
Other comb of 3 or 3.5 years of Social Science	4,545	28	24.7	68	489,586	27	21.0	43
Less than 3 years of Social Science	5,284	33	24.2	65	171,617	10	19.1	32
Zero years / no Social Science courses reported	360	2	22.6	54	72,636	4	17.7	25
NATURAL SCIENCE COURSE PATTERN								
	N	Percent Taking Pattern	Avg ACT Science	Percent Who Met Benchmark	N	Percent Taking Pattern	Avg ACT Science	Percent Who Met Benchmark
Gen Sci ¹ , Bio, Chem, & Phys	10,042	63	23.7	59	767,293	43	21.9	46
Bio, Chem, Phys	2,868	18	23.8	60	183,685	10	23.0	54
Gen Sci ¹ , Bio, Chem	2,001	12	21.1	36	504,165	28	19.9	28
Other comb of 3 years of Natural Science	174	1	21.2	40	51,822	3	19.1	25
Less than 3 years of Natural Science	611	4	20.2	30	218,267	12	18.0	17
Zero years / no Natural Science courses reported	362	2	21.9	43	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: 16,058

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	89	1	22.9	4	4	16.3	76	1	23.2
Architecture	146	1	23.9	1	1	20.0	126	1	23.9
Area, Ethnic, & Multidisciplinary Studies	31	0	26.0	0	0	.	28	0	26.2
Arts: Visual & Performing	670	4	23.0	7	7	17.9	560	4	23.0
Business	2,092	13	23.2	13	13	20.7	1,769	14	23.2
Communications	456	3	22.6	3	3	20.3	387	3	22.5
Community, Family, & Personal Services	146	1	20.0	1	1	17.0	132	1	20.1
Computer Science & Mathematics	393	2	25.4	2	2	20.0	318	2	25.3
Education	649	4	21.8	2	2	20.0	569	4	21.8
Engineering	1,363	8	25.8	4	4	17.3	1,148	9	25.8
Engineering Technology & Drafting	95	1	22.5	6	6	17.7	80	1	22.6
English & Foreign Languages	305	2	26.5	0	0	.	244	2	26.6
Health Administration & Assisting	157	1	20.5	2	2	14.5	129	1	20.7
Health Sciences & Technologies	2,205	14	23.1	12	12	17.7	1,931	15	23.1
Philosophy, Religion, & Theology	30	0	23.1	1	1	19.0	25	0	23.0
Repair, Production, & Construction	28	0	19.1	6	6	17.0	17	0	20.5
Sciences: Biological & Physical	1,649	10	25.8	5	5	15.0	1,413	11	25.8
Social Sciences & Law	1,415	9	23.9	6	6	23.0	1,199	9	23.8
Undecided	3,869	24	24.7	21	21	19.0	2,639	21	24.6
No Response	265	2	22.3	0	0	.	40	0	22.6

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: 16,058

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	42	20.5	4	17.0	0	.	22	20.7	2	15.5
2-yr College Degree	56	17.1	6	14.3	0	.	37	17.2	6	17.3
Bachelors Degree	5,304	22.1	232	17.0	10	19.8	4,186	22.5	285	19.2
Graduate Study	4,284	25.0	120	20.3	6	25.0	3,350	25.3	179	22.9
Prof. Level Degree	3,244	25.7	191	20.8	4	25.0	2,070	26.4	215	22.7
Other	129	22.0	8	18.6	1	23.0	78	22.4	7	20.9
No Response	2,999	24.6	130	18.9	4	25.3	1,890	25.4	150	19.7

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	42	20.5	6	21.3	0	.	1	30.0	7	20.9
2-yr College Degree	56	17.1	2	17.0	1	19.0	1	15.0	3	20.7
Bachelors Degree	5,304	22.1	212	22.7	5	24.2	119	21.7	255	23.0
Graduate Study	4,284	25.0	224	25.6	2	24.0	109	24.8	294	25.2
Prof. Level Degree	3,244	25.7	382	26.1	6	26.8	76	25.3	300	26.5
Other	129	22.0	10	21.0	0	.	5	19.6	20	23.3
No Response	2,999	24.6	218	25.0	1	23.0	42	25.8	564	24.0

