REPORT

BOARD OF EDUCATION OF HOWARD COUNTY

Board Agenda Item

TITLE: Report on the Results of the 2007 Administration of the Maryland School Assessment

DATE: July 12, 2007

OVERVIEW:

Results of the 2007 Maryland School Assessment (MSA) for elementary and middle schools were released in June and are summarized in this report. 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 four years was largest for African American, Hispanic, and special services student groups. Students in Grade 4 demonstrated exemplary performance as EVERY student group met the local target of 70 percent at proficient or advanced in Grade 4 reading. Performance on the Alt-MSA showed impressive gains, and HCPSS students continue to perform at the advanced level on MSA in higher percentages than students around the state.

FUTURE DIRECTION:

At the Summer Institute, the State Superintendent, Dr. Nancy Grasmick applauded the success of the HPCSS and recognized the staff as leaders in the state. She attributed much of the system's success to careful planning and a willingness to always find ways to improve. As school and central office staff members analyze the latest test scores, the planning for improvement will occur and the steps necessary to help EVERY student meet with success will happen. This collective effort requires not only strategic planning, but careful alignment between the work of every department and school within the system. These cross-functional efforts will continue and be strengthened this year as a more cohesive strategic planning process is implemented. As Dr. Grasmick noted, careful planning leads to effective implementation, which leads to success for students.

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PRESENTERS: Terry Alban, Executive Director, Strategic Planning, Assessment and Program Evaluation
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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		
	2006	2007	2008	2006	2007	2008
Grades 3-5	62.5%	67.2%	71.8%	58.8%	63.9%	69.1%
Grades 3-8	62.0%	66.7%	71.5%	50.8%	57.0%	63.1%
Grades 6-8	61.5%	66.3%	71.1%	42.9%	50.0%	57.2%
Grades 9-12	45.3%	52.2%	59.0%	29.8%	38.6%	47.3%
School System	59.6%	64.7%	69.7%	47.8%	54.3%	60.9%

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 83.24 percent for 2007. School systems are held accountable for both of these categories as well.

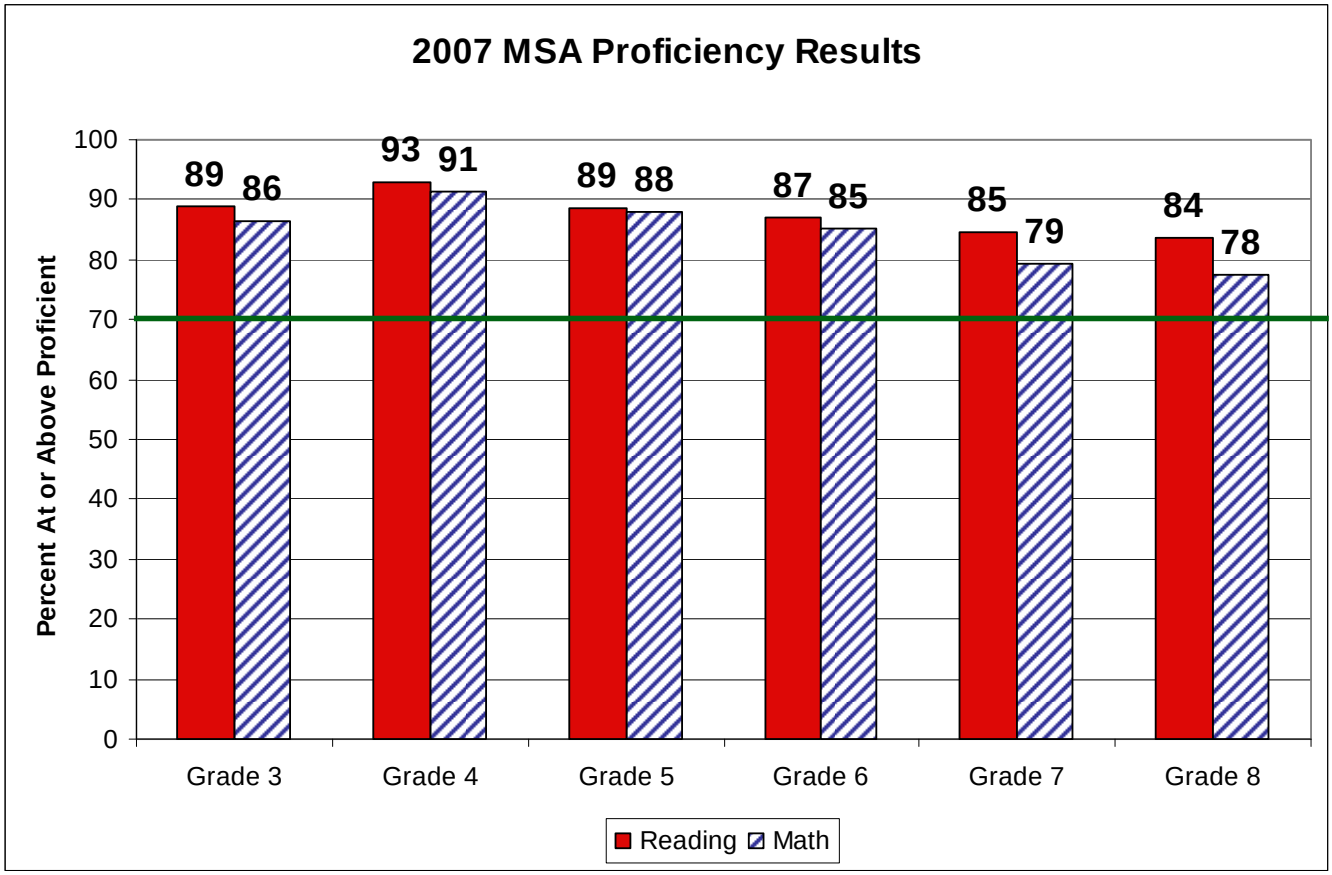
The Howard County Public School System (HCPSS) recognized that many schools were already achieving the AMOs established by MSDE and decided to establish more rigorous local targets for performance on the MSA for the system and schools. The target for 2007 was that every school would meet AYP and have 70 percent of its students and every student group performing 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 2007 MSA

The performance of students throughout the HCPSS on the 2007 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 22,684 students, 88 percent of them were proficient or above in reading and 85 percent of them were proficient or above in mathematics. The 2007 performance of HCPSS students on the MSA continued to be among the highest in the state across the grades and content areas. The performance of students is Grade 4 was particularly noteworthy this year. Overall 93 percent of our Grade 4 students scored proficient or above in reading and 91 percent scored proficient or above in mathematics. Even more impressive is the fact that EVERY student group met the local target of 70 percent at proficient or advanced in Grade 4 reading.

