

CHAPTER II: NEEDS ASSESSMENT

The Howard County Public School System has consistently engaged its community in the development of a shared vision for education, the identification of strategic priorities, and the setting of high standards. This tradition dates to May 1985, when the school system began a strategic planning process that culminated in the adoption of *Toward the Year 2000: A Strategic Plan for the Howard County Public School System*. The plan provided a framework for a dynamic process of continuous review and improvement during a period of dramatic demographic change and increasing student enrollments.

In 1994, a similar planning process resulted in an updated plan, *Beyond the Year 2000*, which articulated the system's vision and belief statements, a mission statement and seven strategic goals. In 2002, the plan's seven goals were combined into two in order to simplify and focus improvement efforts.

The school system's improvement efforts are embodied in school-level improvement teams, program improvement efforts, and a District Planning Team (DPT) convened to monitor district-level performance and recommend strategic priorities to the Superintendent. The priorities identified by the latter represent those needs to which the district must attend to ensure that our students meet state standards rather than become disadvantaged. The work of the DPT is critical to the development and monitoring of the school system's Master plan.

Two other documents, *No Child Left Behind: A Report of the Leadership Committee on School Equity* (March 13, 2000), and the *Management and Performance Review Report* (October 30, 2001) provide additional information regarding school system needs and the expectations of the community. (To prevent confusion between the local *No Child Left Behind Report* and the federal *No Child Left Behind Act of 2001*, the local report will be referred to as the Equity Report.)

No Child Left Behind: A Report of the Leadership Committee on School Equity (Equity Report)

The Leadership Committee on School Equity defined equity as fairness to all stating that:

Equity requires that we provide each student with the resources, support, and instruction necessary to achieve academic success. Schools with disproportionate numbers of children with multiple needs require more support than schools that are less challenged.

The Committee's report, informed by the County Council's Combined Committee on Education and Public Comment, identified 47 priority issues that affected school equity. The 47 issues were grouped into the following four categories:

- Factors Affecting Equity—financing of the educational system

- Resources and Programs—educational options
- Staffing—recruiting and retention of highly qualified staff
- Accountability—combination of data collection and best practices.

One of the Leadership Committee’s recommendations on which immediate action was taken was to hire an outside consultant to conduct an independent performance review of the school system. The review, which was jointly funded by the school system and the county government, was conducted by WCL Enterprise, a Texas-based firm. The final report was presented to the Howard County Board of Education on October 30, 2001.

Management and Performance Review

The *Management and Performance Review Report* was presented to the Board of Education in October 2001. It contained 123 recommendations in the following areas:

- Organization and management
- Educational services delivery and student performance
- Personnel management
- Community involvement
- Facilities use and management
- Asset and risk management
- Financial management
- Purchasing
- Safety and security
- Computers and technology.

The Superintendent, in developing an administrative response to the Report, outlined a process to examine its recommendations in the context of the five Key Results Areas:

- Student performance
- Human resource management
- Leadership
- Financial stability
- Community support.

The process was designed to align the *Management and Performance Review* recommendations with the school system’s planning process in a purposeful and significant manner. Committees with broad representation were established in the Key Results Areas. Each committee was assigned primary responsibility for recommendations in one of the Key Results Areas and given an opportunity to provide input into the findings of the other four committees. The committees considered the consultant’s findings and recommendations and advised the Superintendent as to whether those recommendations should be implemented. (Refer to Appendix E for the complete

listing of the *Management and Performance Review* items. The County Council requested an update, which was presented at its meeting on April 11, 2003. The update is included as part of this appendix.)

The substance of the work of the District Planning Team, as well as the contents of the *Equity* and *Management and Performance* reports, have been considered in assessing school system needs. Consistent with the school system's current improvement efforts, what follows is the most current needs assessment information presented in the five Key Results Areas.

Key Results Area: Student Performance

Because scoring procedures for the 2002 administration of the Maryland School Performance Assessment were inconsistent with those of previous years, 2001 MSPAP results are reviewed for the purpose of identifying needs. (Refer to Appendix H for state and local explanations.) Howard County will include 2003 MSA results in its first annual update in July 2004, since they are not currently available. An analysis of multiple indicators used by the school system to monitor student performance follows.

2001 MSPAP Results

The MSPAP results from spring 2001 showed an overall plateau since 1998. The composite score of 61.2 was essentially unchanged from the previous year, which was 61.4. The county composite score increased 12.9 points since 1993, and this growth had been distributed evenly among the three tested grades. The most significant gains had been in the areas of reading, writing, and language usage at the elementary level, and in social studies at the middle school level. The county had not yet met an MSPAP standard, although the composite score for 2001 was the highest in the state.

MSPAP composite scores provided a reliable way to analyze the performance of groups over time. The following table shows the overall composite score for various student groups for the past three years. The gap between the standard (70) and the score for several of the groups, as well as gaps between groups, is apparent in the table. Also apparent is the lack of progress in some groups over time.

Overall Composite Scores for Subgroups

OVERALL GROUP	2001	2000	1999
Male	55.9	55.4	53.4
Female	66.4	67.7	65.4
Asian	73.1	71.4	70.2

OVERALL GROUP	2001	2000	1999
White	65.9	66.1	64.0
Hispanic	43.4	47.3	44.9
African American	39.0	38.7	36.8
Special Education	27.8	29.7	25.4
Free/Reduced Meals	28.6	32.0	28.7
ESOL	32.5	34.6	36.2
County Overall	61.2	61.4	59.3

Reference: Howard County Board of Education Report, *2001 Maryland School Performance Program Report*, March 7, 2002.

The Maryland State Board of Education has set standards for satisfactory and excellent performance on the MSPAP. To receive a satisfactory rating in any content area or grade, a county or school must have 70 percent of its students scoring in proficiency levels 1, 2, and 3. To receive an excellent rating, a school must meet the satisfactory standard and 25 percent of the students must score in proficiency levels 1 and 2. Baseline data were established in 1993. (Refer to Appendix I for the composite scores for each elementary and middle school.)

The following tables contain data illustrating the percentages of Howard County students scoring in levels 1, 2, and 3 by grade level and content area for the past five years.

