



**BOARD OF EDUCATION OF HOWARD COUNTY
MEETING AGENDA ITEM**

TITLE: Participation and Performance in Advanced Placement Courses and Exams for 2014 **DATE:** December 15, 2014

PRESENTER(S): E. Grace Chesney, Chief Accountability Officer

VISION 2018 GOAL: Students Staff Families and Community Organization

OVERVIEW:

HCPSS students continue to perform at high levels on AP exams as evidenced by the number of exams taken and the scores received in 2014. Overall, more than 4,000 HCPSS students have taken over 9,000 AP exams. Four out of five AP exams taken by HCPSS students scored 3 or higher, a score which may be awarded course credit by colleges. This level of performance exceeds the overall percentage of exams with a score of 3 or higher for public school students across the state of Maryland and across the nation.

Our strategic plan, Vision 2018: Fulfilling the Promise of Preparation emphasizes a rigorous instructional program for all students. The AP program includes a wide variety of courses that offer rigorous college-level courses to our high school students. Research literature indicates that course rigor in high school is the most powerful predictor of postsecondary success. AP courses offer rigorous curricula that students need to prepare for postsecondary education. Research indicates that students who take and pass AP exams are much more likely than their peers to complete a bachelor's degree in four years or less. In addition, students who earn AP exam scores of 3 or higher may be awarded course credit upon entry into college.

According to data tables published by the College Board, HCPSS students outperformed public school students in the state of Maryland and the nation on their AP exam performance in 2014. The percentage of AP exams with a score of 3 or higher for HCPSS students (80.9 percent) was 20.0 and 23.7 percentage points higher than that for public school students in the state of Maryland (60.9 percent) and across the nation (57.2 percent), respectively.

RECOMMENDATION/FUTURE DIRECTION:

SUBMITTED BY: _____
E. Grace Chesney
Chief Accountability

APPROVAL/CONCURRENCE: _____
Renee A. Foose, Ed, D.
Superintendent

Linda T. Wise
Deputy Superintendent

Background

Our strategic plan, *Vision 2018: Fulfilling the Promise of Preparation*, emphasizes a rigorous instructional program for all students. The AP program includes a wide variety of courses that offer rigorous college-level courses to our high school students. Research literature indicates that course rigor in high school is the most powerful predictor of postsecondary success¹. AP courses offer rigorous curricula that students need to prepare for postsecondary education². Research indicates that students who take and pass AP exams are much more likely than their peers to complete a bachelor's degree in four years or less³. In addition, students who earn AP exam scores of 3 or higher may be awarded course credit upon entry into college⁴.

AP Exam Results for the District, State, and Nation

HCPSS students continue to perform at high levels on AP exams as evidenced by the number of exams taken and the scores received in 2014. Overall, more than 4,000 HCPSS students have taken over 9,000 AP exams. Four out of five AP exams taken by HCPSS students scored 3 or higher, a score which may be awarded course credit by colleges. This level of performance exceeds the overall percentage of exams with a score of 3 or higher for public school students across the state of Maryland and across the nation.

According to data tables published by the College Board, HCPSS students outperformed public school students in the state of Maryland and the nation on their AP exam performance in 2014. The percentage of AP exams with a score of 3 or higher for HCPSS students (80.9 percent) was 20.0 and 23.7 percentage points higher than that for public school students in the state of Maryland (60.9 percent) and across the nation (57.2 percent), respectively (Table 1).

Table 1
Number of AP Exam Test Takers, AP Exams Taken, AP Exams with a Score of 3 or Higher, and Percentage of AP Exams with a Score of 3 or Higher for Students in the HCPSS, Maryland, and the Nation, 2014

Region	<i>N</i> AP Test Takers	<i>N</i> AP Exams Taken	<i>n</i> AP Exams 3 or Higher	% AP Exams 3 or Higher
HCPSS	4,286	9,450	7,648	80.9
Maryland Public Schools	57,750	108,826	66,325	60.9
U.S. Public Schools	2,014,675	3,567,207	2,039,795	57.2

Note. AP exam results are based on data reported by the College Board as of October 2014.

From 2013 to 2014, although relatively consistent, a slight decreasing trend is observed in the percentage of HCPSS students earning a 3 or higher on AP exams by 0.7 percentage points from 81.6 to 80.9 percent. Slight increasing trends are observed for the percentage of public school students who earned a 3 or higher on an AP exam across the state of Maryland (0.5 percentage-point increase from 60.4 to 60.9 percent) and the nation (0.2 percentage-point increase from 57.0 to 57.2 percent) (Table 2).

¹ ACT. (2004). ACT national data release. Iowa City, IA: ACT, Inc.

² Adelman, C. (1999). Answers in the tool box: Academic intensity, attendance patterns, and bachelor's degree attainment. Washington, DC: US Department of Education.

