## HOWARD COUNTY

PUBLIC SCHOOL SYSTEM

## Board of Education of Howard County Meeting Agenda Item

| Title: | Report on Participation and Performance in Advanced <br> Placement (AP) Courses and Exams for 2010 | DATE: |
| :--- | :--- | :--- |$\quad$ October 21, 2010

Overview: The number of HCPSS students taking AP exams continues to rise, as does the number of students who perform well on them. In 2010, HCPSS students took a recordsetting 7,140 AP exams. Eighty-one percent of these exams earned a score of 3 or higher, compared to 58 percent nationally and 61 percent in Maryland. These results capped a sustained trend of higher participation and performance in AP testing. Between 2005 and 2010, the overall participation of HCPSS students in AP testing has increased 55 percent, while the number of AP exams taken has increased 64 percent. At the same time, overall, HCPSS students earned 2,332 more scores of 3 or higher in 2010 than in 2005 . African American students had the largest gains in the percentage of AP exams earning scores of 3 or higher, from 57.8 percent in 2005 to 64.8 percent in 2010 , an increase of 7 percentage points. The attached report provides a summary of trend participation and performance in AP courses and exams by student groups and school; the report has expanded in response to requests by the community for more specific detail.

## Recommendmation/Future Direction:

The 2010 results and trend data show that HCPSS schools are making progress in preparing students for college-level work and that more students are meeting the challenge of higher expectations. School staff will continue efforts to identify students with AP potential and to further increase participation and performance levels in all student groups.

## Submitted by:

## Approval/ Concurrence:

Sydney L. Cousin
Superintendent

Theresa R. Alban Chief Operating Officer

## 2010 Advanced Placement Exam Results

## Background

An Advanced Placement (AP) exam is a measure of a student's mastery of college-level studies in specific academic content areas while still in high school. Each AP exam is scored using a five-point scale. According to the College Board, which owns and administers the AP program, an exam score of 3 or higher is a strong predictor of a student's ability to succeed in college and earn a degree. ${ }^{1}$ Furthermore, a score of 3 or higher may earn students credit, advanced placement, or both for college.

## Enrollment in AP Courses

AP courses in the Howard County Public School System (HCPSS) program offer students opportunities to participate in rigorous academic experiences. Many students take more than one AP course, and not all AP students take the corresponding exams.

There has been steady growth in participation in AP courses since 2005. In 2010, there were 4,323 students enrolled in AP courses representing 26.2 percent of the 16,507 students enrolled in Grades 9 to 12 and a gain in AP course enrollment of 7.2 percentage points (from 19.0 to 26.2 percent) from 2005. Nearly half of the 2010 senior and junior classes (48.3 and 41.5 percent, respectively) participated in these challenging courses. Table 1 presents these data.

Table 1: Participation in AP Courses, 2005 and 2010

|  |  |  | 2010 |  |  |  |
| :---: | ---: | :---: | :---: | ---: | :---: | :---: |
| Gr. | End-of- <br> Year <br> Enrollment | Number <br> Enrolled <br> in AP | Percent <br> Enrolled <br> in AP | End-of- <br> Year <br> Enrollment | Number <br> Enrolled <br> in AP | Percent <br> Enrolled <br> in AP |
| 12 | 3,390 | 1,424 | 42.0 | 4,031 | 1,946 | 48.3 |
| 11 | 3,729 | 895 | 24.0 | 3,952 | 1,641 | 41.5 |
| 10 | 3,871 | 542 | 14.0 | 4,008 | 718 | 17.9 |
| 9 | 4,078 | 2 | 0.0 | 4,516 | 18 | 0.4 |
| Total | 15,068 | 2,863 | 19.0 | 16,507 | 4,323 | 26.2 |

[^0]Table 2 shows the breakdown by race and ethnicity of the 4,323 students in Grades 9 to 12 enrolled in AP courses in 2010.

Table 2: 2010 Participation in AP Courses by Student Group

|  | End-of-Year <br> Enrollment | Number Enrolled <br> $\operatorname{In}$ AP | Percent Enrolled <br> $\operatorname{In}$ AP |
| :--- | :---: | :---: | :---: |
| All Students | 16,507 | 4,323 | 26.2 |
| Male | 8,527 | 1,947 | 22.8 |
| Female | 7,980 | 2,376 | 29.8 |
| Asian | 2,489 | 1,020 | 41.0 |
| African | 3,666 | 446 | 12.2 |
| American | 9,370 | 2,714 | 29.0 |
| White | 856 | 126 | 14.7 |
| Hispanic |  |  |  |

Note: The number of test takers by race/ethnicity will not add up to the All Students total because some students do not report their race/ethnicity.