**Percent of Students Meeting Satisfactory Standards
By Grade and Content Area**

Percent at Satisfactory	Reading			Writing			Language Usage		
	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8
2001	60.1	66.5	39.8	65.1	60.3	58.8	62.5	67.4	60.4
2000	58.3	65.6	37.9	63.8	56.4	64.4	61.1	65.8	62.1
1999	60.1	60.2	33.3	61.0	53.9	57.1	64.6	65.8	59.9
1998	59.3	62.0	34.2	60.0	60.2	53.3	67.1	68.3	60.0
1997	57.7	52.1	37.0	54.7	52.8	53.9	63.7	61.9	62.5
Difference 00-01	1.8	0.9	1.9	1.3	3.9	-5.6	1.4	1.6	-1.7

Percent at Satisfactory	Mathematics			Science			Social Studies		
	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8
2001	57.8	60.2	67.3	54.9	67.5	69.5	56.1	61.1	64.5
2000	57.4	64.0	67.6	58.6	69.1	68.3	60.0	60.2	65.2
1999	55.1	62.3	66.5	56.0	67.8	65.7	57.7	60.3	59.0
1998	57.1	66.8	63.3	56.4	69.8	63.3	60.5	62.0	56.5
1997	58.6	66.6	61.4	55.0	65.7	61.3	54.4	62.2	55.7
Difference 00-01	0.4	-3.8	-0.3	-3.7	-1.6	1.2	-3.9	0.9	-0.7

**Percent of Students Meeting Excellent Standards
By Grade and Content Area**

Percent at Excellent	Reading			Writing			Language Usage		
	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8
2001	14.2	26.8	6.0	27.8	29.4	26.4	30.1	41.5	26.5
2000	14.6	26.0	4.3	21.3	31.0	26.8	30.5	43.2	31.0
1999	13.2	18.0	3.2	20.7	29.3	28.5	33.1	41.7	28.2
1998	14.3	18.7	2.9	20.5	31.4	26.1	34.7	43.3	27.4
1997	13.1	11.8	4.9	21.6	26.2	23.1	32.7	35.1	27.0
Difference 00-01	-0.4	0.8	1.7	6.5	-1.6	-0.4	-0.4	-1.7	-4.5

Percent at Excellent	Mathematics			Science			Social Studies		
	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8	Gr 3	Gr 5	Gr 8
2001	11.5	23.3	24.1	15.9	29.3	31.0	12.4	24.8	18.0
2000	12.7	26.6	25.6	17.8	26.0	27.4	14.1	21.5	18.3
1999	11.0	21.9	23.9	13.4	23.1	23.8	10.0	23.0	14.4
1998	11.9	22.5	18.9	14.5	23.4	23.0	10.3	23.0	13.9
1997	12.5	22.2	15.6	12.6	18.2	21.3	8.0	21.1	12.0
Difference 00-01	-1.2	-3.3	-1.5	-1.9	3.3	3.6	-1.7	3.3	-0.3

(Refer to Appendices I, J, K, and L for individual school and system performance data.)

High Schools

High schools currently have nine database areas with approved standards. Nine of the high schools had achieved excellent or satisfactory ratings in all nine-database areas. Centennial High had excellent ratings in all nine areas. Attendance was the only area in which Glenelg and River Hill did not score an excellent standard. The data are summarized by school in the following table.

MSPP Standards Met by High Schools

School	# Excellent	# Satisfactory	# Not Met
Atholton	5	4	0
Centennial	9	0	0
Glenelg	8	1	0
Hammond	5	4	0
Howard	7	2	0
Long Reach	5	4	0
Mt. Hebron	5	4	0
Oakland Mills	2	4	3
River Hill	8	1	0
Wilde Lake	5	4	0
County	5	4	0

Reference: For all elementary and middle school MSPAP data and for high school MSPP data—Howard County Board of Education Report, *2001 Maryland School Performance Program Report*, April 25, 2002.

The 2001 results indicated that Howard gained three excellent standards, Hammond gained two excellent standards, and Atholton and Long Reach each gained one. Oakland Mills lost two satisfactory standards, and Wilde Lake lost one excellent standard. Overall, there was a gain of five excellent standards. Only Centennial received an excellent rating in attendance.

Comprehensive Tests of Basic Skills/Fifth Edition (CTBS/5) School Year 2001-2002

On the CTBS/5, Howard County students performed above the national norm, and scores ranked among the highest in Maryland. Some groups of students lagged behind in their performance. The African-American, Hispanic, and special education students achieved lower scores than the other student groups. Special education students have begun to make some progress over the past three years, but the performance of African-American and Hispanic students remained stable and low.

As a group, Howard County students scored at the 77th percentile, 27 percentile points above the national norm. Score breakdowns by grade and content are as follows:

2002 CTBS/5 Grade and Subject Percentiles

Grade	Reading	Language	Mathematics
2	74	83	78
4	76	82	79
6	69	73	67
9	72	74	72

Average Percentile Scores for Howard County by Grade and Content Area 1998-2002

Grade	Reading					Language					Mathematics				
	02	01	00	99	98	02	01	00	99	98	02	01	00	99	98
2	74	77	74	70	70	83	86	81	79	80	78	81	75	73	73
4	76	75	72	70	70	82	81	78	77	77	79	76	73	72	72
6	69	71	67	68	68	73	73	70	71	68	67	70	63	63	63
9	72	72	71	71	71	74	71	71	70	68	72	73	71	72	71

Howard County’s scores are skewed. This means that rather than a symmetrical distribution, the district has high numbers of students scoring above the fiftieth percentile; many scores are at the top of the distribution. The following table illustrates the distribution of Howard County students over all grade levels on the CTBS/5 and the corresponding percentage expected in the norm group.

Distribution of Howard County 2002 CTBS/5 Scores

	Howard County Percentage	Norm Group Percentage (Expected)
Quartile 1 (1 st -25 th percentile)	8	25
Quartile 2 (26 th -50 th percentile)	14	25
Quartile 3 (51 st -75 th percentile)	24	25
Quartile 4 (76 th -99 th percentile)	53	25

(Refer to Appendix M for the quartile distribution of scores for individual schools.)

CTBS/5 data are disaggregated by gender, race, ethnic group, special education, English for Speakers of Other Languages (ESOL), and free and reduced meal status (FARMS). (Refer to Appendices N and O for the performance of all subgroups and students overall by grade level.) The information is based on the total battery percentile rank, which combines data from the reading, language, and mathematics sections of the tests.

Asian students scored higher than any other student subgroup regardless of grade level. African- American, Hispanic, ESOL, FARMS, and special education students were overrepresented in the students scoring in the lowest quartile, and are underrepresented in the students scoring in the highest quartile. Average percentile rank scores for special education students showed that their performance is significantly below the national norm. They were also below standard Howard County student scores. In addition, 37 percent of the special education students took nonstandard administrations of the test, and, therefore, could not be included in the analysis.