³ Hargrove, L., Godin, D., & Dodd, B. (2008). *College outcomes comparisons by AP and non-AP high school experiences*. New York: The College Board.

⁴ DiYanni, R. (2008). *The history of the AP program*. New York: The College Board.

In 2014, the percentage of AP exams scoring a 3 or higher for Black/African American students in the HCPSS (68.9 percent) was 36.0 and 40.0 percentage points greater than that for Black/African American public school students in the state of Maryland (32.9 percent) and the nation (28.9 percent), respectively. The percentage of AP exams scoring 3 or higher for Hispanic students in the HCPSS (72.9 percent) was 20.0 and 31.1 percentage points greater than that for Hispanic public school students in Maryland (52.9 percent) and the nation (41.8 percent), respectively (Table 2).

Table 2
Percentage of AP Exams with a Score of 3 or Higher for Public School Students by Race/Ethnicity in the HCPSS, Maryland, and the Nation, 2013 and 2014

Student Group	HCPSS ^a		Maryland ^b		Nation ^b	
	2013	2014	2013	2014	2013	2014
All Students	81.6	80.9	60.4	60.9	57.0	57.2
Asian	81.9	81.8	72.8	73.2	67.4	67.9
Black/African American	68.5	68.9	31.1	32.9	28.2	28.9
Hispanic/Latino	74.5	72.9	51.2	52.9	41.0	41.8
White	83.6	82.8	67.3	67.5	63.4	63.5
Two or More Races	83.5	79.4	n/a	n/a	n/a	n/a

Note. AP exam results are based on data reported by the College Board as of October 2014.

^a“All Students” include American Indian or Alaskan Native and Native Hawaiian or Other Pacific Islander students.

^b“All Students” include American Indian and multiracial students, and students who did not report their race/ethnicity.

HCPSS AP Exam Results by Student Group

HCPSS students continue to perform at high levels on AP exams as evidenced by the number of exams taken and the scores received in 2013 and 2014. The number of students participating in the AP exams and the number of exams taken by students both demonstrate slight positive trends from 2013 to 2014. The number of HCPSS students taking an AP exam increased from 4,249 test takers in 2013 to 4,286 in 2014. The number of AP exams taken increased by 2.7 percent from 9,200 exams taken in 2013 to 9,450 in 2014 (Table 3). A higher number of AP exams had a score of 3 or higher in 2014 ($n = 7,648$) compared to 2013 ($n = 7,506$); however, the percentage of exams with a score of 3 or higher dropped 0.7 percentage points from 81.6 percent in 2013 to 80.9 percent in 2014 (Table 3).

In the HCPSS, the percentage of AP exams with scores of 3 or higher and taken by Black/African American students remained relatively stable from 2013 (68.5 percent) to 2014 (68.9 percent) (Table 2). For Hispanic/Latino students, the percentage of AP exams with scores of 3 or higher decreased 1.6 percentage points from 74.5 percent in 2013 to 72.9 percent in 2014. Students of Two or More Races experienced the largest decrease—4.1 percentage points—in the percentage of AP exams with scores of 3 or higher between 2013 (83.5 percent) and 2014 (79.4 percent) (Table 3).

For students who receive special services, only data for those receiving free and reduced meals services (FARMS) are reported here due to insufficient counts for reporting purposes in the special education and English language learner groups. The percentage of AP exams with scores of 3 or higher and taken by FARMS students decreased by 2.1 percentage points from 67.2 percent in 2013 to 65.1 percent in 2014 (Table 3).

Table 3
 Number of AP Exam Test Takers, AP Exams Taken, AP Exams with a Score of 3 or Higher, and
 Percentage of AP Exams with a Score of 3 or Higher for Students in HCPSS, 2013 and 2014

Student Group	N AP Test Takers		N AP Exams Taken		n AP Exams 3 or Higher		% AP Exams 3 or Higher	
	2013	2014	2013	2014	2013	2014	2013	2014
	All Students	4,249	4,286	9,200	9,450	7,506	7,648	81.6
Male	1,972	1,949	4,397	4,493	3,641	3,689	82.8	82.1
Female	2,277	2,337	4,803	4,957	3,865	3,959	80.5	79.9
Asian	1,080	1,108	2,685	2,875	2,198	2,352	81.9	81.8
Black/African American	347	376	639	678	438	467	68.5	68.9
Hispanic/Latino	193	191	412	351	307	256	74.5	72.9
White	2,377	2,352	4,957	4,969	4,144	4,112	83.6	82.8
Two or More Races	238	249	484	548	404	435	83.5	79.4
FARMS	242	246	482	481	324	313	67.2	65.1
Special Ed	18	*	29	*	20	*	69.0	*
ELL	*	*	*	*	*	*	*	*

Note. Results for HCPSS American Indian/Alaskan Native and Native Hawaiian/Pacific Islander students are included with “All Students,” but are not reported separately. AP exam results are based on data reported by the College Board as of October 2014. “*” indicates fewer than 10 AP test takers, thus results are not reported to protect student confidentiality.

