

This e-mail message has been approved for distribution by Dr. Henry R. Johnson, Jr., chief of staff. No hard copy will be provided.

**INFORMATION**

Office of Shared Accountability  
MONTGOMERY COUNTY PUBLIC SCHOOLS  
Rockville, Maryland

September 13, 2018

MEMORANDUM

To: All Principals

From: Janet S. Wilson, Associate Superintendent

Subject: **INFORMATION:** 2018 Final Partnership for Assessment of Readiness for College and Careers Student Results

The Maryland State Department of Education released the districtwide results of the 2018 Partnership for Assessment of Readiness for College and Careers (PARCC) in Mathematics 3–8 and Algebra 1 and English Language Arts (ELA)/Literacy 3–8 and 10 on Tuesday, August 28, 2018. Statewide performance indicated slight gains from 2017. The results for Montgomery County Public Schools (MCPS) also demonstrate some gains in performance, even as our students scored consistently higher than the state average. Performance trends among student subgroups continue to expose performance gaps that are consistent with other student achievement data we see in the district.

These exams measure whether students are meeting new, higher academic standards and mastering the knowledge and skills needed to be successful beyond high school. PARCC measures complex skills such as 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. Students who take the PARCC Algebra 1 and/or ELA/Literacy 10 assessments will have met their Maryland High School Assessment (MHSA) graduation requirement if they scored a 725 or higher (Level 3 or higher). Students who took the PARCC Algebra 1 assessment in Grade 6 or earlier require a score a 750 or higher (Level 4 or higher) to meet the graduation requirement. Student performance data for these courses also is included. To present valid comparisons across years and with Maryland, the results in this report are based on PARCC Consortium published results for the spring administrations.

### English Language Arts/Literacy and Mathematics Grades 3–5 Student Performance

MCPS students in Grades 3–5 continue to demonstrate improvement during the past three years in proficiency in both ELA/Literacy and Mathematics (Figure 1). MCPS students also performed better than the statewide averages in both content areas at the elementary grade levels (Table 1).

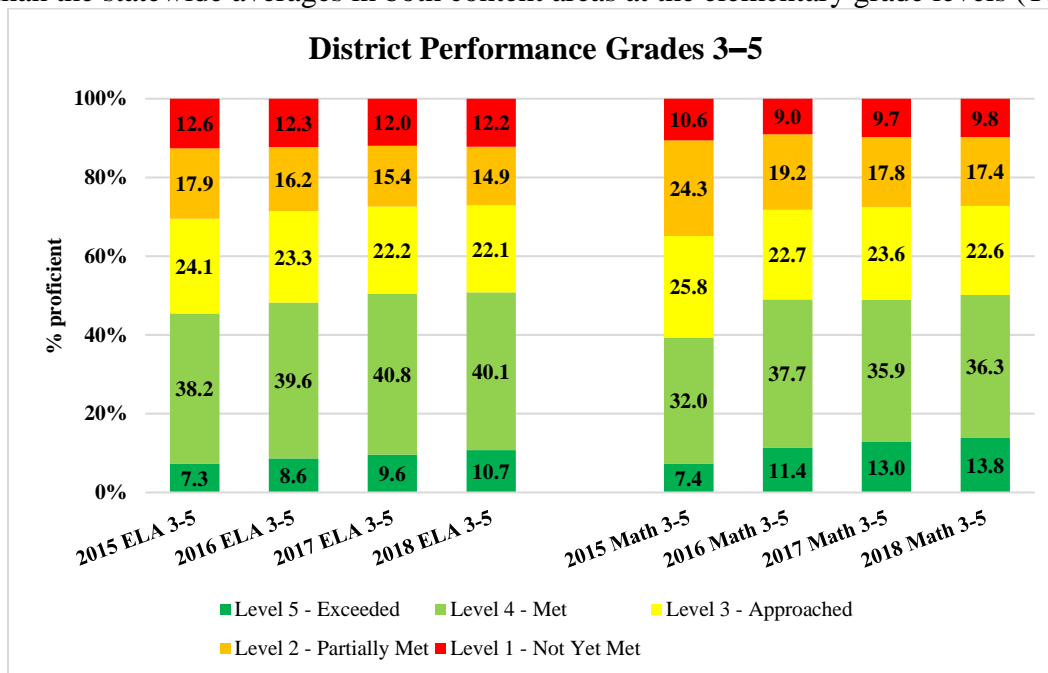


Figure 1. MCPS PARCC Student Performance Grades 3–5

Table 1. MCPS PARCC Student Performance Grades 3–5 compared to State

Test	2018 MCPS % Level 4 & 5	MCPS 3-Year Change	2018 State % Level 4 & 5	2018 MCPS compared to State
<b>ELA 3-5</b>	50.8	+5.4	41.3	+9.5
<b>ELA 3</b>	47.5	+6.3	38.8	+8.7
<b>ELA 4</b>	53.5	+6.6	43.1	+10.4
<b>ELA 5</b>	51.3	+2.9	42.1	+9.2
<b>Math 3-5</b>	50.2	+10.8	39.5	+10.7
<b>Math 3</b>	53.2	+10.4	42.2	+11.0
<b>Math 4</b>	50.3	+11.8	38.7	+11.6
<b>Math 5</b>	47.0	+10.4	38.0	+9.0

### English Language Arts/Literacy and Mathematics Grades 6–8 Student Performance

MCPS students in Grades 6–8 continue to perform better than the statewide average in both content areas. However, Math 8 performance continues to be an area of concern both at the district and state level (Figure 2 and Table 2).