Maintaining this high level of performance is challenging, yet HCPSS continues to have schools with more than 90 percent of students scoring at proficient or above. In 2007, there were 11 elementary schools with 90 to 94 percent of students at proficient or above in reading and 10 elementary schools at that level for mathematics. Additionally, there were 10 elementary schools with 95 percent or more of their students proficient or above in reading and 8 elementary schools at that level for mathematics. Seven middle schools had 90 to 94 percent of their students proficient or above in reading and 3 middle schools reached that level in mathematics. One middle school, Clarksville Middle, had 95 percent of their students proficient or above in mathematics.
Figure 1: Proficiency Results for 2007 MSA



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Schools throughout the system were also very successful at exceeding state and local targets for proficiency on the 2007 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 four middle schools and the PreK-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 have made progress toward the local target for 2007 of having every student group demonstrating 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.) The performance data presented in Tables 2 and 3 reflect the challenges that lie ahead as the state AMOs approach and in some cases, exceed, the local target in 2008.

Table 2: Number of Elementary Schools (out of 38) Meeting the HCPSS 2007 Target for Student Groups

Student Group	Reading	Mathematics
	Number of Schools	Number of Schools
All students	38	38
Male	37	36
Female	38	38
Asian	38	38
African American	37	31
White	38	38
*Hispanic (33)	27	23
*ELL (29)	13	14
*FARMS (30)	19	10
Special Education	12	10

* 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	14
Male	17	14
Female	18	16
Asian	18	18
African American	10	5
White	18	18
*Hispanic (17)	8	6
*ELL (15)	0	3
*FARMS (17)	5	2
Special Education	0	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 PreK-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 2007, Cradlerock met the 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.

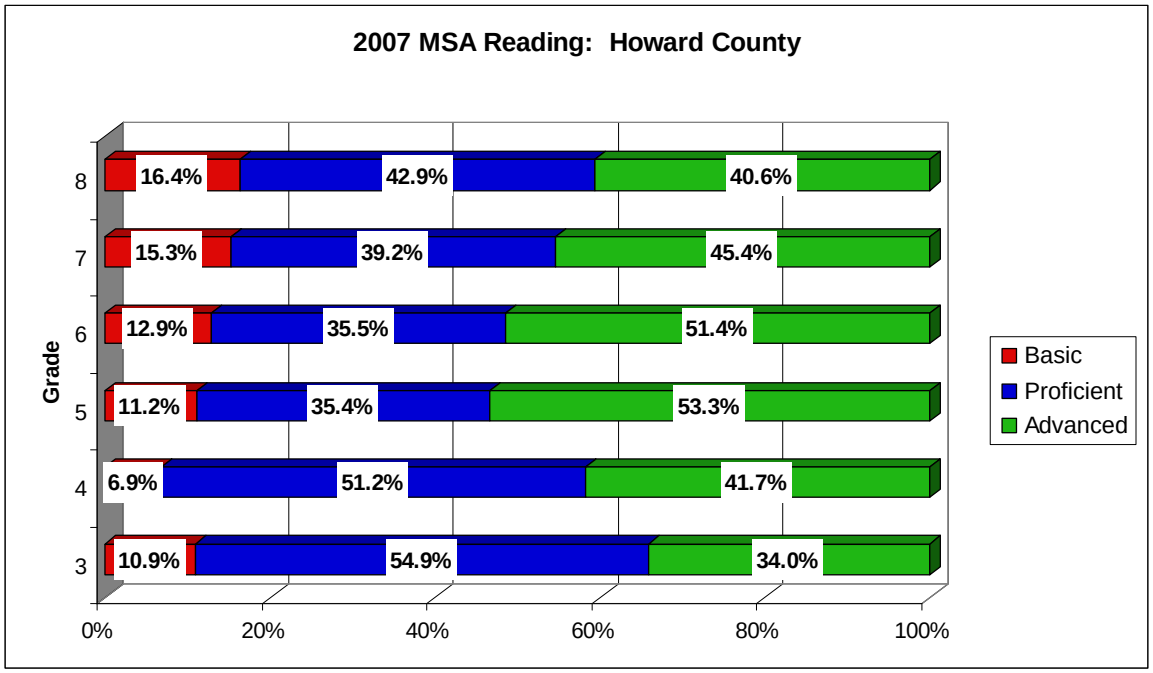
Special recognition to these schools for having every eligible student group meet or exceed the local standard in both reading and mathematics: Centennial Lane Elementary, Northfield Elementary, Pointers Run Elementary, Thunder Hill Elementary, Triadelphia Ridge Elementary, and Worthington Elementary. These schools had every eligible student group meet or exceed the local standard in reading: Clarksville Elementary, Fulton Elementary, Hammond Elementary, and Manor Woods Elementary. This school had every eligible student group meet or exceed the local standard in mathematics: West Friendship 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. In addition to maintaining high levels of performance relative to the state standards, it is important to note HPCSS students consistently reach the highest level of performance by scoring in the advanced category on MSA. 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