## 2010 HCPSS Participation in AP Testing and Trend

HCPSS students took a record-setting 7,140 AP exams in 2010. In addition to taking more exams, HCPSS students substantially outperformed exam takers in Maryland and the nation (Table 3). The percentage of AP exams taken by HCPSS students that earned scores of 3 or higher ( 81.1 percent) was 20.2 points greater than the percentage for students in Maryland ( 60.9 percent) and 23.2 points greater than the percentage for students in the nation (57.9 percent).

Table 3: 2010 AP Exam Participation and Performance

|  | Number of AP <br> Exams Taken | Number AP Exam <br> Scores 3 or Higher | Percentage AP Exam <br> Scores 3 or Higher |
| :--- | :---: | :---: | :---: |
| HCPSS | 7,140 | 5,791 | 81.1 |
| Maryland | 103,977 | 63,300 | 60.9 |
| Nation | $3,213,225$ | $1,861,669$ | 57.9 |

The steady increase in the number of AP exams taken has been accompanied by an equally steady increase in the participation of students in AP testing for all student groups (Table 4). Between 2005 and 2010, the overall participation of HCPSS students in AP testing has increased from 2,172 to 3,368 (54.9 percent). At the same time, the number of AP exams taken has increased from 4,345 to 7,140 tests ( 64.3 percent).

The greatest gains in participation have occurred among African American and Hispanic students. These student groups also had the highest increases in the number of AP exams taken, which has more than doubled since 2005. The American Indian student group is not included due to numbers fewer than five in 2005 and 2010.

Table 4: Number of AP Test Takers and Percentage of AP Exams Taken 005 and 2010

|  | Number of Test Takers |  |  |  | Number of AP Exams Taken |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2005 | 2010 | Change | Percent <br> Change | 2005 | 2010 | Change | Percent <br> Change |
| All Students | 2,172 | 3,368 | $+1,196$ | +54.9 | 4,345 | 7,140 | $+2,795$ | +64.3 |
| Male | 1,037 | 1,480 | +443 | +42.7 | 2,156 | 3,369 | $+1,213$ | +56.3 |
| Female | 1,135 | 1,888 | +753 | +66.3 | 2,189 | 3,771 | $+1,582$ | +72.3 |
| Asian | 534 | 826 | +292 | +54.7 | 1,234 | 2,070 | +836 | +67.7 |
| African American | 105 | 271 | +166 | +158.1 | 166 | 454 | +288 | +173.5 |
| White | 1,498 | 2,174 | +676 | +45.1 | 2,890 | 4,458 | $+1,568$ | +54.3 |
| Hispanic | 33 | 83 | +50 | +151.5 | 52 | 135 | +83 | +159.6 |

Note: The number of test takers by race/ethnicity will not add up to the All Students total because some students do not report their race/ethnicity.

## HCPSS AP Performance Trends

As participation and number of exams taken have increased over the past years, the number and percentages of exams scoring at the college mastery level (scores 3, 4 and 5) on the AP tests have also increased for most student groups (Table 5).

- Overall, HCPSS students earned 2,332 more scores of 3 or higher in 2010 than in 2005 (from 3,459 to 5,791 ). This represents a gain of 1.5 percentage points (from 79.6 to 81.1) in the percentage of AP exams in which they received a score of 3 or higher.
- African American students earned 198 more exam scores of 3 or higher in 2010 than in 2005 (from 96 to 294), while Hispanic students earned 53 more exam scores of 3 or higher (from 41 to 94 ) during the same time period. Proportionally, however, the percentage of exams scoring at the college mastery level for Hispanic students declined by 9.2 percentage points in 2010 relative to 2005.
- African American students had the largest gains in the percentage of AP exams earning scores of 3 or higher, from 57.8 percent in 2005 to 64.8 percent in 2010, an increase of 7 percentage points.

Table 5: Comparison of the Number and Percentage of Exam Scores 3 or Higher, 2005 and 2010

|  | Number of AP Exam <br> Scores 3 or Higher |  |  | Percentage of AP Exam <br> Scores 3 or Higher |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 2005 | 2010 | Change | 2005 | 2010 | Change |
| All Students | 3,459 | 5,791 | $+2,332$ | 79.6 | 81.1 | +1.5 |
| Male | 1,733 | 2,827 | $+1,094$ | 80.4 | 83.9 | +3.5 |
| Female | 1,723 | 2,964 | $+1,241$ | 78.7 | 78.6 | -0.1 |
| Asian | 982 | 1,702 | +720 | 79.6 | 82.2 | +2.6 |
| African American | 96 | 294 | +198 | 57.8 | 64.8 | +7.0 |
| White | 2,338 | 3,682 | $+1,344$ | 80.9 | 82.6 | +1.7 |
| Hispanic | 41 | 94 | +53 | 78.8 | 69.6 | -9.2 |

The trend in the percentage of exams earning a score of 4 or higher further underscores the steady level of success among most HCPSS student groups (Table 6). Overall, the percentage of exams that earned a score of 4 or higher grew 2.8 percentage points (from 52.8 to 55.6 percent) between 2005 and 2010.