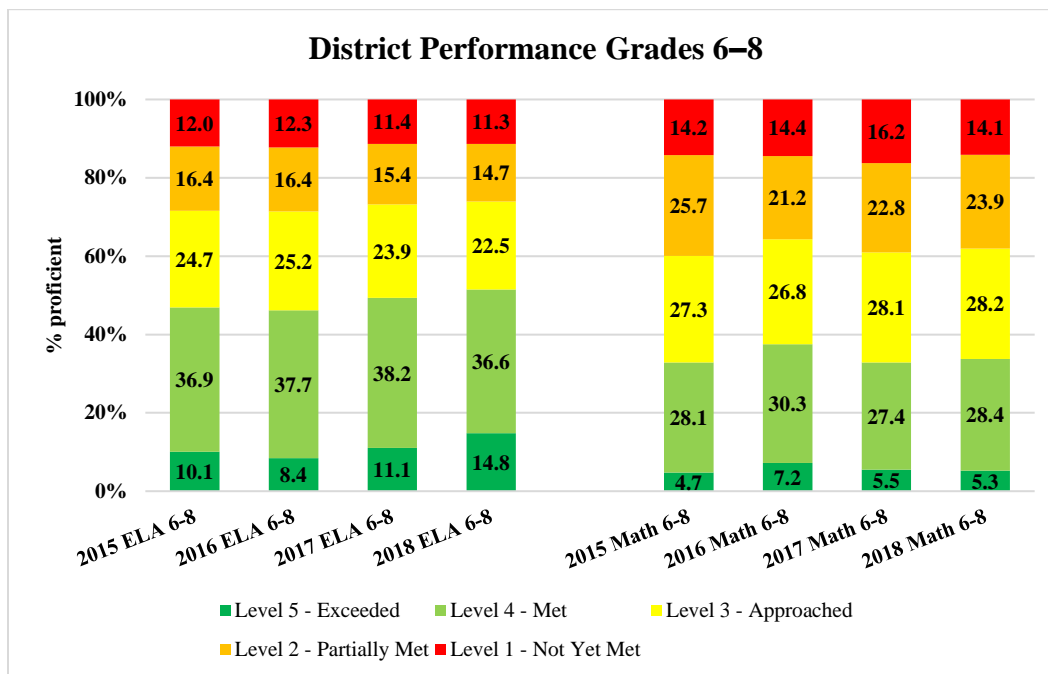


Figure 2. MCPS PARCC Student Performance Grades 6-8

Table 2. MCPS PARCC Student Performance Grades 6-8 compared to State

Test	2018 MCPS % Level 4 & 5	MCPS 3-Year Change	2018 State % Level 4 & 5	2018 MCPS compared to State
ELA 6-8	51.4	+4.5	41.8	+9.6
ELA 6	47.8	+6.8	38.6	+9.2
ELA 7	54.0	+5.0	45.6	+8.4
ELA 8	52.5	+1.6	41.3	+11.2
Math 6-8	33.7	+0.9	26.9	+6.8
Math 6	40.8	+3.0	31.8	+9.0
Math 7	30.2	+6.4	28.6	+1.6
Math 8	≤5.0	--	15.8	--

Of note, during the 2015 PARCC assessment students who were taking Honors Geometry in Grade 8 took the Math 8 PARCC assessment. During the 2016 school year, Grade 8 students in Honors Geometry and Honors Algebra 2 also took the Math 8 PARCC assessment. During the 2017 and 2018 PARCC assessment, only Grade 8 pre-algebra students took the Math 8 PARCC assessment. The PARCC Math 8 assessment data is redacted in Figure 3 to account for higher course level students taking the PARCC Math 8.

