

Office of the Superintendent of School  
MONTGOMERY COUNTY PUBLIC SCHOOLS  
Rockville, Maryland

December 4, 2019

MEMORANDUM

To: Members of the Board of Education  
From: Jack R. Smith, Superintendent of Schools  
Subject: District Trend Data (STPC-10-23-19-01,-A,-B)

During the *Review of Plan: Data Framework, Review of Outcomes/Program Indicators Feedback Report* discussion, Board members requested the following information:

**Question A**

Ms. Dixon requested a printed copy for the Committee members of the 3-year trend data for all schools, including their associated percentages, as referenced by Dr. Johnson.

**Response**

Please reference Attachment A, which provides three-year trend data for all schools. Associated percentages also are included.

**Question B**

Ms. Silvestre requested that the AP/IB data under the District Data Trends tab of the Strategic Plan section of the website be disaggregated further to include data from the equity accountability model target groups.

**Response**

Please reference Attachment B, which presents Advanced Placement/International Baccalaureate (AP/IB) data tables from the Montgomery County Public Schools' web page of District Data Trends. The information is disaggregated by focus groups.

If you have any questions, please contact Dr. Janet S. Wilson, associate superintendent, Office of Shared Accountability, at 240-740-2930.

JRS:HRJ:JSW:lgp

Attachments

Copy to:  
Executive Staff  
Ms. Webb

## Montgomery County Public Schools District Data Trends

### AP/IB Course Enrollment (All High School Students)

Advanced Placement (AP) and International Baccalaureate (IB) courses serve as key components for a rigorous instructional program as well as a foretaste for college-level courses. Students who take AP or IB courses may participate in exams related to the course content.

AP/IB Course Enrollment	Asian			White			Black or African American			Hispanic/Latino			Other		
	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ
2018	5,313	74.4%	↑	9,746	67.1%	↑	4,523	43.4%	↑	5,160	36.2%	↑	1,359	62.9%	↑
2017	4,788	69.0%	↑	9,241	63.5%	↑	3,934	38.4%	↑	4,338	31.3%	↑	1,186	57.0%	↑
2016	4,387	65.9%		9,107	62.1%		3,632	16.4%		3,908	30.7%		1,112	54.4%	

N = Number of MCPS high school students enrolled in one or more AP or IB courses

% = The percentage of students enrolled in one or more AP or IB courses from each racial/ethnic group

Δ = The change from one year to the next in the percentage of students within each racial/ethnic group of students enrolled (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

### AP Exam Performance – Exam Scores of 3 or Higher (All High School Students)

Advanced Placement (AP) courses serve as key components for a rigorous instructional program as well as a foretaste for college-level courses. Students who earn AP exam scores of 3 or higher may receive college credit or advanced placement upon entry to college.

Year	Asian			White			Black or African American			Hispanic/Latino			Other		
	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ
2018	8,435	77.3%	↓	13,049	78.2%	↓	2,382	47.1%	↓	3,042	55.2%	↓	1,696	75.9%	↓
2017	7,651	79.1%	↓	12,613	80.7%	↑	2,196	49.6%	↓	2,811	58.5%	↓	1,509	78.1%	↓
2016	6,905	79.2%		12,755	80.6%		2,056	50.1%		2,577	60.0%		1,449	54.4%	

N = Number of AP Exams with a score of 3 or higher

% = The percentage of exams with a score of 3 or higher within the race/ethnic group

Δ = The change from one year to the next in the percentage of AP exams with a score of 3 or higher within each race/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

## IB Exam Performance – Exam Scores of 4 or Higher (All High School Students)

International Baccalaureate (IB) courses serve as key components for a rigorous instructional program as well as a foretaste for college-level courses. Students who earn IB exam scores of 4 or higher may receive college credit or advanced placement upon entry to college.

Year	Asian			White			Black or African American			Hispanic/Latino			Other		
	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ
2018	646	77.2%	↓	1,119	82.7%	↓	442	50.1%	↓	410	50.3%	↓	180	75.3%	↓
2017	649	80.9%	↑	1,122	88.3%	↑	382	52.0%	↓	473	63.6%	↓	173	78.6%	↓
2016	618	79.7%		1,130	87.6%		310	55.3%		393	66.8%		151	79.5%	

N = Number of IB Exams with a score of 4 or higher

% = The percentage of IB exams with a score of 4 or higher within the race/ethnic group

Δ = The change from one year to the next in the percentage of IB exams with a score of 4 or higher within each race/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

## PSAT Participation – (Grade 10 Students)

The PSAT aligns with best practices in classroom instruction that develop knowledge, skills, and understanding that the research indicates are most important for college and career readiness success. In addition to serving as a prediction tool for how a student will perform on the SAT, the PSAT scores yield data that help identify students enrolled in regular-level classes who have the potential to perform well in challenging courses, including Advanced Placement (AP) courses.

