

BOARD OF EDUCATION OF HOWARD COUNTY**Board Agenda Item****TITLE:** Report on the Results of the 2006 Administration of the Maryland School Assessment**DATE:** July 13, 2006

OVERVIEW:

Results of the 2006 Maryland School Assessment (MSA) for elementary and middle schools were released this month. In every grade, more than 70 percent of HCPSS students were scoring at proficient or above in reading and mathematics—an accomplishment that few systems in the state could match. In addition to exceeding the proficiency standards established by the state of Maryland, every elementary and middle school met or exceeded the rigorous local standard of having 70 percent of students scoring at or above proficient in reading. Every elementary school and most middle schools met the local standard in mathematics, an area where much progress was made and scores increased significantly. The impressive growth in performance on the MSA over three years was largest for African American, Hispanic, and special services student groups. Strategies to support this growth in performance will continue.

FUTURE DIRECTION:

The HCPSS will continue to implement strategies that have proved to be highly effective in improving achievement in mathematics and among various student groups. Moving forward, the HCPSS brought together school improvement planning teams to begin the process of continuous improvement at the Summer Institute and will continue these conversations and training opportunities throughout the school year at administrator meetings. The Department of Student Assessment and Program Evaluation will work with staff from the Department of Curriculum and Instruction to evaluate the impact of intervention programs. The connection between HCPSS's Goal 2 and academic achievement will be highlighted as the local standards and indicators for safe and nurturing schools are established and training in Cultural Proficiency continues.

Submitted by:**Approval/Concurrence:**

Sandra J. Erickson
Deputy Superintendent

Sydney L. Cousin
Superintendent

Theresa R. Alban
Director
Student Assessment and Program Evaluation

Introduction

The Maryland School Assessments (MSA) are tests in reading and mathematics that are given to students in Grades 3 through 8 and as an end-of-course exam in Algebra and English 10 measuring student performance to comply with the federal mandates of the *No Child Left Behind Act* (NCLB). Students in Grades 3 through 8 complete the reading and mathematics tests, which include both selected response and constructed response items, in early March. Algebra and English 10, which meet the federal requirement for testing at the high school level, are end-of-course exams that are given in late May and which also feature selected response as well as constructed response items. Each of these tests has identified score ranges that identify if a student is basic, proficient, or advanced for that content area and grade. The expectation of NCLB is that every student (100 percent) will be able to score at proficient or advanced by 2014.

Another requirement of NCLB is that all students participate in testing, including special education students who are not working toward a regular high school diploma. These students take an alternate assessment known as the Alt-MSA in Grades 3 through 8 and Grade 10. The Alt-MSA requires that each student have ten individualized objectives for performance in mathematics and reading. The student's ability to master these objectives is assessed by reviewing a portfolio that is developed throughout the year and scoring a video documenting the student's actual performance on a selected objective. Students must be able to show 80 percent mastery on these objectives to be identified as proficient.

When scores for the MSA and Alt-MSA are released by the Maryland State Department of Education (MSDE), they are first presented according to proficiency level. Every school and school system receives scores indicating what percent of students in each grade and content area were able to score at or above proficient. These percentages are presented for the total student population and for each student group based on race/ethnicity and special services received. These scores become part of the calculation used to determine if schools met Adequate Yearly Progress (AYP), another mandate of NCLB.

Given the mandated NCLB target of 100 percent of students being proficient in reading and mathematics by 2014, each state was asked to develop annual measurable objectives (AMO) to monitor each school's progress in moving toward the goal. Maryland developed baseline AMOs after the first year of administering the MSA; these targets vary by level and content area and are outlined in Table 1. Each year the AMO increases to assure that by meeting these targets, schools are on course to achieving the ultimate goal of 100 percent proficiency. In order to achieve AYP, the total population and every identified student group with five or more students must reach the AMO. These student groups include African American, American Indian, Asian, Hispanic, White, English Language Learners (ELL), students receiving Free and Reduced Price Meals System services (FARMS), and students receiving special education services. When calculating the percent proficient for AYP purposes, the scores of every student who was enrolled in the school throughout the year and who participated in the MSA or Alt-MSA are included. Therefore, the number of students included in the proficiency reports and the number of students included in AYP calculations are not always the same.

Table 1: Annual Measurable Objectives for the Maryland School Assessment

Level	Reading			Mathematics		
	2005	2006	2007	2005	2006	2007
Grades 3-5	57.8%	62.5%	67.2%	53.6%	58.8%	63.9%
Grades 3-8	57.2%	62.0%	66.7%	44.7%	50.8%	57.0%
Grades 6-8	56.7%	61.5%	66.3%	35.8%	42.9%	50.0%
Grades 9-12	40.0%	45.3%	52.2%	40.7%	29.8%	38.6%
School System	54.8%	59.6%	64.7%	44.1%	47.8%	54.3%

In addition to meeting the reading and mathematics AMOs, schools are also required to meet one academically related target to achieve AYP. For elementary and middle schools, the target is based on school attendance; while for high schools, the target is based on graduation rate. The target for attendance is 94 percent. The target for graduation rate is 90 percent. School systems are held accountable for both of these categories as well.

