### ACT Profile Report - State

**Graduating Class 2014** 

Michigan



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This report provides information about the performance of your 2014 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 2014. 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 <a href="https://www.act.org/standard/infoserv.html">www.act.org/standard/infoserv.html</a>.

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 in August of 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**

22% 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: 119,990 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. 73% 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, 9% 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, 46% 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.

Code 239999 Michigan

Total Students in Report: 119,990

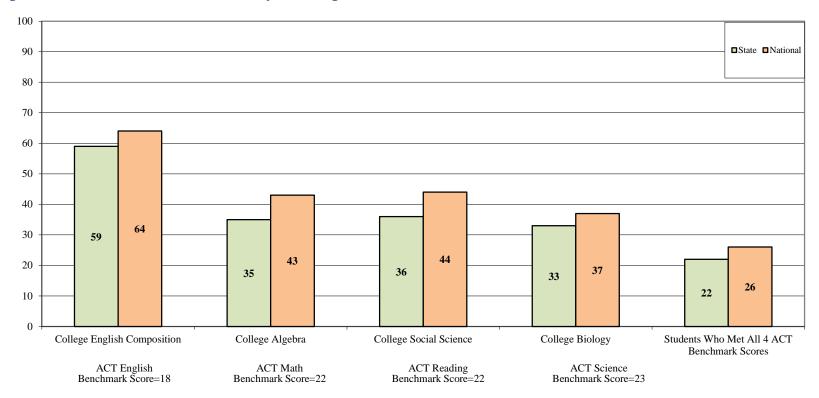
## Section I Executive Summary

Beginning in August of 2013, all students whose scores are college reportable, both standard and extended time tests, are now included.

Also beginning in August 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.

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

	Number o	f Students	Percent Who Met Benchmarks											
	Tes	sted	En	glish	Mathe	ematics	Reading		Sci	ience	Met All Four			
Year	State	National	State	State National		National	State National		State National		State	National		
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		
2014	119,990	1,845,787	59	64	35	43	36	44	33	37	22	26		

Table 1.2. Five Year Trends—Average ACT Scores

	Number o	f Students					Average /	ACT Scores				
	Tes	sted	En	glish	Mathe	ematics	Rea	ading	Sci	ence	Composite	
Year	State	National	State	State National		National	State	State National		National	State	National
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
2014	119,990	1,845,787	19.3	20.3	19.9	20.9	20.2	21.3	20.4	20.8	20.1	21.0

Table 1.3. Five Year Trends—Average ACT Scores Nationwide

	Number of Students		Average ACT Scores									
Year	Tested	English	Mathematics	Reading	Science	Composite						
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						
2014	1,845,787	20.3	20.9	21.3	20.8	21.0						

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

									Average A	ACT Scores				
		f Students sted	Perd	cent <sup>2</sup>	Eng	glish	Mathe	ematics	Rea	ading	Sci	ence	Composite	
Year	Core or More <sup>1</sup>	Less than Core	Core or More	Less than Core	Core or More	Less than Core								
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
2014	88,119	20,371	73	17	20.4	16.7	20.7	18.0	21.0	18.0	21.2	18.5	20.9	17.9

<sup>&</sup>lt;sup>1</sup>"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 1.5. Five Year Trends—Percent and Average Composite Score by Race/Ethnicity

	20	010		2	011		20	012		2013			2014		
	N	%	Avg												
All Students	120,930	100	19.7	116,823	100	20.0	114,727	100	20.1	120,451	100	19.9	119,990	100	20.1
Black/African American	17,793	15	15.8	16,685	14	15.9	16,048	14	16.0	15,857	13	16.0	15,824	13	16.2
American Indian/Alaska Native	1,024	1	17.8	1,008	1	18.0	731	1	17.7	704	1	17.2	716	1	17.1
White	80,204	66	20.7	77,846	67	21.1	75,949	66	21.1	79,066	66	20.9	78,446	65	21.0
Hispanic/Latino	4,384	4	17.7	4,684	4	18.2	6,471	6	18.2	7,245	6	18.3	7,532	6	18.3
Asian	2,847	2	23.1	2,891	2	23.3	3,012	3	23.1	3,202	3	23.1	3,357	3	23.3
Native Hawaiian/Other Pacific Islander	0	0		16	0	20.0	179	0	19.4	128	0	18.7	127	0	19.0
Two or more races	3,860	3	18.7	3,986	3	19.2	4,117	4	19.5	4,700	4	19.5	4,855	4	19.7
Prefer not to respond/No response	10,818	9	18.8	9,707	8	19.1	8,220	7	19.4	9,549	8	19.3	9,133	8	19.3

<sup>&</sup>lt;sup>2</sup>Percent of all students tested. Numbers will not add up to 100% due to student non-response.