Appendix A provides the number of AP test takers, the number of AP exams taken, and the percent of AP exams earning a 3 or higher and 4 or higher by racial/ethnic group within each high school in the HCPSS for 2014. Appendix B provides the number of AP test takers, the number of AP exams taken, the number of exams receiving a score of 1 through 5, and the percentage of AP exams receiving a score of 3 or higher by high school in the HCPSS for 2014.

In 2014, the 20 AP exams taken most frequently by students in the HCPSS were Calculus AB, English Language & Composition, Psychology, English Literature & Composition, U.S. Government & Politics, World History, Statistics, Calculus BC, Biology, Physics C: Mechanics, Macroeconomics, Chemistry, Computer Science A, Microeconomics, Environmental Science, Spanish Language, Studio Art: 2-D Design, Human Geography, U.S. History, and French Language (Table 4). Appendix C displays the AP course enrollment and AP exam performance by school.

Table 4
 Top 20 HCPSS AP Exams Administered, Number of Exams Taken, and
 Percent Earning a 3 or Higher by AP Exam, 2014

AP Exam	<i>N</i> Enrolled in Course	<i>n</i> Took the Exam	<i>n</i> Scored 3 or Higher	% Scored 3 or Higher
Calculus AB	1,188	1,030	855	83.0
English Language & Composition	1,119	1,029	894	86.9
Psychology	1,239	963	748	77.7
English Literature & Composition	1,111	854	636	74.5
Government & Politics: US	928	852	678	79.6
World History	931	809	682	84.3
Statistics	674	495	404	81.6
Calculus BC	536	489	459	93.9
Biology	491	398	341	85.7
Physics C - Mechanics	421	323	263	81.4
Economics: Macroeconomics	470	290	221	76.2
Chemistry	330	283	195	68.9
Computer Science A	257	214	165	77.1
Economics: Microeconomics	365	206	153	74.3
Environmental Science	284	195	134	68.7
Spanish Language	277	185	158	85.4
Art: Studio Art - 2-D Design	405	138	127	92.0
Human Geography	214	136	96	70.6
US History	116	88	75	85.2
French Language	146	82	73	89.0

AP Course and Exam Taking Trends for HCPSS Graduates

Overall, the number of graduates in the HCPSS decreased from 4,097 in 2013 to 3,870 in 2014. The percentage of HCPSS graduates enrolled in at least one AP course increased from 59.9 percent in 2013 to 60.5 percent in 2014. The percent of graduates who took one or more AP exams increased by 3.0 percentage points from 49.7 percent in 2013 to 52.7 percent in 2014. The percent of graduates who scored a 3 or higher on an AP exam also increased, by 2.5 percentage points from 41.9 percent in 2013 to 44.4 percent in 2014 (Table 5).

Increasing trends from 2013 to 2014 in the percent of graduates enrolled in an AP course, percent of graduates who took an AP exam, and percent of graduates who scored a 3 or higher on at least one AP exam are observed in all racial/ethnic groups except for Hispanic/Latino graduates. For Hispanic/Latino students, the percent of graduates enrolled in an AP course decreased by 2.6 percentage points from 46.7 percent in 2013 to 44.1 percent in 2014. The percent of graduates who took at least one AP exam decreased by 11.2 percentage points from 43.3 percent in 2013 to 32.1 percent in 2014. The percent of Hispanic/Latino graduates who scored at least a 3 on at least one AP exam also decreased, from 32.6 percent in 2013 to 24.8 percent in 2014—a 7.8 percentage-point decrease (Table 5).

For students who received FARMS, the percent of graduates enrolled in any AP course decreased by 1.8 percentage points from 33.4 percent in 2013 to 31.6 percent in 2014. The percent of graduates who took at least one AP exam decreased by 3.2 percentage points from 25.3 percent in 2013 to 22.1 percent in 2014 for those who received FARMS. The percent of graduates who received FARMS scoring a 3 or higher on at least one AP exam also decreased, by 2.6 percentage points from 17.5 percent in 2013 to 14.9 percent in 2014 (Table 5).