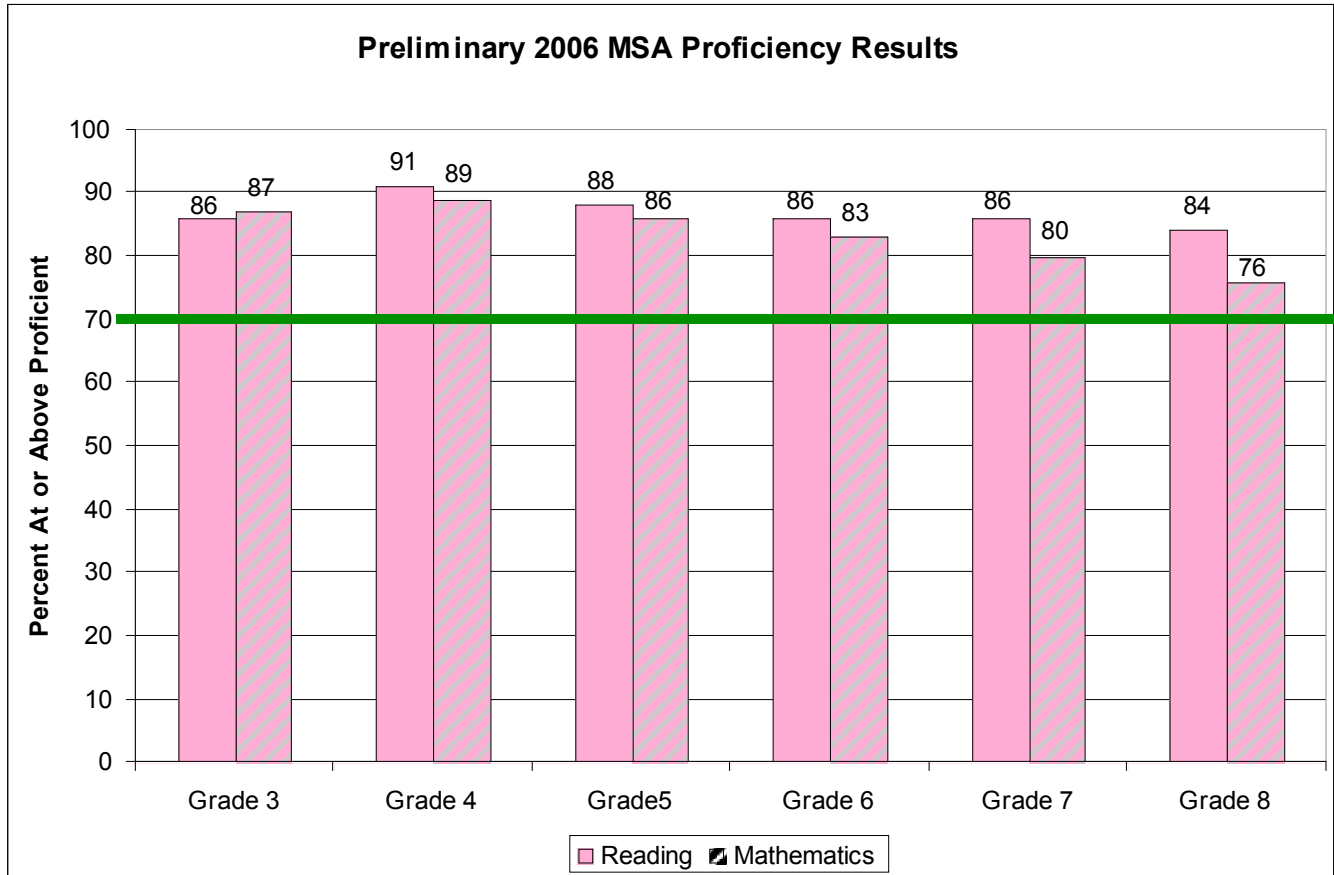
The Howard County Public School System (HCPSS) recognized that many schools were already achieving the AMOs established by MSDE and decided to establish more rigorous local targets for performance on the MSA for the system and schools. The first target was that by 2006, every school would meet AYP and have 70 percent of its students performing at or above proficient. The second target was that by 2007, every school would meet AYP and have 70 percent of every student group (racial/ethnic and special services) achieving at or above proficient. These targets are part of the HCPSS *Bridge to Excellence* plan.

The results presented in this report include only elementary and middle schools' performance because the MSDE has not yet released information for the high schools. Performance by high schools and AYP decisions will be released in the fall, at which time an update will be provided.

Proficiency Results for the 2006 MSA

The performance of students throughout the HCPSS on the 2006 MSA exceeded both the state and local targets at every grade and in both content areas. Figure 1 presents the percent of students achieving at or above proficient for Grades 3 to 8 in reading and mathematics. Combining the scores of these 22,781 students, 88 percent of them were proficient or above in reading and 84 percent of them were proficient or above in mathematics. The 2006 performance of HCPSS students on the MSA continued to be among the highest in the state across the grades and content areas. The greatest improvement in performance for HCPSS students occurred in mathematics in Grades 6 to 8.