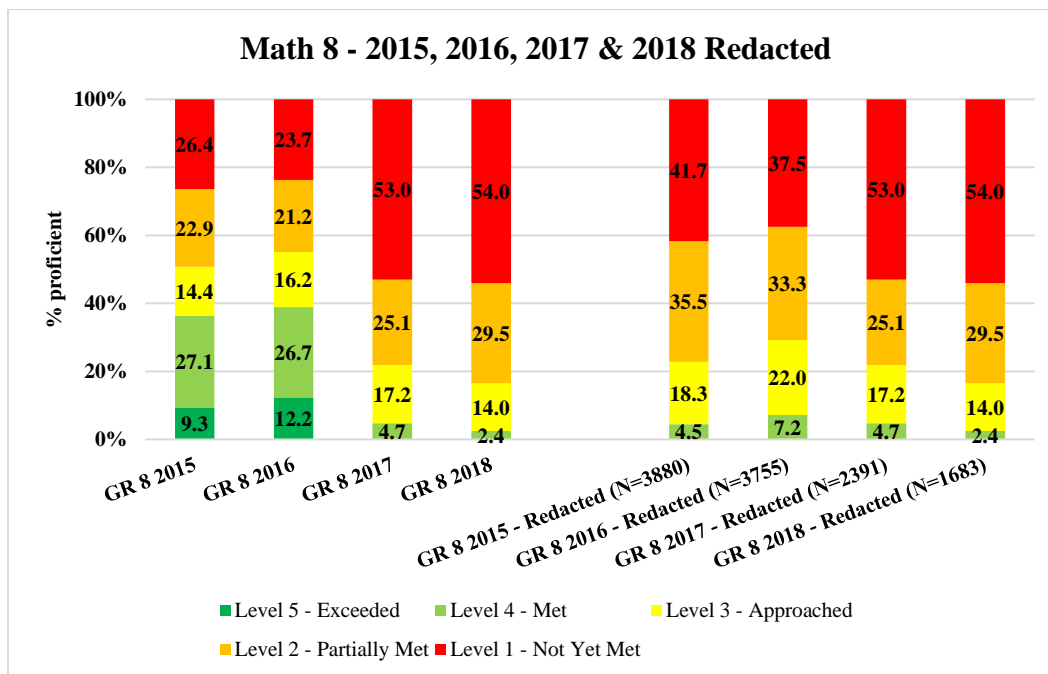


Figure 3. MCPS PARCC student performance on Math 8 PARCC before and after data were redacted

### English Language Arts/Literacy 10, Algebra 1, Geometry and Algebra 2 Student Performance

Overall student performance in high school courses improved during the last three years. Beginning in 2017, students who first enter Grade 9 before 2020–2021 and who perform at a performance Level 3 or higher meet their HSA graduation requirement. MCPS students met the HSA ELA/Literacy 10 graduation requirement at a rate of 76.6 percent in 2018 (Figure 4, Table 3). The rates of MCPS students who met the MHSA Algebra 1 requirement are presented separately for high school and middle school students and are included in this memorandum. Students in middle school taking Honors Geometry and Honors Algebra 2 also outperformed their peers within the state (Figure 5, Table 4). These students already would have met the HSA requirement and only are taking the assessment to meet the federal assessment requirement that each student must test once a year in English and mathematics in Grades 3–8.

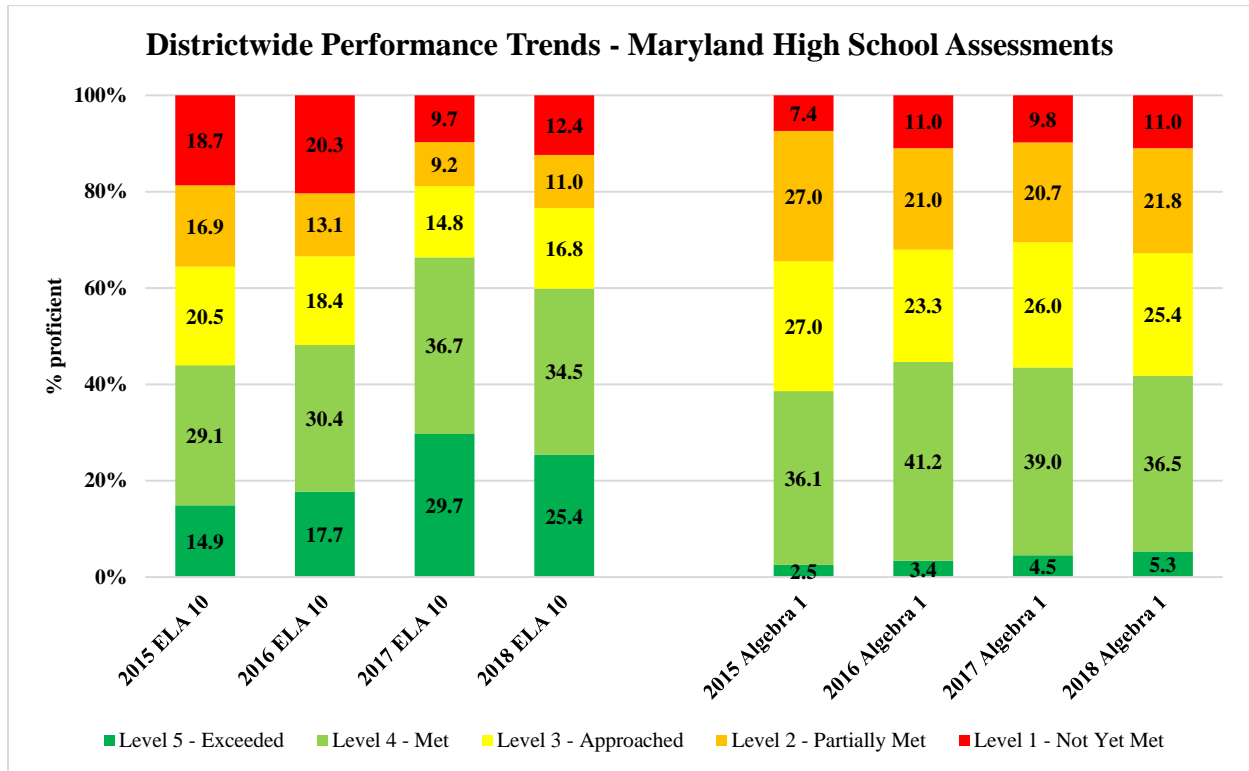


Figure 4. MCPS Student Performance on Maryland High School Assessments

Table 3. MCPS Student Performance on Maryland High School Assessments compared to State