One of the advantages of the CTBS/5 is that it can provide some detailed information about the areas of student strength and weakness. The percentage of students mastering each objective provides valuable information concerning the effectiveness of the implementation of the curriculum at the individual school and county level. In some cases, because the test was administered in March, it was not unexpected that an objective that had not, as yet, been taught, had not been mastered. In many cases, the same objective appears at different grade levels. The test items that measure each objective become more difficult as the grade level advances. (Refer to Appendix P.)

Students who take the CTBS/5 in both Grade 2 and again in Grade 4 in the same school provide the school system the opportunity to evaluate how effectively the system maintains or improves student performance. Data for these analyses include only students who took the CTBS/5 in the same elementary school as a second grader in 2000 and again as a fourth grader in 2002. The expectation is that students would maintain their percentile ranking from one grade level to the next, assuming that academic progress was on par with the performance demonstrated by the norm group. The data indicated that from Grade 2 to Grade 4, students maintained their percentile rank with the exception of African-American students, who showed a drop in scores. The majority of comparisons showed maintenance or improvement in percentile rank. (Refer to Appendix Q for a data review.)

Reference: Howard County Board of Education Report, *Comprehensive Tests of Basic Skills/Fifth Edition (CTBS/5) School Year 2001-2002*, June 27, 2002. (Refer to Appendix HH for 2003 CTBS results.)

Functional Tests

Howard County’s K-8 Grading, Reporting, Promotion, Retention, and Acceleration policy requires students to pass Maryland Functional Tests in reading, mathematics, and writing by the end of Grade 8. The policy was instituted in response to the inauguration of more rigorous high school assessments to make sure that students leaving middle school had attained the necessary skills to achieve high school learning goals.

The following table presents preliminary results for the 2001-2002 school year.

Maryland Functional Tests—County Results

	Percentage Excellent	Percentage Satisfactory	2001-2002 % Passing	2002 Standard Met	2001 Standard Met
Grade 8					
Reading	NA	NA	99.3	NA	NA
Mathematics	NA	NA	96.0	NA	NA
Writing	NA	NA	95.1	NA	NA
Grade 9					
Reading	97	95	99.5	Excellent	Excellent

	Percentage Excellent	Percentage Satisfactory	2001-2002 % Passing	2002 Standard Met	2001 Standard Met
Mathematics	90	80	95.7	Excellent	Excellent
Writing	96	90	96.4	Excellent	Satisfactory
Grade 11					
Reading	99	97	99.7	Excellent	Excellent
Mathematics	99	97	98.3	Satisfactory	Satisfactory
Writing	99	97	98.8	Satisfactory	Excellent
Passed All	96	90	95.8	Satisfactory	Satisfactory

Although summer school provides another chance for further instruction and another test administration for students who have completed Grade 8 without passing all of the functional tests, the goal is to reduce the number of students who must attend summer school as much as possible. In effect, Howard County has adopted a higher standard for its students than the state of Maryland. The district goal is to have 100 percent of the current students pass all three functional tests by the end of Grade 8.

The emphasis on the attainment of functional skills at the middle school has resulted in increased performance on the functional tests. Further improvement depends on increased attention and accelerated instruction for students and student subgroups struggling to meet functional test requirements. This includes effective instructional programs at the high school level for any students who have yet to meet these requirements.

Maryland Functional Reading Test (MFRT)

The MFRT is administered in the fall and spring of each school year. The first-time administration of the reading test occurs in the fall of Grade 6. The skills assessed on the reading test are taught in elementary school. The first administration of the MFRT resulted in a county pass rate of 92 percent. Of the students who were taught in Howard County in elementary school, the pass rate was 90.8 percent. (Refer to Appendix R for each elementary school's reading pass rate.)

The following table presents MFRT pass rate and average scale score data by subgroups. Special education, ESOL, FARMS, Hispanic, and African-American subgroups have larger gaps between the pass rate goal of 100 percent and lower average scale scores.

2001 Grade 6 First Administration of MFRT —Performance by Subgroups

Group	Total Number	Number Failures	Number Passers	Pass Rate	Average Scale Score
All Students	3748	311	3437	92%	373
Male	1920	196	1724	90%	371
Female	1828	115	1713	94%	374
African American	734	135	599	82%	359
Asian	370	18	352	95%	378

Group	Total Number	Number Failures	Number Passers	Pass Rate	Average Scale Score
White	2540	135	2405	95%	376
Hispanic	93	21	72	77%	362
Special Education	329	127	202	61%	347
ESOL	51	17	34	67%	353
FARMS	395	113	282	71%	352

It is worth noting that four middle schools had MFRT pass rates above 99 percent at the end of Grade 6, four had pass rates of 100 percent at the end of Grade 7, and six of the eighteen Howard County middle schools had MFRT pass rates of 100 percent at the end of grade 8. Both elementary and middle schools must be aware of early signs that a student may have difficulty passing the MFRT. Data show that of the ten eighth graders who have yet to pass the MFRT, one was not in Howard County in Grade 6, and the remaining nine received CTBS/5 reading scores in Grade 6 below the 25th percentile.

Maryland Functional Mathematics Test (MFMT)

In Howard County, the skills tested on the MFMT have been taught in the regular curriculum by the end of Grade 7, and earlier for students who enroll in more advanced courses in mathematics. The first administration of the mathematics test is in the spring of Grade 6 to allow the more advanced students who have mastered basic mathematics skills to complete their requirement prior to beginning higher level mathematics courses. It also allows identification of areas of weakness for those students who do not yet have the skills to pass the test. While all students are not expected to pass the MFMT in Grade 6, all students should be able to pass it by the end of Grade 7. The first administration of the MFMT resulted in a county pass rate of 62 percent. Of the students who were in Howard County in elementary school, the pass rate was 62.2 percent. (Refer to Appendix R for each elementary school's mathematics pass rate.)

The following table presents MFMT pass rate and average scale score data by subgroups. Pass rates indicate that all groups have to make progress to pass the MFMT by the end of Grade 8, but significant progress will be needed for special education, FARMS, African-American, Hispanic, and ESOL students. These students require accelerated instruction in mathematics to pass the test.

