# Board of Education of Howard County Meeting Agenda Item 

TitLE: 2015 Advanced Placement Exam Participation and Performance_ Date: December 17, 2015

| Presenter(s): | E. Grace Chesney, Eva Yiu and Mark Stout |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Vision 2018 GoaL: | $\square$ Students $\quad \square$ Staff $\quad \square$ Families and Community | $\square$ 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 2015. Overall, more than 4,400 HCPSS students have taken over 9,900 AP exams. More than 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.

## REGOMMENDATION/FUTURE DIRECTION:

Continue to offer high school students the opportunity to access a wide variety of course topics across the curriculum, including art, computer science, English, mathematics, music, science, social studies, and world languages. Intentionally recruit students throughout the system to participate in AP courses. Support students in attaining an exam score of 3 or higher as it is a strong predictor of a student's ability to succeed in college and earn a degree.

SUBMITTED BY: $\qquad$ 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 success ${ }^{1}$. AP courses offer rigorous curricula that students need to prepare for postsecondary education ${ }^{2}$. 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 ${ }^{3}$. In addition, students who earn AP exam scores of 3 or higher may be awarded course credit upon entry into college ${ }^{4}$.

## AP Exam Results for the District, State, and 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 AP exams in 2015. The percentage of AP exams with a score of 3 or higher for HCPSS students ( 80.8 percent) was 19.7 and 24.9 percentage points higher than that for public school students in the state of Maryland ( 61.1 percent) and across the nation ( 55.9 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 the HCPSS, Maryland, and the Nation, 2015

| Region | $N$ AP Test Takers |  | $\begin{array}{r} n \mathrm{AP} \\ \text { Exams } 3 \text { or } \\ \text { Higher } \\ \hline \end{array}$ | $\begin{array}{r} \% \mathrm{AP} \\ \text { Exams } 3 \text { or } \\ \text { Higher } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| HCPSS | 4,481 | 9,920 | 8,017 | 80.8 |
| Maryland Public Schools | 56,743 | 107,717 | 65,828 | 61.1 |
| U.S. Public Schools | 2,136,968 | 3,826,645 | 2,140,859 | 55.9 |

Note: AP exam results are based on data reported by the College Board as of October 2015.
In 2015 the percentage of AP exams taken by HCPSS students and scored a 3 or higher ( 80.8 percent) remained within a percentage point of that in 2014 ( 81.4 percent). The percentage of AP exams with a score of 3 or higher and taken by public school students in the state of Maryland also stayed similar at 60.9 percent in 2014 to 61.1 percent in 2015. Nationally, a 1.3 percentage-point decrease is observed from 57.2 percent in 2014 to 55.9 percent in 2015 in the percentage of AP exams scoring a 3 or higher (Table 2).

In 2015, the percentage of AP exams with a score of 3 or higher for Black/African American students in the HCPSS ( 65.1 percent) was 31.0 and 35.9 percentage points greater than that for Black/African American public school students in the state of Maryland ( 34.1 percent) and the nation ( 29.2 percent), respectively. The percentage of AP exams with a score of 3 or higher for Hispanic/Latino students in HCPSS ( 78.4 percent) was 26.5 and 38.0 percentage points greater than that for Hispanic/Latino public school students in Maryland (51.9 percent) and the nation (40.4 percent) respectively (Table 2).

[^0]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, 2014 and 2015

| Student Group | HCPSS $^{\mathrm{a}}$ |  | Maryland $^{\mathrm{b}}$ |  |  | Nation $^{\mathrm{b}}$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 |  |
| All Students | 81.4 | 80.8 | 60.9 | 61.1 | 57.2 | 55.9 |  |
| Asian | 82.7 | 82.2 | 73.2 | 72.9 | 67.9 | 67.3 |  |
| Black/African American | 69.5 | 65.1 | 32.9 | 34.1 | 28.9 | 29.2 |  |
| Hispanic/Latino | 73.6 | 78.4 | 52.9 | 51.9 | 41.8 | 40.4 |  |
| White | 83.0 | 82.5 | 67.5 | 67.7 | 63.5 | 62.4 |  |
| Two or More Races | 80.0 | 81.0 | $n / a$ | n/a | n/a | n/a |  |

Note: AP exam results are based on data reported by the College Board as of October 2015.
a "All Students" include American Indian or Alaskan Native, and Native Hawaiian or Other Pacific Islander students.
b"All Students" include students reported as American Indian, Other, and students who did not report their race/ethnicity; "Hispanic/Latino" include students reported as Mexican American, Puerto Rican and Other Hispanic.

## HCPSS AP Exam Performance: Two-Year Trend

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 and 2015. The number of students participating in the AP exams and the number of exams taken by students both demonstrate slight positive trends from 2014 to 2015. The number of HCPSS students taking an AP exam increased from 4,287 test takers in 2014 to 4,481 in 2015. The number of AP exams taken increased by 4.8 percent from 9,464 exams taken in 2014 to 9,920 in 2015 (Table 3). A higher number of AP exams had a score of 3 or higher in $2015(n=8,017)$ compared to 2014 ( $n=7,704$ ); proportionate to the total number of exams taken in the two years, the percentage of exams with a score of 3 or higher remained fairly stable at 81.4 percent in 2014 to 80.8 percent in 2015 (Table 3).

Table 3
HCPSS AP Exam Score Distribution, 2014 and 2015

| AP | 2014 |  | 2015 |  |
| :--- | :---: | ---: | ---: | ---: |
| Exam | (Test takers $=4,287)$ |  | (Test takers $=4,481)$ |  |
| Score | $n$ Exams | $\%$ | $n$ Exams |  |

Note: AP exam results are based on data reported by the College Board as of October 2015.

## HCPSS AP Exam Results by Student Group

In the HCPSS the total numbers of AP test takers, AP exams taken, and AP exams with a score of 3 or higher increased for all racial/ethnic groups except for the White student group from 2014 to 2015. Increases in the number of AP test takers ranged from 6.4 percent for Two or More Races to 25.1 percent for Hispanic/Latino students; increases in the number of AP exams taken ranged from 3.6 percent for Two or More Races to 26.4 percent for Hispanic/Latino students (Table 4).

The percentage of AP exams with scores of 3 or higher and taken by Hispanic/Latino students increased by 4.8 percentage points from 73.6 percent in 2014 to 78.4 percent in 2015. For Black/African American students, the percentage of AP exams with scores of 3 or higher decreased by 4.4 percentage points from 69.5 percent in 2014 to 65.1 percent in 2015 (Table 4).

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 numbers of AP test takers and AP exams taken, increased from 2014 to 2015 for students who received FARMS. The percentage of AP exams with scores of 3 or higher taken by FARMS students decreased by 1.3 percentage points from 65.6 percent in 2014 to 64.3 percent in 2015 (Table 4).