Figure 1: Proficiency Results for 2006 MSA



Schools throughout the system were also very successful at exceeding state and local targets for proficiency on the 2006 MSA. Every HCPSS elementary and middle school was at or above the local target of having 70 percent of its overall student population at or above proficient in reading. Every elementary school also met or exceeded the local target of having 70 percent of its overall student population at or above proficient in mathematics. All but five middle schools and the K-8 school achieved the local target for mathematics, but most of these schools demonstrated growth as they achieved between 60 and 68 percent of their students reaching proficient or above in mathematics.

Many schools are also showing impressive progress in meeting the local target for 2007 because many of the student groups already have 70 percent or more of the students at or above proficient in reading and mathematics. Table 2 presents the number of elementary schools who have met the 70 percent target for each student group and Table 3 presents this information for middle schools. It is important to note that none of the schools had more than five students in the American Indian student group, therefore information for that student group is not included in the tables.

Table 2: Number of Elementary Schools (out of 37) Meeting the HCPSS 2007 Target for Student Groups

Student Group	Reading	Mathematics
	Number of Schools	Number of Schools
All students	37	37
Male	36	36
Female	37	37
*Asian (36)	36	36
African American	32	29
White	37	37
*Hispanic (28)	24	21
*ELL (24)	11	6
*FARMS (31)	19	12
Special Education	10	9

* Several schools had five or fewer students and could not be included in calculations. The number in parentheses indicates the total number of schools included in the calculations.

Table 3: Number of Middle Schools (out of 18) Meeting the HCPSS 2007 Target for Student Groups

Student Group	Reading	Mathematics
	Number of Schools	Number of Schools
All students	18	13
Male	18	13
Female	18	14
Asian	18	18
African American	14	5
White	18	18
*Hispanic (17)	8	6
*ELL (15)	1	4
*FARMS (17)	4	1
Special Education	1	0

* Several schools had five or fewer students and could not be included in calculations. The number in parentheses indicates the total number of schools included in the calculations.

Cradlerock School is a K-8 school in the HCPSS and has to meet different AMOs for the state accountability program because it includes Grades 3 to 8, but is expected to meet the same local targets as the elementary and middle schools. In 2006, Cradlerock met the 2007 target for student groups for all students, female, Asian, and White student groups in reading. For mathematics, Cradlerock met the 2007 target for the Asian and White student groups.

Special recognition to these schools for having every eligible student group meet or exceed the local standard in both reading and mathematics: Bellow Springs Elementary, Centennial Lane Elementary, Clarksville Elementary, Worthington Elementary. These schools had every eligible student group meet or exceed the local standard in reading: Bushy Park Elementary, Fulton Elementary, Pointers Run Elementary, West Friendship Elementary, and Folly Quarter Middle School. These schools had every eligible student group meet or exceed the local standard in mathematics: Hammond Elementary, Ilchester Elementary, Northfield Elementary, Thunder Hill Elementary, and Waverly Elementary.

Advanced Performance on MSA

The standards for MSA set by the state are calculated by combining the performance of students who score in the proficient and advanced categories on the test. However, it is important to note that since 2004, nearly one-third or more of HCPSS students have scored at the advanced level for both reading and mathematics across Grades 3 to 8. This achievement is markedly greater than the percent of students statewide who are able to reach advanced levels on the MSA as illustrated in Figures 2 and 3 below.