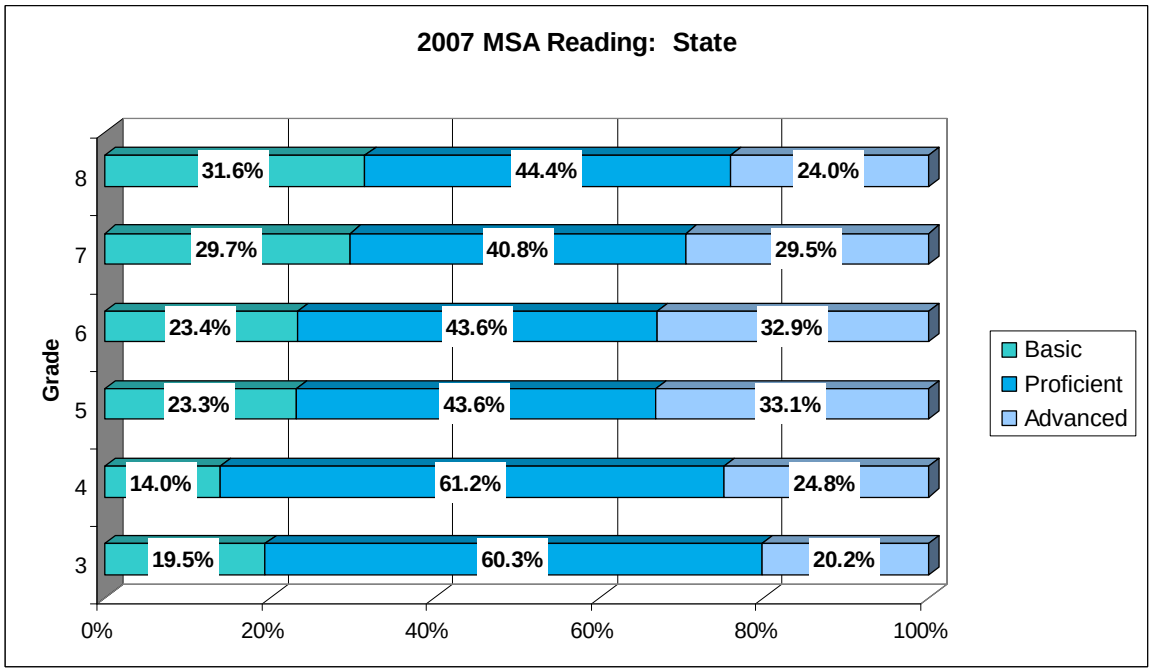
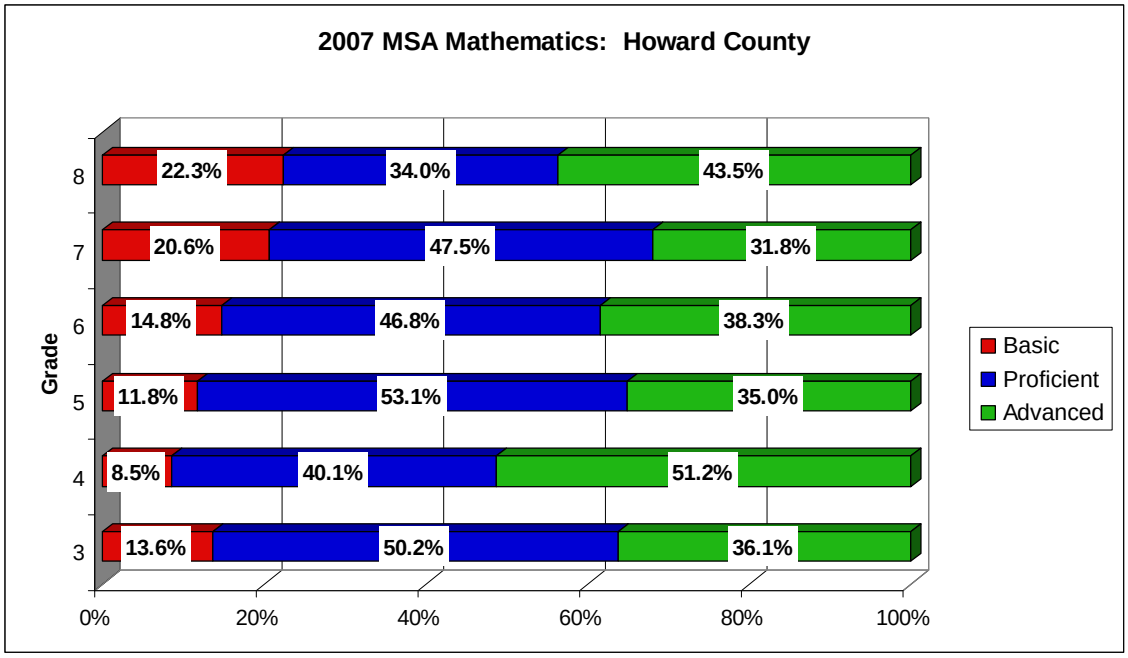
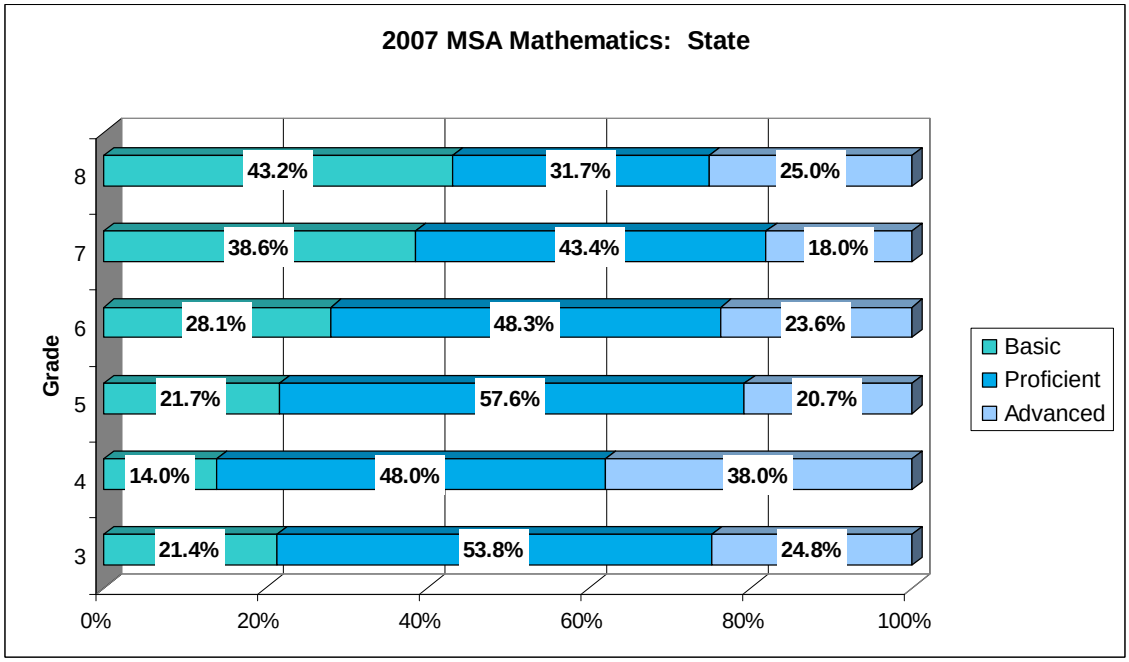