2002 Grade 6 First Administration of MFMT – Performance by Subgroups

Group	Total Number	Number Failures	Number Passers	Pass Rate	Average Scale Score
All Students	3754	1415	2339	62%	350
Male	1920	729	1191	62%	350
Female	1834	686	1148	63%	350
African American	738	507	231	31%	329
Asian	383	72	311	81%	366

Group	Total Number	Number Failures	Number Passers	Pass Rate	Average Scale Score
White	2524	769	1755	70%	354
Hispanic	98	57	41	42%	335
Special Education	328	258	70	21%	325
ESOL	60	31	29	48%	340
FARMS	400	311	89	22%	322

The CTBS/5 scores of the students who had not passed the MFMT by the end of Grade 8 indicate that the students had shown these weaknesses early. Of the 106 students who had not passed, two were not in Howard County schools in Grade 6, and 92 received sixth grade CTBS/5 scores below the 25th percentile. The remaining 12 had scores between the 26th and 50th percentile. In other words, 100 percent of these students who were in Howard County in Grade 6 provided evidence of their weaknesses in an earlier standardized assessment. Clearly, these students could be identified early for additional help in mathematics.

Maryland Writing Test (MWT)

The MWT is administered in the winter of each school year. It is administered for the first time in Grade 7. Students should be able to pass the MWT the first time they take it. The first administration of the MWT resulted in a county pass rate of 85.3 percent. The following table presents MWT first administration pass rate and average scale score data by subgroups. Pass rates indicate that special education, ESOL, FARMS, African-American, and Hispanic students have the most progress to make if they are to meet the expectation that they pass the MWT when they take it in Grade 7. These students need accelerated instruction in writing.

2001 Grade 7 First Administration of MWT — Performance by Subgroups

Group	Total Number	Number Failures	Number Passers	Pass Rate	Average Scale Score
All Students	3548	522	3026	85%	361
Male	1843	330	1513	82%	358
Female	1708	192	1516	89%	364
African American	621	180	441	71%	350
Asian	373	30	343	92%	366
White	2457	288	2169	88%	363
Hispanic	88	22	66	75%	355
Special Education	328	134	194	59%	340
ESOL	55	22	33	60%	343
FARMS	377	131	246	65%	345

One of the reasons that MWT could remain a challenge for middle school students is that it is only administered once during each regular school year. The only way for students to receive an additional administration of the test is to attend summer school, and this is recommended for students with scores below 320 on their Grade 7 attempt.

Because of the limited number of opportunities to pass the MWT, it will be especially important for teachers charged with preparing students for this test to continue to receive routine staff development to keep them focused on the requirements and rubrics used for this test. Teachers should also use the actual test papers of students who have failed the test to work with them to improve their writing so that it meets the standards for the MWT. These papers are sent to each middle school the spring following each winter test administration.

Pass Rates for All Three Tests

Since it is important for Grade 8 students to pass all three functional tests to meet the functional test portion of the promotion requirement, it will be necessary to pay close attention to how many student fail tests, and in what combinations, by grade level. At the end of the school year, 90.6 percent of Howard County eighth graders had passed all three functional tests, an increase of 3.3 percent over the previous year. Of the remaining 9.4 percent, some students had not yet taken one or more of the tests. (Refer to Appendices S and T for individual middle school data.)

The following table illustrates the pass rates for the end of Grade 8 by ethnic group and gender.

**Grade 8 Pass Rates by Ethnic Group and Gender
School Year 2001-2002**

	Reading	Mathematics	Writing
Asian American			
Male	99.5	98.1	96.6
Female	99.4	98.3	98.8
African American			
Male	98.1	86.3	86.9
Female	99.1	91.3	93.5
White			
Male	99.1	97.3	94.2
Female	99.7	97.8	98.1
Hispanic			
Male	100.0	94.2	86.2
Female	100.0	95.5	95.3

The issue of students who fail functional tests is not limited to special education students. Of the total number of eighth grade students who failed the reading test, 74 percent were in special education, but of those failing mathematics, only 31 percent were enrolled in

special education, and 41 percent of those who failed the writing test were special education students.

Reference: Howard County Board of Education Report, *Howard County Results of the Maryland Functional Testing Program School Year 2001-2002*, August 22, 2002.

Advanced Placement (AP) Examinations
Preliminary Standard Achievement Test (PSAT)
Standard Achievement Tests I Reasoning (SAT I)
Standard Achievement Tests II Subject Tests (SAT II)

AP, PSAT, and SAT results are based on self-selected samples. The tests are not required, and all students enrolled in the AP courses do not elect to take AP tests. Therefore, the results cannot be generalized to all Howard County students since they do not represent Howard County's total student population. For the population of students who do take the AP tests, the results are of significant student value.

The *Comprehensive Plan for Accelerated School Improvement* emphasizes the achievement of all student subgroups. In addition, the indicators for the Key Results Areas include SAT, PSAT, and AP participation and performance. Since students who take the PSAT score higher on the SAT than students who do not, the Board of Education has included funds in its budget to support the administration of the PSAT to all students in Grade 10 as part of regular instruction and assessments. Howard County is also developing strategies that encourage all students to participate in challenging, advanced coursework. The general findings of all three assessments follow.

AP

- Schools need to increase the number of students who take AP examinations each year.
- In 2002, 83.4 percent of the AP examinations taken by Howard County students received a grade of three or above, an increase of 4.2 percentage points from the 79.2 percent receiving a grade of three or above in 2001.
- African-American students received scores ten points lower than other subgroups and are underrepresented in the AP population.
- For the past five years, the percentage of Howard County students who received a score of three or above on AP examinations has been higher than the percentage in the state and nation receiving the same score.

PSAT

- The mean verbal score was 51, one point lower than the 2000 mean verbal score of 52.
- The mean mathematics score was 53, one point lower than the 2000 mean score of 54.
- The mean writing score is 51, one point lower than the 2000 mean score of 52.

- Howard County PSAT scores continued to be above those of Maryland, the middle states, and the nation.
- Male students continued to score higher than females on the mathematics section of the PSAT; females scored higher on the writing skills section.
- African-American students continued to score below the other subgroups on the PSAT.

SAT

- The Howard County combined SAT score of 1,084 for the class of 2002 represented the county's all time high combined score for the second consecutive year.
- Eighty-one percent of the Class of 2002 participated in SAT testing, an increase of two percentage points from 2001.
- The average verbal score of 534 represented a decrease of two points from the previous year.
- The average mathematics score of 550 represented an increase of two points from 2001. Mathematics scores have increased a total of nine points since 2000.
- SAT average verbal and mathematics scores increase as student academic preparation increases.