Test	2018 MCPS % Level 4 & 5	MCPS 3-Year Change	2018 State % Level 4 & 5	2018 MCPS Compared to State	2018 MCPS % Levels 3, 4, and 5
ELA 10	59.9	+15.9	48.5	+11.4	76.6
Algebra 1	41.8	+3.1	34.9	+6.9	

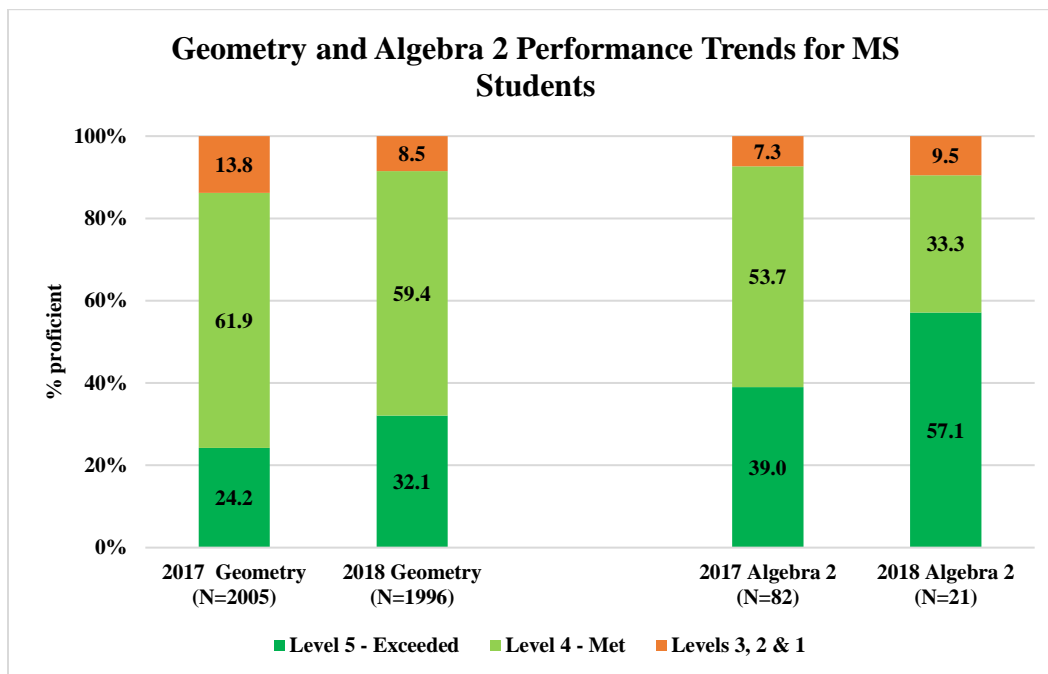


Figure 5. Middle School Student Performance on the Geometry and Algebra 2 Assessments

Table 4. Middle School Student Performance on the Geometry and Algebra 2 Assessments Compared to State

Test	2018 MCPS % Level 4 & 5	2018 State % Level 4 & 5	2018 MCPS Compared to State
Geometry	91.5	48.4	+43.1
Algebra 2	90.5	29.6	+60.9

**Note:** Most districts have their high school students take the Geometry and/or Algebra 2 assessments to meet the federal testing requirement or to count for College and Career Readiness. MCPS currently tests only middle school students in those courses.

### PARCC Algebra 1 Participation and Performance in Middle School

Middle School Algebra 1 PARCC participation reached a historic high in 2018 as the number of students earning valid scores climbed to 10,918, a 65.9 percent increase (4,337 more valid scores) more than the number of valid scores in 2015. Increases in the numbers of PARCC Algebra 1 participants were greatest in Grade 8, particularly among Black or African American and Hispanic/Latino students, students who received English Speakers of Other Languages (ESOL) services, Free and Reduced-price Meals Systems (FARMS) services, and special education services (Table 5).