Year	Asian			White			Black or African American			Hispanic/Latino			Two or More Races		
	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ
2018	1,751	97.4%	↑	3,597	95.2%	↑	2,384	90.9%	↑	3,164	85.3%	↑	500	93.7%	↑
2017	1,705	97.2%	↑	3,585	94.6%	↑	2,351	88.5%	↓	2,916	83.1%	↓	482	91.9%	↓
2016	1,659	96.9%		3,524	94.2%		2,359	89.6%		2,785	85.8%		508	94.1%	

N = Number of PSAT participation

% = The percentage of PSAT participation within the race/ethnic group

Δ = The change from one year to the next in the percentage of PSAT participation within each race/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

Notes: First-time Grade 10 students enrolled in English for Speakers of Other Languages level 1 or 2 instruction and students enrolled in a certificate curriculum are excluded in the analysis. Students from alternative schools, American Indian or Alaskan Native, and Native Hawaiian or Other Pacific Islander students are included but not reported separately.

## ACT Exam Participation and Performance (High School Graduates)

The ACT is a standardized test used for college admissions. There are four subtest scores (i.e., English, math, reading, and science) and a composite score. The composite score is the average of the four test scores and ranges from 1 (low) to 36 (high). This dashboard includes data on the performance and participation of MCPS graduates as it relates to the ACT.

Year	Asian			White			Black or African American			Hispanic/Latino			Other		
	#	Score	Δ	#	Score	Δ	#	Score	Δ	#	Score	Δ	#	Score	Δ
2018	599	28	↔	1,668	27	↑	687	20	↔	573	22	↑	195	27	↔
2017	656	28	↑	2,049	27	↔	771	20	↔	539	21	↔	195	26	↔
2016	561	27		1,787	27		753	20		455	21		173	26	

N = Number of students taking the ACT

Score = Average composite score

Δ = The change from one year to the next in the average ACT composite score within each racial/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

## SAT Exam Participation and Performance (High School Graduates)

The SAT is a standardized test used for college admissions developed by The College Board. There are two sections of the SAT that are scored: 1) Evidence-Based Reading and Writing (ERW) and 2) Math. Each section score ranges from 200 to 800. There is also a total score, a composite of the two sections, which ranges from 400 to 1600. The SAT was redesigned for the 2017 school year—scores from prior years should not be used for comparison. This dashboard includes data on the performance MCPS graduates as it relates to the SAT.

Year	Asian			White			Black or African American			Hispanic/Latino			Other		
	#	Score	Δ	#	Score	Δ	#	Score	Δ	#	Score	Δ	#	Score	Δ
2018	1,409	1280	↑	2,327	1253	↑	1,684	1036	↑	1,324	1045	↑	379	1228	↑
2017	877	1206		1,861	1223		1,504	1020		1,138	1037		253	1173	

N = Number of students taking the SAT

Score = Average composite score

Δ = The change from one year to the next in the average SAT composite score within each racial/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

Advanced Placement (AP) and International Baccalaureate (IB) tests are college-level exams on specific subjects and are administered upon the completion of an AP or IB course taken at a student's high school. Students who earn AP exam scores of 3 or higher or IB exam scores of 4 or higher may receive college credit or advanced placement upon entry to college.