Total Students in Report: 16,058

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
UNIV OF MASSACHUSETTS AMHERST	Massachusetts	881	249	632	1	2	12	30	33	20	2
NORTHEASTERN UNIVERSITY	Massachusetts	585	201	384	1	2	9	24	34	28	3
BOSTON UNIVERSITY	Massachusetts	436	138	298	1	2	9	25	32	28	4
BOSTON COLLEGE	Massachusetts	335	156	179	0	1	8	22	29	36	4
UNIVERSITY OF NEW HAMPSHIRE	New Hampshire	302	63	239	0	1	13	43	30	12	1
UNIVERSITY OF RHODE ISLAND	Rhode Island	281	51	230	0	3	17	44	25	9	1
UNIV OF MASSACHUSETTS LOWELL	Massachusetts	270	54	216	1	6	25	32	25	10	1
UNIV OF MASSACHUSETTS-DARTMOUTH	Massachusetts	257	62	195	5	7	25	33	21	9	0
WESTFIELD STATE UNIVERSITY	Massachusetts	220	62	158	2	9	35	38	14	2	0
BRIDGEWATER STATE COLLEGE	Massachusetts	211	64	147	5	5	32	33	20	4	0
UNIVERSITY OF VERMONT	Vermont	202	45	157	0	0	7	23	36	29	3
SALEM STATE UNIVERSITY	Massachusetts	201	52	149	4	8	35	36	15	2	0
QUINNIPIAC UNIVERSITY	Connecticut	200	60	140	0	1	14	45	29	12	0
TUFTS UNIVERSITY	Massachusetts	200	70	130	0	1	5	13	32	43	8
WORCESTER POLYTECHNIC INST	Massachusetts	200	58	142	1	0	2	16	46	31	6
UNIVERSITY OF CONNECTICUT	Connecticut	192	47	145	0	1	7	35	32	23	2
WORCESTER STATE UNIVERSITY	Massachusetts	172	42	130	2	10	32	40	15	2	0
FRAMINGHAM STATE COLLEGE	Massachusetts	166	50	116	3	11	36	35	9	5	1
BROWN UNIVERSITY	Rhode Island	157	69	88	0	0	5	10	27	41	17
UNIV OF MASSACHUSETTS BOSTON	Massachusetts	134	23	111	3	10	28	31	19	9	0
ENDICOTT COLLEGE	Massachusetts	131	47	84	0	7	26	44	21	3	0
MASSACHUSETTS COLL PHARM/HLTH SCIENCES	Massachusetts	126	35	91	2	5	15	44	24	10	1
NCAA ELIGIBILITY CENTER	Indiana	119	78	41	1	12	14	22	26	23	3
BENTLEY UNIVERSITY	Massachusetts	116	34	82	0	2	9	31	37	18	3
HARVARD COLLEGE	Massachusetts	116	43	73	0	2	4	15	29	37	13
ROGER WILLIAMS UNIVERSITY	Rhode Island	115	34	81	0	1	21	42	23	12	1
SUFFOLK UNIVERSITY	Massachusetts	114	24	90	3	4	30	35	18	11	0
FITCHBURG STATE UNIVERSITY	Massachusetts	111	22	89	2	12	33	36	12	5	0
WENTWORTH INSTITUTE OF TECHNOLOGY	Massachusetts	111	35	76	0	2	24	31	24	15	4
SYRACUSE UNIVERSITY	New York	104	21	83	1	1	7	29	36	26	1
All Other Institutions		7,328	1,930	5,398	1	5	14	27	28	22	4
Total		14,093	3,919	10,174	1	4	15	29	28	20	3

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: 16,058

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

	N		Average ACT Scores					
			English		Essay		English/Writing Combined	
	State	National	State	National	State	National	State	National
All Students	14,328	942,769	24.2	21.3	7.7	7.0	23.4	20.5
Black/African American	596	114,751	18.5	16.3	6.9	6.1	18.4	16.0
American Indian/Alaska Native	21	6,031	23.0	16.8	8.0	6.1	22.7	16.4
White	10,363	518,407	24.7	22.9	7.8	7.2	23.8	21.9
Hispanic/Latino	741	151,504	20.5	18.6	7.3	6.8	20.3	18.3
Asian	974	54,580	24.3	23.5	7.8	7.6	23.5	22.7
Native Hawaiian/Other Pac. Isl.	12	2,812	24.6	19.5	7.8	6.9	23.8	19.2
Two or more races	318	35,355	24.1	21.5	7.7	7.0	23.2	20.6
Prefer not/No Response	1,303	59,329	24.8	21.8	7.8	7.1	23.8	20.9
Males	6,290	423,104	24.0	21.0	7.6	6.7	23.0	20.1
Females	8,038	513,945	24.4	21.6	7.8	7.2	23.6	20.9
Missing	0	5,720	.	16.6	.	6.3	.	16.5