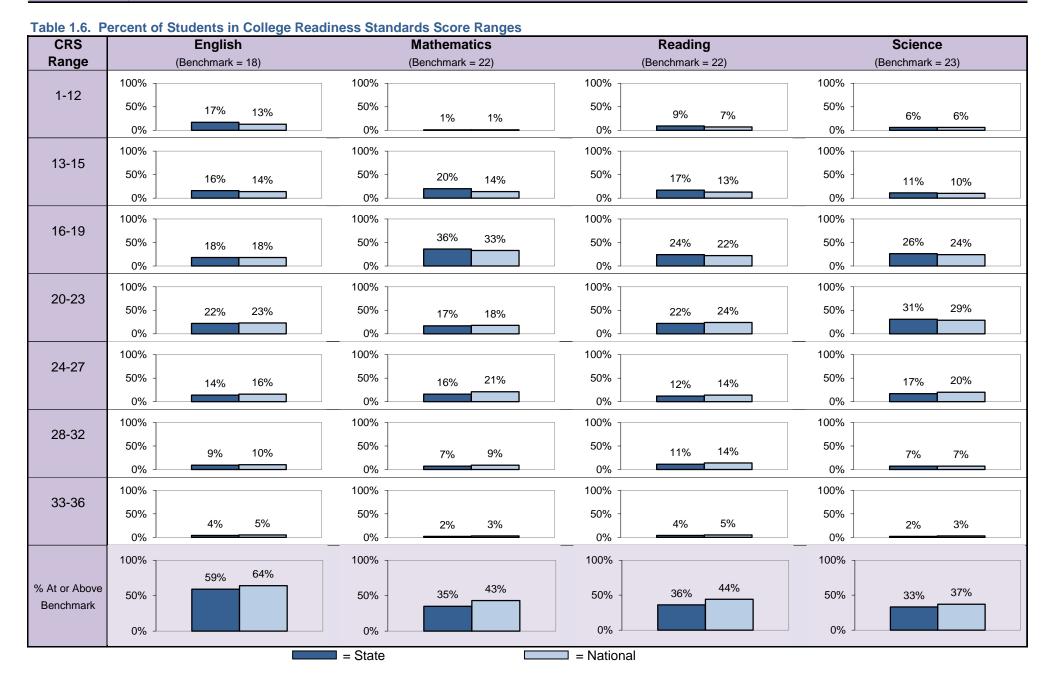


Table 1.7. Average ACT College Reportable Scores by Test Session Duration

Student Group	Test Session			Average ACT Scores								
Student Group	Duration	N	Percent	English	Mathematics	Reading	Science	Composite				
	Standard Time	110,732	92	19.8	20.2	20.5	20.7	20.4				
State	Extended Time	9,258	8	13.6	16.2	16.2	16.8	15.9				
	Total	119,990	100	19.3	19.9	20.2	20.4	20.1				
	Standard Time	1,769,033	96	20.5	21.0	21.4	20.9	21.1				
National	Extended Time	76,754	4	16.2	17.8	18.5	18.1	17.8				
	Total	1,845,787	100	20.3	20.9	21.3	20.8	21.0				

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

Student Group	Test Session		Per	cent of Stude	ents	Met
Student Group	Duration	English	Mathematics	Reading	Science	All Four
	Standard Time	62	37	38	34	23
State	Extended Time	21	10	15	11	6
	Total	59	35	36	33	22
	Standard Time	65	44	45	37	27
National	Extended Time	37	21	30	21	15
	Total	64	43	44	37	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.

Table 2.1. ACT Score Distributions, Cumulative Percentages (CP<sup>1</sup>), and Score Averages

ACT Scale	Eng	jlish	Mathe	matics	Rea	ding	Scie	ence	Comp	oosite	ACT Scale
Score	N	CP	N	СР	N	CP	N	СР	N	CP	Score
36	350	100	218	100	726	100	537	100	58	100	36
35	1,150	100	760	100	847	99	405	100	346	100	35
34	1,404	99	860	99	1,330	99	882	99	587	100	34
33	1,425	98	865	98	1,719	98	473	98	955	99	33
32	1,437	96	874	98	2,221	96	1,044	98	1,253	98	32
31	1,518	95	1,025	97	2,234	94	1,491	97	1,631	97	31
30	2,331	94	1,640	96	3,622	92	1,341	96	2,119	96	30
29	2,034	92	1,999	95	2,666	89	1,281	95	2,454	94	29
28	2,977	90	2,860	93	2,942	87	2,770	94	3,086	92	28
27	2,597	88	4,127	91	3,236	85	3,583	91	3,673	90	27
26	3,878	86	4,339	87	3,347	82	3,978	88	4,303	87	26
25	4,424	82	5,956	84	3,794	79	6,583	85	4,964	83	25
24	6,154	79	5,154	79	4,350	76	6,828	80	5,686	79	24
23	5,647	74	6,630	74	5,573	72	8,011	74	6,216	74	23
22	6,700	69	5,118	69	5,133	68	9,027	67	6,864	69	22
21	7,224	63	4,982	65	9,967	64	9,227	60	7,535	63	21
20	7,188	57	3,816	60	6,145	55	10,525	52	7,858	57	20
19	6,863	51	5,724	57	6,791	50	11,640	43	8,190	50	19
18	4,971	46	9,173	53	5,809	44	6,436	34	8,637	44	18
17	5,063	41	10,835	45	10,512	40	6,279	28	8,508	36	17
16	5,235	37	17,645	36	5,726	31	6,551	23	8,370	29	16
15	8,972	33	14,312	21	6,191	26	5,266	18	7,839	22	15
14	5,231	25	7,382	9	8,335	21	4,491	13	7,106	16	14
13	4,484	21	2,478	3	5,415	14	3,733	9	6,030	10	13
12	5,147	17	908	1	3,913	9	2,942	6	3,794	5	12
11	3,985	13	176	1	4,447	6	2,185	4	1,511	2	11
10	4,799	10	70	1	1,482	2	1,284	2	318	1	10
9	3,244	6	40	1	759	1	753	1	61	1	9
8	2,049	3	7	1	397	1	278	1	26	1	8
7	1,084	1	2	1	177	1	102	1	5	1	7
6	297	1	6	1	125	1	37	1	3	1	6
5	78	1	0	1	34	1	4	1	1	1	5
4	37	1	6	1	4	1	13	1	2	1	4
3	7	1	0	1	11	1	5	1	1	1	3
2	5	1	0	1	6	1	1	1	0	1	2
1	1	1	3	1	4	1	4	1	0	1	1
Avg (SD)	19.3	(6.6)	19.9	(5.2)	20.2	(6.3)	20.4	(5.2)	20.1	(5.3)	Avg (SD)

<sup>1</sup>CP 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.