Figure 2: Advanced Performance in Reading for HCPSS and Maryland

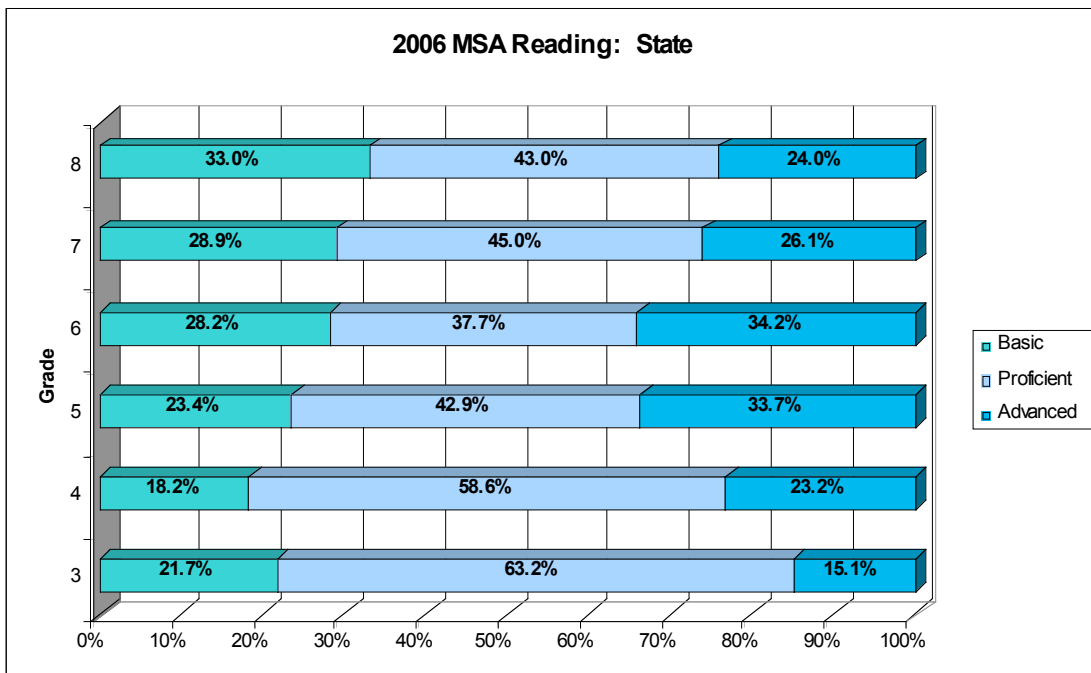
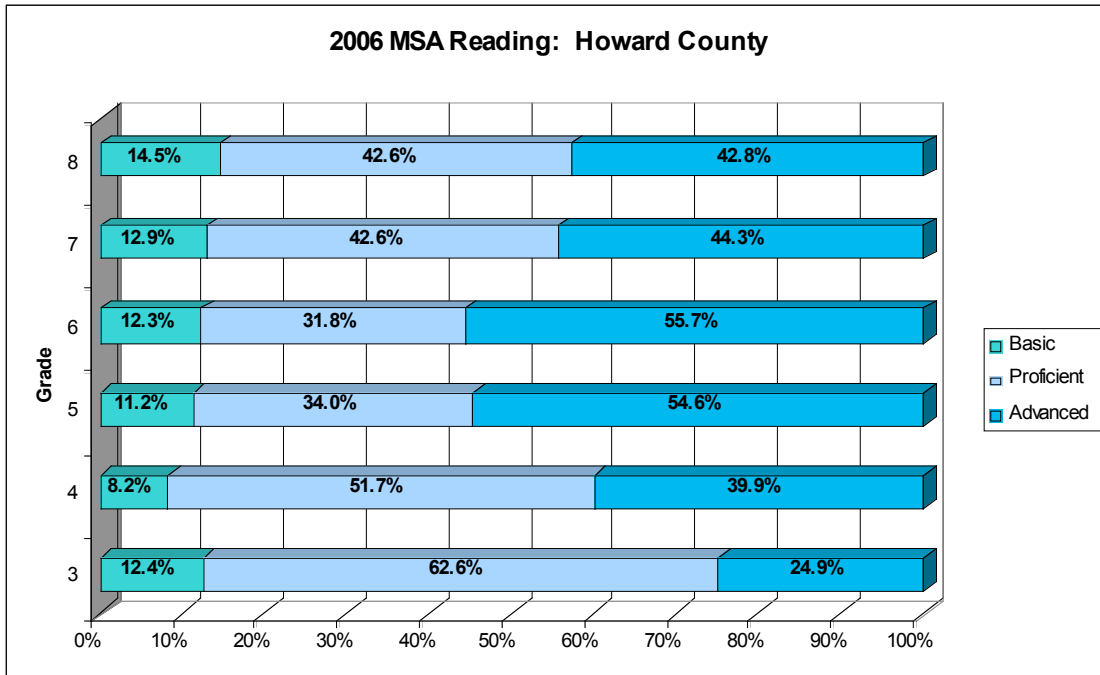
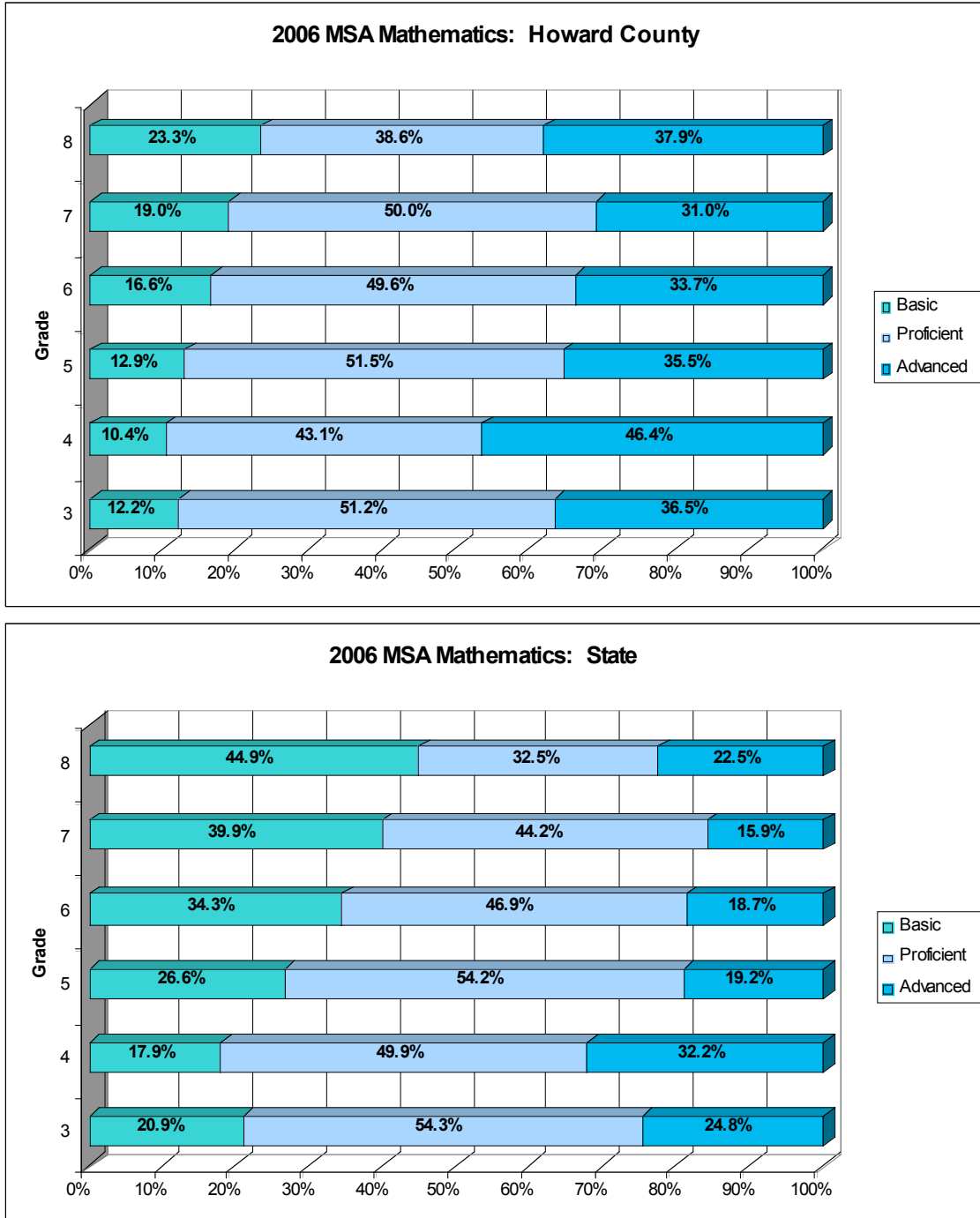