Figure 3: Advanced Performance in Mathematics for HCPSS and Maryland



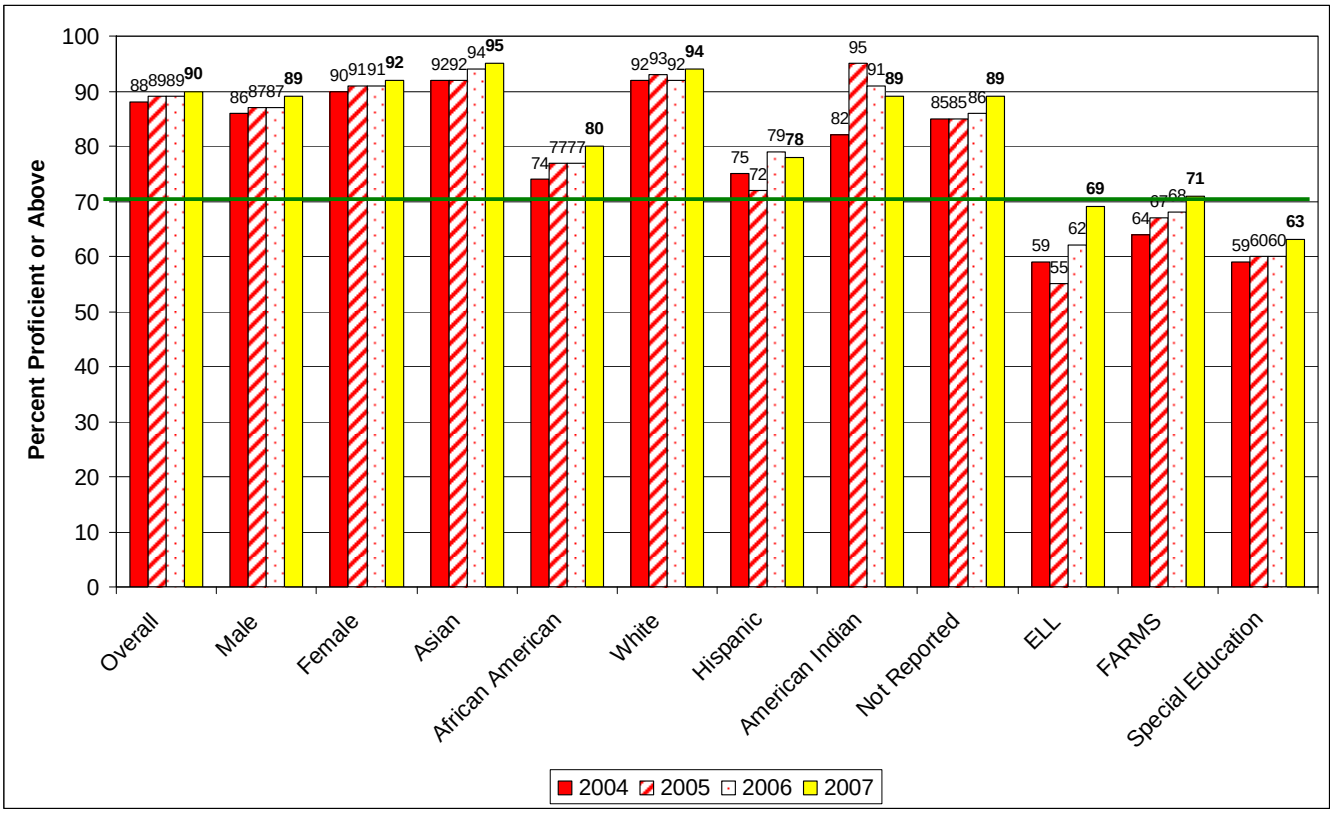


Trend Performance on MSA

While the performance on the 2007 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. The trend performance in reading for all student groups is depicted in Figures 4 and 5. 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.