Table 5
 Number and Percentage of Graduates Enrolled in at Least One AP Course, Took at Least One AP Exam,
 and Earned a Score of 3 or Higher on an AP Exam, 2013-2014

Racial/Ethnic Group	Graduates <i>N</i>		Graduates Enrolled in an AP Course				Graduates Who Took an AP Exam				Graduates Who Scored 3+ on an AP Exam			
			<i>n</i>		%		<i>n</i>		%		<i>n</i>		%	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
All Graduates	4,097	3,870	2,456	2,342	59.9	60.5	2,037	2,038	49.7	52.7	1,715	1,720	41.9	44.4
Male	2,107	1,960	1,182	1,085	56.1	55.4	955	930	45.3	47.4	810	787	38.4	40.2
Female	1,990	1,910	1,274	1,257	64.0	65.8	1,082	1,108	54.4	58.0	905	933	45.5	48.8
Asian	640	613	515	502	80.5	81.9	460	450	71.9	73.4	399	387	62.3	63.1
Black/African American	756	756	265	273	35.1	36.1	176	210	23.3	27.8	129	143	17.1	18.9
Hispanic/Latino	291	290	136	128	46.7	44.1	126	93	43.3	32.1	95	72	32.6	24.8
White	2,154	1,976	1,397	1,304	64.9	66.0	1,167	1,170	54.2	59.2	1,004	1,025	46.6	51.9
Two or More Races	243	220	134	127	55.1	57.7	102	108	42.0	49.1	85	87	35.0	39.5
FARMS	578	570	193	180	33.4	31.6	146	126	25.3	22.1	101	85	17.5	14.9
Special Ed	213	177	18	*	8.5	*	12	*	5.6	*	*	*	≤5.0	*
ELL	38	23	*	*	*	*	*	*	*	*	*	*	*	*

Note. Results for HCPSS American Indian/Alaskan Native and Native Hawaiian/Pacific Islander students are included with “All Students,” but are not reported separately. AP exam results are based on data reported by the College Board as of October 2014. “*” indicates fewer than 10 AP test takers, thus results are not reported to protect student confidentiality. Values greater than or equal to 95% or less than or equal to 5% are suppressed to protect student confidentiality.

Appendix A

Number of AP Exam Test Takers, AP Exams Taken, and Percentage of AP Exams with a Score of 3 or Higher and 4 or Higher by HCPSS High School and Race/Ethnicity, 2014

High School	Student Group	Number of Test Takers	Number of Exams Taken	% Exam 3 or Higher	% Exam 4 or Higher
Atholton	All Students	333	720	82.8	53.5
	Asian	93	249	80.3	54.2
	Black/African American	21	40	90.0	50.0
	Hispanic/Latino	9	18	83.3	61.1
	White	193	374	82.9	53.5
	Two or More Races	15	32	87.5	50.0
Centennial	All Students	548	1345	81.5	59.8
	Asian	244	665	80.8	59.7
	Black/African American	17	32	84.4	59.4
	Hispanic/Latino	18	35	65.7	54.3
	White	242	550	84.5	61.3
	Two or More Races	27	63	69.8	50.8
Glenelg	All Students	370	771	81.6	55.9
	Asian	39	111	82.9	60.4
	Black/African American	11	16	50.0	18.8
	Hispanic/Latino	12	25	72.0	48.0
	White	293	588	82.3	56.6
	Two or More Races	15	31	87.1	51.6
Hammond	All Students	209	378	70.9	41.8
	Asian	39	78	64.1	39.7
	Black/African American	35	64	65.6	35.9
	Hispanic/Latino	12	18	72.2	44.4
	White	108	193	75.1	45.6
	Two or More Races	15	25	72.0	32.0
Howard	All Students	466	1087	74.6	42.4
	Asian	61	145	75.2	41.4
	Black/African American	52	107	61.7	28.0
	Hispanic/Latino	25	46	67.4	41.3
	White	284	669	77.4	44.7
	Two or More Races	42	112	71.4	42.0
Long Reach	All Students	273	561	69.2	37.3
	Asian	60	146	72.6	38.4
	Black/African American	59	104	52.9	27.9
	Hispanic/Latino	18	34	67.6	38.2
	White	116	235	73.6	40.0
	Two or More Races	20	42	73.8	40.5
Marriotts Ridge	All Students	436	1081	86.1	58.7
	Asian	123	325	85.2	60.6
	Black/African American	18	38	76.3	44.7
	Hispanic/Latino	11	23	78.3	43.5
	White	266	648	86.9	58.6
	Two or More Races	17	40	≥95.0	75.0

Note. "All Students" includes American Indian/Alaskan Native and Hawaiian/Pacific Islander students. To comply with federal requirements and protect student confidentiality, any percentage rates greater than or equal to 95.0 percent or less than or equal to 5.0 percent will be noted as ≥95.0 or ≤5.0, respectively; "*" is used in place of the actual *n* to suppress those data.