Michigan
Total Students in Report: 119,990

Table 2.2. ACT Subscore Distributions, Cumulative Percentages (CP<sup>1</sup>), and Subscore Averages

		Eng					ding				Mathem	atics			
ACT Scale	Usage/ Med	chanics	Rhetorica	l Skills	Social St Science		Arts/ Lite	rature	Pre/Elem Algeb		Algebra/ Co Geom		Plane Geo Trigonor	•	ACT Scale
Score	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	Score
18	3,159	100	1,764	100	1,835	100	2,987	100	2,642	100	776	100	854	100	18
17	4,908	97	1,216	99	5,081	98	4,718	98	3,216	98	857	99	459	99	17
16	3,342	93	4,221	98	5,237	94	5,363	94	4,308	95	2,209	99	4,044	99	16
15	4,043	90	7,927	94	6,631	90	5,305	89	4,935	92	5,209	97	4,905	96	15
14	5,400	87	6,495	87	7,388	84	6,667	85	6,076	87	5,946	92	7,260	91	14
13	7,238	83	9,017	82	7,682	78	8,028	79	10,741	82	9,820	88	8,006	85	13
12	7,842	77	11,572	74	8,629	72	10,034	72	9,041	73	13,640	79	11,332	79	12
11	9,445	70	10,308	65	9,139	65	9,987	64	7,129	66	9,441	68	9,787	69	11
10	13,303	62	12,291	56	17,688	57	10,474	56	11,953	60	20,810	60	18,219	61	10
9	10,600	51	10,484	46	11,267	42	12,076	47	8,233	50	13,694	43	21,914	46	9
8	10,076	42	12,427	37	12,653	33	10,062	37	13,944	43	13,277	31	12,907	28	8
7	12,073	34	8,520	27	10,003	22	8,932	29	18,464	31	10,493	20	4,152	17	7
6	8,585	24	8,369	20	11,150	14	8,997	21	11,057	16	6,506	12	7,232	13	6
5	7,585	17	4,351	13	3,327	5	7,017	14	5,363	7	1,779	6	5,370	7	5
4	7,023	10	7,441	9	1,402	2	6,421	8	1,909	2	3,118	5	1,124	3	4
3	3,321	4	2,788	3	403	1	2,160	2	749	1	921	2	1,626	2	3
2	1,838	2	735	1	384	1	730	1	209	1	1,083	1	431	1	2
1	209	1	64	1	91	1	32	1	21	1	411	1	368	1	1
Avg (SD)	9.6 (3.	9)	9.9 (3	.7)	10.4 (3	3.5)	10.1 (3	3.9)	10.0 (3	3.5)	10.0 (3	3.1)	10.0 (3	Avg (SD)	

<sup>&</sup>lt;sup>1</sup>CP 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	17	16

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

Student		Number of Students	Percent Taking	Average ACT C	omposite Score
Group	Race/Ethnicity	Tested	Core or More <sup>1</sup>	Core or More	Less Than Core
	All Students	119,990	73	20.9	17.9
	Black/African American	15,824	65	16.8	15.2
	American Indian/Alaska Native	716	63	17.8	16.3
	White	78,446	77	21.7	18.9
State	Hispanic/Latino	7,532	70	19.1	16.8
	Asian	3,357	77	24.6	19.3
	Native Hawaiian/Other Pac. Isl.	127	76	19.6	17.3
	Two or more races	4,855	74	20.3	18.2
	Prefer not/No Response	9,133	61	20.6	17.4
	All Students	1,845,787	73	21.8	18.9
	Black/African American	241,678	68	17.6	15.7
	American Indian/Alaska Native	14,263	62	19.0	16.5
	White	1,038,435	76	23.1	20.2
National	Hispanic/Latino	281,216	71	19.5	17.3
	Asian	80,370	79	24.2	21.6
	Native Hawaiian/Other Pac. Isl.	5,676	65	20.0	16.6
	Two or more races	70,013	74	22.0	19.2
	Prefer not/No Response	114,136	56	22.6	18.5

<sup>&</sup>lt;sup>1</sup>"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
	All Students	19.3	19.9	20.2	20.4	20.1
	Black/African American	14.8	16.3	16.2	16.8	16.2
	American Indian/Alaska Native	15.7	17.1	17.3	17.9	17.1
	White	20.5	20.7	21.2	21.3	21.0
State	Hispanic/Latino	17.3	18.3	18.4	18.8	18.3
	Asian	22.6	24.6	22.3	23.2	23.3
	Native Hawaiian/Other Pac. Isl.	18.2	18.9	18.9	19.4	19.0
	Two or more races	19.0	19.2	20.0	20.0	19.7
	Prefer not/No Response	18.4	19.2	19.4	19.6	19.3
	All Students	20.3	20.9	21.3	20.8	21.0
	Black/African American	15.8	17.2	17.3	17.0	17.0
	American Indian/Alaska Native	16.6	18.1	18.4	18.3	18.0
	White	22.0	22.0	22.8	22.1	22.3
National	Hispanic/Latino	17.7	19.2	19.1	18.8	18.8
	Asian	22.8	24.9	22.8	23.2	23.5
	Native Hawaiian/Other Pac. Isl.	17.5	19.2	18.7	18.6	18.6
	Two or more races	20.6	20.9	21.7	21.0	21.2
	Prefer not/No Response	20.0	20.7	21.1	20.5	20.7

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

Student	CRS	Eng	llish	Mathe	matics	Rea	ding	Scie	ence
Group	Range	N	%	N	%	N	%	N	%
	33 to 36	4,329	4	2,703	2	4,622	4	2,297	2
	28 to 32	10,297	9	8,398	7	13,685	11	7,927	7
	24 to 27	17,053	14	19,576	16	14,727	12	20,972	17
State	20 to 23	26,759	22	20,546	17	26,818	22	36,790	31
	16 to 19	22,132	18	43,377	36	28,838	24	30,906	26
	13 to 15	18,687	16	24,172	20	19,941	17	13,490	11
	01 to 12	20,733	17	1,218	1	11,359	9	7,608	6
	33 to 36	92,922	5	55,103	3	97,714	5	55,222	3
	28 to 32	185,768	10	174,260	9	257,722	14	128,357	7
	24 to 27	302,723	16	383,630	21	263,034	14	367,160	20
National	20 to 23	431,178	23	336,283	18	445,726	24	542,581	29
	16 to 19	330,518	18	616,601	33	409,685	22	448,064	24
	13 to 15	264,127	14	266,401	14	240,948	13	186,262	10
	01 to 12	238,551	13	13,509	1	130,958	7	118,141	6

Table 2.7. Average ACT Scores by Gender

Student Group	Gender				Aver	age ACT Sco	ores	
Student Group	Gender	N	Percent	English	Mathematics	Reading	Science	Composite
	Males	58,998	49	18.7	20.2	19.8	20.7	20.0
State	Females	59,660	50	20.0	19.6	20.5	20.2	20.2
	Missing	1,332	1	16.3	17.8	17.7	18.3	17.6
	Males	856,651	46	20.0	21.4	21.1	21.2	21.1
National	Females	977,127	53	20.7	20.5	21.5	20.5	20.9
	Missing	12,009	1	15.7	17.8	17.3	17.4	17.2