Table 4
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 the HCPSS by Student Group, 2014 and 2015

| Student Group | $N$ AP Test Takers |  | $N$ AP Exams Taken |  | $n$ AP Exams 3 or Higher |  | \% AP Exams3 or Higher |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 |
| All Students | 4,287 | 4,481 | 9,464 | 9,920 | 7,704 | 8,017 | 81.4 | 80.8 |
| Male | 1,948 | 2,035 | 4,492 | 4,718 | 3,717 | 3,902 | 82.7 | 82.7 |
| Female | 2,339 | 2,446 | 4,972 | 5,202 | 3,987 | 4,115 | 80.2 | 79.1 |
| Asian | 1,108 | 1,235 | 2,877 | 3,233 | 2,378 | 2,659 | 82.7 | 82.2 |
| Black/African American | 378 | 418 | 682 | 766 | 474 | 499 | 69.5 | 65.1 |
| Hispanic/Latino | 191 | 239 | 352 | 445 | 259 | 349 | 73.6 | 78.4 |
| White | 2,351 | 2,315 | 4,975 | 4,893 | 4,128 | 4,035 | 83.0 | 82.5 |
| Two or More Races | 249 | 265 | 549 | 569 | 439 | 461 | 80.0 | 81.0 |
| Free and Reduced Meals | 246 | 328 | 482 | 631 | 316 | 406 | 65.6 | 64.3 |
| Special Education | * | 15 | * | 28 | * | 23 | * | 82.1 |
| English Language Learner | * | * | * | * | * | * | * | * |

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 2015. "*" indicates fewer than 10 AP test takers, thus results are not reported to protect student confidentiality.

Table 5 presents the two-year trend data for the number of AP exam test takers, AP exams taken, AP exams with a score of 3 or higher, and the percentage of AP exams with a score of 3 or higher for HCPSS students by male and female racial/ethnic groups.

The percentage of AP exams with scores of 3 or higher taken by Black/African American males decreased by 3.5 percentage points from 69.7 percent in 2014 to 66.2 percent in 2015. This percentage increased by 1.4 percentage points for Two or More Races males from 82.6 percent in 2014 to 84.0 percent in 2015. Most notably, the percentage of AP exams with a score of 3 or higher taken by Hispanic/Latino males increased by 11.0 percentage from 72.0 percent in 2014 to 83.0 percent in 2015 (Table 5).

The percentage of AP exams with scores of 3 or higher taken by Black/African American females decreased by 4.9 percentage points from 69.4 percent in 2014 to 64.5 percent in 2015. This percentage increased by 1.5 percentage points for Two or More Races females from 77.4 percent in 2014 to 78.9
percent in 2015. For other female racial/ethnic groups, the percentage of AP exams with a score of 3 or higher stayed within a percentage point in 2015 compared to 2014 (Table 5).

Table 5
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 the HCPSS
by Race/Ethnicity and Gender, 2014 and 2015

| Racial/Ethnic Group | Gender | AP Test Takers |  | Number of AP Exams Taken |  | Number of AP Exams 3 or Higher |  | Percent of AP Exams 3 or Higher |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 |
| Asian | All | 1,108 | 1,235 | 2,877 | 3,233 | 2,378 | 2,659 | 82.7 | 82.2 |
|  | Male | 527 | 604 | 1,449 | 1,643 | 1,213 | 1,368 | 83.7 | 83.3 |
|  | Female | 581 | 631 | 1,428 | 1,590 | 1,165 | 1,291 | 81.6 | 81.2 |
| Black/African American | All | 378 | 418 | 682 | 766 | 474 | 499 | 69.5 | 65.1 |
|  | Male | 134 | 147 | 244 | 281 | 170 | 186 | 69.7 | 66.2 |
|  | Female | 244 | 271 | 438 | 485 | 304 | 313 | 69.4 | 64.5 |
| Hispanic/Latino | All | 191 | 239 | 352 | 445 | 259 | 349 | 73.6 | 78.4 |
|  | Male | 89 | 103 | 164 | 194 | 118 | 161 | 72.0 | 83.0 |
|  | Female | 102 | 136 | 188 | 251 | 141 | 188 | 75.0 | 74.9 |
| White | All | 2,351 | 2,315 | 4,975 | 4,893 | 4,128 | 4,035 | 83.0 | 82.5 |
|  | Male | 1,084 | 1,062 | 2,355 | 2,354 | 1,984 | 1,979 | 84.2 | 84.1 |
|  | Female | 1,267 | 1,253 | 2,620 | 2,539 | 2,144 | 2,056 | 81.8 | 81.0 |
| Two or more races | All | 249 | 265 | 549 | 569 | 439 | 461 | 80.0 | 81.0 |
|  | Male | 110 | 114 | 270 | 238 | 223 | 200 | 82.6 | 84.0 |
|  | Female | 139 | 151 | 279 | 331 | 216 | 261 | 77.4 | 78.9 |

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 HCPSS high school for 2015. 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 HCPSS high school for 2015. Appendix C provides this information by race/ethnicity for each high school.

In 2015, the 20 AP exams taken most frequently by HCPSS students were English Language \& Composition, Calculus AB, Psychology, U.S. Government \& Politics, World History, English Literature \& Composition, Statistics, Calculus BC, Biology, Chemistry, Physics C: Mechanics, Microeconomics, Environmental Science, Macroeconomics, Computer Science A, Spanish Language, Studio Art: 2-D Design, Physics 1, Physics C: Electricity and Magnetism, and Human Geography (Table 6). Appendix D displays AP course enrollment and AP exam performance by school.

Table 6
Top 20 HCPSS AP Exams Administered, Number of Exams Taken, and Percent Earning a 3 or Higher by AP Exam, 2015

| AP Exam | $N$ Enrolled <br> in Course | $N$ Exams | $n$ Exams 3 <br> or Higher | \% Exams 3 <br> or Higher |
| :--- | ---: | ---: | ---: | ---: |
| English Language \& Composition | 1,173 | 1,090 | 910 | 83.5 |
| Calculus AB | 1,222 | 1,050 | 871 | 83.0 |
| Psychology | 1,501 | 1,041 | 785 | 75.4 |
| Government \& Politics: US | 959 | 898 | 713 | 79.4 |
| World History | 955 | 798 | 652 | 81.7 |
| English Literature \& Composition | 1,095 | 780 | 601 | 77.1 |
| Statistics | 747 | 553 | 455 | 82.3 |
| Calculus BC | 550 | 500 | 481 | 96.2 |
| Biology | 473 | 382 | 330 | 86.4 |
| Chemistry | 391 | 337 | 247 | 73.3 |
| Physics C - Mechanics | 436 | 330 | 268 | 81.2 |
| Economics: Microeconomics | 465 | 300 | 251 | 83.7 |
| Environmental Science | 379 | 252 | 172 | 68.3 |
| Economics: Macroeconomics | 366 | 230 | 145 | 63.0 |
| Computer Science A | 243 | 214 | 177 | 82.7 |
| Spanish Language | 317 | 211 | 190 | 90.0 |
| Art: Studio Art - 2-D Design | 429 | 136 | 129 | 94.9 |
| Physics 1a | 0 | 109 | 44 | 40.4 |
| Physics C - Electricity \& Magnetism | 125 | 106 | 90 | 84.9 |
| Human Geography | 185 | 103 | 88 | 85.4 |

${ }^{\text {a }}$ The SY2015 administration of the AP Physics 1 exam was the first ever administration, and the AP Physics I course has not been traditionally offered in the HCPSS for this new AP exam; however, this course is now being offered starting SY2016.

## AP Course and Exam Taking Trends for HCPSS Graduates

Overall, the number of HCPSS graduates remained fairly stable from 3,870 in 2014 to 3,866 in 2015. The percent of HCPSS graduates enrolled in at least one AP course increased by 2.8 percentage points from 65.6 percent in 2014 to 68.4 percent in 2015 . The percent of graduates who took one or more AP exams increased by 1.4 percentage points from 52.7 percent in 2014 to 54.1 percent in 2015. The percent of graduates who scored a 3 or higher on an AP exam also increased by 1.0 percentage point from 44.7 percent in 2014 to 45.7 percent in 2015 (Table 7).