Figure 3: Advanced Performance in Mathematics for HCPSS and Maryland

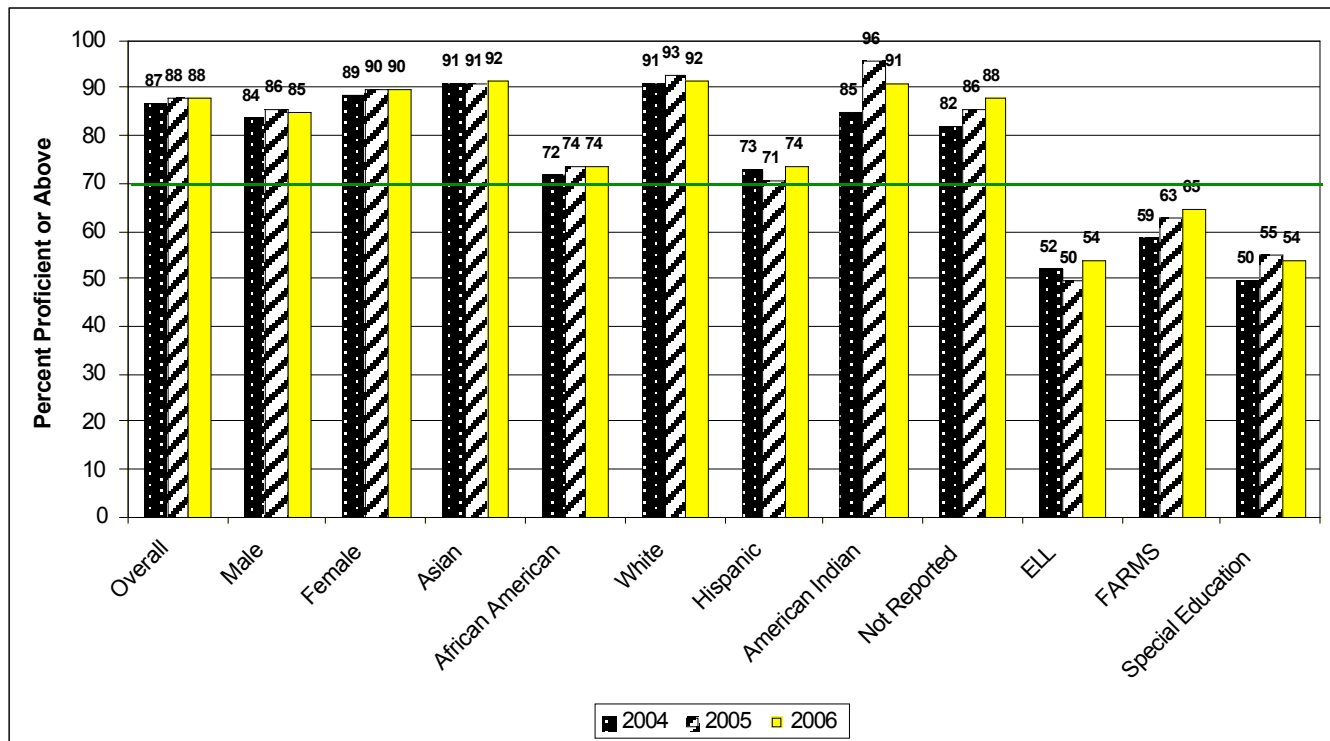


Trend Performance on MSA

While the performance on the 2006 MSA by HCPSS students was impressive, it is important to monitor progress over time to determine if systemic initiatives are achieving the desired results. Generally, it is best to examine trends using three or more years of data. An examination of the trend performance across Grades 3 to 8 in reading and mathematics indicates generally positive growth, with African American, Hispanic, ELL, FARMS, and Special Education students making the greatest gains over time.