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

Student Group	Gender		Per	cent of Stude	ents	Met
Student Group	Gender	English	Mathematics	Reading	Science	All Four
State	Males	54	38	35	35	23
State	Females	63	33	38	31	21
National	Males	62	47	43	40	29
ivational	Females	66	40	45	34	25

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

Tubic 2.5.	table 2.5. Conlege Readiness Benommark (ORB) I croom and Average Act Cooles by Cveran riigh Conloci Carriodian												
Student	Curriculum	N	Eng	lish	Mathe	matics	Rea	ding	Scie	ence	Comp	osite	
Group	Taken <sup>1</sup>	IN	CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB % <sup>4</sup>	Avg	
	Core or More <sup>2</sup>	88,119	65	20.4	41	20.7	42	21.0	38	21.2	26	20.9	
State	Less than Core	20,371	41	16.7	20	18.0	23	18.0	19	18.5	11	17.9	
	Missing <sup>3</sup>	11,500	36	16.0	17	17.5	20	17.4	17	18.0	9	17.3	
	Core or More	1,347,997	71	21.4	50	21.7	50	22.2	42	21.6	31	21.8	
National	Less than Core	405,073	48	17.9	27	18.9	30	19.2	23	18.9	15	18.9	
	Missing	92,717	36	16.0	18	17.7	23	17.7	16	17.6	10	17.4	

<sup>&</sup>lt;sup>1</sup> "Curriculum Taken" reflects overall high school curriculum in this table.

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

Student	Curriculum		English		Mathematics				Reading			Science		
Group	Taken <sup>1</sup>	Ν	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg	
	Core or More <sup>2</sup>	98,736	63	20.1	105,209	38	20.3	102,387	40	20.7	100,638	35	20.8	
State	Less than Core	11,157	35	15.8	4,326	9	16.3	7,038	15	16.6	8,470	21	18.8	
	Missing <sup>3</sup>	10,097	38	16.1	10,455	18	17.5	10,565	21	17.5	10,882	17	18.1	
	Core or More	1,676,095	67	20.8	1,686,194	46	21.3	1,580,108	47	21.7	1,538,158	41	21.4	
National	Less than Core	88,420	36	15.9	74,627	8	16.4	180,385	32	19.4	220,701	17	18.1	
	Missing	81,272	38	16.3	84,966	19	17.8	85,294	24	17.8	86,928	17	17.7	

<sup>&</sup>lt;sup>1</sup> "Curriculum Taken" reflects content-specific curriculum in this table.

<sup>&</sup>lt;sup>2</sup> "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.

<sup>&</sup>lt;sup>3</sup> Zero years or no coursework information reported in one or more content areas.

<sup>&</sup>lt;sup>4</sup> Composite CRB% results reflect students who met all four subject-area benchmarks.

<sup>&</sup>lt;sup>2</sup> "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.

<sup>&</sup>lt;sup>3</sup> Zero years or no coursework information reported in the specified content area.

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Total Students in Report: 119,990