Appendix A (Continued)
 Number of AP Exam Test Takers, AP Exams Taken, and Percentage of AP Exams with a
 Score of 3 or Higher and 4 or Higher by HCPSS High School and Race/Ethnicity, 2014

High School	Student Group	Number of Test Takers	Number of Exams Taken	% Exam 3 or Higher	% Exam 4 or Higher
Mt. Hebron	All Students	346	833	88.5	66.6
	Asian	141	384	85.7	62.5
	Black/African American	18	34	91.2	55.9
	Hispanic/Latino	11	20	80.0	60.0
	White	160	358	91.3	70.9
	Two or More Races	14	34	91.2	82.4
Oakland Mills	All Students	163	308	78.9	45.8
	Asian	17	36	83.3	44.4
	Black/African American	34	61	72.1	34.4
	Hispanic/Latino	15	24	58.3	25.0
	White	78	151	84.8	53.6
	Two or More Races	19	36	75.0	47.2
Reservoir	All Students	335	662	75.8	46.1
	Asian	67	146	77.4	51.4
	Black/African American	56	92	71.7	27.2
	Hispanic/Latino	30	56	78.6	32.1
	White	161	325	75.1	49.8
	Two or More Races	20	41	80.5	56.1
River Hill	All Students	565	1278	84.9	58.5
	Asian	190	519	87.3	63.4
	Black/African American	27	46	73.9	39.1
	Hispanic/Latino	13	28	82.1	42.9
	White	312	632	84.2	57.0
	Two or More Races	22	52	82.7	55.8
Wilde Lake	All Students	242	426	85.0	61.7
	Asian	34	71	78.9	60.6
	Black/African American	28	44	65.9	38.6
	Hispanic/Latino	17	24	75.0	58.3
	White	139	246	90.7	65.9
	Two or More Races	23	40	87.5	67.5

Note. "All Students" includes American Indian/Alaskan Native and Hawaiian/Pacific Islander students. To comply with federal requirements and protect student confidentiality, any percentage rates greater than or equal to 95.0 percent or less than or equal to 5.0 percent will be noted as ≥ 95.0 or ≤ 5.0 , respectively; "*" is used in place of the actual *n* to suppress those data.

Appendix B

Number of AP Exam Test Takers, AP Exams Taken, AP Exams Receiving a Score of 1 through 5, and Percentage of AP Exams with a Score of 3 or Higher by HCPSS High School, 2014

High School	N Test Takers	N Exams Taken	Number of exams receiving a score of*:					% Exams 3 or Higher
			1	2	3	4	5	
All HCPSS	4,286	9,450	510	1238	2553	2714	2381	80.9
Atholton	333	720	27	87	211	230	155	82.8
Centennial	548	1,345	82	158	292	397	407	81.5
Glenelg	370	771	33	107	198	251	180	81.6
Hammond	209	378	29	78	110	87	71	70.9
Howard	466	1,087	93	180	350	290	171	74.6
Long Reach	273	561	47	122	179	123	86	69.2
Marriotts Ridge	436	1,081	40	102	296	315	320	86.1
Mt. Hebron	346	833	25	68	182	263	292	88.5
Oakland Mills	163	308	17	47	102	74	67	78.9
Reservoir	335	662	48	110	197	187	118	75.8
River Hill	565	1,278	52	134	337	383	365	84.9
Wilde Lake	242	426	17	45	99	114	149	85.0

*54 exams had either a score of 0 or no score. They are included in the total number of exams taken.

Appendix C
AP Course Enrollment and AP Exam Performance by School, 2014

High School	AP Exam	N Enrolled in the Course	N Test Taker	n Test Takers scored 3 or Higher	% Test takers Scored 3 or Higher
Atholton	Art: Studio Art - 2-D Design	35	16	*	≥ 95.0
	Art: Studio Art - Drawing	11	*	*	*
	Biology	50	28	17	60.7
	Calculus AB	122	99	84	84.8
	Calculus BC	38	32	28	87.5
	Chemistry	60	49	28	57.1
	Chinese Lang and Culture	*	*	*	*
	Computer Science A	16	14	10	71.4
	Economics: Macro	53	26	13	50.0
	Economics: Micro	53	31	28	90.3
	Eng Lang & Comp	117	94	79	84.0
	Eng Lit & Comp	88	48	42	87.5
	Environmental Science	16	*	*	*
	European History	22	16	15	93.8
	French Lang	17	*	*	*
	Govt & Politics: Comparative	15	*	*	*
	Govt & Politics: US	72	70	*	≥ 95.0
	Physics B	*	*	*	*
	Physics C - Electr & Magnetism	*	*	*	*
	Physics C - Mechanics	60	34	29	85.3
	Psychology	65	29	23	79.3
	Spanish Lang	22	14	*	≥ 95.0
	Statistics	71	44	37	84.1
	US History	*	*	*	*
	World History	50	45	38	84.4
	Centennial	Art: Studio Art - 2-D Design	36	17	*
Art: Studio Art - Drawing		*	*	*	*
Biology		81	76	67	88.2
Calculus AB		144	143	126	88.1
Calculus BC		55	54	*	≥ 95.0
Chemistry		47	38	26	68.4
Chinese Lang and Culture		*	16	7	43.8
Computer Science A		53	54	46	85.2
Economics: Macro		66	44	30	68.2
Economics: Micro		66	45	30	66.7
Eng Lang & Comp		113	115	107	93.0
Eng Lit & Comp		117	100	85	85.0
Environmental Science		67	53	27	50.9
European History		37	34	18	52.9
French Lang		14	*	*	*
German Lang		11	12	10	83.3
Govt & Politics: Comparative		19	12	*	≥ 95.0
Govt & Politics: US		111	108	90	83.3
Human Geography		*	*	*	*
Italian Lang and Culture		*	*	*	*
Japanese Lang and Culture		*	*	*	*
Music Theory		13	14	12	85.7
Physics B		*	*	*	*
Physics C - Electr & Magnetism		13	13	*	≥ 95.0
Physics C - Mechanics		43	42	*	≥ 95.0