Table 6: Comparison of the Number and Percentage of Exam Scores 4 or Higher 2005 and 2010

|  | Number of AP Exam <br> Scores 4 or Higher |  |  | Percentage of AP Exam <br> Scores 4 or Higher |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
|  | 2005 | 2010 | Change | 2005 | 2010 | Change |
| All Students | 2,294 | 3,970 | $+1,676$ | 52.8 | 55.6 | +2.8 |
| Male | 1,199 | 2,032 | +833 | 55.6 | 60.3 | +4.7 |
| Female | 1,095 | 1,938 | +843 | 50.0 | 51.4 | +1.4 |
| Asian | 689 | 1,250 | +561 | 55.8 | 60.4 | +4.6 |
| African American | 53 | 159 | +106 | 31.9 | 35.0 | +3.1 |
| White | 1,523 | 2,501 | +978 | 52.7 | 56.1 | +3.4 |
| Hispanic | 27 | 48 | +21 | 51.9 | 35.6 | -16.3 |

## Performance by Schools

The participation of HCPSS students in AP exams has increased steadily at most high schools since 2005 (Table 7). Most schools have also seen an increase in the number of AP exams taken. Most schools have been successful in raising or maintaining high achievement on the AP exams with scores at 3 or higher. A similar trend is evident with the percentage of scores at 4 or higher. In 2010, at least four schools achieved gains in both participation (number of test takers and number of exams taken) and performance (percentage of scores 3 or higher and 4 or higher) relative to 2005. The schools are Howard, Long Reach, Reservoir, and Wilde Lake.

Table 7: Participation and Performance on AP Exams by School, 2005 and 2010

|  | Number of Test Takers |  |  | Number of Exams Taken |  |  | Percentage of Scores 3 or Above |  |  | Percentage of Scores 4 or Above |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 | 2010 | Change | 2005 | 2010 | Change | 2005 | 2010 | Change | 2005 | 2010 | Change |
| HCPSS | 2,172 | 3,368 | +1,196 | 4,345 | 7,140 | +2,795 | 79.6 | 81.1 | +1.5 | 52.8 | 55.6 | +2.8 |
| Atholton | 157 | 255 | +98 | 301 | 571 | +270 | 86.0 | 85.5 | -0.5 | 55.5 | 57.6 | +2.1 |
| Centennial | 429 | 422 | -7 | 934 | 1,040 | +106 | 84.6 | 90.2 | +5.6 | 64.3 | 69.7 | +5.4 |
| Glenelg | 191 | 258 | +67 | 369 | 468 | +99 | 77.0 | 75.2 | -1.8 | 40.9 | 41.2 | +0.3 |
| Hammond | 131 | 168 | +37 | 238 | 315 | +77 | 78.6 | 67.6 | -11.0 | 55.9 | 40.3 | -15.6 |
| Howard | 162 | 348 | +186 | 246 | 762 | +516 | 59.3 | 71.1 | +11.8 | 32.1 | 39.5 | +7.4 |
| Long Reach | 146 | 159 | +13 | 257 | 297 | +40 | 70.8 | 75.1 | +4.3 | 39.7 | 44.8 | +5.1 |
| MarriottsRidge | * | 340 | * | * | 626 | * | * | 86.4 | * | * | 62.5 | * |
| Mt. Hebron | 171 | 336 | +165 | 422 | 752 | +330 | 91.2 | 87.1 | -4.1 | 71.3 | 67.7 | -3.6 |
| Oakland Mills | 88 | 142 | +54 | 148 | 266 | +118 | 75.7 | 77.1 | +1.4 | 53.4 | 53.4 | +0.0 |
| Reservoir | 142 | 276 | +134 | 262 | 522 | +260 | 65.3 | 77.0 | +11.7 | 33.2 | 50.2 | +17.0 |
| River Hill | 381 | 479 | +98 | 865 | 1,171 | +306 | 82.4 | 80.4 | -2.0 | 51.8 | 55.3 | +3.5 |
| Wilde Lake | 174 | 193 | +19 | 303 | 350 | +47 | 75.2 | 82.3 | +7.1 | 47.5 | 60.0 | +12.5 |

* Marriotts Ridge High School did not have students participating in AP testing until 2007-2008.