# 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

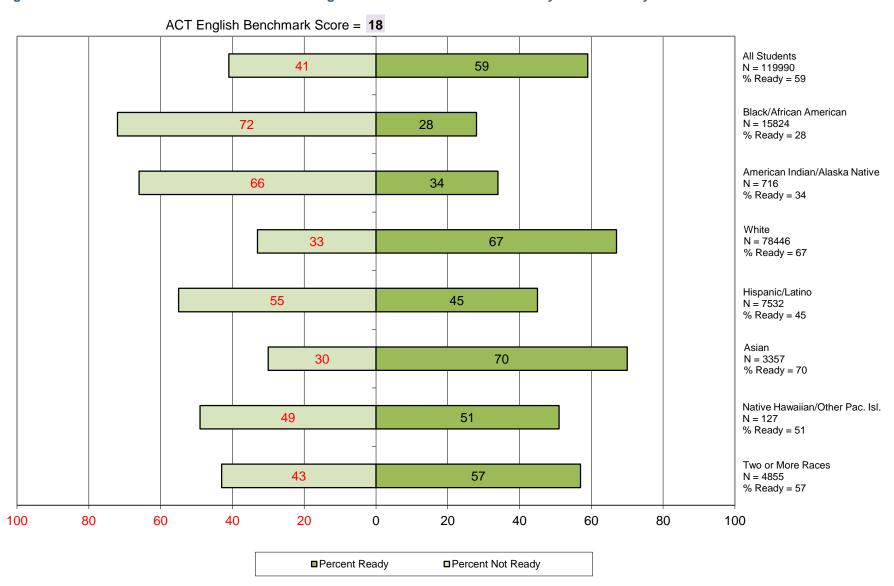


Figure 3.2. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: MATHEMATICS

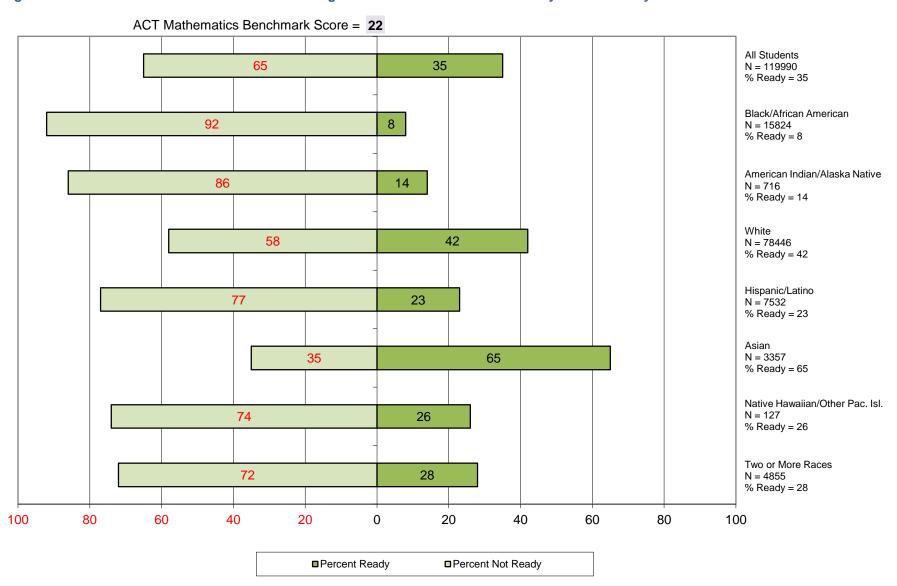


Figure 3.3. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: READING

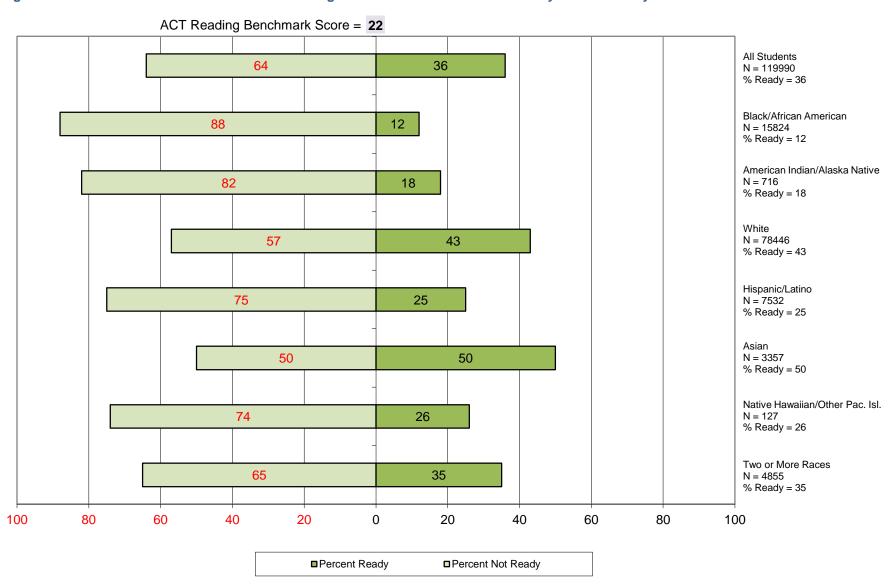


Figure 3.4. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: SCIENCE

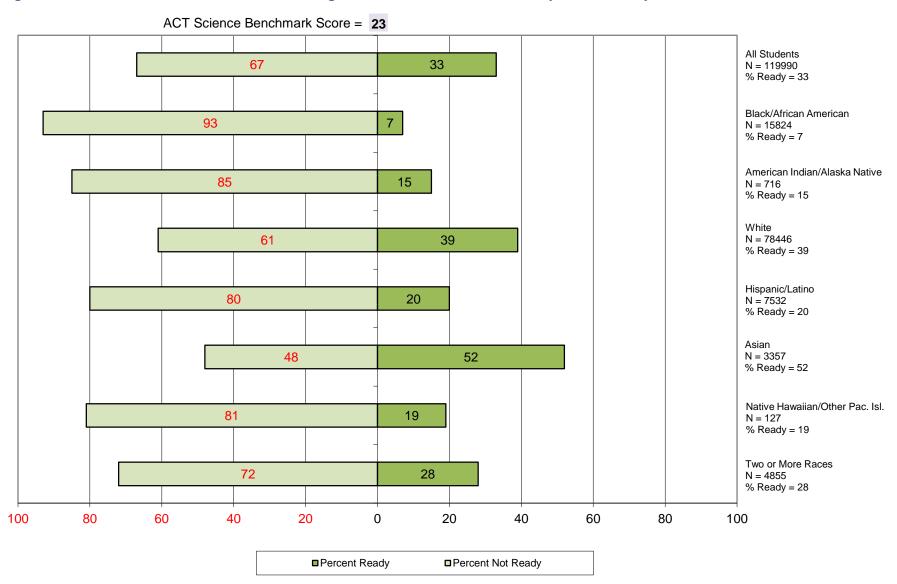


Figure 3.5. Percent of Students Who Met ACT College Readiness Benchmark Scores by Race/Ethnicity: ALL FOUR