## AP Exams Taken (All High School Students)

Year	Asian		White		Black or African American		Hispanic/Latino		Other	
	#	Δ	#	Δ	#	Δ	#	Δ	#	Δ
2018	10,911	↑	16,689	↑	5,060	↑	5,509	↑	2,235	↑
2017	9,668	↑	15,635	↑	4,427	↑	4,802	↑	1,931	↑
2016	8,718		15,825		4,102		4,296		1,819	

N = Number of AP exams taken by MCPS high school students

Δ = The change from one year to the next in the number of exams taken by MCPS high school students within each racial/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

## IB Exams Taken (All High School Students)

Year	Asian		White		Black or African American		Hispanic/Latino		Other	
	#	Δ	#	Δ	#	Δ	#	Δ	#	Δ
2018	837	↑	1,353	↑	883	↑	815	↑	239	↑
2017	802	↑	1,270	↓	734	↑	744	↑	220	↑
2016	775		1,290		561		588		190	

N = Number of IB exams taken by MCPS high school students

Δ = The change from one year to the next in the number of exams taken by MCPS high school students within each racial/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

## AP Exam Performance – Exam Scores of 3 or Higher (All High School Students)

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Year	Asian			White			Black or African American			Hispanic/Latino			Other		
	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ	#	%	Δ
2018	8,435	77.3%	↓	12,755	78.2%	↓	2,382	47.1%	↓	3,042	55.2%	↓	1,696	75.9%	↓
2017	7,651	79.1%	↓	12,613	80.7%	↑	2,196	49.6%	↓	2,811	58.5%	↓	1,509	78.1%	↓
2016	6,905	79.7%		13,049	80.6%		2,056	50.1%		2,577	60.0%		1,449	79.7%	

N = Number of AP Exams with a score of 3 or higher

% = The percentage of exams with a score of 3 or higher within the race/ethnic group

Δ = The change from one year to the next in the percentage of AP exams with a score of 3 or higher within each race/ethnic group (A green arrow shows an increase while a red arrow shows a decrease. A yellow arrow indicates no change)

## Number of Bridge Plan Projects

Students who meet the eligibility criteria listed in COMAR and have failed to satisfy any of their Maryland High School Graduation Assessment requirements by passing the assessment outright or through a combined score may satisfy unmet requirements through successful completion of applicable Bridge Plan projects. The Bridge Plan for Academic Validation provides remediation and a path to graduation that is tied to State standards. The Bridge Plan for Academic Validation provides a process that helps ensure all students have a fair opportunity to demonstrate their knowledge and skills if traditional assessments are not effective measures.

Year	Algebra	Biology	English	Government
2019	456	0	1,018	1,064
2018	0	0	2	814
2017	0	67	0	522
2016	0	623	0	7

- Note: Bridge Plans were not required for Algebra and English during school years 2016 and 2017 as the State was transitioning between test versions. Students were awarded participation credit during these years and did not need to pass the assessment but only take the assessment.
- Note: Bridge Plans were not required for Biology beginning in school year 2018 as the State is transitioning to the new High School-Maryland Integrated Science Assessment (HS-MISA). Students are currently awarded participation credit for taking the assessment.

## MCAP (PARCC) ELA Performance – (Students in Grades 3 through 8 and Grade 10)

The Maryland Comprehensive Assessment Program (MCAP) English Language Arts (ELA) is a required assessment in the state of Maryland. Formerly known as PARCC, the assessment measures complex skills like critical thinking, persuasive writing and problem solving. The tests are scored on a five-point scale—Level 1: Did not yet meet expectations; Level 2: Partially Met Expectations; Level 3: Approached Expectations; Level 4: Met expectations and Level 5: Exceeded Expectations. Students scoring 4's and 5's are considered to be on track to be college and career ready.

Grade	Year	Level 1 Not Met		Level 2 Partially Met		Level 3 Approached		Level 4 Met		Level 5 Exceeded	
		N	%	N	%	N	%	N	%	N	%
ELA03	2018	2,020	16.8%	1,806	15.0%	2,476	20.6%	4,848	40.4%	852	7.1%
	2017	2,024	16.5%	1,918	15.6%	2,507	20.4%	4,950	40.3%	879	7.2%
	2016	2,054	17.3%	1,994	16.8%	2,520	21.3%	4,472	37.7%	813	6.9%
ELA04	2018	1,252	10.1%	1,808	14.5%	2,730	21.9%	4,397	35.3%	2,256	18.1%
	2017	1,138	9.5%	1,829	15.3%	2,742	23.0%	4,487	37.6%	1,750	14.6%
	2016	1,230	10.5%	1,755	14.9%	2,912	24.8%	4,373	37.2%	1,474	12.6%
ELA05	2018	1,192	9.8%	1,854	15.2%	2,901	23.7%	5,442	44.5%	830	6.8%