Appendix A contains 2010 AP participation and performance overall on AP exams as well as on select AP exams with number of scores from 1 to 5 , systemwide and by school. To protect student confidentiality, no data are reported when the number of scores is fewer than five.

## Summary

The 2010 AP results are the latest example of a sustained trend of increased participation and performance on AP exams for HCPSS students. Particularly encouraging are the gains in the number of African American and Hispanic students who participate in AP testing. The participation and performance of African American students, defined as scoring a 3 or higher on an AP exam, has been especially noteworthy. The number of African American test takers and the number of exams they have taken have doubled since 2005, while the number of exams in which they earned a score of 3 or higher has nearly tripled.

HCPSS will continue its commitment to offer rigorous and challenging courses and other curricular opportunities for all students in order to support their preparation for academic achievement and success.

Appendix A
INROADS Accountability Reports

AP Participation and Performance by School, 2009-2010

| School | Test Takers | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 255 | 571 | 29 | 54 | 159 | 167 | 162 |
| Centennial HS | 422 | 1,040 | 23 | 79 | 213 | 301 | 424 |
| Glenelg HS | 258 | 468 | 42 | 74 | 159 | 123 | 70 |
| Hammond HS | 168 | 315 | 44 | 58 | 86 | 67 | 60 |
| Howard HS | 348 | 762 | 84 | 136 | 241 | 164 | 137 |
| Long Reach HS | 159 | 297 | 25 | 49 | 90 | 70 | 63 |
| Marriotts Ridge HS | 340 | 626 | 22 | 63 | 150 | 177 | 214 |
| Mt. Hebron HS | 336 | 752 | 31 | 66 | 146 | 245 | 264 |
| Oakland Mills HS | 142 | 266 | 24 | 37 | 63 | 69 | 73 |
| Reservoir HS | 276 | 522 | 36 | 84 | 140 | 139 | 123 |
| River Hill HS | 479 | 1,171 | 60 | 170 | 293 | 351 | 297 |
| Wilde Lake HS | 193 | 350 | 18 | 44 | 78 | 93 | 117 |
| All Schools | 3,376 | 7,140 | 438 | 914 | 1,818 | 1,966 | 2,004 |

Biology

| School | Exams <br> Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 41 | 6 | 7 | 8 | 10 | 10 |
| Centennial HS | 74 | 7 | 8 | 11 | 18 | 30 |
| Glenelg HS | 7 | * | * | * | * | * |
| Hammond HS | 16 | 11 | * | 0 | * | * |
| Howard HS | 40 | 9 | * | 11 | 7 | 9 |
| Long Reach HS | 15 | * | * | * | * | * |
| Marriotts Ridge HS | 18 | * | * | * | * | 6 |
| Mt. Hebron HS | 24 | 6 | 10 | 7 | * | 0 |
| Oakland Mills HS | 6 | * | * | 0 | * | * |
| Reservoir HS | 12 | * | * | * | * | 5 |
| River Hill HS | 50 | * | * | 13 | 21 | 11 |
| Wilde Lake HS | 15 | * | * | * | * | 6 |
| All Schools | 318 | 54 | 45 | 63 | 72 | 84 |

* Results are not included due to numbers fewer than five.

Calculus AB

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 76 | 5 | * | 20 | 16 | 32 |
| Centennial HS | 107 | * | * | 14 | 17 | 73 |
| Glenelg HS | 53 | 6 | * | 16 | 11 | 16 |
| Hammond HS | 40 | * | 6 | 8 | 8 | 14 |
| Howard HS | 45 | * | * | 11 | 7 | 19 |
| Long Reach HS | 34 | * | * | 8 | * | 16 |
| Marriotts Ridge HS | 68 | 5 | * | 16 | 16 | 28 |
| Mt. Hebron HS | 114 | * | * | 10 | 39 | 62 |
| Oakland Mills HS | 36 | * | * | * | 8 | 19 |
| Reservoir HS | 36 | * | 5 | 5 | 8 | 16 |
| River Hill HS | 91 | 6 | 11 | 14 | 26 | 34 |
| Wilde Lake HS | 47 | 0 | 0 | * | 9 | 36 |
| All Schools | 747 | 42 | 46 | 126 | 168 | 365 |

* Results are not included due to numbers fewer than five.