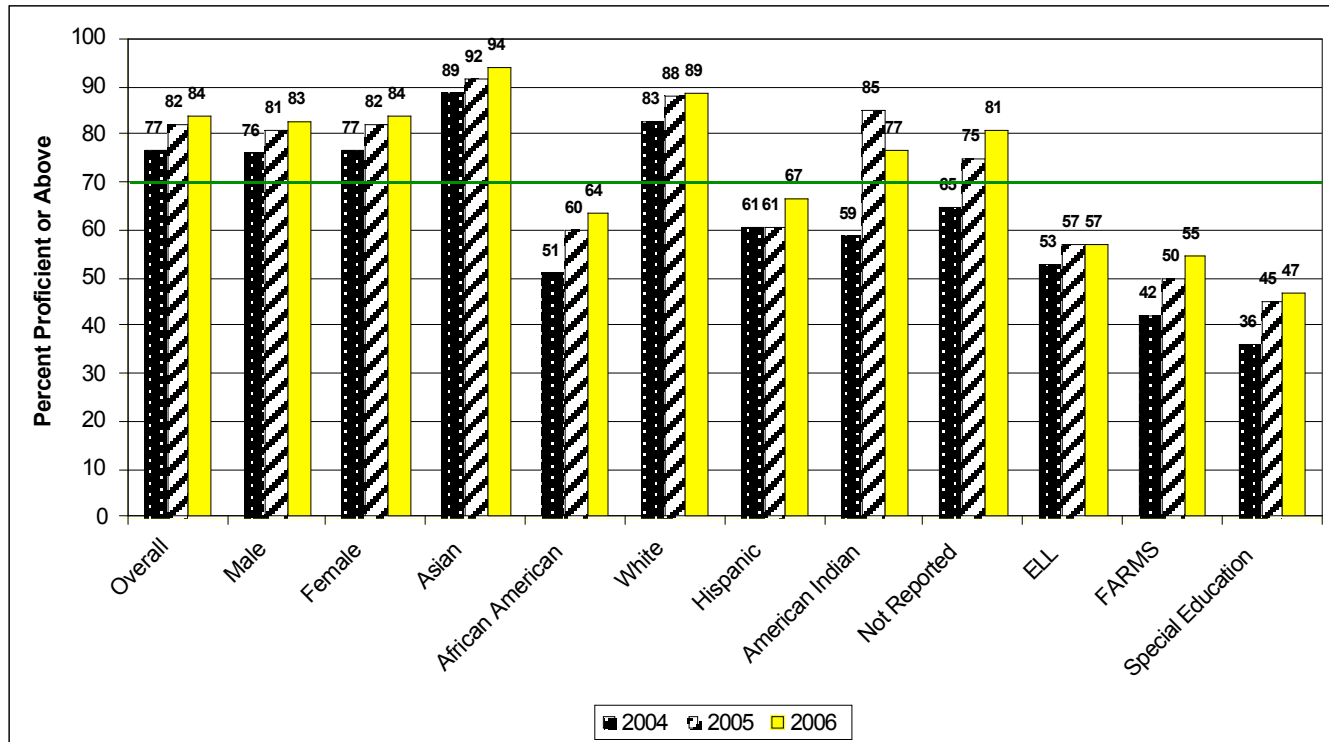
The trend performance in reading for all student groups is depicted in Figure 4. The student group identified as “Not Reported” is used for those students who choose not to provide a single race/ethnicity code in their records. When examining performance for this group and for American Indian students, it is important to note that fewer than 50 students are represented; therefore changes in percentages may appear more significant due to the small number of students and should be interpreted with caution. As illustrated in Figure 4, all racial/ethnic student groups have been able to maintain performance above the local standard of 70 percent at proficient or above for the last three years. Students receiving special services have improved performance over time as well.

Figure 4: Trend Performance in Reading



The trend performance in mathematics is presented in Figure 5. African American students and students receiving FARMS have gained an impressive 13 percentage points over time and are nearing the local standard of 70 percent at proficient or above. Special education students have gained 11 percentage points and Hispanic students have moved very close to achieving the local standard. Overall performance in mathematics has grown by 7 percentage points—a gain attributed to concerted efforts to address mathematics performance through intervention efforts and differentiated resources, such as Math Support Teachers.