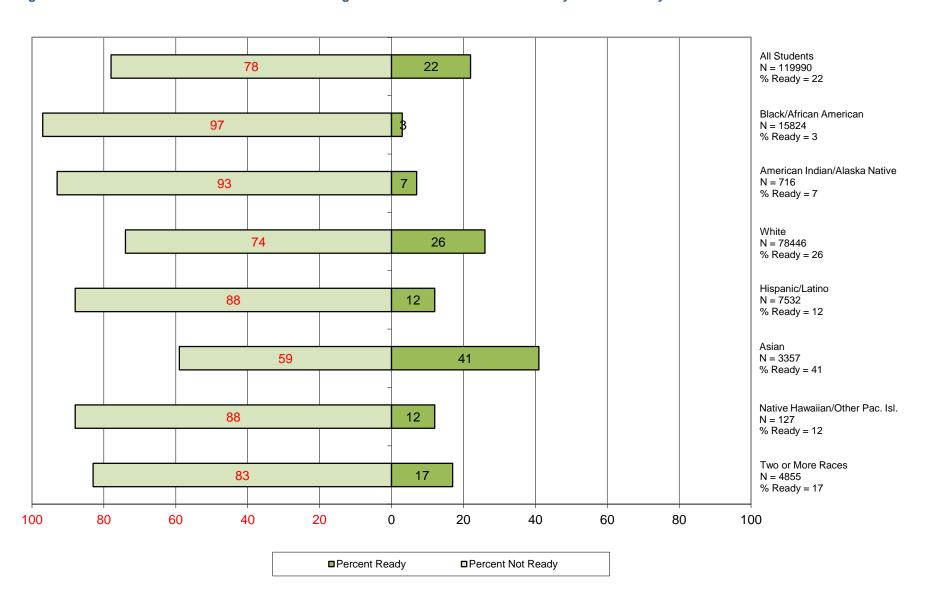


Table 3.1. Average ACT Scores and Average ACT Score Changes by Common Course Patterns												
Course Pattern		All	Students				Males			F	emales	
			ACT	Course Value			ACT	Course Value			ACT	Course Value
ENGLISH COURSE PATTERN	N	Percent	English	Added <sup>1</sup>	N	Percent	English	Added <sup>1</sup>	N	Percent	English	Added <sup>1</sup>
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	23,642	20	21.9	6.1	9,953	17	21.2	5.9	13,531	23	22.4	5.8
Eng 9, Eng 10, Eng 11, Eng 12	75,094	63	19.5	3.7	37,606	64	19.0	3.7	36,843	62	20.0	3.4
Less than 4 years of English	11,157	9	15.8	-	6,081	10	15.3	-	4,887	8	16.6	-
Zero years / no English courses reported	10,097	8	16.1	-	5,358	9	15.7	-	4,399	7	16.8	-
			ACT	Course Value			ACT	Course Value			ACT	Course Value
MATHEMATICS COURSE PATTERN	N	Percent	Math	Added <sup>1</sup>	N	Percent	Math	Added <sup>1</sup>	N	Percent	Math	Added <sup>1</sup>
Alg 1, Alg 2, Geom, Trig, & Calc	6,075	5	22.3	6.0	2,908	5	22.9	6.5	3,114	5	21.8	5.5
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	8,010	7	21.7	5.4	3,168	5	22.1	5.7	4,795	8	21.4	5.1
Alg 1, Alg 2, Geom, & Trig	7,892	7	19.0	2.7	3,807	6	19.3	2.9	4,008	7	18.8	2.5
Alg 1, Alg 2, Geom, & Other Adv Math	19,900	17	19.4	3.1	8,334	14	19.7	3.3	11,397	19	19.3	3.0
Other comb of 4 or more years of Math	33,566	28	23.0	6.7	17,482	30	23.6	7.2	15,897	27	22.4	6.1
Alg 1, Alg 2, & Geom	22,235	19	17.0	0.7	11,572	20	17.2	0.8	10,358	17	16.7	0.4
Other comb of 3 or 3.5 years of Math	7,531	6	18.2	1.9	3,818	6	18.7	2.3	3,644	6	17.8	1.5
Less than 3 years of Math	4,326	4	16.3	-	2,354	4	16.4	-	1,894	3	16.3	-
Zero years / no Math courses reported	10,455	9	17.5	-	5,555	9	17.7	-	4,553	8	17.3	-
			4.0=	Course Value			107	Course Value			107	Course Value
COCIAL COIENCE COLIDGE DATTERN	N	Damasus	ACT Reading	Added <sup>1</sup>	N	D	ACT Reading	Added <sup>1</sup>	N	Dawasant	ACT Reading	Added <sup>1</sup>
SOCIAL SCIENCE COURSE PATTERN	660	Percent			396	Percent	•		258	Percent	•	
US Hist, World Hist, Am Gov, & Other Hist		1 53	20.6 21.4	4.0	28,649	1 49	20.4 21.2	3.9 4.7		0	21.2 21.6	4.3 4.7
Other comb of 4 or more years Social Science	63,562			4.8	· '				34,440	58		
US Hist, World Hist, & Am Gov	2,524	2	18.2	1.6	1,462	2	17.9	1.4	1,043	2	18.7	1.8 2.9
Other comb of 3 or 3.5 years of Social Science	35,641	30	19.6	3.0	18,893	32	19.5	3.0	16,395	27	19.8	2.9
Less than 3 years of Social Science	7,038	6 9	16.6	-	3,967	7 10	16.5 17.3	=	2,943	5 8	16.9 17.9	-
Zero years / no Social Science courses reported	10,565	9	17.5	-	5,631	10	17.3	-	4,581	0	17.9	-
			ACT	Course Value			ACT	Course Value			ACT	Course Value
NATURAL SCIENCE COURSE PATTERN	N	Percent	Science	Added <sup>1</sup>	N	Percent	Science	Added <sup>1</sup>	N	Percent	Science	Added <sup>1</sup>
Gen Sci <sup>2</sup> , Bio, Chem, & Phys	46,078	38	21.3	2.5	23,802	40	21.7	3.2	21,896	37	20.9	1.8
Bio, Chem, Phys	12,183	10	22.5	3.7	6,263	11	23.1	4.6	5,842	10	21.9	2.8
Gen Sci <sup>2</sup> , Bio, Chem	35,677	30	19.9	1.1	15,161	26	19.8	1.3	20,185	34	20.0	0.9
Other comb of 3 years of Natural Science	6,700	6	19.4	0.6	3,765	6	19.7	1.2	2,853	5	19.0	-0.1
Less than 3 years of Natural Science	8,470	7	18.8	-	4,220	7	18.5	=	4,151	7	19.1	-
Zero years / no Natural Science courses reported	10,882	9	18.1	-	5,787	10	18.2	-	4,733	8	18.1	-

<sup>1</sup>Course 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.

<sup>&</sup>lt;sup>2</sup>Includes General, Physical and Earth Sciences.