Table 5. 2015–2018 PARCC Algebra 1 Participation in MS and Grade 8  
by Race/Ethnicity<sup>1</sup> and Service Group

	N, Earned Valid Score <sup>2</sup> Any PARCC Math Test				N, Earned Valid Score PARCC Algebra 1				3-Yr Change in Algebra 1 Participation	
	2015	2016	2017	2018	2015	2016	2017	2018	N Diff	% Diff
<b>Middle School</b>	32,612	34,089	34,973	35,613	6,581	7,092	9,082	10,918	4,337	65.9
AS	4,895	5,062	5,241	5,310	1,310	1,293	1,633	1,931	621	47.4
BL	6,725	7,047	7,395	7,610	1,079	1,220	1,665	2,127	1,048	97.1
HI	8,674	9,354	9,807	10,410	1,278	1,462	2,091	2,693	1,415	110.7
WH	10,712	10,959	10,862	10,583	2,547	2,710	3,229	3,641	1,094	43.0
MU	1,551	1,608	1,601	1,618	364	388	451	511	147	40.4
ESOL	2,837	2,960	3,081	3,289	212	282	401	582	370	174.5
FARMS	11,005	11,646	11,923	12,446	1,532	1,787	2,453	3,096	1,564	102.1
Special Ed	3,203	3,285	3,456	3,758	221	250	460	655	434	196.4
<b>Grade 8</b>	10,641	11,146	11,522	11,862	4,285	5,031	6,991	8,181	3,896	90.9
AS	1,617	1,680	1,693	1,796	608	693	949	1,048	440	72.4
BL	2,255	2,270	2,411	2,536	832	992	1,483	1,836	1,004	120.7
HI	2,764	3,053	3,216	3,318	1,012	1,285	1,961	2,435	1,423	140.6
WH	3,492	3,605	3,631	3,677	1,615	1,811	2,267	2,510	895	55.4
MU	499	514	553	518	217	236	321	342	125	57.6
ESOL	1,031	995	1,050	1,091	205	268	391	564	359	175.1
FARMS	3,466	3,738	3,788	3,901	1,218	1,591	2,290	2,800	1,582	129.9
Special Ed	1,048	1,030	1,107	1,181	189	219	428	591	402	212.7

<sup>1</sup> MSDE abbreviations used in table for race/ethnicity groups: Asian (AS); Black or African American (BL); Hispanic/Latino (HI); White (WH); Two or More (Multiple) Races (MU).

<sup>2</sup> The PARCC Consortium considers scores to be valid when at least one item was attempted in all but one unit of the assessment.

Increased participation in the PARCC Algebra 1 coincided with increased numbers of students earning scores at performance levels (PL) 3 or higher (Table 6). Overall, 3,179 more middle school students and 2,694 Grade 8 students earned scores at PL 3 or higher in 2018 compared with the numbers in 2015. However, the increases in the numbers of students earning scores at PL 3 or higher are accompanied with small overall decreases (-4.3 percent for middle school, -4.4 percent for Grade 8) in the rates of Algebra 1 participants who earn scores at PL 3 or higher (Table 6).

Therefore, more students are participating in Algebra 1 in middle school, and more students are earning scores at PL 3 or higher; however, there also are small decreases in the rates of students earning scores at PL 3 or higher. Middle school performance results by racial/ethnic and service groups is presented in Figures 6 and 7 noting the increase in participation of students within these groups. The percent of middle school students earning valid PARCC Algebra 1 scores at PL 4 or higher decreased over the three-year period by 3.0 percentage points with 79.8 percent of students having met the high school graduation requirement (Table 7).

Table 6: 2015–2018 PARCC Algebra 1 Performance of MCPS Middle School and Grade 8 Students by Race/Ethnicity<sup>1</sup> and Service Group

	N, PARCC Alg 1 Valid Scores at Performance Level (PL) 3 or Higher					% of PARCC Alg 1 Valid Scores at PL 3 or Higher					3-Yr Change in Algebra 1 Valid Scores at PL 3 or Higher	
	2015	2016	2017	2018		2015	2016	2017	2018		N	%
<b>Middle School</b>	5,536	6,082	7,286	8,715		84.1	85.8	80.2	79.8		3,179	-4.3
AS	1,255	1,237	1,520	1,833		95.8	95.7	93.1	94.9		578	-0.9
BL	733	867	1,102	1,389		67.9	71.1	66.2	65.3		656	-2.6
HI	863	1,003	1,234	1,618		67.5	68.6	59.0	60.1		755	-7.4
WH	2,356	2,598	3,035	3,419		92.5	95.9	94.0	93.9		1,063	1.4
MU	326	359	384	446		89.6	92.5	85.1	87.3		120	-2.3
ESOL	99	121	126	190		46.7	42.9	31.4	32.6		91	-14.1
FARMS	984	1,146	1,400	1,770		64.2	64.1	57.1	57.2		786	-7.1
Special Ed	125	141	254	314		56.6	56.4	55.2	47.9		189	-8.6
<b>Grade 8</b>	3,357	4,055	5,218	6,051		78.3	80.6	74.6	74.0		2,694	-4.4
AS	559	641	837	955		91.9	92.5	88.2	91.1		396	-0.8
BL	522	652	927	1,125		62.7	65.7	62.5	61.3		603	-1.5
HI	638	831	1,108	1,388		63.0	64.7	56.5	57.0		750	-6.0
WH	1,453	1,707	2,079	2,299		90.0	94.3	91.7	91.6		846	1.6
MU	184	211	259	278		84.8	89.4	80.7	81.3		94	-3.5
ESOL	92	107	117	174		44.9	39.9	29.9	30.9		82	-14.0
FARMS	721	963	1,245	1,510		59.2	60.5	54.4	53.9		789	-5.3
Special Ed	98	111	223	252		51.9	50.7	52.1	42.6		154	-9.2

<sup>1</sup> MSDE abbreviations used in table for race/ethnicity groups: Asian (AS); Black or African American (BL); Hispanic/Latino (HI); White (WH); Two or More (Multiple) Races (MU).