Appendix C (Continued)

High School	AP Exam	N Enrolled in the Course	N Test Taker	n Test Takers scored 3 or Higher	% Test takers Scored 3 or Higher
Centennial	Psychology	120	97	75	77.3
	Spanish Lang	42	38	26	68.4
	Statistics	76	68	53	77.9
	US History	24	24	*	≥ 95.0
	World History	109	101	78	77.2
Glenelg	Art: Studio Art - 2-D Design	69	12	11	91.7
	Art: Studio Art - 3-D Design	*	*	*	*
	Art: Studio Art - Drawing	18	*	*	*
	Biology	22	17	16	94.1
	Calculus AB	128	116	85	73.3
	Calculus BC	35	33	27	81.8
	Chemistry	34	30	18	60.0
	Chinese Lang and Culture	*	*	*	*
	Computer Science A	*	*	*	*
	Economics: Macro	25	*	*	*
	Economics: Micro	25	22	18	81.8
	Eng Lang & Comp	97	96	84	87.5
	Eng Lit & Comp	86	84	70	83.3
	Environmental Science	22	18	14	77.8
	French Lang	*	*	*	*
	German Lang	*	*	*	*
	Govt & Politics: US	89	87	73	83.9
	Human Geography	15	10	9	90.0
	Latin: Vergil	14	*	*	*
	Music Theory	*	*	*	*
	Physics C - Electr & Magnetism	*	*	*	*
	Physics C - Mechanics	21	18	15	83.3
	Psychology	136	100	83	83.0
	Spanish Lang	19	13	*	≥ 95.0
	Statistics	48	43	38	88.4
	US History	*	*	*	*
	World History	47	39	*	≥ 95.0
Hammond	Art: Studio Art - 2-D Design	24	14	7	50.0
	Biology	12	*	*	*
	Calculus AB	48	43	29	67.4
	Calculus BC	22	21	14	66.7
	Chemistry	22	15	5	33.3
	Computer Science A	16	*	*	*
	Economics: Macro	*	*	*	*
	Eng Lang & Comp	28	23	20	87.0
	Eng Lit & Comp	43	37	24	64.9
	Environmental Science	*	*	*	*
	French Lang	*	*	*	*
	Govt & Politics: Comparative	*	*	*	*
	Govt & Politics: US	48	45	40	88.9
	Human Geography	18	*	*	*
	Italian Lang and Culture	*	*	*	*
Physics C - Electr & Magnetism	*	*	*	*	

Appendix C (Continued)