Increasing trends from 2014 to 2015 in the percent of graduates who had ever enrolled in an AP course are observed in all racial/ethnic groups, as well as for graduates who received special services. Notably, Hispanic/Latino and Two or More Races graduates' AP course enrollment increased by 8.7 and 10.9 percentage points, respectively, for the Class of 2015 compared to the Class of 2014. The Class of 2015 FARMS graduates had a 7.9 percentage-point higher AP course enrollment rate compared to their peers in the Class of 2014.

The percent of graduates who took an AP exam increased for Asian ( 3.9 percentage-point increase), Hispanic/Latino ( 9.2 percentage-point increase), and Two or More Races (11.0 percentage-point increase) graduates, but it decreased for Black/African American graduates by 1.4 percentage points. The percent of White graduates who took an AP exam remained fairly stable over the two years. The percent of FARMS graduates who took at least one AP exam increased by 5.8 percentage points from 2014 to 2015.

The percent of graduates who scored a 3 or higher on at least one AP exam increased from 2014 to 2015 for Asian (4.7 percentage-point increase to 68.5 percent in 2015), Hispanic/Latino (10.2 percentage-point increase to 35.0 percent in 2015), and Two or More Races ( 9.4 percentage-point increase to 49.4 percent in 2015) graduates. The percent of White graduates who scored a 3 or higher on at least one AP exam decreased by 1.6 percentage points from 52.0 percent in 2014 to 50.4 percent in 2015 and remained fairly stable for Black/African American graduates at about 19.0 percent in 2014 to 18.6 percent in 2015. The percent of FARMS graduates who scored a 3 or higher on at least one AP exam increased by 5.5 percentage points from 15.1 percent in 2014 to 20.6 percent in 2015 (Table 7).

Table 7
AP Course Participation and AP Exam Performance of HCPSS Graduates, 2014 and 2015

| Student Group | Graduates <br> $N$ | Graduates Enrolled in an AP Course $n \quad$ \% |  | Graduates Who Took an AP Exam n \% |  | Graduates Who Scored 3+ on an AP Exam n \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2014 \quad 2015$ | $2014 \quad 2015$ | 20142015 | 2014 2015 | 20142015 | $2014 \quad 2015$ | 20142015 |
| All Students | 3,870 3,866 | 2,538 2,644 | 65.668 .4 | 2,039 2,090 | 52.754 .1 | 1,728 1,768 | 44.745 .7 |
| Male | 1,960 1,942 | 1,174 1,230 | 59.963 .3 | $930 \quad 967$ | 47.449 .8 | 791821 | 40.442 .3 |
| Female | 1,910 1,924 | 1,364 1,414 | 71.473 .5 | 1,109 1,123 | $58.1 \quad 58.4$ | 937947 | 49.149 .2 |
| Asian | $613 \quad 647$ | $516 \quad 561$ | 84.286 .7 | $450 \quad 500$ | 73.4 | 391443 | $63.8 \quad 68.5$ |
| Black/African Am. | 756774 | 319344 | 42.244 .4 | 210204 | $27.8 \quad 26.4$ | 144144 | $19.0 \quad 18.6$ |
| Hispanic/Latino | 290303 | 147180 | 50.759 .4 | $93 \quad 125$ | 32.141 .3 | $72 \quad 106$ | $\begin{array}{lll}24.8 & 35.0\end{array}$ |
| White | 1,976 1,876 | 1,410 1,370 | 71.473 .0 | 1,171 1,105 | 59.358 .9 | 1,027 946 | $\begin{array}{ll}52.0 & 50.4\end{array}$ |
| Two or More | $220 \quad 253$ | $136 \quad 184$ | $61.8 \quad 72.7$ | $108 \quad 152$ | $49.1 \quad 60.1$ | $88 \quad 125$ | $40.0 \quad 49.4$ |
| FARMS | $570 \quad 602$ | 210269 | 36.844 .7 | $126 \quad 168$ | $22.1 \quad 27.9$ | $86 \quad 124$ | 15.120 .6 |
| Special Ed | $177 \quad 207$ | $13 \quad 19$ | $\begin{array}{ll}7.3 & 9.2\end{array}$ | * * | $\leq 5.0 \leq 5.0$ | * * | $\leq 5.0 \leq 5.0$ |
| ELL | $22 \quad 28$ | 5 | $\leq 5.0 \quad 17.9$ | * * | $\leq 5.0 \leq 5.0$ | * * | $\leq 5.0 \leq 5.0$ |

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 2015. To comply with federal requirements and protect student privacy, any percentage rates greater than or equal to 95.0 percent or less than or equal to 5.0 percent will be noted as $\geq 95.0$ or $\leq 5.0$, respectively; $" * "$ is used in place of the actual count to suppress those data. Results for groups with fewer than 10 test takers are also suppressed to protect student privacy.

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Executive Team

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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, 2015

| High School | Student Group | $N$ Test <br> Takers | $N$ Exams | \% Exams 3+ | $\begin{array}{r} \% \text { Exam } \\ 4+ \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Atholton | All Students | 324 | 711 | 84.8 | 58.2 |
|  | Asian | 104 | 259 | 82.6 | 59.5 |
|  | Black/African American | 19 | 35 | 65.7 | 42.9 |
|  | Hispanic/Latino | * | * | * | * |
|  | White | 174 | 363 | 86.8 | 58.1 |
|  | Two or More Races | 17 | 27 | 92.6 | 66.7 |
| Centennial | All Students | 558 | 1433 | 84.9 | 60.2 |
|  | Asian | 256 | 742 | 84.6 | 59.7 |
|  | Black/African American | 21 | 40 | 90.0 | 50.0 |
|  | Hispanic/Latino | 16 | 34 | 79.4 | 64.7 |
|  | White | 236 | 538 | 85.1 | 61.7 |
|  | Two or More Races | 29 | 79 | 86.1 | 57.0 |
| Glenelg | All Students | 432 | 927 | 80.9 | 49.1 |
|  | Asian | 56 | 142 | 77.5 | 47.2 |
|  | Black/African American | 14 | 29 | 58.6 | 27.6 |
|  | Hispanic/Latino | 16 | 33 | 78.8 | 57.6 |
|  | White | 331 | 690 | 82.8 | 49.7 |
|  | Two or More Races | 15 | 33 | 78.8 | 54.5 |
| Hammond | All Students | 251 | 488 | 71.9 | 39.1 |
|  | Asian | 44 | 112 | 65.2 | 27.7 |
|  | Black/African American | 53 | 88 | 52.3 | 21.6 |
|  | Hispanic/Latino | 24 | 34 | 85.3 | 41.2 |
|  | White | 101 | 200 | 82.0 | 54.0 |
|  | Two or More Races | 28 | 53 | 71.7 | 34.0 |
| Howard | All Students | 502 | 1155 | 71.2 | 37.1 |
|  | Asian | 79 | 202 | 69.3 | 37.6 |
|  | Black/African American | 56 | 107 | 57.9 | 19.6 |
|  | Hispanic/Latino | 27 | 65 | 69.2 | 29.2 |
|  | White | 299 | 681 | 74.0 | 41.3 |
|  | Two or More Races | 41 | 100 | 71.0 | 31.0 |
| Long Reach | All Students | 218 | 458 | 71.0 | 41.0 |
|  | Asian | 59 | 141 | 70.2 | 39.7 |
|  | Black/African American | 47 | 91 | 58.2 | 36.3 |
|  | Hispanic/Latino | 20 | 36 | 66.7 | 44.4 |
|  | White | 82 | 168 | 77.4 | 42.9 |
|  | Two or More Races | 10 | 22 | 86.4 | 50.0 |
| Marriotts Ridge | All Students | 453 | 1021 | 86.7 | 60.8 |
|  | Asian | 152 | 369 | 85.4 | 62.6 |
|  | Black/African American | 13 | 34 | 88.2 | 61.8 |
|  | Hispanic/Latino | 17 | 35 | 80.0 | 51.4 |
|  | White | 249 | 539 | 87.9 | 60.1 |
|  | Two or More Races | 22 | 44 | 86.4 | 61.4 |

Note: "All Students" includes American Indian/Alaskan Native and Hawaiian/Pacific Islander students. To comply with federal requirements and protect student privacy, any percentage rates greater than or equal to 95.0 percent or less than or equal to 5.0 percent will be noted as $\geq 95.0$ or $\leq 5.0$, respectively; "*" is used in place of the actual count to suppress those data. Results for groups with fewer than 10 test takers are also suppressed to protect student privacy.