Calculus BC

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 23 | * | 0 | * | 5 | 15 |
| Centennial HS | 46 | * | 0 | * | 7 | 37 |
| Glenelg HS | 21 | * | * | 6 | 5 | 7 |
| Hammond HS | 18 | * | 0 | * | * | 12 |
| Howard HS | 20 | 0 | * | * | * | 12 |
| Long Reach HS | 11 | 0 | 0 | * | * | 8 |
| Marriotts Ridge HS | 31 | 0 | 0 | * | 7 | 21 |
| Mt. Hebron HS | 38 | * | 0 | * | 0 | 34 |
| Oakland Mills HS | 12 | 0 | * | * | 0 | 9 |
| Reservoir HS | 16 | 0 | * | * | * | 10 |
| River Hill HS | 61 | 0 | * | 7 | 10 | 43 |
| Wilde Lake HS | 21 | 0 | 0 | 0 | * | 18 |
| All Schools | 318 | 6 | 5 | 31 | 50 | 226 |

* Results are not included due to numbers fewer than five.

Chemistry

| School | Exams <br> Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| Atholton HS | 35 | $*$ | 6 | 15 | 9 | $*$ |
| Centennial HS | 27 | $*$ | $*$ | 5 | 7 | 13 |
| Glenelg HS | 17 | $*$ | $*$ | 7 | $*$ | $*$ |
| Hammond HS | 13 | 9 | $*$ | $*$ | $*$ | 0 |
| Howard HS | 22 | $*$ | $*$ | 5 | 7 | 5 |
| Long Reach HS | 15 | 6 | 0 | 5 | $*$ | $*$ |
| Marriotts Ridge HS | 6 | 0 | 0 | $*$ | $*$ | $*$ |
| Mt. Hebron HS | 13 | $*$ | $*$ | $*$ | $*$ | $*$ |
| Oakland Mills HS | 13 | $*$ | $*$ | $*$ | 6 | $*$ |
| Reservoir HS | 18 | 6 | $*$ | $*$ | $*$ | $*$ |
| River Hill HS | 30 | $*$ | $*$ | $*$ | 12 | 10 |
| Wilde Lake HS | 8 | 0 | 0 | $*$ | 5 | 0 |
| All Schools | 217 | 35 | 23 | 56 | 60 | 43 |

* Results are not included due to numbers fewer than five.

Computer Science A

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 6 | 0 | 0 | * | * | * |
| Centennial HS | 21 | * | * | * | 7 | 7 |
| Glenelg HS | 6 | 0 | * | * | 0 | * |
| Hammond HS | 6 | * | 0 | * | * | 0 |
| Howard HS | 6 | * | 0 | * | * | 0 |
| Long Reach HS | * | * | * | 0 | 0 | * |
| Marriotts Ridge HS | 15 | 0 | 0 | * | * | 9 |
| Mt. Hebron HS | 11 | * | * | * | * | * |
| Oakland Mills HS | 10 | * | * | * | * | * |
| Reservoir HS | * | * | * | * | 0 | 0 |
| River Hill HS | 12 | * | 0 | * | 5 | * |
| Wilde Lake HS | * | * | 0 | 0 | 0 | * |
| All Schools | 102 | 19 | 6 | 22 | 25 | 30 |

* Results are not included due to numbers fewer than five.

Economics: Macroeconomics

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 8 | 0 | * | * | 0 | 6 |
| Centennial HS | 68 | * | 5 | 14 | 26 | 22 |
| Hammond HS | * | 0 | 0 | 0 | 0 | * |
| Howard HS | 8 | * | 0 | * | * | * |
| Long Reach HS | * | * | 0 | 0 | 0 | 0 |
| Marriotts Ridge HS | * | 0 | 0 | 0 | * | 0 |
| Mt. Hebron HS | 64 | 0 | * | * | 23 | 37 |
| Reservoir HS | 8 | * | * | * | * | * |
| River Hill HS | * | * | * | * | * | * |
| Wilde Lake HS | 9 | 0 | 0 | 0 | 0 | 0 |
| All Schools | 169 | 6 | 11 | 24 | 56 | 72 |

* Results are not included due to numbers fewer than five.

Economics: Microeconomics

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 9 | 0 | 0 | * | 0 | 7 |
| Centennial HS | 63 | * | 6 | 11 | 23 | 22 |
| Hammond HS | 8 | 0 | * | * | * | * |
| Howard HS | 15 | 6 | * | * | * | * |
| Long Reach HS | * | * | 0 | 0 | 0 | * |
| Marriotts Ridge HS | 13 | * | * | * | 6 | * |
| Mt. Hebron HS | 8 | 0 | 0 | * | 6 | * |
| River Hill HS | * | * | 0 | 0 | 0 | * |
| Wilde Lake HS | * | * | 0 | * | * | 0 |
| All Schools | 121 | 9 | 12 | 24 | 40 | 36 |

* Results are not included due to numbers fewer than five.