Future Strategies

- Parents and staff members should continue to encourage students to choose challenging academic courses and to work hard to obtain high grades in those courses.
- School guidance offices should provide information about AP courses and testing, PSAT testing, and SAT testing to all students and the entire school community.
- This information should include test dates, opportunities to prepare, and information about strategies to enhance scores, such as participating in more than one SAT administration.
- All Howard County students should be encouraged to take the PSAT no later than the junior year of high school.
- High schools should encourage all students to make use of the SAT One-on-One computer program in preparing for the SAT.
- Students should be encouraged to order their PSAT and SAT test answers to be returned to them so that they can see the correct answers and what mistakes they made on the test.

Reference: Board of Education Report, *Howard County Results of the AP, PSAT, and SAT—School Year 2001-2002*, October 24, 2002.

Tables excerpted from the Howard County Results of the *AP, PSAT, and SAT—School Year 2001-2002*, Board of Education report follow.

Advanced Placement Test Results

Year	# Exams taken by Howard County Students	% of students receiving a grade of 3 or higher		
		County	State	Global
2002	2322	83.4	71.2	63.4
2001	2057	79.2	68.9	61.6
2000	1716	82.5	70.9	63.9

Percentage of Students Taking the AP Tests

	2002	2001	2000
Grade 12	17	16	15
Grade 11	14	14	12
Grade 10	8	9	9

Advanced Placement Results by Gender

	Students Number			Exams Taken Number			% Receiving Grade 3 or Higher			Mean Score		
	2002	2001	2002	2002	2001	2000	2002	2001	2000	2002	2001	2000
Male	622	573	478	1248	1090	894	85.3	81.4	84.8	3.72	3.62	3.66
Female	609	574	530	1074	967	622	81.2	76.8	79.9	3.55	3.41	3.46

The following table illustrates AP results by ethnic group for 2002 and 2001. Because increasing numbers of students do not choose an ethnic group or check “other”, it is difficult to analyze these data for trends in participation for all subgroups.

Advanced Placement Results by Ethnic Group

Ethnic Group	# of Students		# Exams Taken		% of AP Population		% Receiving Grade 3 or Higher		Mean Score	
	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
Asian	266	214	563	425	21.6	18.7	81.9	80.0	3.6	3.6
African Amer	43	39	66	59	3.5	3.4	71.2	62.7	3.2	3.0
Hispanic	22	22	33	33	1.8	1.9	81.8	87.9	3.8	3.9
White	819	780	1509	1381	66.6	68.0	85.0	79.8	3.7	3.5
Not Reported	26	33	51	65	2.1	2.9	86.0	78.5	3.7	3.3
Other	52	59	95	94	4.2	5.1	74.7	75.5	3.4	3.3

Graduates

The vast majority of Howard County students (99.2 percent) receive high school diplomas. The dropout rate remains low (1.91 percent overall) but did increase slightly for the first time in four years. Approximately 61 percent of Howard County graduates plan to attend a four-year college, and 67.5 percent met University of Maryland’s

requirement. While a large percentage (77 percent) of the students met the state's rigorous high school program indicators, the low percentage of students meeting requirements for career and technology requirements (4 percent) suggested that almost twenty percent of Howard County students leave school less prepared than they should be.

Reference: Board of Education Report, *2001 Maryland School Performance Program Report*, March 7, 2002.

Howard County's overall achievement ranks it among the highest-performing districts in Maryland over the past decade. Factors that contribute to this ranking include, but are not limited to:

- Howard County's affluence—Howard County is ranked among the top ten counties in the nation for family income.
- Howard County's essential curriculum—educational leaders across the nation recognize the district's instructional program as outstanding.
- A majority of students who come to school ready to learn—most students enter kindergarten with prekindergarten educational experiences and a positive attitude toward learning.
- A highly qualified professional and support staff—although there is a national shortage of teachers, Howard County successfully recruits and maintains high-caliber teachers at each district school.
- A comprehensive professional development program—Howard County provides embedded teacher support, districtwide inservice days, leadership academies for teachers and administrators, and opportunities for staff to attend national conferences.
- Parental and community involvement—all Howard County schools have active school/home partnerships and community business partners.
- Each curriculum office has an active advisory council that meets regularly throughout each school year.
- A yearlong School Improvement Planning Cycle. (Refer to Appendix F for an overview of the planning process.) This approach enables schools to monitor continuous progress, provide interventions in a timely manner, provide flexible instructional groupings so that all children receive a rigorous education, and communicate with parents throughout the year. The School Improvement Planning Cycle encompasses the school system's core values, which include a focus on instruction, partnerships, and continuous improvement.

Despite this overall success, all students in all classrooms in all schools are not meeting local and state standards and achievement gaps persist. System needs in the area of student performance are embodied in its first goal:

Each child, regardless of race, ethnicity, socio-economic status, disability or gender, will meet or exceed rigorous performance standards. All diploma-bound students will perform on or above grade level in all measured content areas.

The District Planning Team (DPT), based on achievement data and information regarding existing programming, recommended to the Superintendent that the first priority of the school system be student achievement. In particular, the DPT recommended that the district provide a comprehensive, basic educational program that meets the needs of and promotes the achievement of rigorous standards for *all* students. The DPT further recommended that particular attention be focused on the elimination of achievement gaps through the implementation of the *Comprehensive Plan for Accelerated School Improvement* and the development of the school system's School Improvement Unit.

Thus far, Howard County's needs assessment has focused on *all* students, which is the essential element of the school system's *Comprehensive Plan for Accelerated School Improvement*. However, careful analyses of the data indicate that the system is not equally effective with all student populations.

For the school system to reach its targets that all schools will meet the standards by 2005 and the achievement gaps will be eliminated by 2007, a concentrated effort for accelerated achievement must occur for identified student populations. The populations include special education, economically disadvantaged, Limited English Proficient (LEP), and minority groups. Special education students receive accelerated instruction and interventions based on their Individual Education Plans (IEPs). To monitor progress, all assessment data are disaggregated. The economically disadvantaged students attending the nine elementary schools with the highest percentage of low-income students as determined by the free and reduced price meals program will receive Title I services. (Refer to Attachment 7 in this document for a description of the Title I program for the 2003-2004 school year.)

The English for Speakers of Other Languages (ESOL) Program is characterized by an extremely diverse LEP student population representing 84 countries and 63 languages. The May 2001 ESOL enrollment figure of 1,551 students represents a 102% increase since 1995 and a 50% increase from the previous year. While LEP students enter at all levels of instruction, Pre-kindergarten through Grade 12, the HCPSS has seen a dramatic increase in the number of students entering at the middle and high school levels. Staffing ratios have not kept pace with enrollment growth and the resulting shortfall comes at a time when academic challenges and state-mandated assessment programs demand an increase in the level of intensity of services. With the increase in the LEP population in Howard County also comes an increase in the demand for interpreter and translation services. The ESOL Community Outreach Program helps parents bridge the language gap so that they may become active partners in their children's education.