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, 2015

| High School | Student Group | $N$ Test <br> Takers | $N$ Exams | \% Exams 3+ | $\begin{array}{r} \text { \% Exam } \\ 4+ \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mt. Hebron | All Students | 389 | 864 | 89.6 | 68.4 |
|  | Asian | 145 | 361 | 89.2 | 65.4 |
|  | Black/African American | 17 | 30 | 80.0 | 66.7 |
|  | Hispanic/Latino | 18 | 27 | $\geq 95.0$ | 74.1 |
|  | White | 192 | 415 | 90.4 | 70.8 |
|  | Two or More Races | 15 | 28 | 85.7 | 67.9 |
| Oakland Mills | All Students | 175 | 320 | 73.8 | 37.5 |
|  | Asian | 25 | 54 | 75.9 | 38.9 |
|  | Black/African American | 36 | 69 | 73.9 | 40.6 |
|  | Hispanic/Latino | 17 | 28 | 64.3 | 10.7 |
|  | White | 76 | 133 | 72.2 | 40.6 |
|  | Two or More Races | 21 | 36 | 83.3 | 38.9 |
| Reservoir | All Students | 376 | 743 | 73.4 | 39.2 |
|  | Asian | 89 | 214 | 76.2 | 43.0 |
|  | Black/African American | 69 | 121 | 66.9 | 31.4 |
|  | Hispanic/Latino | 36 | 66 | 74.2 | 36.4 |
|  | White | 157 | 287 | 73.9 | 39.7 |
|  | Two or More Races | 22 | 50 | 70.0 | 42.0 |
| River Hill | All Students | 551 | 1324 | 84.5 | 59.2 |
|  | Asian | 190 | 555 | 87.7 | 66.5 |
|  | Black/African American | 22 | 47 | 61.7 | 36.2 |
|  | Hispanic/Latino | 16 | 28 | $\geq 95.0$ | 60.7 |
|  | White | 300 | 640 | 82.3 | 54.2 |
|  | Two or More Races | 22 | 53 | 90.6 | 64.2 |
| Wilde Lake | All Students | 252 | 476 | 81.9 | 53.2 |
|  | Asian | 36 | 82 | 81.7 | 58.5 |
|  | Black/African American | 51 | 75 | 62.7 | 26.7 |
|  | Hispanic/Latino | 23 | 35 | 77.1 | 42.9 |
|  | White | 118 | 239 | 87.4 | 59.0 |
|  | Two or More Races | 23 | 44 | 88.6 | 65.9 |

Note: "All Students" includes American Indian/Alaskan Native and Hawaiian/Pacific Islander students. To comply with federal requirements and protect student privacy, any percentage rates greater than or equal to 95.0 percent or less than or equal to 5.0 percent will be noted as $\geq 95.0$ or $\leq 5.0$, respectively; "*" is used in place of the actual count to suppress those data. Results for groups with fewer than 10 test takers are also suppressed to protect student privacy.

## Appendix B

Number of AP Exam Test Takers, AP Exams Taken, AP Exams Receiving a Score of 1 through 5, and

| HighSchool | $N$ Test | $N$ Exams | Number of exams receiving a score of: |  |  |  |  | \% Exams 3 or Higher |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Takers | Taken | 1 | 2 | 3 | 4 | 5 |  |
| All HCPSS | 4,481 | 9,920 | 582 | 1,321 | 2,819 | 2,752 | 2,446 | 80.8 |
| Atholton | 324 | 711 | 25 | 83 | 189 | 218 | 196 | 84.8 |
| Centennial | 558 | 1,433 | 67 | 149 | 355 | 405 | 457 | 84.9 |
| Glenelg | 432 | 927 | 58 | 119 | 295 | 267 | 188 | 80.9 |
| Hammond | 251 | 488 | 53 | 84 | 160 | 105 | 86 | 71.9 |
| Howard | 502 | 1,155 | 114 | 219 | 394 | 254 | 174 | 71.2 |
| Long Reach | 218 | 458 | 45 | 88 | 137 | 116 | 72 | 71.0 |
| Marriotts Ridge | 453 | 1,021 | 34 | 102 | 264 | 300 | 321 | 86.7 |
| Mt. Hebron | 389 | 864 | 25 | 65 | 183 | 312 | 279 | 89.6 |
| Oakland Mills | 175 | 320 | 22 | 62 | 116 | 82 | 38 | 73.8 |
| Reservoir | 376 | 743 | 57 | 141 | 254 | 173 | 118 | 73.4 |
| River Hill | 551 | 1,324 | 62 | 143 | 335 | 391 | 393 | 84.5 |
| Wilde Lake | 252 | 476 | 20 | 66 | 137 | 129 | 124 | 81.9 |

Appendix C
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 Race/Ethnicity for Each High School, 2015