English Language \& Composition

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 99 | * | 13 | 32 | 35 | 18 |
| Centennial HS | 98 | 0 | * | 19 | 38 | 37 |
| Glenelg HS | 83 | 0 | 13 | 30 | 27 | 13 |
| Hammond HS | 42 | * | 6 | 14 | 16 | 5 |
| Howard HS | 102 | 0 | 16 | 45 | 26 | 15 |
| Long Reach HS | 41 | * | 6 | 14 | 13 | 6 |
| Marriotts Ridge HS | 74 | 0 | 6 | 19 | 27 | 22 |
| Mt. Hebron HS | 131 | * | 18 | 47 | 48 | 17 |
| Oakland Mills HS | 45 | 0 | 5 | 15 | 16 | 9 |
| Reservoir HS | 47 | 0 | * | 16 | 16 | 11 |
| River Hill HS | 128 | 0 | 15 | 38 | 51 | 24 |
| Wilde Lake HS | 22 | 0 | * | 6 | 8 | 7 |
| All Schools | 912 | 5 | 107 | 295 | 321 | 184 |

* Results are not included due to numbers fewer than five.

English Literature \& Composition

| School | Exams | Number of Exams Receiving a Score of: |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Taken | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
|  | 36 | 0 | ${ }^{*}$ | 11 | 17 | 5 |
| Centennial HS | 69 | 0 | ${ }^{*}$ | 19 | 32 | 15 |
| Glenelg HS | 56 | $*$ | $*$ | 22 | 24 | 7 |
| Hammond HS | 33 | 0 | 7 | 10 | 10 | 6 |
| Howard HS | 80 | $*$ | 21 | 28 | 16 | 12 |
| Long Reach HS | 38 | $*$ | 12 | 14 | 7 | $*$ |
| Marriotts Ridge HS | 24 | 0 | $*$ | 10 | 11 | $*$ |
| Mt. Hebron HS | 46 | 0 | $*$ | 13 | 17 | 14 |
| Oakland Mills HS | 22 | 0 | $*$ | 7 | 6 | 8 |
| Reservoir HS | 39 | 0 | 5 | 12 | 18 | $*$ |
| River Hill HS | 148 | $*$ | 43 | 48 | 38 | 15 |
| Wilde Lake HS | 33 | 0 | $*$ | 9 | 16 | $*$ |
| All Schools | $\mathbf{6 2 4}$ | $\mathbf{9}$ | $\mathbf{1 0 4}$ | $\mathbf{2 0 3}$ | $\mathbf{2 1 2}$ | $\mathbf{9 6}$ |

* Results are not included due to numbers fewer than five.

Environmental Science

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 11 | * | * | * | 5 | * |
| Centennial HS | 21 | 0 | 7 | * | 9 | * |
| Glenelg HS | 18 | * | 6 | 5 | * | * |
| Howard HS | 20 | * | 5 | 8 | 5 | 0 |
| Marriotts Ridge HS | * | * | * | * | 0 | 0 |
| Mt. Hebron HS | 10 | * | * | * | * | * |
| Oakland Mills HS | * | 0 | 0 | * | * | * |
| Reservoir HS | * | 0 | * | 0 | 0 | 0 |
| River Hill HS | 33 | * | 6 | * | 14 | 9 |
| Wilde Lake HS | * | 0 | 0 | * | 0 | 0 |
| All Schools | 122 | 13 | 28 | 24 | 41 | 16 |

* Results are not included due to numbers fewer than five.

European History

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Centennial HS | 15 | * | * | * | * | 5 |
| Hammond HS | 7 | * | * | * | 0 | * |
| Howard HS | 19 | * | * | 7 | 6 | * |
| Long Reach HS | * | 0 | 0 | * | 0 | 0 |
| Marriotts Ridge HS | * | 0 | 0 | 0 | * | * |
| Reservoir HS | 9 | * | 0 | * | * | 0 |
| River Hill HS | 46 | 9 | 7 | 21 | * | 6 |
| Wilde Lake HS | * | 0 | 0 | * | 0 | * |
| All Schools | 103 | 16 | 10 | 40 | 19 | 18 |

* Results are not included due to numbers fewer than five.

French Language

| School | Exams | Number of Exams Receiving a Score of: |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Taken | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
|  | 6 | 0 | 0 | $*$ | $*$ | 0 |
| Centennial HS | $*$ | 0 | $*$ | $*$ | $*$ | 0 |
| Glenelg HS | $*$ | $*$ | $*$ | 0 | 0 | 0 |
| Hammond HS | $*$ | $*$ | 0 | $*$ | 0 | 0 |
| Howard HS | 12 | $*$ | 5 | 5 | $*$ | 0 |
| Long Reach HS | $*$ | 0 | $*$ | 0 | 0 | 0 |
| Mt. Hebron HS | 8 | 0 | 0 | $*$ | $*$ | 6 |
| Oakland Mills HS | 7 | $*$ | $*$ | $*$ | 0 | 0 |
| Reservoir HS | 6 | $*$ | $*$ | $*$ | $*$ | 0 |
| River Hill HS | 11 | 0 | $*$ | $*$ | 5 | $*$ |
| Wilde Lake HS | $*$ | 0 | 0 | 0 | $*$ | 0 |
| All Schools | $\mathbf{6 2}$ | $\mathbf{1 0}$ | $\mathbf{1 5}$ | $\mathbf{1 7}$ | $\mathbf{1 3}$ | $\mathbf{7}$ |

* Results are not included due to numbers fewer than five.