Grade	Year	Level 1 Not Met		Level 2 Partially Met		Level 3 Approached		Level 4 Met		Level 5 Exceeded	
		N	%	N	%	N	%	N	%	N	%
ELA06	2017	1,158	9.8%	1,810	15.3%	2,763	23.3%	5,290	44.6%	847	7.1%
	2016	1,035	9.0%	1,941	16.8%	2,749	23.9%	5,060	43.9%	736	6.4%
	2018	1,150	9.7%	2,020	17.0%	3,036	25.5%	4,447	37.4%	1,238	10.4%
ELA07	2017	1,013	8.8%	2,072	18.0%	3,054	26.5%	4,534	39.3%	858	7.4%
	2016	1,064	9.3%	1,863	16.4%	3,182	28.0%	4,559	40.1%	712	6.3%
	2018	1,374	11.7%	1,558	13.3%	2,448	20.9%	3,866	33.0%	2,459	21.0%
ELA08	2017	1,324	11.4%	1,512	13.0%	2,599	22.4%	4,244	36.5%	1,946	16.7%
	2016	1,515	13.5%	1,894	16.9%	2,840	25.3%	3,784	33.8%	1,173	10.5%
	2018	1,485	12.6%	1,635	13.9%	2,482	21.0%	4,652	39.4%	1,549	13.1%
ELA10	2017	1,595	13.9%	1,756	15.4%	2,605	22.8%	4,454	38.9%	1,029	9.0%
	2016	1,539	14.0%	1,745	15.8%	2,461	22.3%	4,339	39.4%	939	8.5%
	2018	1,524	12.4%	1,362	11.0%	2,068	16.8%	4,254	34.5%	3,131	25.4%
ELA10	2017	1,073	9.7%	1,019	9.2%	1,632	14.8%	4,056	36.7%	3,283	29.7%
	2016	2,422	20.3%	1,561	13.1%	2,196	18.4%	3,625	30.4%	2,112	17.7%

N = Number of students at proficiency level  
 % = The percentage of students at proficiency level

## MCAP (PARCC) Math Performance – (Students in Grades 3 through 8, Algebra 1 and Geometry)

The Maryland Comprehensive Assessment Program (MCAP) Mathematics (Math) is a required assessment in the state of Maryland. Formerly known as PARCC Math, it measures complex skills like critical thinking, mathematical reasoning, and problem solving. The tests are scored on a five-point scale—Level 1: Did not yet meet expectations; Level 2: Partially Met Expectations; Level 3: Approached Expectations; Level 4: Met expectations and Level 5: Exceeded Expectations. Students scoring 4's and 5's are considered to be on track to be college and career ready.

Grade	Year	Level 1 Not Met		Level 2 Partially Met		Level 3 Approached		Level 4 Met		Level 5 Exceeded	
		N	%	N	%	N	%	N	%	N	%
Math03	2018	1,201	9.9%	1,958	16.1%	2,525	20.8%	4,116	33.9%	2,358	19.4%
	2017	1,200	9.6%	1,893	15.1%	2,705	21.6%	4,374	35.0%	2,342	18.7%
	2016	1,219	10.2%	1,848	15.4%	2,480	20.7%	4,631	38.6%	1,826	15.2%
ELA04	2018	1,165	9.3%	2,170	17.3%	2,917	23.2%	5,078	40.4%	1,239	9.9%
	2017	1,227	10.1%	2,228	18.3%	2,898	23.8%	4,726	38.8%	1,104	9.1%
	2016	999	8.4%	2,356	19.8%	2,819	23.7%	4,833	40.6%	911	7.6%
ELA05	2018	1,253	10.2%	2,334	18.9%	2,939	23.8%	4,267	34.6%	1,530	12.4%