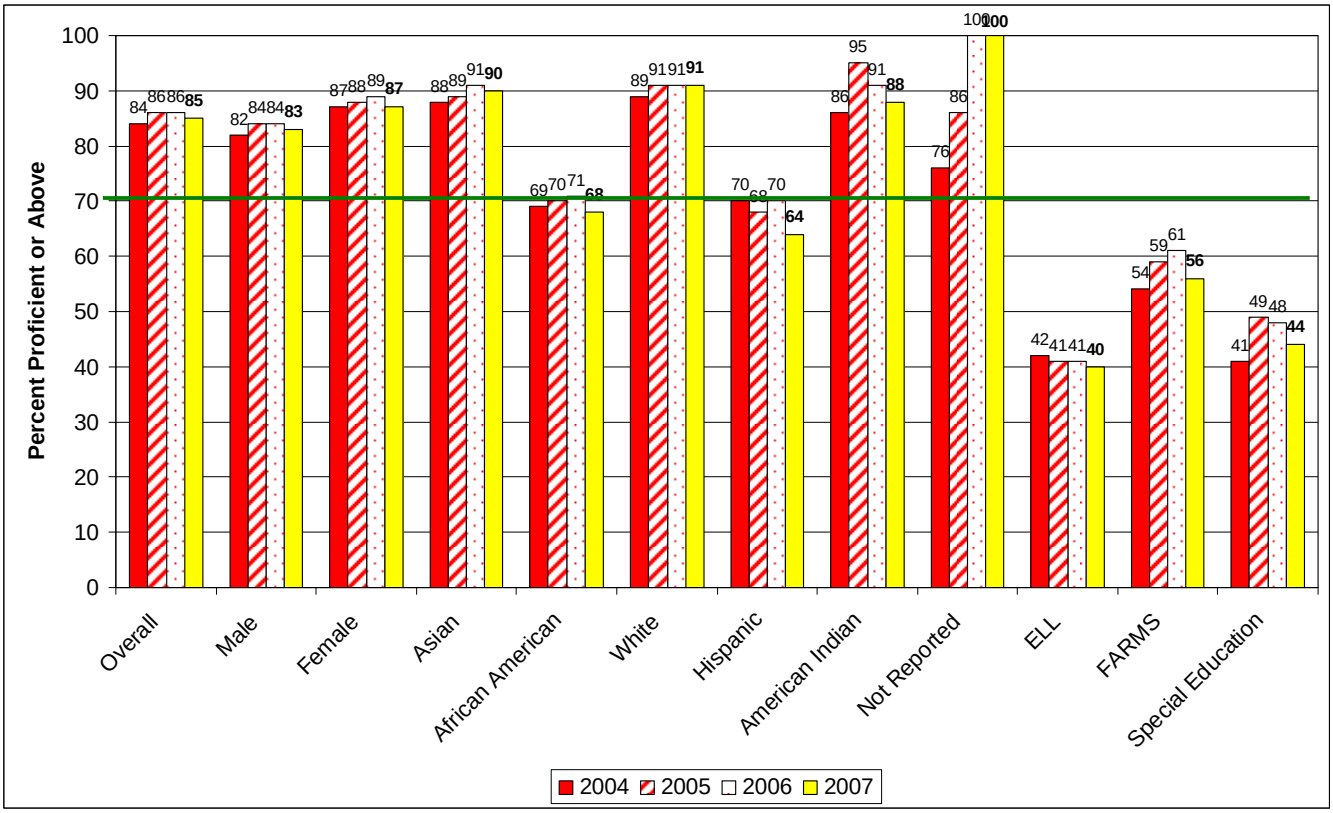
As illustrated in Figure 4, all racial/ethnic student groups have been able to maintain performance above the local standard of 70 percent at proficient or above for the last four years. Students receiving special services have improved performance over time, and students receiving FARMS exceeded the local target for the first time in 2007.

Figure 4: Trend Performance in Elementary Reading Grades 3 to 5



The trend performance for middle school reading is shown in Figure 5. After maintaining performance for several years, there were several student groups who experienced a decline in 2007. African American and Hispanic students dropped below the local target, and all student groups receiving special services showed a decline in scores. During the school year, there were several retreats with middle school principals regarding areas of concern. Plans are underway to implement a diagnostic reading assessment for students performing below grade level at many middle schools in response to the needs identified by principals. The areas of concern will continue to be explored during the upcoming year as student scores from 2007 are analyzed in more detail.

Figure 5: Trend Performance in Middle School Reading Grades 6 to 8



The trend performance in mathematics is presented in Figures 6 and 7. At the elementary level, the performance of every student group either improved or was maintained. All racial/ethnic groups exceeded the local target and students receiving special services moved closer to the target in 2007, with both ELL and students receiving FARMS within 5 percentage points of the local target.

The performance of middle school students in mathematics continues to be an area needing improvement for HCPSS and systems across the state. The growth since 2004 is encouraging for many students groups. Performance for African American students has increased 18 percentage points, for Hispanic students 14 percentage points, for ELL students 12 percentage points, for special education students 16 percentage points, and for students receiving FARMS 17 percentage points. Yet, there is still much work to be done to ensure that these student groups reach the local target of 70 percent scoring at proficient or advanced. Efforts are already underway to evaluate mathematics intervention programs to determine which programs are most effective for middle school students.