Table 3.2. College Readiness Percents by Common Course Patterns												
Course Pattern			State				National					
		Percent Taking	Avg ACT	Percent Who Met		Percent Taking	Avg ACT	Percent Who Met				
ENGLISH COURSE PATTERN	N	Pattern	English	Benchmark	N	Pattern	English	Benchmark				
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	23,642	20	21.9	74	370,875	20	21.7	73				
Eng 9, Eng 10, Eng 11, Eng 12	75,094	63	19.5	60	1,305,220	71	20.5	65				
Less than 4 years of English	11,157	9	15.8	35	88,420	5	15.9	36				
Zero years / no English courses reported	10,097	8	16.1	38	81,272	4	16.3	38				
		Percent Taking	Avg ACT	Percent Who Met		Percent Taking	Avg ACT	Percent Who Met				
MATHEMATICS COURSE PATTERN	N	Pattern	Math	Benchmark	N	Pattern	Math	Benchmark				
Alg 1, Alg 2, Geom, Trig, & Calc	6,075	5	22.3	55	118,677	6	23.8	67				
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	8,010	7	21.7	53	157,764	9	21.8	55				
Alg 1, Alg 2, Geom, & Trig	7,892	7	19.0	29	120,160	7	19.3	30				
Alg 1, Alg 2, Geom, & Other Adv Math	19,900	17	19.4	32	356,555	19	19.4	31				
Other comb of 4 or more years of Math	33,566	28	23.0	60	622,896	34	23.7	65				
Alg 1, Alg 2, & Geom	22,235	19	17.0	10	220,037	12	17.1	11				
Other comb of 3 or 3.5 years of Math	7,531	6	18.2	21	90,105	5	19.8	35				
Less than 3 years of Math	4,326	4	16.3	9	74,627	4	16.4	8				
Zero years / no Math courses reported	10,455	9	17.5	18	84,966	5	17.8	19				
		Percent Taking	Avg ACT	Percent Who Met		Percent Taking	Avg ACT	Percent Who Met				
SOCIAL SCIENCE COURSE PATTERN	N	Pattern	Reading	Benchmark	N	Pattern	Reading	Benchmark				
US Hist, World Hist, Am Gov, & Other Hist	660	1	20.6	39	48,992	3	22.3	50				
Other comb of 4 or more years Social Science	63,562	53	21.4	44	921,129	50	22.2	50				
US Hist, World Hist, & Am Gov	2,524	2	18.2	24	105,110	6	19.6	33				
Other comb of 3 or 3.5 years of Social Science	35,641	30	19.6	32	504,877	27	21.3	43				
Less than 3 years of Social Science	7,038	6	16.6	15	180,385	10	19.4	32				
Zero years / no Social Science courses reported	10,565	9	17.5	21	85,294	5	17.8	24				
		Percent Taking	Avg ACT	Percent Who Met		Percent Taking	Avg ACT	Percent Who Met				
NATURAL SCIENCE COURSE PATTERN	N	Pattern	Science	Benchmark	N	Pattern	Science	Benchmark				
Gen Sci <sup>1</sup> , Bio, Chem, & Phys	46,078	38	21.3	40	781,043	42	22.1	46				
Bio, Chem, Phys	12,183	10	22.5	49	199,419	11	23.1	54				
Gen Sci <sup>1</sup> , Bio, Chem	35,677	30	19.9	27	505,460	27	20.0	28				
Other comb of 3 years of Natural Science	6,700	6	19.4	23	52,236	3	19.2	24				
Less than 3 years of Natural Science	8,470	7	18.8	21	220,701	12	18.1	17				
Zero years / no Natural Science courses reported	10,882	9	18.1	17	86,928	5	17.7	17				

<sup>&</sup>lt;sup>1</sup>Includes General, Physical and Earth Sciences.

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### 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.

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

		All Students		Plan on 2	Years or Less	of College	Plan on 4 Years or More of College			
Planned Educational Major	N <sup>1</sup>	Percent <sup>2</sup>	Avg ACT Comp	N	Percent <sup>2</sup>	Avg ACT Comp	N	Percent <sup>2</sup>	Avg ACT Comp	
Agriculture & Natural Resources Conservation	1,696	1	18.7	417	3	16.4	1,182	1	19.8	
Architecture	1,104	1	20.0	109	1	16.1	935	1	20.6	
Area, Ethnic, & Multidisciplinary Studies	136	0	21.0	22	0	16.0	109	0	22.1	
Arts: Visual & Performing	9,571	8	19.3	1,433	12	16.5	7,542	8	20.0	
Business	10,007	8	20.6	1,034	9	16.4	8,643	10	21.1	
Communications	2,157	2	20.5	168	1	16.3	1,902	2	21.0	
Community, Family, & Personal Services	6,041	5	17.7	1,330	11	16.4	4,335	5	18.3	
Computer Science & Mathematics	3,212	3	22.1	336	3	18.0	2,771	3	22.7	
Education	5,031	4	20.4	251	2	15.8	4,607	5	20.7	
Engineering	8,324	7	22.6	704	6	15.9	7,351	8	23.3	
Engineering Technology & Drafting	2,335	2	19.2	490	4	16.1	1,724	2	20.3	
English & Foreign Languages	1,329	1	23.0	86	1	18.6	1,191	1	23.4	
Health Administration & Assisting	2,813	2	17.8	341	3	15.8	2,338	3	18.2	
Health Sciences & Technologies	23,068	19	20.8	1,142	9	16.4	21,337	24	21.1	
Philosophy, Religion, & Theology	473	0	21.2	34	0	18.1	402	0	21.5	
Repair, Production, & Construction	2,911	2	17.2	1,349	11	16.5	1,317	1	17.9	
Sciences: Biological & Physical	4,849	4	23.6	124	1	16.6	4,561	5	23.9	
Social Sciences & Law	9,143	8	21.2	383	3	16.6	8,416	9	21.5	
Undecided	9,467	8	20.9	984	8	16.1	7,389	8	21.9	
No Response	15,589	13	17.0	1,026	9	14.7	1,756	2	16.7	

<sup>&</sup>lt;sup>1</sup>2-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.

<sup>&</sup>lt;sup>2</sup>Percent of students tested within College Plan groups (All Students, 2-Year, 4-Year).

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

Educational Degree	All Racial/Ethnic Groups Combined		Black/Africa	an American	American India	n/ Alaska Native	WI	nite	Hispanic/Latino		
Aspirations	N	Average	N	Average	N	Average	N	Average	N	Average	
Voc-Tech	3,320	15.9	543	13.7	45	14.7	2,048	16.5	227	15.1	
2-yr College Degree	8,720	16.3	1,303	14.1	83	15.6	5,590	17.0	692	15.6	
Bachelors Degree	50,788	19.8	6,569	16.0	283	17.3	34,787	20.8	3,192	18.3	
Graduate Study	15,352	23.0	1,569	17.8	60	19.3	10,823	23.9	704	20.9	
Prof. Level Degree	24,045	22.6	3,224	18.1	99	20.5	15,021	23.5	1,449	20.6	
Other	3,248	16.9	383	14.6	46	15.2	1,992	17.4	245	15.9	
No Response	14,517	17.7	2,233	14.7	100	15.3	8,185	18.6	1,023	16.7	