Grade	Year	Level 1 Not Met		Level 2 Partially Met		Level 3 Approached		Level 4 Met		Level 5 Exceeded	
		N	%	N	%	N	%	N	%	N	%
	2017	1,147	9.5%	2,414	20.0%	3,063	25.4%	4,110	34.1%	1,323	11.0%
	2016	1,001	8.6%	2,621	22.5%	2,791	23.9%	3,940	33.8%	1,317	11.3%
ELA06	2018	1,290	10.8%	2,572	21.6%	3,199	26.8%	3,804	31.9%	1,060	8.9%
	2017	1,454	12.5%	2,447	21.0%	3,035	26.0%	3,601	30.9%	1,121	9.6%
	2016	1,287	11.1%	2,312	20.0%	3,084	26.7%	3,872	33.5%	999	8.6%
ELA07	2018	999	11.0%	2,360	26.0%	2,968	32.7%	2,606	28.7%	137	1.5%
	2017	1,104	11.4%	2,368	24.4%	3,229	33.3%	2,798	28.9%	190	2.0%
	2016	1,120	12.0%	2,127	22.8%	3,171	34.0%	2,693	28.9%	216	2.3%
ELA08	2018	908	54.0%	497	29.5%	236	14.0%	41	2.4%	1	0.1%
	2017	1,303	53.0%	616	25.1%	422	17.2%	116	4.7%	0	0.0%
	2016	1,485	24.3%	1,296	21.2%	983	16.1%	1,616	26.4%	736	12.0%
Alg. 1	2018	1,770	11.0%	3,518	21.8%	4,087	25.4%	5,871	36.5%	856	5.3%
	2017	1,359	9.8%	2,870	20.7%	3,604	26.0%	5,418	39.0%	629	4.5%
	2016	1,366	11.0%	2,603	21.0%	2,889	23.3%	5,099	41.2%	421	3.4%
Geometry	2018	0	0.0%	13	0.7%	157	7.9%	1,185	59.4%	641	32.1%
	2017	2	0.1%	30	1.5%	245	12.2%	1,242	61.9%	486	24.2%
	2016	Geometry PARCC was not administered this year									

N = Number of students at proficiency level  
 % = The percentage of students at proficiency level

Attachment B

*AP/IB Course Enrollment*

	Non-FARMS All Other Student Groups		Non-FARMS Black or African American		Non-FARMS Hispanic/Latino		FARMS All Other Student Groups		FARMS Black or African American		FARMS Hispanic/Latino	
	#	%	#	%	#	%	#	%	#	%	#	%
2018	15378	70.8	2881	50.2	2868	44.4	1040	49.5	1642	35.0	2292	29.4
2017	14323	66.7	2485	44.9	2488	40.9	892	42.5	1449	30.7	1850	23.8
2016	13788	64.9	2298	41.9	2345	41.0	818	38.5	1334	28.5	1563	22.3

Attachment B

*AP Exam Performance – Exam Scores of 3 or Higher  
(All High School Students)*

	Non-FARMS All Other Student Groups		Non-FARMS Black or African American		Non-FARMS Hispanic/Latino		FARMS All Other Student Groups		FARMS Black or African American		FARMS Hispanic/Latino	
	#	%	#	%	#	%	#	%	#	%	#	%
2018	22302	78.8	1790	52.0	2149	61.5	878	56.7	592	36.5	893	44.3
2017	21039	81.2	1621	54.3	1992	65.4	734	55.6	575	39.8	819	46.6
2016	20398	81.1	1490	55.1	1862	65.5	711	59.1	566	40.5	715	49.2

Attachment B

*IB Exam Performance – Exam Scores of 4 or Higher  
(All High School Students)*

	Non-FARMS All Other Student Groups		Non-FARMS Black or African American		Non-FARMS Hispanic/Latino		FARMS All Other Student Groups		FARMS Black or African American		FARMS Hispanic/Latino	
	#	%	#	%	#	%	#	%	#	%	#	%
2018	1828	82.0	294	52.3	286	58.8	117	58.5	148	46.1	124	37.7
2017	1865	86.5	284	59.7	312	73.1	79	58.1	98	38.0	161	50.8
2016	1787	85.9	231	59.8	298	73.9	112	64.4	79	45.1	95	51.4

Attachment B

*AP Exam Taken  
(All High School Students)*

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	Non-FARMS All Other Student Groups	Non-FARMS Black or African American	Non-FARMS Hispanic/Latino	FARMS All Other Student Groups	FARMS Black or African American	FARMS Hispanic/Latino
	#	#	#	#	#	#
2018	28287	3440	3495	1548	1620	2014
2017	25915	2983	3044	1319	1444	1758
2016	25159	2706	2843	1203	1396	1453

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Attachment B

*IB Exam Taken  
(All High School Students)*

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	Non-FARMS All Other Student Groups	Non-FARMS Black or African American	Non-FARMS Hispanic/Latino	FARMS All Other Student Groups	FARMS Black or African American	FARMS Hispanic/Latino
	#	#	#	#	#	#
2018	2229	562	486	200	321	329
2017	2156	476	427	136	258	317
2016	2081	386	403	174	175	185

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