Figure 6: Trend Performance in Elementary Mathematics Grades 3 to 5

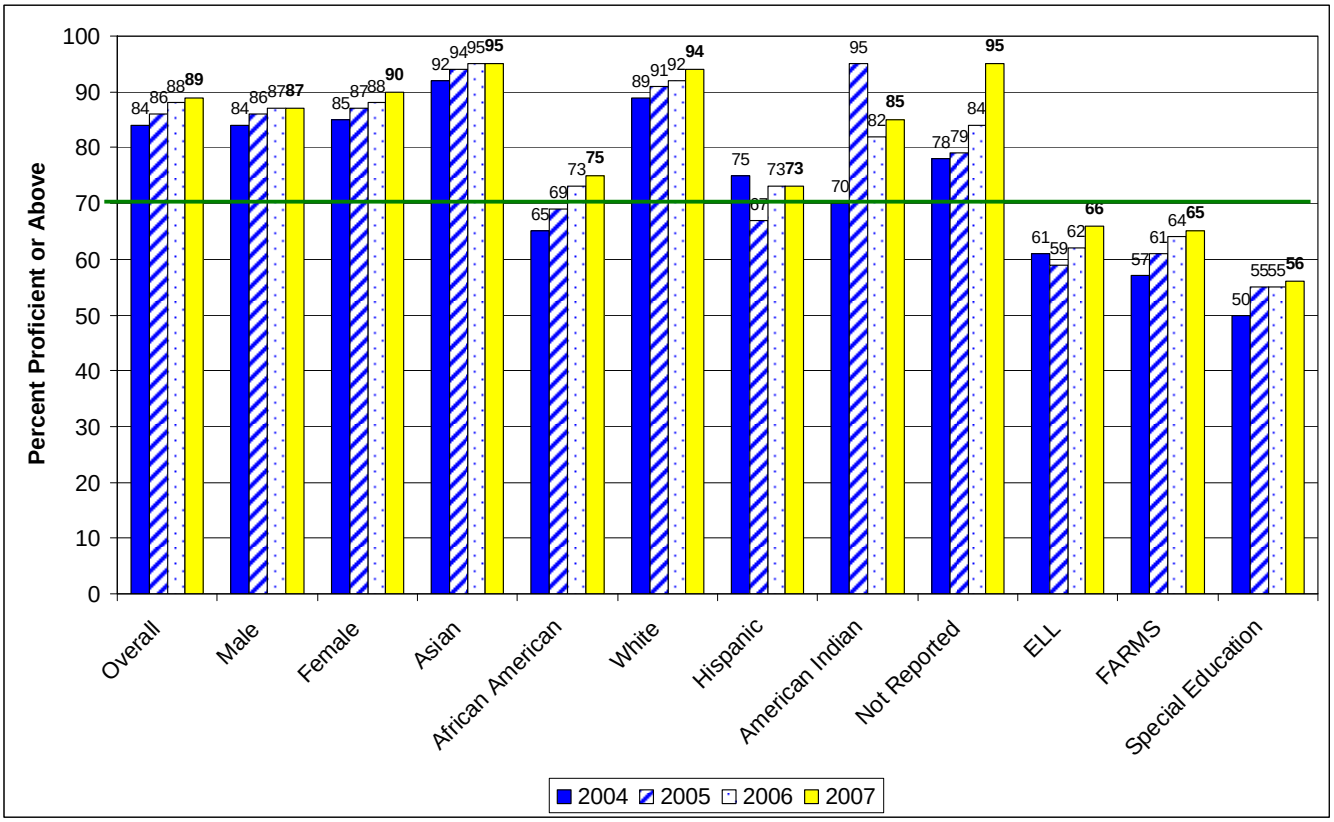
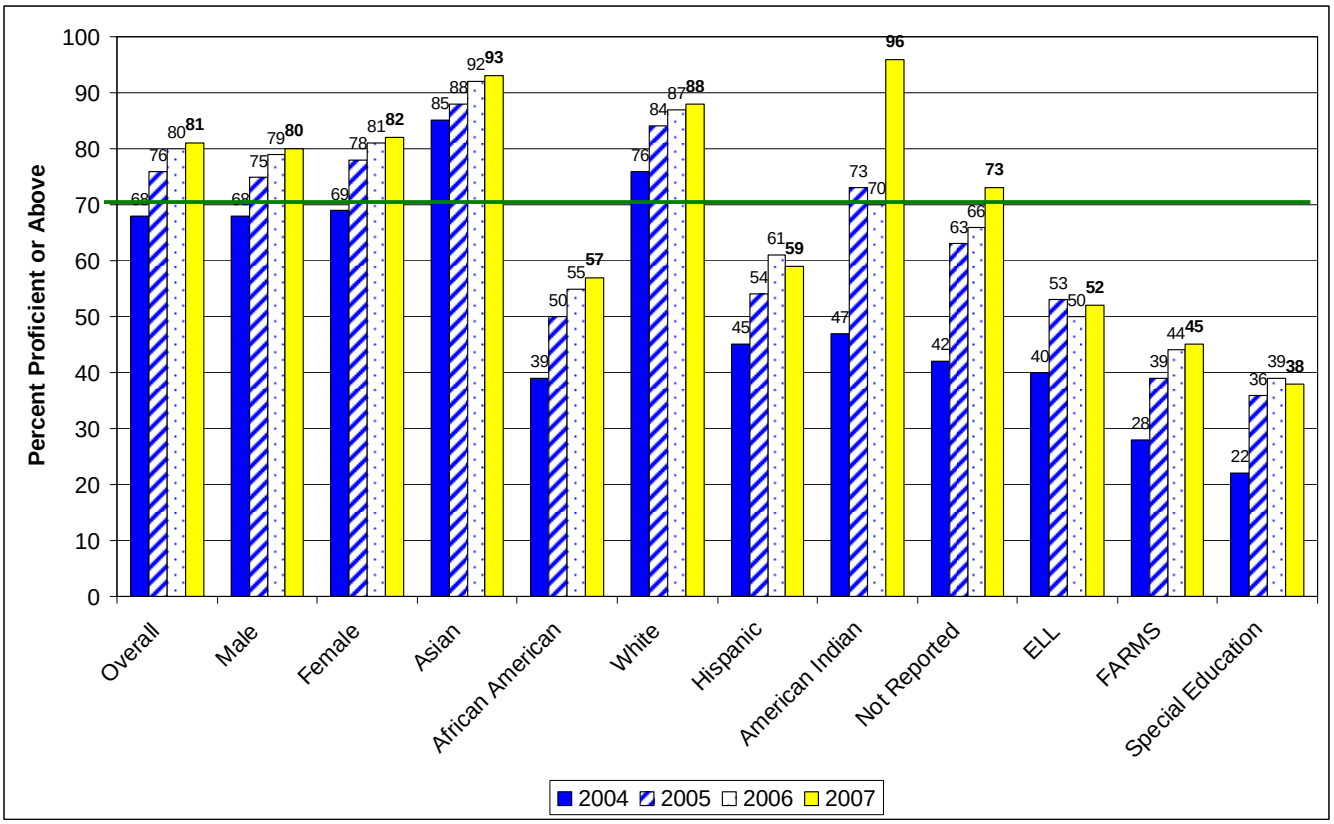