Reference: MSDE: *Survey of Services for Limited English Proficient and Immigrant Students School Year 2001-2002*, May 15, 2002.

(Refer to Attachment 10 in this document for a complete description of the LEP program for the 2003-2004 school year.)

The academic needs of African-American students and Hispanic students were presented in the disaggregated data for each mandated assessment. Howard County's plan to eliminate the achievement gap for minority students will be presented in the section of this document, *How might we provide it?*

The needs assessment for Howard County's second goal, *provide a safe and nurturing school environment that values diversity and commonality*, includes the review of data in three reports presented to the Board of Education on October 9, 2002:

- ✓ *Disruptive Behavior Report School Year 2001-2002*
- ✓ *Evening School Annual Report 2001-2002*
- ✓ *In-School Alternative Education Programs.*

The Disruptive Behavior Report provides information and data regarding student suspensions within the HCPSS for the 2001-2002 school year. Some significant figures show that:

- Incidents requiring suspension have decreased at the elementary school level by 1 percent, and at the middle school level by 1.37 percent.
- At the high school level, there was an increase of 5.39 percent.
- Two thousand six hundred ninety students (2,690) were suspended during the 2001-2002 school year as compared to 2,570 students during the previous school year, an increase of 120 students or 4.67 percent.
- Eight more students were suspended in school year 2001-2002 as were suspended in school year 2000-2001.
- The number of African American suspensions decreased by 20 students for 2001-2002.
- The number of female student suspensions (642) remained unchanged between 2001-2002 and 2000-2001.
- Attacks/Threats/Fighting category at all instructional levels has the largest number of suspensions with 1279 incidents or 43.7 percent.
- The Disrespect/Insubordination category is the second highest with 784 incidents or 26.79 percent.
- The student population has increased 2.68 percent to 46,500 students, and the suspension incidents have increased by 2 percent.

Research indicates that students experiencing academic difficulties are most likely to be suspended. The implementation of crisis intervention programs provides a viable alternative to suspensions. The Howard County Code of Conduct, with emphasis on appropriate and expected behaviors, has been fully implemented and provides a clear set of expectations and consistent methods of discipline for all students.

The following recommendations were made to decrease the number of HCPSS suspensions:

- Effectively utilize the Student Support Teams and Instructional Intervention programs to identify causes of disruptive behaviors and plan to address them appropriately before they reach suspension level.
- Provide intervention strategies to all staff on how to address cultural differences in students appropriately so that the disproportional number of African-American suspensions is decreased.
- Provide early interventions in elementary schools, which will enhance the opportunities for success by providing students with additional academic support.
- Establish and maintain strong alliances with the home following initial disciplinary referrals in order to continue to provide an avenue of communication and a unified effort with the home to correct behaviors that lead to suspensions.

(Refer to Appendix U for a three-year comparison of suspensions. Refer to Appendix V for a review of suspensions to the Superintendent. Refer to Appendix W for a review of Saturday School, which serves as an alternative to suspension.)

The Evening School Program began in February 1998 as one component of alternative education programming. During the 2001-2002 school year, the Evening School provided educational services to 118 middle and high school students. Each of these students had received either a long-term suspension or expulsion for violations of Howard County Public School System policies and procedures. Students assigned to the Evening School program receive instruction in mathematics, reading, English, Social studies/history, and science for nine hours per week. Group and individual counseling were available. In general, the academic performance of the participating students was average to above average. The attendance rate was approximately 80 percent. A small group of students with poor attendance skewed the average attendance rate. However, the majority of the participating students attend the Evening School program more than 80 percent of the time. Students with disabilities represented 38 percent of the student populations and the majority of the students were either ninth or tenth graders. According to Evening School staff report, the Evening School program proved successful in helping students with academic and behavior difficulties achieve some degree of success in school. Most students returned to their sending schools with improved academic standing.

One hundred eighteen students were assigned to the Evening School program during the 2001-2002 school year. Of these 118 students, 97 were male and 21 were female. (Refer to Appendix X for the population data of participating students.)

The in-school alternative education programs (AEPs) are designed to meet the needs of students with behavioral and academic difficulties. Staff provides students with academic support, strategies for behavioral change, improved social skills, anger management strategies, and enhanced parent outreach. The following schools have AEPs:

Elementary Schools (10)—Dasher Green, Deep Run, Elkridge, Guilford, Laurel Woods, Phelps Luck, Running Brook, St. John’s Lane, Swansfield, and Waterloo

Middle Schools (8)—Elkridge Landing, Harper’s Choice, Mayfield Woods, Murray Hill, Oakland Mills, Owen Brown, Patuxent Valley, and Wilde Lake

High Schools (7)—Atholton, Hammond, Howard, Long Reach, Mt. Hebron, Oakland Mills, and Wilde Lake.

Most of these programs were created during the 1998-1999 and 1999-2000 school years. No new programs have been established since September 1999 due to limited funding.

The AEPs provide a combination of academic support, social skills instruction, behavior change support and strategies, family and community outreach, and case management services. While each of the programs is tailored to the needs of the students in a particular school community, all programs are expected to provide each of the critical components just mentioned. Students referred for AEP support services are often exhibiting disruptive behaviors. The link between disruptive behavior and underachievement is evident throughout the literature. AEPs are expected to go beyond the provision of behavioral support and address the lack of academic achievement. In this way, students accomplish permanent behavioral and academic changes that are useful in multiple settings and situations.

For the past three years, the 25 AEP schools reported the following number of in-school suspensions.

2001-2002 school year	1,894 in-school suspensions
2000-2001 school year	2,080 in-school suspensions
1999-2000 school year	1,986 in-school suspensions

Disaggregating the demographic characteristics of the participating students by age and grade revealed that:

- Thirty-seven (37) percent of the students who received services from the AEPs were in high schools; 21 percent were in middle schools; and 42 percent were in elementary schools.
- Most students received services in Grades 9 and 10.
- Forty-five (45) percent of the students receiving services were white, 48 percent were African American, and 7 percent were Hispanic, Asian or other.