Figure 5: Trend Performance in Mathematics

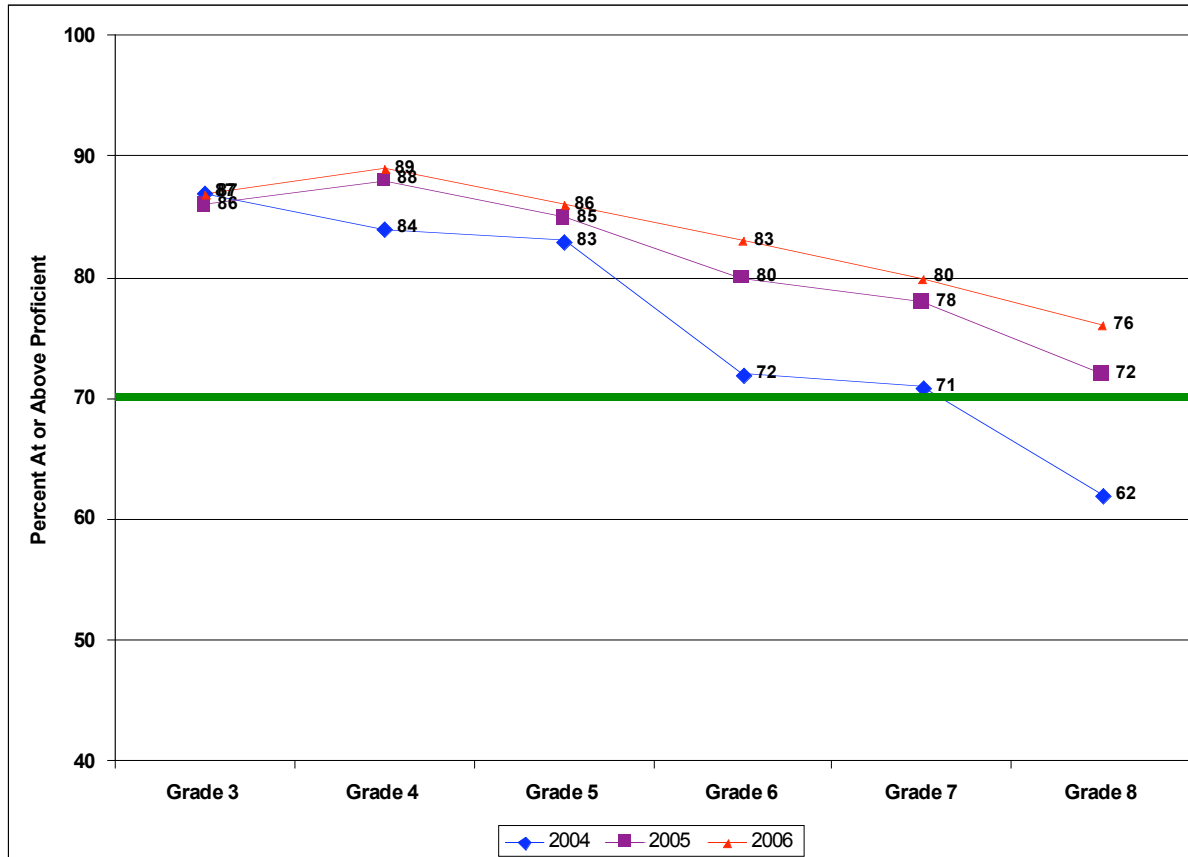


While African American students have not yet achieved the 2007 target of 70 percent scoring at proficient or above, it is important to note that these HCPSS students also perform at levels exceeding most of their peers across the state. In middle school mathematics and reading, African American students in the HCPSS are at the highest level of performance among African American students from every other school system with an enrollment greater than 200.

Improving Performance in Mathematics

Since MSA results were first reported in 2003, the HCPSS, like most school systems in the state, noted higher performance in reading than mathematics. Strategic efforts to improve this performance have been implemented across the system, and the results are encouraging. As illustrated in Figure 6, mathematics performance has improved in every grade since 2004. The most significant increases have occurred in middle school mathematics, where gains ranged from 9 percentage points in Grade 7 to 14 percentage points in Grade 8.

Figure 6: Trend Performance in MSA Mathematics by Grade



One systemic effort to address mathematics performance was providing a Math Support Teacher (MST) to identified elementary schools. The trend performance in mathematics for these elementary schools is presented in Table 4.

Table 4: Elementary Schools with Math Support Teachers

School	2004 Percent Proficient	2005 Percent Proficient	2006 Percent Proficient	Percentage Point Increase from 2004
Bryant Woods	69	71	71	+2
Cradlerock (3-5)	72	72	74	+2
Deep Run	71	76	*80	+9
Guilford	80	80	80	+0
Laurel Woods	70	70	73	+3
Longfellow	77	*82	85	+8
Phelps Luck	73	66	75	+2
Running Brook	74	68	77	+3
Stevens Forest	*76	72	74	-2
Swansfield	73	73	76	+3
Talbot Springs	76	78	81	+5

* Indicates the first year MST was in the school.

Math Instructional Support Teachers were placed at four middle schools for the 2005-2006 school year. While it is often difficult to determine the impact of a program in its first year, there were some very positive improvements at these middle schools on the 2006 Math MSA as presented in Table 5.