| High School | Student Group | $N$ Test Takers | $N$ Exams Taken | Number of exams receiving a score of: |  |  |  |  | \% Exams 3 or Higher |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 | 2 | 3 | 4 | 5 |  |
| All HCPSS | All Students | 4,481 | 9,920 | 582 | 1,321 | 2,819 | 2,752 | 2,446 | 80.8 |
|  | Asian | 1,235 | 3,233 | 183 | 391 | 835 | 882 | 942 | 82.2 |
|  | Black/African American | 418 | 766 | 99 | 168 | 239 | 177 | 83 | 65.1 |
|  | Hispanic/Latino | 239 | 445 | 25 | 71 | 147 | 115 | 87 | 78.4 |
|  | White | 2,315 | 4,893 | 235 | 623 | 1414 | 1425 | 1196 | 82.5 |
|  | Two or More Races | 265 | 569 | 40 | 68 | 176 | 148 | 137 | 81.0 |
| Atholton | All Students | 324 | 711 | 25 | 83 | 189 | 218 | 196 | 84.8 |
|  | Asian | 104 | 259 | 12 | 33 | 60 | 75 | 79 | 82.6 |
|  | Black/African American | 19 | 35 | 5 | 7 | 8 | 10 | 5 | 65.7 |
|  | Hispanic/Latino | 9 | 24 | 0 | 1 | 8 | 10 | 5 | 95.8 |
|  | White | 174 | 363 | 8 | 40 | 104 | 112 | 99 | 86.8 |
|  | Two or More Races | 17 | 27 | 0 | 2 | 7 | 10 | 8 | 92.6 |
| Centennial | All Students | 558 | 1,433 | 67 | 149 | 355 | 405 | 457 | 84.9 |
|  | Asian | 256 | 742 | 37 | 77 | 185 | 198 | 245 | 84.6 |
|  | Black/African American | 21 | 40 | 0 | 4 | 16 | 11 | 9 | 90.0 |
|  | Hispanic/Latino | 16 | 34 | 1 | 6 | 5 | 12 | 10 | 79.4 |
|  | White | 236 | 538 | 23 | 57 | 126 | 161 | 171 | 85.1 |
|  | Two or More Races | 29 | 79 | 6 | 5 | 23 | 23 | 22 | 86.1 |
| Glenelg | All Students | 432 | 927 | 58 | 119 | 295 | 267 | 188 | 80.9 |
|  | Asian | 56 | 142 | 13 | 19 | 43 | 37 | 30 | 77.5 |
|  | Black/African American | 14 | 29 | 4 | 8 | 9 | 6 | 2 | 58.6 |
|  | Hispanic/Latino | 16 | 33 | 2 | 5 | 7 | 8 | 11 | 78.8 |
|  | White | 331 | 690 | 37 | 82 | 228 | 207 | 136 | 82.8 |
|  | Two or More Races | 15 | 33 | 2 | 5 | 8 | 9 | 9 | 78.8 |
| Hammond | All Students | 251 | 488 | 53 | 84 | 160 | 105 | 86 | 71.9 |
|  | Asian | 44 | 112 | 13 | 26 | 42 | 21 | 10 | 65.2 |
|  | Black/African American | 53 | 88 | 21 | 21 | 27 | 14 | 5 | 52.3 |
|  | Hispanic/Latino | 24 | 34 | 1 | 4 | 15 | 9 | 5 | 85.3 |
|  | White | 101 | 200 | 11 | 25 | 56 | 52 | 56 | 82.0 |
|  | Two or More Races | 28 | 53 | 7 | 8 | 20 | 9 | 9 | 71.7 |
| Howard | All Students | 502 | 1,155 | 114 | 219 | 394 | 254 | 174 | 71.2 |
|  | Asian | 79 | 202 | 24 | 38 | 64 | 44 | 32 | 69.3 |
|  | Black/African American | 56 | 107 | 17 | 28 | 41 | 18 | 3 | 57.9 |
|  | Hispanic/Latino | 27 | 65 | 5 | 15 | 26 | 14 | 5 | 69.2 |
|  | White | 299 | 681 | 54 | 123 | 223 | 160 | 121 | 74.0 |
|  | Two or More Races | 41 | 100 | 14 | 15 | 40 | 18 | 13 | 71.0 |
| Long Reach | All Students | 218 | 458 | 45 | 88 | 137 | 116 | 72 | 71.0 |
|  | Asian | 59 | 141 | 16 | 26 | 43 | 30 | 26 | 70.2 |
|  | Black/African American | 47 | 91 | 14 | 24 | 20 | 22 | 11 | 58.2 |
|  | Hispanic/Latino | 20 | 36 | 5 | 7 | 8 | 12 | 4 | 66.7 |
|  | White | 82 | 168 | 7 | 31 | 58 | 44 | 28 | 77.4 |
|  | Two or More Races | 10 | 22 | 3 | 0 | 8 | 8 | 3 | 86.4 |

Note. "All Students" includes American Indian/Alaskan Native and Hawaiian/Pacific Islander students.

Appendix C (continued)
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 Race/Ethnicity for Each High School, 2015

| High School | Student Group | $N$ Test Takers | $\begin{aligned} & N \text { Exams } \\ & \text { Taken } \\ & \hline \end{aligned}$ | Number of exams receiving a score of: |  |  |  |  | \% Exams 3 or Higher |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 | 2 | 3 | 4 | 5 |  |
| Marriotts Ridge | All Students | 453 | 1,021 | 34 | 102 | 264 | 300 | 321 | 86.7 |
|  | Asian | 152 | 369 | 11 | 43 | 84 | 105 | 126 | 85.4 |
|  | Black/African American | 13 | 34 | 0 | 4 | 9 | 7 | 14 | 88.2 |
|  | Hispanic/Latino | 17 | 35 | 1 | 6 | 10 | 9 | 9 | 80.0 |
|  | White | 249 | 539 | 21 | 44 | 150 | 171 | 153 | 87.9 |
|  | Two or More Races | 22 | 44 | 1 | 5 | 11 | 8 | 19 | 86.4 |
| Mt. Hebron | All Students | 389 | 864 | 25 | 65 | 183 | 312 | 279 | 89.6 |
|  | Asian | 145 | 361 | 13 | 26 | 86 | 116 | 120 | 89.2 |
|  | Black/African American | 17 | 30 | 3 | 3 | 4 | 14 | 6 | 80.0 |
|  | Hispanic/Latino | 18 | 27 | 0 | 1 | 6 | 7 | 13 | 96.3 |
|  | White | 192 | 415 | 7 | 33 | 81 | 159 | 135 | 90.4 |
|  | Two or More Races | 15 | 28 | 2 | 2 | 5 | 14 | 5 | 85.7 |
| Oakland Mills | All Students | 175 | 320 | 22 | 62 | 116 | 82 | 38 | 73.8 |
|  | Asian | 25 | 54 | 2 | 11 | 20 | 16 | 5 | 75.9 |
|  | Black/African American | 36 | 69 | 7 | 11 | 23 | 21 | 7 | 73.9 |
|  | Hispanic/Latino | 17 | 28 | 6 | 4 | 15 | 1 | 2 | 64.3 |
|  | White | 76 | 133 | 6 | 31 | 42 | 37 | 17 | 72.2 |
|  | Two or More Races | 21 | 36 | 1 | 5 | 16 | 7 | 7 | 83.3 |
| Reservoir | All Students | 376 | 743 | 57 | 141 | 254 | 173 | 118 | 73.4 |
|  | Asian | 89 | 214 | 19 | 32 | 71 | 57 | 35 | 76.2 |
|  | Black/African American | 69 | 121 | 14 | 26 | 43 | 25 | 13 | 66.9 |
|  | Hispanic/Latino | 36 | 66 | 4 | 13 | 25 | 18 | 6 | 74.2 |
|  | White | 157 | 287 | 17 | 58 | 98 | 64 | 50 | 73.9 |
|  | Two or More Races | 22 | 50 | 3 | 12 | 14 | 7 | 14 | 70.0 |
| River Hill | All Students | 551 | 1,324 | 62 | 143 | 335 | 391 | 393 | 84.5 |
|  | Asian | 190 | 555 | 19 | 49 | 118 | 158 | 211 | 87.7 |
|  | Black/African American | 22 | 47 | 8 | 10 | 12 | 14 | 3 | 61.7 |
|  | Hispanic/Latino | 16 | 28 | 0 | 1 | 10 | 8 | 9 | 96.4 |
|  | White | 300 | 640 | 34 | 79 | 180 | 193 | 154 | 82.3 |
|  | Two or More Races | 22 | 53 | 1 | 4 | 14 | 18 | 16 | 90.6 |
| Wilde Lake | All Students | 252 | 476 | 20 | 66 | 137 | 129 | 124 | 81.9 |
|  | Asian | 36 | 82 | 4 | 11 | 19 | 25 | 23 | 81.7 |
|  | Black/African American | 51 | 75 | 6 | 22 | 27 | 15 | 5 | 62.7 |
|  | Hispanic/Latino | 23 | 35 | 0 | 8 | 12 | 7 | 8 | 77.1 |
|  | White | 118 | 239 | 10 | 20 | 68 | 65 | 76 | 87.4 |
|  | Two or More Races | 23 | 44 | 0 | 5 | 10 | 17 | 12 | 88.6 |