High School	AP Exam	N Enrolled in the Course	N Test Taker	n Test Takers scored 3 or Higher	% Test takers Scored 3 or Higher
Hammond	Physics C - Mechanics	24	16	9	56.3
	Psychology	70	56	46	82.1
	Spanish Lang	17	11	*	≥ 95.0
	Statistics	10	*	*	*
	US History	11	*	*	*
	World History	47	43	37	86.0
Howard	Art: Studio Art - 2-D Design	32	15	*	≥ 95.0
	Art: Studio Art - 3-D Design	*	*	*	*
	Art: Studio Art - Drawing	11	*	*	*
	Biology	52	49	38	77.6
	Calculus AB	114	106	73	68.9
	Calculus BC	35	35	*	≥ 95.0
	Chemistry	14	14	8	57.1
	Computer Science A	19	13	9	69.2
	Economics: Macro	48	35	25	71.4
	Economics: Micro	48	45	28	62.2
	Eng Lang & Comp	133	129	110	85.3
	Eng Lit & Comp	165	157	93	59.2
	Environmental Science	16	14	11	78.6
	French Lang	21	21	18	85.7
	Govt & Politics: US	83	83	62	74.7
	Human Geography	15	*	*	*
	Italian Lang and Culture	*	*	*	*
	Latin: Vergil	*	*	*	*
	Music Theory	*	*	*	*
	Physics C - Mechanics	47	45	34	75.6
	Psychology	120	112	75	67.0
	Spanish Lang	21	21	*	≥ 95.0
	Statistics	65	63	52	82.5
World History	102	98	83	84.7	
Long Reach	Art: Studio Art - 2-D Design	31	*	*	*
	Art: Studio Art - Drawing	20	*	*	*
	Biology	18	15	13	86.7
	Calculus AB	48	40	34	85.0
	Calculus BC	27	23	*	≥ 95.0
	Chemistry	32	31	22	71.0
	Chinese Lang and Culture	*	*	*	*
	Computer Science A	*	*	*	*
	Economics: Macro	50	30	21	70.0
	Economics: Micro	50	*	*	*
	Eng Lang & Comp	83	73	47	64.4
	Eng Lit & Comp	122	89	50	56.2
	Environmental Science	13	*	*	*
	French Lang	*	*	*	*
	Govt & Politics: Comparative	*	*	*	*
	Govt & Politics: US	60	46	16	34.8
	Human Geography	19	12	9	75.0
	Physics C - Mechanics	13	*	*	*
	Psychology	89	66	47	71.2
	Spanish Lang	18	14	9	64.3
Statistics	42	21	18	85.7	
US History	12	*	*	*	

Appendix C (Continued)
AP Course Enrollment and AP Exam Performance by School, 2014

High School	AP Exam	N Enrolled in the Course	N Test Taker	n Test Takers scored 3 or Higher	% Test takers Scored 3 or Higher
Marriotts Ridge	Art: Studio Art - 2-D Design	29	*	*	*
	Art: Studio Art - Drawing	17	*	*	*
	Biology	29	22	*	≥ 95.0
	Calculus AB	134	102	91	89.2
	Calculus BC	86	77	*	≥ 95.0
	Chemistry	26	23	19	82.6
	Chinese Lang and Culture	*	*	*	*
	Computer Science A	37	27	*	≥ 95.0
	Economics: Macro	66	42	27	64.3
	Economics: Micro	66	38	33	86.8
	Eng Lang & Comp	122	113	*	≥ 95.0
	Eng Lit & Comp	97	83	67	80.7
	Environmental Science	49	30	19	63.3
	French Lang	14	12	11	91.7
	German Lang	*	*	*	*
	Govt & Politics: Comparative	49	33	31	93.9
	Govt & Politics: US	67	60	*	≥ 95.0
	History of Art	15	13	8	61.5
	Human Geography	56	24	11	45.8
	Italian Lang and Culture	*	*	*	*
	Latin: Vergil	*	*	*	*
	Music Theory	*	*	*	*
	Physics C - Electr & Magnetism	*	*	*	*
	Physics C - Mechanics	33	32	29	90.6
	Psychology	218	183	154	84.2
	Spanish Lang	53	27	23	85.2
	Statistics	63	42	30	71.4
	US History	23	17	15	88.2
	World History	66	57	*	≥ 95.0
	Mt. Hebron	Art: Studio Art - 2-D Design	28	*	*
Art: Studio Art - Drawing		*	*	*	*
Biology		55	42	*	≥ 95.0
Calculus AB		150	124	114	91.9
Calculus BC		63	55	52	94.5
Chemistry		25	21	14	66.7
Computer Science A		53	41	23	56.1
Economics: Macro		122	94	*	≥ 95.0
Economics: Micro		*	*	*	*
Eng Lang & Comp		113	102	90	88.2
Eng Lit & Comp		83	29	26	89.7
Environmental Science		22	12	10	83.3
European History		12	*	*	*
French Lang		*	*	*	*
German Lang		*	*	*	*
Govt & Politics: Comparative		15	11	10	90.9
Govt & Politics: US		37	36	34	94.4
Music Theory		*	*	*	*
Physics C - Electr & Magnetism		14	11	*	≥ 95.0
Physics C - Mechanics		46	39	*	≥ 95.0
Psychology	127	84	69	82.1	

Appendix C (Continued)