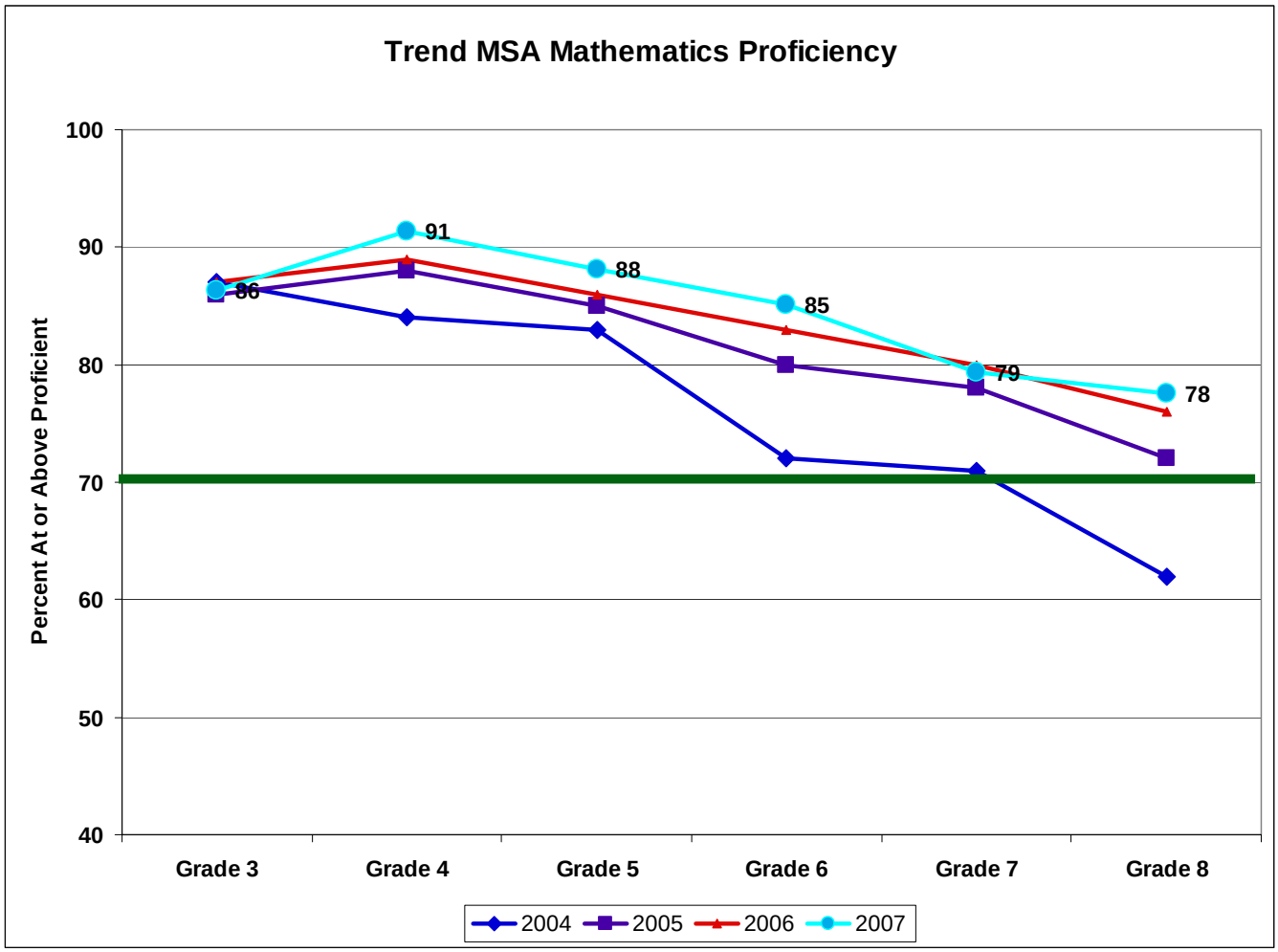
Figure 7: Trend Performance in Middle School Mathematics Grades 6 to 8



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 8, mathematics performance has improved since 2004. The most significant increases are seen in middle school mathematics, where gains of 13 percentage points in Grade 6, 8 percentage points in Grade 7, and 16 percentage points in Grade 8 have occurred.

Figure 8: Trend Performance in MSA Mathematics by Grade



One systemic effort to address mathematics performance was providing a Mathematics 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	2007 Percent Proficient	Percentage Point Increase from 2004
Bryant Woods	69	71	71	71	+2
Cradlerock (3-5)	72	72	74	76	+4
Deep Run	71	76	*80	83	+12
Guilford	80	80	80	82	+2
Laurel Woods	70	70	73	74	+4
Longfellow	77	*82	85	82	+5
Phelps Luck	73	66	75	70	-3
Running Brook	74	68	77	82	+8
Stevens Forest	*76	72	74	77	+1
Swansfield	73	73	76	77	+4
Talbott Springs	76	78	81	85	+9

* Indicates the first year MST was in the school.

Mathematics Instructional Support Teachers (MIST) were placed at four middle schools for the 2005-2006 school year and one additional school, Patuxent Valley, received this position in 2006-2007. Early trend data show some very positive improvements at these middle schools on the 2007 Mathematics MSA as presented in Table 5.

Table 5: Middle Schools with Mathematics Instructional Support Teachers

School	2005 Percent Proficient	2006 Percent Proficient	2007 Percent Proficient	Percentage Point Increase from 2005
Harper's Choice	60	*68	72	+12
Murray Hill	58	*61	64	+6
Oakland Mills	60	*66	67	+7
Patuxent Valley	63	67	*68	+5
Wilde Lake	61	*60	66	+5

* Indicates the first year MIST was in the school.

The MST and MIST provide job-embedded professional development to other teachers and offer additional support to students. In the "Candid Conversations with Teachers," many teachers noted the value of having Mathematics Support Teachers in the school and requested that the program be expanded. Next year, there will be two additional MSTs at Veterans Elementary and Jeffers Hill Elementary and three additional MISTs at Cradlerock (Grades 6-8), Elkridge Landing Middle, and Mayfield Woods Middle.