[^1]Appendix D
AP Course Enrollment and AP Exam Performance by High School, 2015

| High School | AP Content | AP Exam | $N$ Enrolled in AP Course | $\begin{array}{r} \hline N \text { Exams } \\ \text { Taken } \end{array}$ | $n$ Exams 3 or Higher | \% Exams 3 or Higher |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Atholton | English | English Language \& Composition | 124 | 113 | 105 | 92.9 |
|  |  | English Literature \& Composition | 61 | 24 | 22 | 91.7 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 24 | * | * | * |
|  |  | Art: Studio Art - 3-D Design | * | * | * | * |
|  |  | Art: Studio Art - Drawing | 12 | * | * | * |
|  |  | History of Art | 12 | * | * | * |
|  |  | Music Theory | * | * | * | * |
|  | Foreign Language | Chinese Language and Culture | * | * | * | * |
|  |  | French Language | 11 | * | * | * |
|  |  | Spanish Language | 20 | * | * | * |
|  | Mathematics | Calculus AB | 117 | 83 | 73 | 88.0 |
|  |  | Calculus BC | 43 | 34 | * | $\geq 95.0$ |
|  |  | Statistics | 78 | 46 | 40 | 87.0 |
|  | Science | Biology | 50 | 32 | 25 | 78.1 |
|  |  | Chemistry | 45 | 42 | 24 | 57.1 |
|  |  | Environmental Science | 52 | * | * | * |
|  |  | Physics 1 | * | * | * | * |
|  |  | Physics C - Electricity \& Magnetism | 16 | 10 | 7 | 70.0 |
|  |  | Physics C-Mechanics | 40 | 26 | 21 | 80.8 |
|  | Social Studies | Economics: Macroeconomics | 33 | 21 | 13 | 61.9 |
|  |  | Economics: Microeconomics | 33 | 24 | 17 | 70.8 |
|  |  | Government \& Politics: Comparative | * | * | * | * |
|  |  | Government \& Politics: US | 77 | 67 | 56 | 83.6 |
|  |  | Human Geography | 32 | 14 | * | $\geq 95.0$ |
|  |  | Psychology | 131 | 25 | 17 | 68.0 |
|  |  | U.S. History | * | * | * | * |
|  |  | World History | 99 | 81 | 72 | 88.9 |
|  | Technology | Computer Science A | 20 | 23 | 21 | 91.3 |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

| Appendix D (continued) <br> AP Course Enrollment and AP Exam Performance |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High School | AP Content | AP Exam | $N$ Enrolled in AP Course | $N$ Exams Taken | $n$ Exams 3 or Higher | \% Exams 3 or Higher |
| Centennial | English | English Language \& Composition | 136 | 138 | 122 | 88.4 |
|  |  | English Literature \& Composition | 142 | 114 | 95 | 83.3 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 29 | 13 | * | $\geq 95.0$ |
|  |  | Art: Studio Art - 3-D Design | 18 | * | * | * |
|  |  | Art: Studio Art - Drawing | * | * | * | * |
|  |  | Music Theory | * | * | * | * |
|  | Foreign Language | Chinese Language and Culture | * | * | * | * |
|  |  | French Language | 20 | 14 | 13 | 92.9 |
|  |  | German Language | 11 | 11 | * | $\geq 95.0$ |
|  |  | Italian Language and Culture | * | * | * | * |
|  |  | Spanish Language | 39 | 32 | 30 | 93.8 |
|  |  | Spanish Literature | * | * | * | * |
|  | Mathematics | Calculus AB | 142 | 141 | 122 | 86.5 |
|  |  | Calculus BC | 57 | 55 | * | $\geq 95.0$ |
|  |  | Statistics | 58 | 53 | 44 | 83.0 |
|  | Science | Biology | 96 | 93 | 84 | 90.3 |
|  |  | Chemistry | 53 | 48 | 41 | 85.4 |
|  |  | Environmental Science | 65 | 48 | 29 | 60.4 |
|  |  | Physics 1 | * | 25 | 20 | 80.0 |
|  |  | Physics C - Electricity \& Magnetism | 21 | 21 | * | $\geq 95.0$ |
|  |  | Physics C-Mechanics | 51 | 49 | * | $\geq 95.0$ |
|  | Social Studies | Economics: Macroeconomics | 57 | 46 | 34 | 73.9 |
|  |  | Economics: Microeconomics | 57 | 42 | 37 | 88.1 |
|  |  | European History | 49 | 33 | 25 | 75.8 |
|  |  | Government \& Politics: US | 131 | 129 | 106 | 82.2 |
|  |  | Human Geography | 44 | 28 | 23 | 82.1 |
|  |  | Psychology | 158 | 108 | 84 | 77.8 |
|  |  | US History | 43 | 41 | 35 | 85.4 |
|  |  | World History | 104 | 93 | 72 | 77.4 |
|  | Technology | Computer Science A | 42 | 41 | 36 | 87.8 |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

| Appendix D (continued) <br> AP Course Enrollment and AP Exam Performance by High School, 20 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High School | AP Content | AP Exam | $N$ Enrolled in AP Course | $N$ Exams Taken | $n$ Exams 3 or Higher | $\begin{gathered} \% \text { Exams } 3 \\ \text { or Higher } \\ \hline \end{gathered}$ |
| Glenelg | English | English Language \& Composition | 113 | 112 | 99 | 88.4 |
|  |  | English Literature \& Composition | 98 | 91 | 83 | 91.2 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 76 | * | * | * |
|  |  | Art: Studio Art - 3-D Design | * | * | * | * |
|  |  | Art: Studio Art - Drawing | 23 | * | * | * |
|  |  | Music Theory | * | * | * | * |
|  | Foreign Language | French Language | 11 | * | * | * |
|  |  | German Language | * | * | * | * |
|  |  | Latin: Vergil | 10 | * | * | * |
|  |  | Spanish Language | 15 | 13 | * | $\geq 95.0$ |
|  | Mathematics | Calculus AB | 145 | 136 | 97 | 71.3 |
|  |  | Calculus BC | 50 | 49 | 44 | 89.8 |
|  |  | Statistics | 86 | 73 | 65 | 89.0 |
|  | Science | Biology | 26 | 17 | 16 | 94.1 |
|  |  | Chemistry | 36 | 30 | 22 | 73.3 |
|  |  | Environmental Science | 34 | 27 | 21 | 77.8 |
|  |  | Physics 1 | * | * | * | * |
|  |  | Physics C - Electricity \& Magnetism | * | * | * | * |
|  |  | Physics C-Mechanics | 44 | 37 | 30 | 81.1 |
|  | Social Studies | Economics: Macroeconomics | 29 | * | * | * |
|  |  | Economics: Microeconomics | 29 | 22 | 17 | 77.3 |
|  |  | European History | 19 | * | * | * |
|  |  | Government \& Politics: US | 96 | 95 | 68 | 71.6 |
|  |  | Psychology | 98 | 73 | 51 | 69.9 |
|  |  | U.S. History | 15 | 11 | * | $\geq 95.0$ |
|  |  | World History | 83 | 70 | 59 | 84.3 |
|  | Technology | Computer Science A | 28 | 22 | 19 | 86.4 |
| Hammond | English | English Language \& Composition | 52 | 53 | 40 | 75.5 |
|  |  | English Literature \& Composition | 54 | 43 | 26 | 60.5 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 25 | 15 | 12 | 80.0 |
|  |  | Art: Studio Art - 3-D Design | * | * | * | * |
|  |  | Art: Studio Art - Drawing | * | * | * | * |
|  | Foreign Language | Chinese Language and Culture | * | * | * | * |
|  |  | Italian Language and Culture | * | * | * | * |
|  |  | Spanish Language | 17 | 15 | 13 | 86.7 |
|  | Mathematics | Calculus AB | 50 | 47 | 40 | 85.1 |
|  |  | Calculus BC | 20 | 14 | * | $\geq 95.0$ |
|  |  | Statistics | 18 | 12 | 9 | 75.0 |
|  | Science | Biology | 23 | * | * | * |
|  |  | Chemistry | 15 | * | * | * |
|  |  | Physics 1 | * | * | * | * |
|  |  | Physics C - Electricity \& Magnetism | * | * | * | * |
|  |  | Physics C-Mechanics | 34 | 28 | 18 | 64.3 |
|  | Social Studies | Economics: Macroeconomics | 18 | 17 | 8 | 47.1 |
|  |  | Economics: Microeconomics | * | * | * | * |
|  |  | Government \& Politics: Comparative | 15 | 13 | 10 | 76.9 |
|  |  | Government \& Politics: US | 42 | 42 | 38 | 90.5 |
|  |  | Human Geography | * | * | * | * |
|  |  | Psychology | 98 | 83 | 57 | 68.7 |
|  |  | World History | 61 | 55 | 45 | 81.8 |
|  | Technology | Computer Science A | 19 | 17 | 7 | 41.2 |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