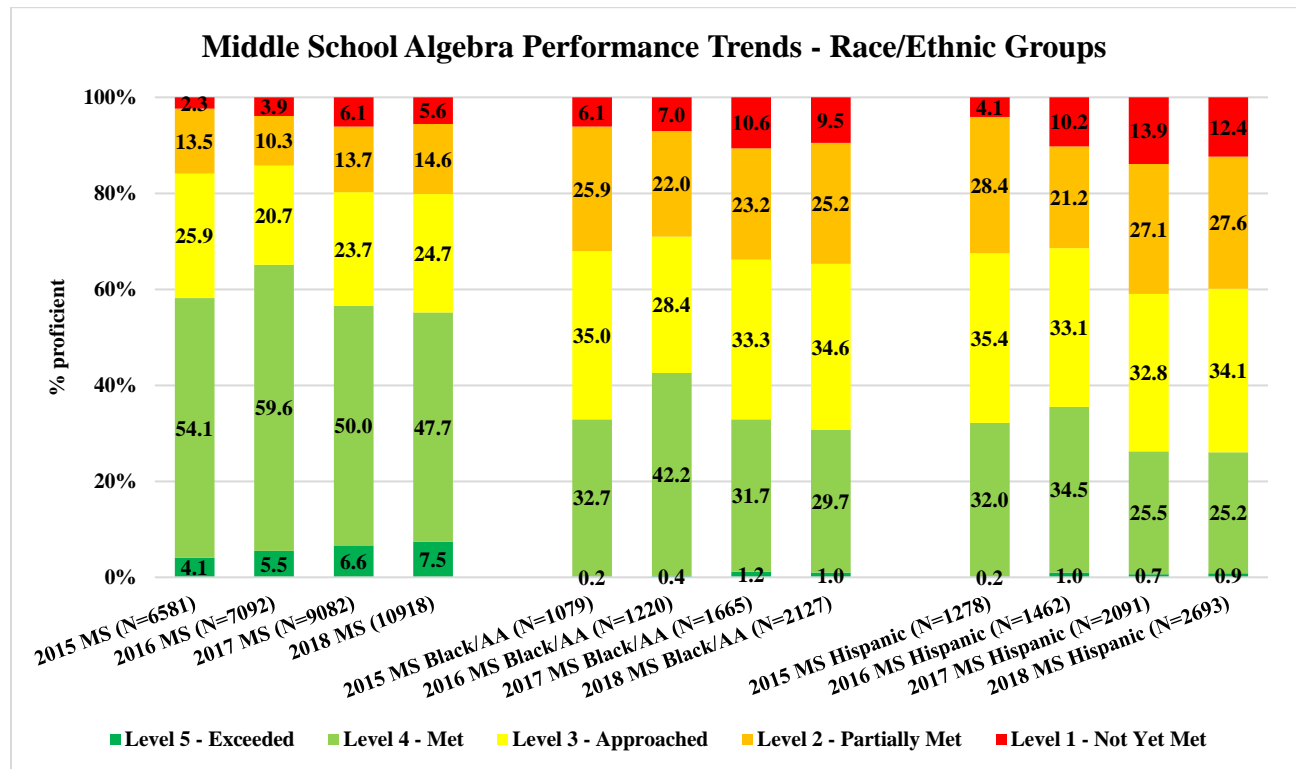


Figure 6. Middle School Students Algebra 1 Performance – Overall and by Racial/Ethnic Focus Groups