Proficiency Results for 2007 Alt-MSA

The performance of 216 students in Grades 3 through 8 and 10 who completed the Alt-MSA is presented for reading and mathematics in Figures 8 and 9. 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.

The Department of Special Education worked diligently with schools this year to improve the processes for monitoring the performance of students on the Alt-MSA. The improvement is impressive, and continued improvement is expected.

Figure 8: Trend Performance in Reading for the Alt-MSA

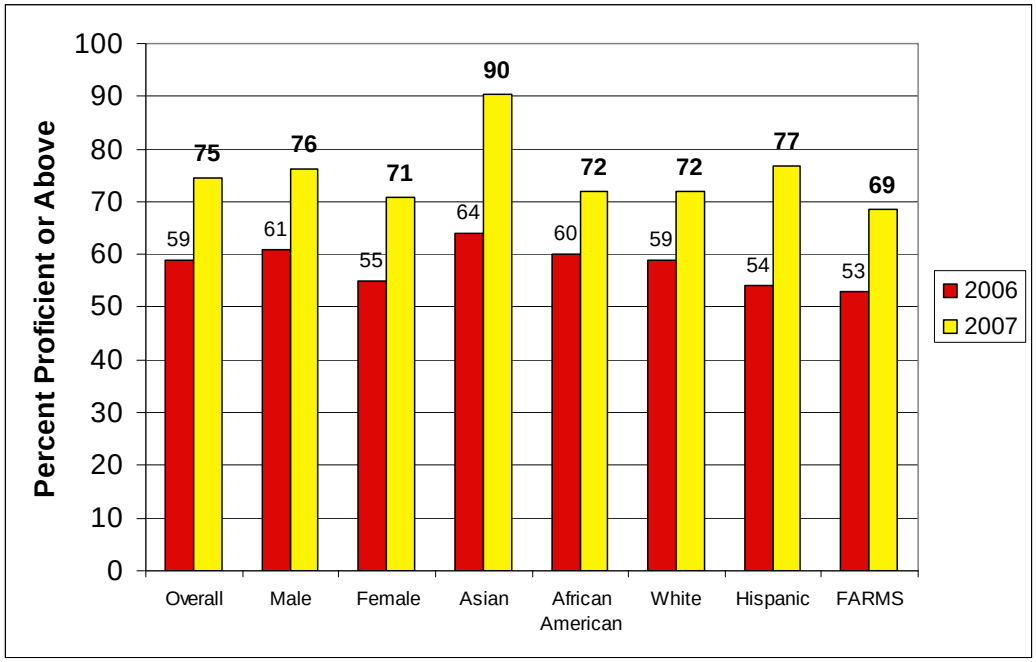
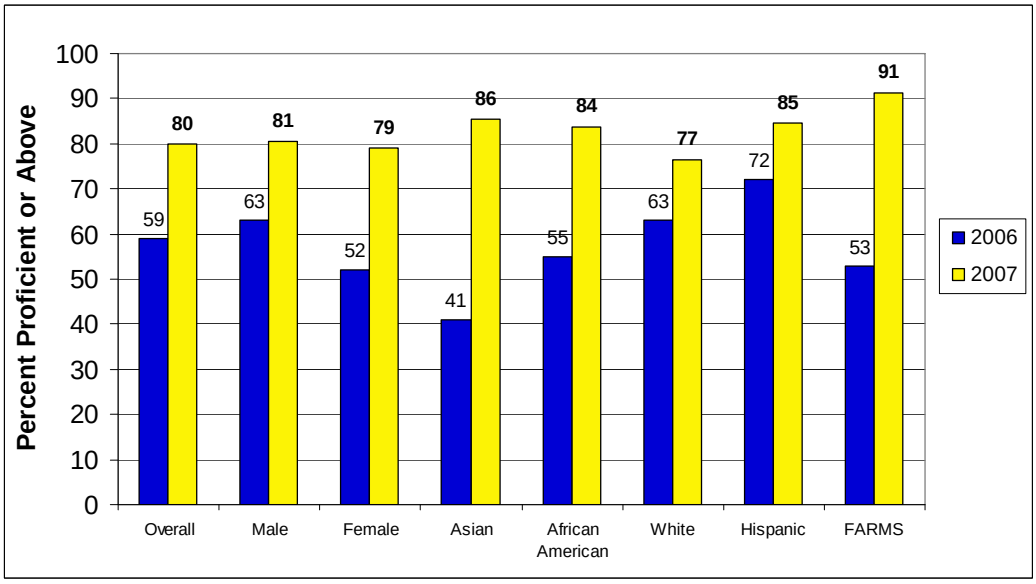


Figure 9: Trend Performance in Mathematics for the Alt-MSA



SUMMARY AND NEXT STEPS

The HCPSS and its schools demonstrated impressive performance in the 2007 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 2007, and the schools rose to that challenge. 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 four middle

schools and the PreK-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.

The target of having 70 percent of every student group at or above proficient continues to be the focus for all HCPSS schools and it is a rigorous expectation. For the first time, HCPSS was able to reach this target with EVERY student group in Grade 4 reading. Other grade levels continue to make progress and it is hoped that more grades will match the accomplishment of Grade 4 students. Additionally, there were 10 elementary schools that met the 2007 target in both reading and mathematics and 5 other elementary schools that met it in either reading or mathematics. These schools are to be commended, and many other schools are showing the progress and determination that are necessary to make reaching this target a reality. However, it will take a collective effort across the system to meet this challenge.

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 and Reading 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.

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 Strategic Planning, Assessment, and Program Evaluation will work with staff from the Department of Curriculum and Instruction to continue to evaluate and monitor the impact of intervention programs. The connection between Goal 2 and academic achievement will be examined as the local standards and indicators for safe and nurturing schools are monitored by schools in a more strategic manner.

Finally, it is important to note that the 2007 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.