| Appendix D (continued) <br> AP Course Enrollment and AP Exam Performance by High School, 2015 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High School | AP Content | AP Exam | $N$ Enrolled in AP Course | $N$ Exams Taken | $n$ Exams 3 or Higher | \% Exams 3 or Higher |
| Howard | English | English Language \& Composition | 132 | 130 | 107 | 82.3 |
|  |  | English Literature \& Composition | 190 | 158 | 83 | 52.5 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 37 | 18 | * | $\geq 95.0$ |
|  |  | Art: Studio Art - 3-D Design | * | * | * | * |
|  |  | Art: Studio Art - Drawing | 12 | 10 | 9 | 90.0 |
|  |  | Music Theory | 11 | * | * | * |
|  | Foreign Language | French Language | 17 | 17 | 12 | 70.6 |
|  |  | German Language | * | * | * | * |
|  |  | Japanese Language and Culture | * | * | * | * |
|  |  | Latin: Vergil | * | * | * | * |
|  |  | Spanish Language | 43 | 41 | 36 | 87.8 |
|  | Mathematics | Calculus AB | 118 | 105 | 66 | 62.9 |
|  |  | Calculus BC | 56 | 54 | 51 | 94.4 |
|  |  | Statistics | 63 | 52 | 38 | 73.1 |
|  | Science | Biology | 59 | 48 | 40 | 83.3 |
|  |  | Chemistry | 35 | 36 | 18 | 50.0 |
|  |  | Environmental Science | 48 | 36 | 24 | 66.7 |
|  |  | Physics 1 | * | 22 | 6 | 27.3 |
|  |  | Physics C-Mechanics | 32 | 30 | 18 | 60.0 |
|  | Social Studies | Economics: Macroeconomics | 35 | 25 | 16 | 64.0 |
|  |  | Economics: Microeconomics | 35 | 31 | 20 | 64.5 |
|  |  | European History | 14 | 11 | * | $\geq 95.0$ |
|  |  | Government \& Politics: US | 98 | 98 | 78 | 79.6 |
|  |  | Psychology | 128 | 96 | 64 | 66.7 |
|  |  | U.S. History | * | * | * | * |
|  |  | World History | 97 | 90 | 77 | 85.6 |
|  | Technology | Computer Science A | 30 | 23 | 15 | 65.2 |
| Long Reach | English | English Language \& Composition | 87 | 67 | 44 | 65.7 |
|  |  | English Literature \& Composition | 102 | 49 | 33 | 67.3 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 28 | * | * | * |
|  |  | Art: Studio Art - Drawing | 22 | * | * | * |
|  | Foreign Language | Chinese Language and Culture | * | * | * | * |
|  |  | French Language | * | * | * | * |
|  |  | German Language | * | * | * | * |
|  |  | Spanish Language | 18 | * | * | * |
|  |  | Spanish Literature | * | * | * | * |
|  | Mathematics | Calculus AB | 53 | 42 | 33 | 78.6 |
|  |  | Calculus BC | 23 | 21 | 17 | 81.0 |
|  |  | Statistics | 29 | 21 | 18 | 85.7 |
|  | Science | Biology | 29 | 21 | 17 | 81.0 |
|  |  | Chemistry | 59 | 47 | 31 | 66.0 |
|  |  | Environmental Science | * | * | * | * |
|  |  | Physics 1 | * | * | * | * |
|  |  | Physics C-Electricity \& Magnetism | * | * | * | * |
|  |  | Physics C-Mechanics | 21 | 15 | * | $\geq 95.0$ |
|  | Social Studies | Economics: Macroeconomics | 39 | 23 | 15 | 65.2 |
|  |  | Economics: Microeconomics | 40 | * | * | * |
|  |  | Government \& Politics: US | 25 | 17 | 13 | 76.5 |
|  |  | Human Geography | * | * | * | * |
|  |  | Psychology | 58 | 45 | 29 | 64.4 |
|  |  | World History | 81 | 47 | 26 | 55.3 |
|  | Technology | Computer Science A | 10 | * | * | * |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

Appendix D (continued)
AP Course Enrollment and AP Exam Performance by High School, 2015

|  |  | AP Course Enrollment and AP Exam Performance by High School, 2015 |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