Disaggregating the demographic characteristics of the participating students by low-income, previous grade retentions, special education or a 504 plan, and mental health diagnosis such as depression or Attention Deficit/Hyperactivity Deficit (ADHD) disorder indicated that:

- Approximately one-third (33 percent) of the students participating in the AEPs participate in the free and reduced price meal program. This number was

disproportionate in regards to the percentage of low-income in the county, which is less than 10 percent

- Fourteen percent of the participating students had been retained one or more times and were frequently referred for academic support services.
- Fourteen percent of the participating students had learning disabilities and 4 percent had a 504 plan.
- Twenty-one percent of the students had an existing mental health diagnosis, and 13 percent take medication to treat the symptoms of mental health disorders.

An analysis of “what works” provided the following information:

- Programs that balance the delivery of behavioral intervention strategies with academic instruction and support provide the best student outcomes.
- The Prevention, Action, Resolution Training (PAR) has had a significant impact on the reduction of suspension incidents at the middle school level.
- AEP staff must continue to provide comprehensive case management services for students.
- Ongoing staff development opportunities are critical to the success of AEP
- Involvement of parents of students who are at risk improves the changes for student success.
- Improved data collection will facilitate program improvement.
- Holding high standards and expectations for students with academic and behavioral difficulties will ensure student success.

Key Results Area: Human Resource Management

The *Hiring and Separation Report 2002* presented to the Howard County Board of Education on March 27, 2003, by the Office of Human Resources provided the most current information. Between October 1, 2001, and September 30, 2002, 472 new teachers were hired.

Signing bonuses of \$1,000 dollars were given to new teachers in critical content areas as follows:

Critical Area	Number of Teachers Hired	Critical Area	Number of Teachers Hired
Computer Science	2	Speech Pathologist	8
Occupational Therapist	1	Special Education	52
Mathematics	11	English	15
Reading Specialist	4	ESOL	8
Science	5	Technology Education	2
Family Consumer Science	2	Foreign Language	10
Library Science	5		

The following table provides descriptive data relating to the 2000-2001 newly hired staff.

Hired by Level
2002 Compared with Three and Five Year Averages

Level	Five Year Average 1997-2001	Three Year Average 1998-2001	2002
Elementary	217.0	245.3	207.0
Middle	98.4	112.3	101.0
High	114.4	129.7	126.0
Other	24.4	29.3	38.0
Totals	454.2	516.6	472.0

Four hundred and seventy-two (472) teachers were selected from 6,447 applicants, representing an overall selection rate of 7.3 percent. Howard County’s competitive position among other Maryland school districts has improved by increasing the number of early contracts offered to selected candidates in fields in which numerous vacancies were anticipated.

During the 2001-2002 school year, 146 Professional Development School (PDS) interns were placed in Howard County. Of the 146, 42 were hired, 7 declined offers, and 63 did not apply or chose not to interview. Of the 219 student teachers, 57 were hired, 11 declined offers, and 108 did not apply or did not interview.

As the national shortage continues, it is difficult to find qualified applicants in an increasing number of fields. An analysis of the candidate pool revealed that of all the applicants 37.5 percent were elementary or early childhood certified.

The tables on the following page include the new teacher profile based on years of experience, age, gender, and race.

Number of New Teachers Hired by Years of Experience

Years of Experience	Number & % of Teachers		Years of Experience	Number & % of Teachers		Years of Experience	Number & % of Teachers	
	#	%		#	%		#	%
0	216	45.8%	8	10	2.1%	15	6	1.3%
1	18	3.8%	9	9	1.9%	16	4	0.8%
2	27	5.7%	10	12	2.5%	17	5	1.1%
3	33	7.0%	11	8	1.7%	18	4	0.8%
4	23	4.9%	12	4	0.8%	19	1	0.2%
5	32	6.8%	13	3	0.6%	20	0	0.0%
6	11	2.3%	14	4	0.8%	20+	20	4.2%
7	22	4.7%						

Number of New Teachers by Age Three Years of Comparative Data

Age	2000	Percentage	2001	Percentage	2002	Percentage
21-24	145	27.5%	142	29.4%	126	26.7%
25-29	133	25.2%	113	23.4%	122	25.8%
30-34	85	16.1%	71	14.7%	61	12.9%
35-39	43	8.2%	39	8.1%	48	10.2%
Over 40	121	23.0%	118	24.4%	115	24.4%

Number of New Teachers by Gender and Race

Male/ Race	Total Number	Percentage	Female/ Race	Total Number	Percentage
Minority	10	2.1%	Minority	45	9.5%
White	78	16.5%	White	339	71.9%

Number of New Teachers by Degree Status

Degree	Total Number	Percentage	Degree	Total Number	Percentage
Non-Degree	0	0.0%	Master's	169	35.8%
Bachelor's	231	48.9%	Master's + 30	27	5.7%
Bachelor's + 30	34	7.2%	Doctorate	11	2.3%

Total separations increased by 12 percent from 2001. The largest increase was in professional staff retirements, which increased by 49 percent from the previous year. For the 2002 school year, the professional employee turnover rate of 9.5 percent represented a small increase over the 2001 school year.

Reference: Board of Education Report, *Hiring and Separation Report 2002*, March 27, 2003.

The school system sees the following as human resource needs:

- Filling vacancies in the critical content areas with highly qualified teachers
- Recruiting highly qualified minority teachers
- Retaining newly hired teachers for multiple years
- Verifying that all teachers and instructional assistants meet the new requirements of the *No Child Left Behind Act of 2001* (NCLB).

(For a more detailed analysis of the newly hired professional staff and the Administrative, Management, Technical, and Other Certified Personnel staff, the reader is referred to the complete *Hiring and Separation Report 2001* available upon request from the HCPSS's Office of Human Resources.)

Key Results Area: Leadership

To meet the needs of students, staff and the community, the Superintendent and the Board of Education must provide the leadership necessary to facilitate the attainment of the mission, vision and goals of the school system. While their success in this regard is influenced by each of the Key Results Areas, it is through leadership, demonstrated by both words and deeds, that the best thinking of the professional education community and other stakeholders is integrated into sound responses to the queries regarding what we want for our children, how we might provide it and how we will know we've done it well. It is also through leadership that adequate resources to implement identified strategies are provided and barriers to continuous improvement are removed.

Effective, sustained leadership is also crucial to the attainment of school system goals. To provide this leadership, the school system must:

- Identify skills necessary for effective leadership.
- Ensure these skills are reflected in hiring and evaluation processes.
- Provide effective professional development to build leadership capacity, including succession training.

These needs are consistent with the strategic priority recommended by the District Planning Team regarding Workforce/Professional Development.