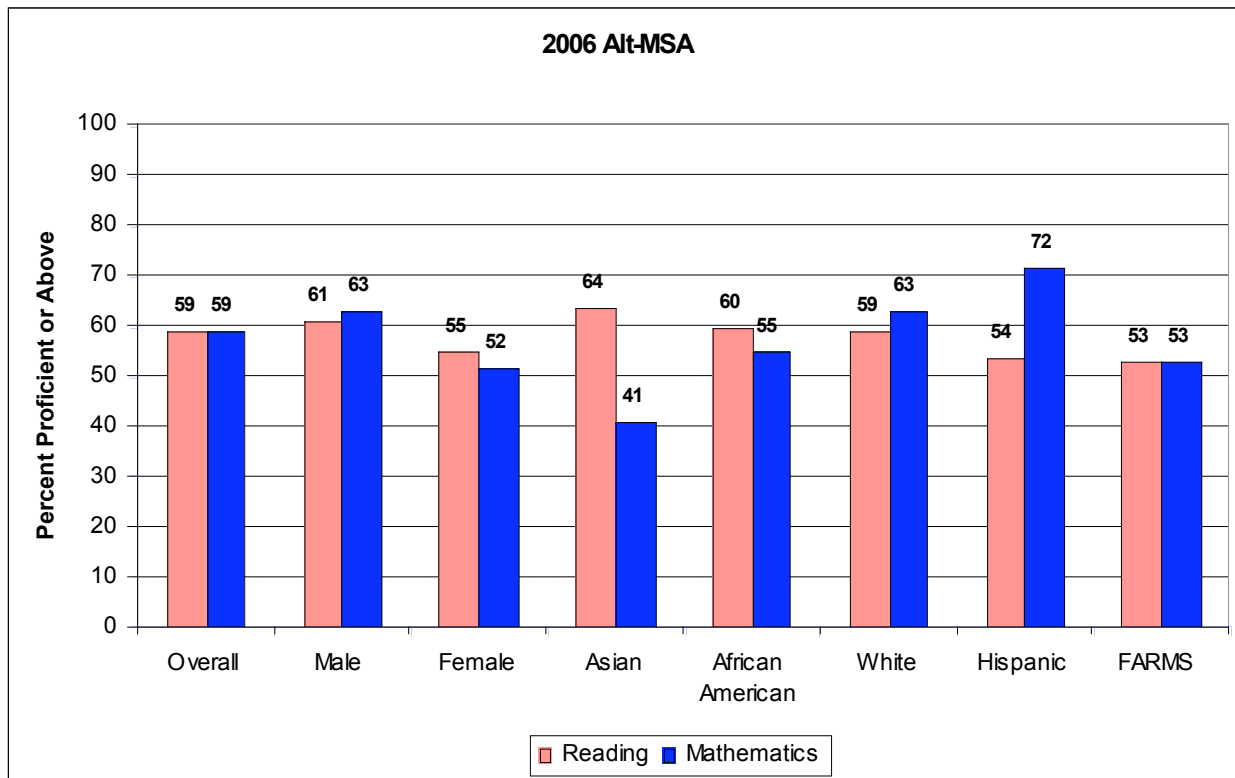
Table 5: Middle Schools with Math Instructional Support Teachers

School	2005 Percent Proficient	2006 Percent Proficient	Percentage Point Increase from 2005
Harper's Choice	60	68	+8
Murray Hill	58	61	+3
Oakland Mills	60	66	+6
Wilde Lake	61	60	-1

Proficiency Results for 2006 Alt-MSA

The performance of 174 students in Grades 3 through 8 who completed the Alt-MSA is presented for reading and mathematics in Figure 7. To achieve proficient status on the Alt-MSA, a student must master at least 80 percent of the individualized objectives in reading and mathematics. The proficiency results for Alt-MSA are included in AYP calculations. When considering the performance of student groups on the Alt-MSA, it is important to remember that many group sizes are small.

Figure 7: Proficiency Results for 2006 Alt-MSA



SUMMARY AND NEXT STEPS

The HCPSS and its schools demonstrated impressive performance in the 2006 state accountability program for elementary and middle schools. This performance is a tribute to the efforts of students, parents, and school system staff who worked diligently to realize the vision of NCLB. The HCPSS set local targets that challenged schools to reach beyond state expectations in 2006 and 2007, and the schools rose to that challenge. All elementary and middle schools met the 2006 local target in reading, all elementary schools met the local target in mathematics and 13 middle schools met the local target in mathematics. Many schools were already meeting the 2007 local targets for student groups; however, work remains to be done in achieving this rigorous target.

The HCPSS has already done many things to support the growth and success of students on the MSA. These strategies include but are not limited to the following: 1) providing differentiated support, such as Math Support Teachers, to schools based on identified areas of need; 2) emphasizing the power of professional learning communities; 3) providing easy access to student level data on the multiple measures used to monitor student progress; 4) emphasizing the connection between safe and nurturing environments (HCPSS Goal 2) and student achievement; 5) conducting Comprehensive Program Reviews; and 6) implementing high leverage strategies as part of the school improvement process. These efforts have led to improved performance by all student groups, but particularly for African American, Hispanic, and students receiving special services. The HCPSS will continue to implement these successful strategies. The local standard for all student groups is rigorous, and there is still much work to be done.

Moving forward, the HCPSS brought together school improvement planning teams to begin the process of continuous improvement at the Summer Institute and will continue these conversations and training opportunities throughout the school year at administrator meetings. The Department of Student Assessment and Program Evaluation will work with staff from the Department of Curriculum and Instruction to evaluate the impact of intervention programs. The connection between HCPSS's Goal 2 and academic achievement will be highlighted as the local standards and indicators for safe and nurturing schools are established and training in Cultural Proficiency continues.

Finally, it is important to note that the 2006 MSA results are merely one measure used to gauge the performance of the HCPSS. In the fall, the multiple measures used to monitor performance will be presented in the update to the *Bridge to Excellence* plan and will provide a more comprehensive examination of what the HPCSS has achieved.