High School	AP Exam	N Enrolled in the Course	N Test Taker	n Test Takers scored 3 or Higher	% Test takers Scored 3 or Higher
Mt. Hebron	Spanish Lang	11	12	*	≥ 95.0
	Statistics	90	64	53	82.8
	World History	29	29	27	93.1
Oakland Mills	Art: Studio Art - 2-D Design	16	*	*	*
	Biology	16	10	9	90.0
	Calculus AB	41	33	*	≥ 95.0
	Calculus BC	29	22	19	86.4
	Chemistry	*	*	*	*
	Computer Science A	10	12	7	58.3
	Eng Lang & Comp	64	54	39	72.2
	Eng Lit & Comp	43	23	*	≥ 95.0
	Environmental Science	*	*	*	*
	French Lang	15	*	*	*
	German Lang	*	*	*	*
	Govt & Politics: US	39	29	17	58.6
	Human Geography	17	10	*	≥ 95.0
	Music Theory	*	*	*	*
	Physics C - Electr & Magnetism	*	*	*	*
	Physics C - Mechanics	16	15	11	73.3
	Psychology	20	*	*	*
	Spanish Lang	*	*	*	*
	Spanish Lit	12	*	*	*
	Statistics	22	14	11	78.6
US History	13	*	*	*	
World History	44	39	29	74.4	
Reservoir	Art: Studio Art - 2-D Design	21	*	*	*
	Biology	41	26	19	73.1
	Calculus AB	65	50	32	64.0
	Calculus BC	26	24	*	≥ 95.0
	Computer Science A	*	*	*	*
	Economics: Macro	10	*	*	*
	Eng Lang & Comp	97	86	74	86.0
	Eng Lit & Comp	107	67	45	67.2
	European History	20	*	*	*
	French Lang	17	*	*	*
	Govt & Politics: US	72	60	54	90.0
	History of Art	11	*	*	*
	Human Geography	19	19	10	52.6
	Japanese Lang and Culture	*	*	*	*
	Music Theory	*	*	*	*
	Physics C - Electr & Magnetism	17	*	*	*
	Physics C - Mechanics	55	28	15	53.6
	Psychology	95	94	62	66.0
	Spanish Lang	42	20	*	≥ 95.0
	Statistics	49	32	29	90.6
US History	18	14	12	85.7	
World History	118	102	74	72.5	

Appendix C (Continued)

High School	AP Exam	N Enrolled in the Course	N Test Taker	n Test Takers scored 3 or Higher	% Test takers Scored 3 or Higher	
River Hill	Art: Studio Art - 2-D Design	56	32	*	≥ 95.0	
	Art: Studio Art - Drawing	*	10	*	≥ 95.0	
	Biology	82	79	75	94.9	
	Calculus AB	164	144	126	87.5	
	Calculus BC	80	73	*	≥ 95.0	
	Chemistry	48	43	*	≥ 95.0	
	Chinese Lang and Culture	*	*	*	*	
	Computer Science A	32	28	*	≥ 95.0	
	Economics: Macro	29	*	*	*	
	Economics: Micro	29	*	*	*	
	Eng Lang & Comp	123	119	112	94.1	
	Eng Lit & Comp	124	108	84	77.8	
	Environmental Science	72	49	43	87.8	
	European History	20	11	8	72.7	
	French Lang	15	10	9	90.0	
	German Lang	*	*	*	*	
	Govt & Politics: US	182	168	110	65.5	
	History of Art	11	*	*	*	
	Human Geography	43	35	30	85.7	
	Music Theory	*	*	*	*	
	Physics C - Electr & Magnetism	12	*	*	*	
	Physics C - Mechanics	56	41	35	85.4	
	Psychology	121	90	73	81.1	
	Spanish Lang	*	*	*	*	
	Statistics	82	61	55	90.2	
	US History	*	*	*	*	
	World History	153	130	112	86.2	
	Wilde Lake	Art: Studio Art - 2-D Design	28	*	*	*
		Art: Studio Art - 3-D Design	10	*	*	*
		Art: Studio Art - Drawing	10	*	*	*
Biology		33	25	23	92.0	
Calculus AB		30	30	*	≥ 95.0	
Calculus BC		40	40	*	≥ 95.0	
Chemistry		13	13	10	76.9	
Chinese Lang and Culture		*	*	*	*	
Computer Science A		*	*	*	*	
Economics: Micro		18	*	*	*	
Eng Lang & Comp		29	25	*	≥ 95.0	
Eng Lit & Comp		36	29	27	93.1	
Environmental Science		*	*	*	*	
French Lang		*	*	*	*	
Govt & Politics: US		68	60	55	91.7	
Human Geography		10	*	*	*	
Italian Lang and Culture		*	*	*	*	
Physics C - Electr & Magnetism		*	*	*	*	
Physics C - Mechanics		*	*	*	*	
Psychology		58	43	36	83.7	
Spanish Lang		17	*	*	*	
Statistics		56	37	24	64.9	
US History	14	*	*	*		
World History	70	68	62	91.2		

* Values are suppressed to protect student privacy if the percent is greater than or equal to 95 or less than or equal to 5; and when a group has fewer than 10 students.