Educational Degree		Racial/Ethnic Groups Combined Asian		ian	Native Hawaiian/ Other Pacific Islander		Two or more races		Prefer not to respond/ No Response	
Aspirations	N	Average	N	Average	N	N Average N		Average	N	Average
Voc-Tech	3,320	15.9	57	16.8	2	13.5	111	16.2	287	15.6
2-yr College Degree	8,720	16.3	79	15.8	13	15.5	317	16.6	643	15.8
Bachelors Degree	50,788	19.8	995	20.4	46	18.8	1,992	19.3	2,924	18.9
Graduate Study	15,352	23.0	607	25.4	13	18.8	583	21.7	993	22.6
Prof. Level Degree	24,045	22.6	1,263	26.6	37	21.4	1,114	21.8	1,838	22.6
Other	3,248	16.9	71	15.7	5	18.6	151	17.7	355	16.8
No Response	14,517	17.7	285	19.7	11	16.9	587	17.9	2,093	17.5

Table 4.3. Students' Score Report Preferences at Time of Testing											
						Percent of Students in					
			Number of Students				College Readiness Standards Ranges				
				2nd-6th							
Name	State	Total	1st Choice	Choice	01-12	13-15	16-19	20-23	24-27	28-32	33-36
MICHIGAN STATE UNIVERSITY	Michigan	31,842	11,922	19,920	2	10	22	28	24	13	2
CENTRAL MICHIGAN UNIVERSITY	Michigan	21,987	6,035	15,952	2	12	32	32	17	5	0
UNIVERSITY OF MICHIGAN-ANN ARBOR	Michigan	19,849	7,718	12,131	1	7	15	22	27	23	5
GRAND VALLEY STATE UNIVERSITY	Michigan	17,995	4,442	13,553	1	8	25	33	22	9	1
WESTERN MICHIGAN UNIVERSITY	Michigan	16,202	3,534	12,668	2	13	30	31	17	6	0
FERRIS STATE UNIVERSITY	Michigan	11,587	3,249	8,338	2	15	35	30	13	4	0
STATE-COLLEGE/NO REPORTS NOW	Iowa	11,097	11,096	1	8	27	31	19	8	4	2
WAYNE STATE UNIVERSITY	Michigan	10,604	2,671	7,933	4	19	31	25	14	6	1
EASTERN MICHIGAN UNIVERSITY	Michigan	10,064	2,438	7,626	3	18	34	27	13	4	0
OAKLAND UNIVERSITY	Michigan	9,649	2,498	7,151	2	13	29	29	19	7	1
SAGINAW VALLEY STATE UNIVERSITY	Michigan	6,728	1,605	5,123	3	16	34	29	14	4	0
NORTHERN MICHIGAN UNIVERSITY	Michigan	4,896	1,469	3,427	2	10	31	33	18	6	0
GRAND RAPIDS COMMUNITY COLLEGE	Michigan	4,822	1,792	3,030	5	21	38	25	9	2	0
MICHIGAN TECHNOLOGICAL UNIVERSITY	Michigan	4,381	1,169	3,212	2	11	20	24	23	17	3
UNIVERSITY OF MICHIGAN-DEARBORN	Michigan	3,906	843	3,063	3	13	26	28	20	10	1
NCAA ELIGIBILITY CENTER	Indiana	3,671	1,595	2,076	3	12	30	29	18	8	1
OAKLAND COMMUNITY COLLEGE	Michigan	3,500	1,113	2,387	7	25	38	21	7	2	0
UNIVERSITY OF DETROIT MERCY	Michigan	3,040	668	2,372	5	20	31	24	14	5	0
LANSING COMMUNITY COLLEGE	Michigan	2,998	1,054	1,944	7	25	37	22	8	2	0
STATE-NO COLLEGE PLANS	Iowa	2,620	2,620	0	20	40	27	10	3	0	0
MACOMB COMMUNITY COLLEGE	Michigan	2,585	969	1,616	8	27	37	20	7	1	0
UNIVERSITY OF MICHIGAN-FLINT	Michigan	2,377	562	1,815	4	17	31	27	15	6	1
KALAMAZOO VALLEY COMMUNITY COLLEGE	Michigan	2,357	915	1,442	6	25	35	21	9	3	0
HOPE COLLEGE	Michigan	2,293	546	1,747	1	5	15	26	30	20	2
LAKE SUPERIOR STATE UNIVERSITY	Michigan	2,218	591	1,627	2	11	34	30	17	6	0
DAVENPORT UNIVERSITY	Michigan	2,157	564	1,593	4	17	37	27	11	3	0
DELTA COLLEGE	Michigan	2,152	896	1,256	5	23	37	24	9	2	0
HENRY FORD COMMUNITY COLLEGE	Michigan	2,118	663	1,455	11	34	36	15	3	0	0
SCHOOLCRAFT COLLEGE	Michigan	1,971	683	1,288	5	25	37	23	8	2	0
OHIO STATE UNIVERSITY THE	Ohio	1,801	339	1,462	6	19	27	19	16	12	1
All Other Institutions		120,376	30,871	89,505	4	18	28	22	15	10	2
Total		343,843	107,130	236,713	4	16	28	25	17	9	1

Code 239999 Michigan

## 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.

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

	N		Average ACT Scores						
			Eng	lish	Es	say	English/Writing Combined		
	State	National	State	National	State	National	State	National	
All Students	102,165	976,031	19.0	21.3	6.7	7.1	18.6	20.6	
Black/African American	13,636	114,263	14.6	16.4	5.9	6.3	14.5	16.3	
American Indian/Alaska Native	638	6,408	15.4	16.8	5.9	6.2	15.2	16.5	
White	65,979	520,054	20.0	23.1	6.9	7.3	19.6	22.1	
Hispanic/Latino	6,599	167,575	17.0	18.5	6.5	6.9	16.9	18.4	
Asian	2,884	61,663	22.8	23.7	7.4	7.7	22.0	22.9	
Native Hawaiian/Other Pac. Isl.	115	3,742	17.9	17.7	6.8	6.6	17.9	17.6	
Two or more races	4,227	39,565	18.8	21.4	6.7	7.1	18.4	20.7	
Prefer not/No Response	8,087	62,761	18.2	21.6	6.5	7.1	17.7	20.9	
Males	50,936	438,500	18.3	21.1	6.4	6.9	17.8	20.2	
Females	49,915	530,240	19.6	21.6	7.0	7.3	19.4	21.1	
Missing	1,314	7,291	16.4	16.0	6.1	5.9	16.1	15.7	