Government \& Politics: Comparative

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 11 | 0 | * | * | * | 7 |
| Marriotts Ridge HS | * | 0 | 0 | 0 | 0 | * |
| Mt. Hebron HS | 18 | 0 | 0 | * | * | 10 |
| River Hill HS | 16 | * | * | * | 5 | * |
| Wilde Lake HS | * | 0 | 0 | 0 | 0 | * |
| All Schools | 48 | 2 | 5 | 7 | 11 | 23 |

* Results are not included due to numbers fewer than five.

Government \& Politics: U.S.

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 31 | 0 | 0 | 8 | 5 | 18 |
| Centennial HS | 100 | 5 | 11 | 34 | 21 | 29 |
| Glenelg HS | 64 | 14 | 21 | 15 | 9 | 5 |
| Hammond HS | 35 | * | 14 | 13 | * | * |
| Howard HS | 80 | 5 | 9 | 45 | 12 | 9 |
| Long Reach HS | 27 | * | * | 9 | 9 | * |
| Marriotts Ridge HS | 77 | 5 | 19 | 28 | 16 | 9 |
| Mt. Hebron HS | 53 | * | 9 | 13 | 12 | 17 |
| Oakland Mills HS | 21 | * | 5 | 10 | * | * |
| Reservoir HS | 45 | * | 7 | 15 | 7 | 15 |
| River Hill HS | 84 | * | 13 | 30 | 18 | 20 |
| Wilde Lake HS | 42 | 0 | 0 | 12 | 12 | 18 |
| All Schools | 659 | 42 | 111 | 232 | 125 | 149 |

* Results are not included due to numbers fewer than five.

Physics C - Electricity \& Magnetism

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Centennial HS | 14 | 0 | 0 | * | * | 12 |
| Hammond HS | * | 0 | * | 0 | 0 | 0 |
| Marriotts Ridge HS | 15 | 0 | * | 0 | * | 11 |
| Mt. Hebron HS | 11 | 0 | 0 | 0 | * | 9 |
| Oakland Mills HS | * | * | * | 0 | 0 | 0 |
| Reservoir HS | 7 | 0 | * | * | * | * |
| River Hill HS | 15 | * | * | * | * | 8 |
| All Schools | 66 | 3 | 6 | 4 | 10 | 43 |

* Results are not included due to numbers fewer than five.

Physics C - Mechanics

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 15 | * | * | * | * | 5 |
| Centennial HS | 36 | 0 | 0 | * | 10 | 24 |
| Glenelg HS | 14 | 5 | * | * | * | * |
| Hammond HS | 17 | * | * | 5 | 5 | * |
| Howard HS | 19 | * | * | 0 | 9 | 5 |
| Long Reach HS | 7 | 0 | * | * | * | * |
| Marriotts Ridge HS | 29 | * | 7 | 11 | * | 8 |
| Mt. Hebron HS | 33 | * | * | 9 | 12 | 8 |
| Oakland Mills HS | * | * | * | * | * | 0 |
| Reservoir HS | 26 | 5 | * | 9 | 6 | * |
| River Hill HS | 43 | * | 6 | 14 | 9 | 11 |
| Wilde Lake HS | * | * | * | * | 0 | 0 |
| All Schools | 247 | 23 | 31 | 61 | 61 | 71 |

* Results are not included due to numbers fewer than five.

Psychology

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 60 | * | 11 | 16 | 24 | 5 |
| Centennial HS | 89 | 0 | 7 | 17 | 31 | 34 |
| Glenelg HS | 43 | * | 5 | 14 | 16 | 6 |
| Hammond HS | 22 | 6 | * | * | 5 | * |
| Howard HS | 83 | 6 | 7 | 18 | 25 | 27 |
| Long Reach HS | 28 | * | * | 8 | 9 | 7 |
| Marriotts Ridge HS | 105 | 0 | * | 18 | 42 | 44 |
| Mt. Hebron HS | 62 | 8 | 14 | 10 | 19 | 11 |
| Oakland Mills HS | 18 | * | * | * | 5 | * |
| Reservoir HS | 71 | 6 | 9 | 11 | 18 | 27 |
| River Hill HS | 109 | 13 | 20 | 23 | 36 | 17 |
| Wilde Lake HS | 26 | * | 9 | 7 | 5 | * |
| All Schools | 716 | 54 | 91 | 149 | 235 | 187 |

* Results are not included due to numbers fewer than five.