Key Results Area: Financial Stability

Operating Budget

One of the challenges faced by the school system in pursuing its goals is maintaining financial stability, particularly in unstable economic times. The school system's operating budget for the 2003-2004 school year, which pays for classroom instruction, maintenance, and the day-to-day operations of the school system, is proposed to reach \$440.4 million. The Superintendent announced the 12.7 percent increase when he presented his Proposed Operating Budget for Fiscal 2004 to the Board of Education in early January 2003. As a result, the county, which funds nearly 75 percent of the system's operating budget, was asked for \$34.4 million more than last year.

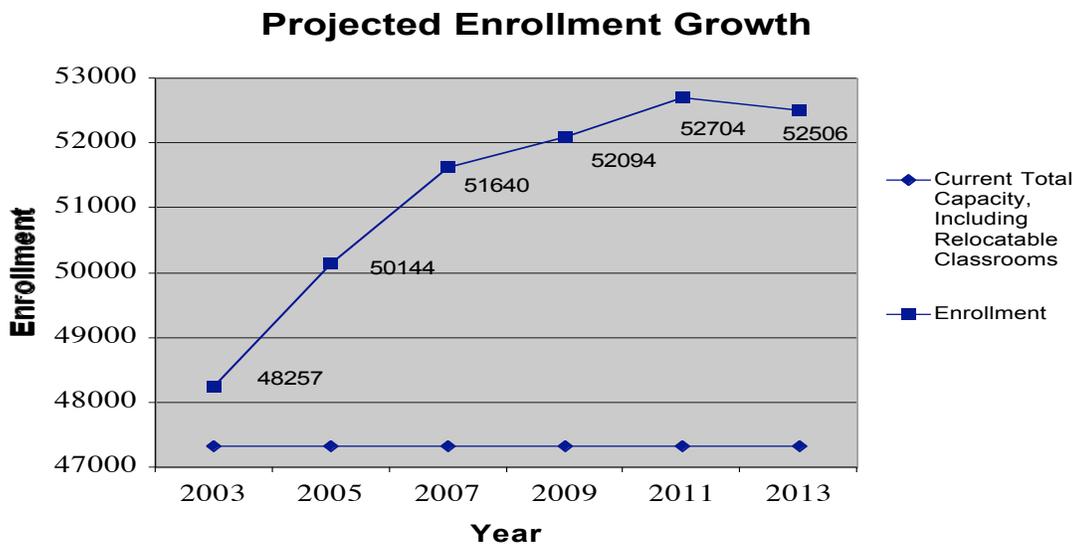
Many factors contribute to the increase, including growing student enrollment, salary increases, escalating health insurance and social security costs, and school maintenance needs. In preparing the budget, the Superintendent focused on three priorities recommended by the District Planning Team— student achievement; workforce/professional development; and a comprehensive facilities master plan.

Capital Budget

The Howard County Public School System has realized an increase of nearly 14,000 students over the past decade. Projections show that enrollments will continue to increase, although at a decreasing rate, over the next 10 years. To provide for this growth, the school system has built 26 new facilities—13 elementary schools, 9 middle schools, and 4 high schools—since 1994.

Between 2003 and 2013, the system anticipates enrolling an additional 3,500 students—the equivalent of seven elementary schools. The annual capital budget, the five-year capital improvement program, and the ten-year long master plan identify school capacity needs and the funding required to meet those needs (see Ten Year Facilities Master Plan). The determination of need is based on:

- A comparison of anticipated enrollment and capacities of existing schools
- A comparison of spaces within schools and instructional programs
- The feasibility of adjusting school boundary lines to accommodate and balance anticipated enrollments.



New facilities or additions to existing schools are proposed when projected enrollments cannot reasonably be accommodated within available capacity. Relocatable classrooms are used to provide temporary capacity to a school. Currently, there are 107 relocatable classrooms in use by the Howard County Public School System to resolve over-capacity situations.

School construction has not kept pace with growth for several reasons:

- The economic downturn in the early 1990s resulted in reductions to capital budgets.

- Over the years, the state has contributed less to school construction, leaving the county to fund a greater proportion of capital costs. The state does not fund school projects based on projections. A school system must show seats are needed for existing students before the state will fund a new school or addition.
- The housing boom has continued in the county despite a slow economy.

Additionally, as sites for new facilities have become increasingly scarce, their costs and the costs of construction have increased. Program changes, such as class size reductions in the first and second grades, and increased numbers of non-English speaking students and students requiring special education services, also require additional space. Finally, the mandate to provide full-day kindergarten by the 2007-2008 school year will require the equivalent of 80 additional classrooms. Providing prekindergarten programs to economically disadvantaged students will require still more space.

In recognition of the school system's significant facilities needs, the District Planning Team recommended the development of a Comprehensive Facilities Master Plan as one of the system's three strategic priorities. The plan will include provisions for school site acquisition and the construction of new school facilities, as well as the renovation and/or replacement of existing facilities. As a result of budget constraints, this plan was eliminated from the Fiscal 2004 budget, but will be reinstated for consideration for the Fiscal 2005 budget.

Key Result Area: Community Support

Community support is critical to the attainment of school system goals. Research shows that school systems are more apt to realize their goals when they "engage" the public in sharing responsibility for school improvement. The Howard County Public School System is committed to creating an environment that engenders community support and in which partnerships among students, staff, families, and community members are highly valued.

As community expectations increase, the school system must look to enhance its relationships with various publics. In doing so, it is critical that decision makers recognize that a different level of "engagement" in decision-making processes is required. These publics want to know not only "what" decisions are made, but also "how" they are made. In some cases, they are interested in taking part in the "how." Publics want status as substantive partners.

Meeting these changing demands requires the following:

- Effective public engagement to create an environment in which students, staff, families, and community members participate and contribute
- Acceptance of communication as a primary function of leadership and a responsibility of all employees

- Well-informed employees and citizens who are effective ambassadors for developing broad community support
- Open, two-way communication between the school system and the community
- Accurate, understandable and timely communication of the decision-making processes of the school system.
- A variety of methods and strategies used to enhance the system's ability to communicate effectively and thoroughly
- Public relations and communications strategies linked to the mission and goals of the school system.

Needs in this Key Results Area will be supplemented by the results of the School Improvement Survey. The school system is currently working with a national company to develop, administer and score surveys of parents, staff and students, and to report results to the community. Data gathered as a result of the first administration of these surveys will provide baseline data for measuring school and system performance in this Key Results Area; subsequent administrations will provide trend data and provide a means for measuring improvement and be used to evaluate current strategies for effectiveness and develop new ones as necessary.