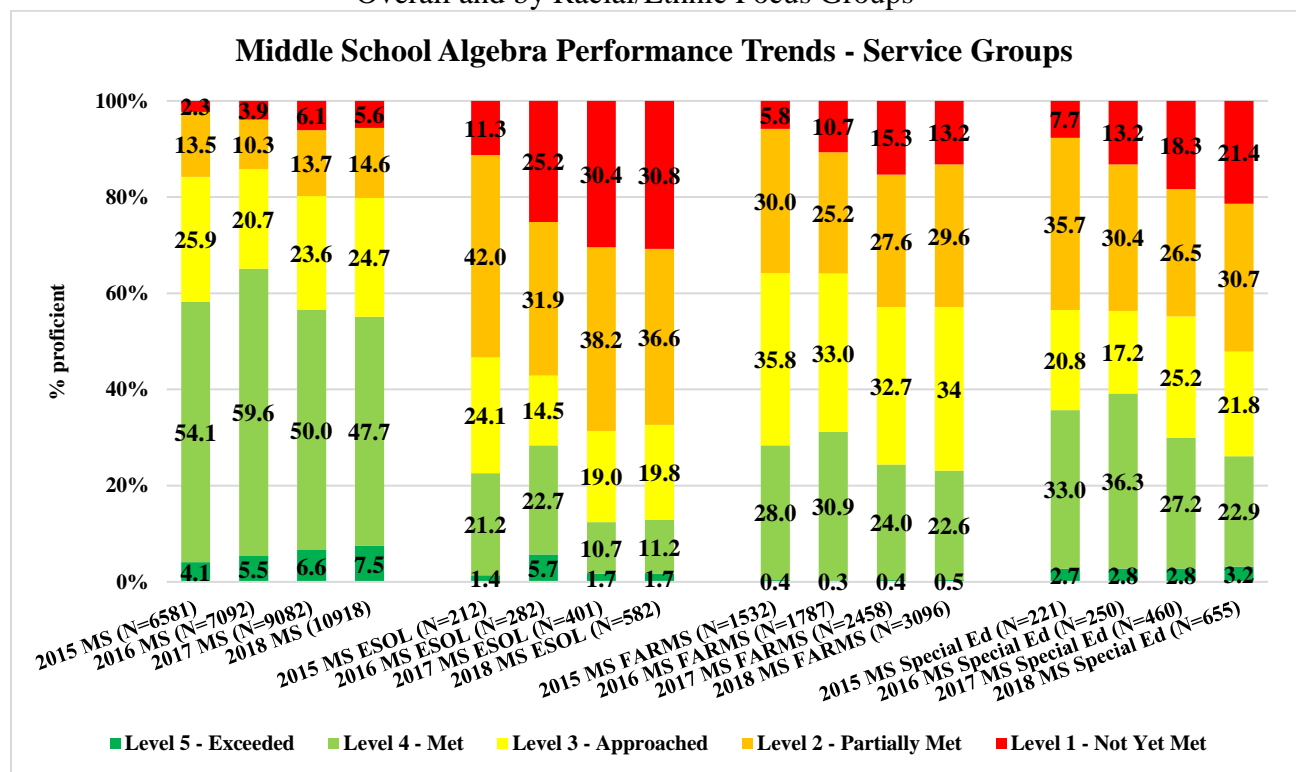


Figure 7. Middle School Students Algebra 1 Performance – Focus Student Service Groups

Table 7. Middle School Students Algebra 1 Performance

Test	MCPS % Level 4 & 5	MCPS 3-Year Change	MCPS % Met Graduation Requirement <sup>1</sup>
<b>MS Algebra 1</b>	55.2	-3.0	79.8

<sup>1</sup> The calculated percentage takes into account the change in the MHSA graduation requirement for students in different grades in 2018. The requirement for students in Grades 7 and 8 in 2018 is Performance Level 3 or higher, while the requirement for students in Grade 6 or below in 2018 is Performance Level 4 or higher.

The rates of high school students earning valid Algebra 1 scores at PL 3 or higher increased in the first three years with a slight decrease in 2018 (Figure 8). High school performance results by racial/ethnic and service groups is presented in Figures 8 and 9.