Spanish Language

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 9 | 0 | 0 | * | * | * |
| Centennial HS | 14 | * | * | 5 | * | * |
| Glenelg HS | 9 | 0 | * | 5 | * | 0 |
| Hammond HS | * | * | * | * | 0 | 0 |
| Howard HS | 29 | 7 | 10 | 6 | * | * |
| Long Reach HS | 6 | * | 0 | * | * | 0 |
| Marriotts Ridge HS | 15 | 0 | 5 | * | * | * |
| Mt. Hebron HS | 13 | 0 | * | 0 | 8 | * |
| Oakland Mills HS | 8 | * | * | * | * | 0 |
| Reservoir HS | 19 | * | 5 | * | 6 | * |
| River Hill HS | 16 | * | * | 6 | * | * |
| Wilde Lake HS | 6 | * | 0 | * | * | 0 |
| All Schools | 147 | 22 | 32 | 39 | 37 | 17 |

* Results are not included due to numbers fewer than five.

Statistics

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 23 | * | * | * | 11 | 5 |
| Centennial HS | 35 | 0 | * | 6 | 11 | 14 |
| Glenelg HS | 14 | * | * | 7 | * | * |
| Hammond HS | 7 | 0 | * | * | 0 | 0 |
| Howard HS | 56 | 18 | 12 | 15 | 7 | * |
| Long Reach HS | 22 | * | * | 9 | 5 | 5 |
| Marriotts Ridge HS | 41 | * | 11 | 11 | 9 | 8 |
| Mt. Hebron HS | 50 | * | 0 | 7 | 25 | 17 |
| Oakland Mills HS | 11 | 0 | * | * | * | * |
| Reservoir HS | 37 | * | 6 | 11 | 12 | * |
| River Hill HS | 94 | * | 8 | 16 | 36 | 33 |
| Wilde Lake HS | 25 | * | 11 | * | 7 | * |
| All Schools | 415 | 31 | 62 | 95 | 130 | 97 |

* Results are not included due to numbers fewer than five.
U.S. History

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | * | * | $\underline{0}$ | $\underline{0}$ | * | * |
| Centennial HS | 39 | 0 | * | 8 | 17 | 11 |
| Glenelg HS | 5 | 0 | * | * | * | * |
| Hammond HS | 7 | 0 | 0 | * | * | * |
| Long Reach HS | * | $\underline{0}$ | * | 0 | 0 | 0 |
| Marriotts Ridge HS | 7 | 0 | 0 | * | * | * |
| Mt. Hebron HS | * | * | $\underline{0}$ | * | 0 | $\underline{0}$ |
| Oakland Mills HS | * | $\underline{0}$ | $\underline{0}$ | 0 | $\underline{0}$ | * |
| River Hill HS | 24 | 0 | * | 6 | 8 | 9 |
| Wilde Lake HS | 15 | 0 | * | 5 | * | * |
| All Schools | 104 | 1 | 9 | 25 | 35 | 34 |

* Results are not included due to numbers fewer than five.

World History

| School | Exams Taken | Number of Exams Receiving a Score of: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |
| Atholton HS | 54 | * | * | 23 | 7 | 16 |
| Centennial HS | 60 | * | 12 | 24 | 9 | 14 |
| Glenelg HS | 50 | * | 5 | 22 | 14 | 7 |
| Hammond HS | 34 | 0 | 7 | 11 | 12 | * |
| Howard HS | 77 | 5 | 23 | 23 | 14 | 12 |
| Long Reach HS | 39 | 0 | 10 | 15 | 10 | * |
| Marriotts Ridge HS | 52 | 0 | * | 9 | 17 | 24 |
| Mt. Hebron HS | 39 | * | * | 9 | 16 | 12 |
| Oakland Mills HS | 42 | * | 5 | 12 | 15 | 9 |
| Reservoir HS | 98 | * | 20 | 33 | 30 | 13 |
| River Hill HS | 135 | * | 26 | 37 | 39 | 29 |
| Wilde Lake HS | 57 | * | 11 | 15 | 16 | 11 |
| All Schools | 737 | 24 | 126 | 233 | 199 | 155 |

* Results are not included due to numbers fewer than five.


[^0]:    ${ }^{1}$ Geiser, S. \& Santelices, V. (2004). The Role of Advanced Placement and Honors Courses in College Admissions. Center for Studies in Higher Education. University of California, Berkeley.