| Appendix D (continued) <br> AP Course Enrollment and AP Exam Performance |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High School | AP Content | AP Exam | $N$ Enrolled in AP Course | $\begin{gathered} N \text { Exams } \\ \text { Taken } \end{gathered}$ | $n$ Exams 3 or Higher | \% Exams 3 or Higher |
| Mt. Hebron | English | English Language \& Composition | 76 | 72 | 64 | 88.9 |
|  |  | English Literature \& Composition | 78 | 41 | * | $\geq 95.0$ |
|  | Fine Arts | Art: Studio Art - 2-D Design | 31 | 14 | 12 | 85.7 |
|  |  | Art: Studio Art - Drawing | * | * | * | * |
|  |  | Music Theory | * | * | * |  |
|  | Foreign Language | Chinese Language and Culture | * | * | * | * |
|  |  | French Language | * | * | * | * |
|  |  | German Language | * | * | * | * |
|  |  | Italian Language and Culture | * | * | * | * |
|  |  | Spanish Language | 18 | 17 | * | $\geq 95.0$ |
|  | Mathematics | Calculus AB | 140 | 113 | 103 | 91.2 |
|  |  | Calculus BC | 81 | 75 | * | $\geq 95.0$ |
|  |  | Statistics | 76 | 62 | 52 | 83.9 |
|  | Science | Biology | 40 | 31 | 28 | 90.3 |
|  |  | Chemistry | 35 | 27 | 22 | 81.5 |
|  |  | Environmental Science | 57 | 46 | 38 | 82.6 |
|  |  | Physics 1 | * | * | * | * |
|  |  | Physics C - Electricity \& Magnetism | 21 | 20 | * | $\geq 95.0$ |
|  |  | Physics C-Mechanics | 42 | 33 | 29 | 87.9 |
|  | Social Studies | Economics: Macroeconomics | * | * | * | * |
|  |  | Economics: Microeconomics | 116 | 92 | * | $\geq 95.0$ |
|  |  | European History | 23 | 20 | * | $\geq 95.0$ |
|  |  | Government \& Politics: Comparative | 12 | 11 | 9 | 81.8 |
|  |  | Government \& Politics: US | 45 | 43 | 38 | 88.4 |
|  |  | Human Geography | * | * | * | * |
|  |  | Psychology | 147 | 100 | 81 | 81.0 |
|  |  | US History | * | * | * | * |
|  |  | World History | 12 | 10 | 8 | 80.0 |
|  | Technology | Computer Science A | 18 | 17 | 14 | 82.4 |
| Oakland Mills | English | English Language \& Composition | 59 | 52 | 34 | 65.4 |
|  |  | English Literature \& Composition | 43 | 24 | 18 | 75.0 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 21 | 11 | * | $\geq 95.0$ |
|  |  | Art: Studio Art - 3-D Design | * | * | * | * |
|  |  | Art: Studio Art - Drawing | * | * | * | * |
|  |  | Music Theory | * | * | * | * |
|  | Foreign Language | French Language | * | * | * | * |
|  |  | Spanish Language | * | * | * | * |
|  |  | Spanish Literature | 11 | * | * | * |
|  | Mathematics | Calculus AB | 34 | 27 | 22 | 81.5 |
|  |  | Calculus BC | 20 | 15 | 13 | 86.7 |
|  |  | Statistics | 37 | 23 | * | $\geq 95.0$ |
|  | Science | Biology | * | * | * | * |
|  |  | Chemistry | 15 | 12 | 10 | 83.3 |
|  |  | Environmental Science | * | * | * | * |
|  |  | Physics C - Electricity \& Magnetism | * | * | * | * |
|  |  | Physics C-Mechanics | 11 | * | * | * |
|  | Social Studies | Government \& Politics: US | 53 | 44 | 28 | 63.6 |
|  |  | Human Geography | 21 | 10 | 8 | 80.0 |
|  |  | Psychology | 40 | 23 | 17 | 73.9 |
|  |  | World History | 44 | 34 | 23 | 67.6 |
|  | Technology | Computer Science A | 10 | * | * | * |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

Appendix D (continued)
AP Course Enrollment and AP Exam Performance by High School, 2015

|  | AP Course Enrollment and AP Exam Performance by High School, 2015 |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

Appendix D (continued)
AP Course Enrollment and AP Exam Performance by High School, 2015

| High School | AP Content | AP Exam | $N$ Enrolled in AP Course | $\begin{gathered} N \text { Exams } \\ \text { Taken } \end{gathered}$ | $n$ Exams 3 or Higher | $\begin{gathered} \text { \% Exams } 3 \\ \text { or Higher } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| River Hill | English | English Language \& Composition | 128 | 123 | 103 | 83.7 |
|  |  | English Literature \& Composition | 103 | 78 | 69 | 88.5 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 54 | 28 | * | $\geq 95.0$ |
|  |  | Art: Studio Art - 3-D Design | * | * | * | * |
|  |  | Art: Studio Art - Drawing | * | * | * | * |
|  |  | History of Art | 18 | 10 | 7 | 70.0 |
|  |  | Music Theory | * | * | * | * |
|  | Foreign Language | Chinese Language and Culture | * | 14 | * | $\geq 95.0$ |
|  |  | French Language | 18 | 13 | * | $\geq 95.0$ |
|  |  | German Language | * | * | * | * |
|  |  | Spanish Language | 17 | 10 | * | $\geq 95.0$ |
|  | Mathematics | Calculus AB | 149 | 123 | 113 | 91.9 |
|  |  | Calculus BC | 92 | 92 | * | $\geq 95.0$ |
|  |  | Statistics | 90 | 71 | 66 | 93.0 |
|  | Science | Biology | 67 | 61 | * | $\geq 95.0$ |
|  |  | Chemistry | 55 | 52 | 49 | 94.2 |
|  |  | Environmental Science | 73 | 57 | 36 | 63.2 |
|  |  | Physics 1 | * | 14 | 6 | 42.9 |
|  |  | Physics C-Electricity \& Magnetism | 21 | 17 | 16 | 94.1 |
|  |  | Physics C-Mechanics | 45 | 32 | 27 | 84.4 |
|  | Social Studies | Economics: Macroeconomics | 29 | 22 | 13 | 59.1 |
|  |  | Economics: Microeconomics | 29 | 22 | 17 | 77.3 |
|  |  | European History | 18 | * | * | * |
|  |  | Government \& Politics: US | 154 | 140 | 104 | 74.3 |
|  |  | Human Geography | 17 | * | * | * |
|  |  | Psychology | 212 | 157 | 120 | 76.4 |
|  |  | US History | * | * | * | * |
|  |  | World History | 154 | 129 | 109 | 84.5 |
|  | Technology | Computer Science A | 26 | 24 | * | $\geq 95.0$ |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.

Appendix D (continued)
AP Course Enrollment and AP Exam Performance by High School, 2015

| High School | AP Content | AP Exam | $N$ Enrolled in AP Course | $\begin{array}{r} N \text { Exams } \\ \text { Taken } \end{array}$ | $n$ Exams 3 or Higher | \% Exams 3 or Higher |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wilde Lake | English | English Language \& Composition | 28 | 27 | 24 | 88.9 |
|  |  | English Literature \& Composition | 45 | 33 | 30 | 90.9 |
|  | Fine Arts | Art: Studio Art - 2-D Design | 32 | * | * | * |
|  |  | Art: Studio Art - 3-D Design | * | * | * | * |
|  |  | Art: Studio Art - Drawing | 15 | 10 | 6 | 60.0 |
|  | Foreign Language | Chinese Language and Culture | * | * | * | * |
|  |  | French Language | * | * | * | * |
|  |  | German Language | * | * | * | * |
|  |  | Spanish Language | 23 | 12 | 5 | 41.7 |
|  |  | Spanish Literature | * | * | * | * |
|  | Mathematics | Calculus AB | 68 | 63 | * | $\geq 95.0$ |
|  |  | Calculus BC | 17 | 15 | * | $\geq 95.0$ |
|  |  | Statistics | 66 | 41 | 30 | 73.2 |
|  | Science | Biology | 30 | 24 | 19 | 79.2 |
|  |  | Chemistry | 18 | 15 | 13 | 86.7 |
|  |  | Environmental Science | 10 | * | * | * |
|  |  | Physics 1 | * | 10 | 2 | 20.0 |
|  |  | Physics C-Mechanics | 17 | * | * | * |
|  | Social Studies | Economics: Macroeconomics | 12 | * | * | * |
|  |  | Economics: Microeconomics | 12 | * | * | * |
|  |  | Government \& Politics: Comparative | 16 | * | * | * |
|  |  | Government \& Politics: US | 53 | 47 | 43 | 91.5 |
|  |  | Psychology | 112 | 63 | 48 | 76.2 |
|  |  | US History | 14 | * | * | * |
|  |  | World History | 65 | 57 | 46 | 80.7 |
|  | Technology | Computer Science A | * | * | * | * |

Note: Percentages 95 percent or greater and 5 percent or less are noted as $\geq 95.0$ or $\leq 5.0$, respectively, and counts suppressed as "*"; results for exams with fewer than 10 test takers are also suppressed to protect student privacy.


[^0]:    ${ }^{1}$ 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.

[^1]:    Note. "All Students" includes American Indian/Alaskan Native and Hawaiian/Pacific Islander students.