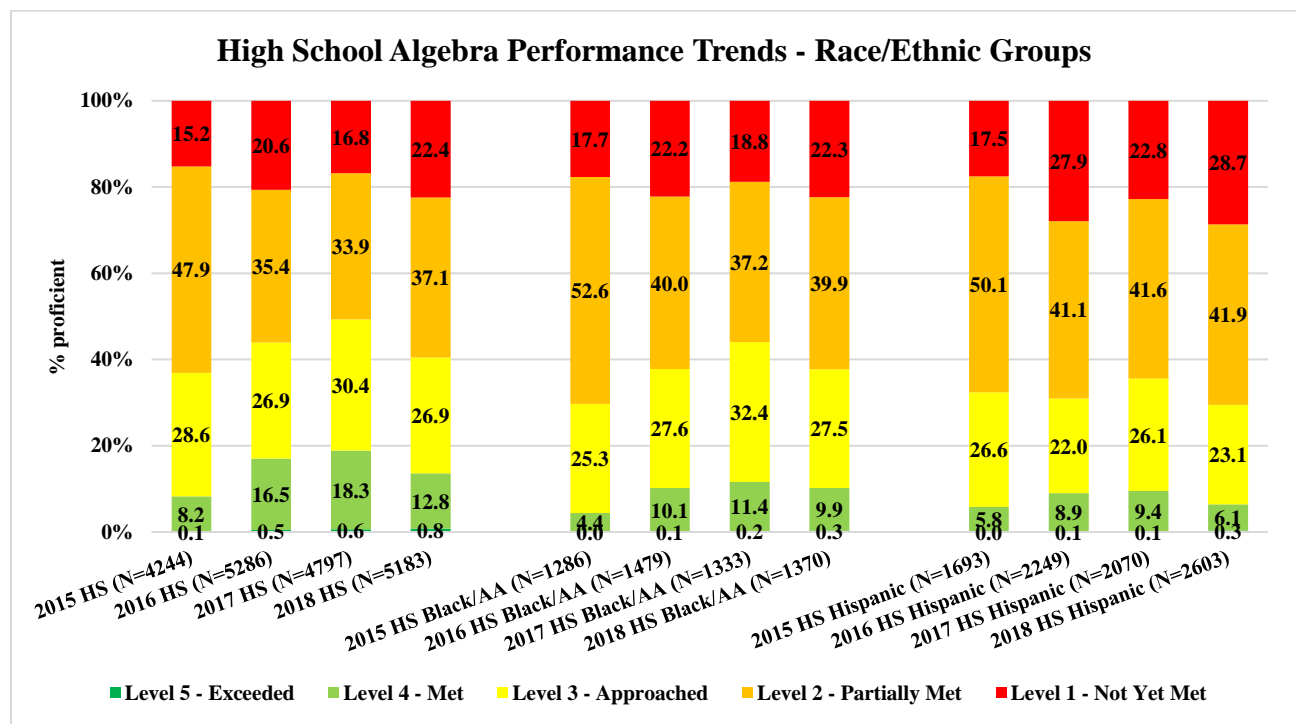


Figure 8. High School Students Algebra 1 Performance – Overall and by Racial/Ethnic Focus Groups

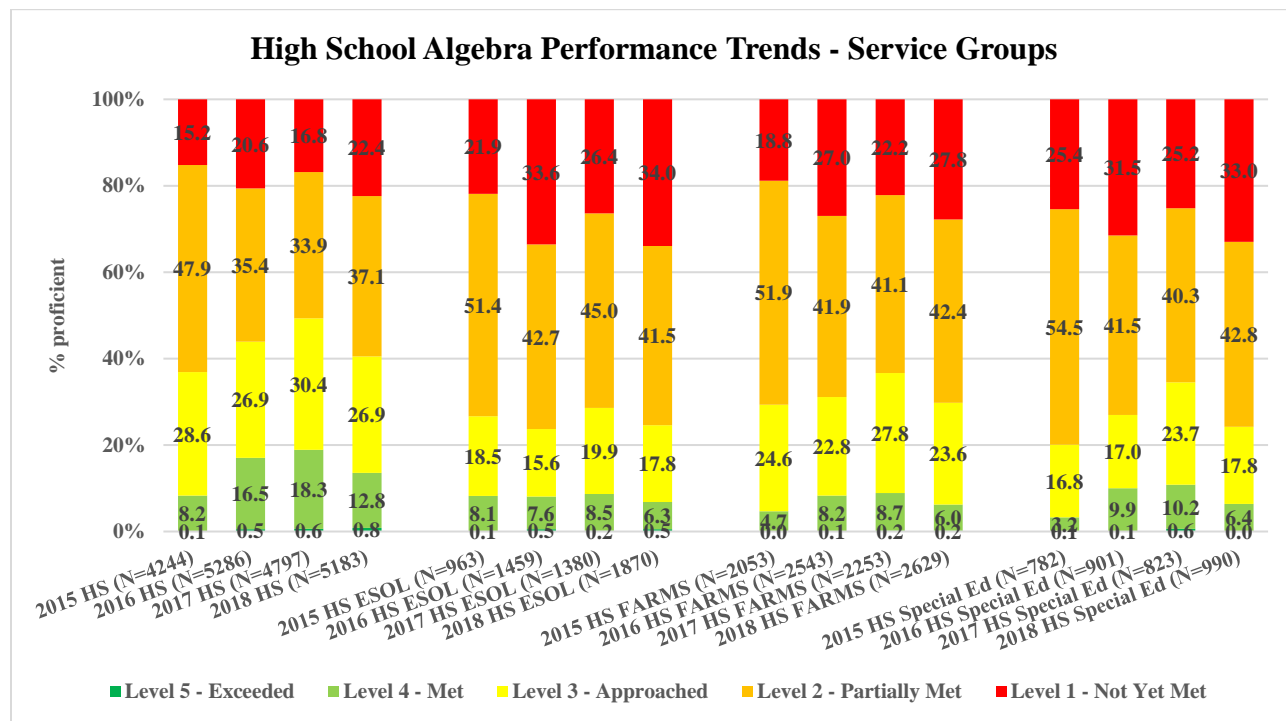


Figure 9. High School Students Algebra 1 Performance – Focus Student Service Groups

The percent of high school students earning valid PARCC Algebra 1 scores at PL 4 or higher increased during the three-year period by 5.2 percentage points (Table 8).

Table 8. High School Students PARCC Algebra 1 Performance

Test	2018 MCPS % Level 4 & 5	MCPS 3-- Year Change	2018 MCPS % Met Graduation Requirement <sup>1</sup> (PL 3, 4, 5)
<b>Algebra 1</b>	13.6	+5.2	40.5

<sup>1</sup> Note this percentage does not include the 2018 graduates who met the graduation requirement by participation only.

The official data presentation was shared with the Maryland State Board of Education on Tuesday August 28, 2018. The presentation is available on the Maryland State Department of Education website.

**Questions**

- Please contact Mrs. Donna M. Blaney, supervisor, Testing and Reporting Unit, OSA, at 240-740-2940 or via e-mail.

JSW:dmb

Copy to:

Executive Staff

Mrs. Blaney

School Administrative Secretaries

School Test Coordinators

Dr. Stanislaus

Mr. Koutsos

Mr. Lloyd

Approved: \_\_\_\_\_

Henry R. Johnson, Jr., Chief of Staff