

**Performance of High Schools on Standards and Targets
for the System of Shared Accountability
High School Academic Attainment Outcomes**

Office of Shared Accountability

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EXECUTIVE SUMMARY

On December 11, 2001, the Montgomery County Public Schools (MCPS) Board of Education adopted the High School Academic Attainment standards and targets of the System of Shared Accountability (SSA). The purpose of this accountability measure was to foster better preparation of MCPS graduates and thus reduce the need for college remediation. This report provides a summary of high school performance on the SSA academic attainment standards and annual improvement targets for spring 2003.

High School Academic Attainment is a four-category system that reflects the rigor of the courses of study completed by each graduating class. The four categories—College Rigorous, College Ready, College/Career Capable, and Minimally Prepared—correspond to high school program completion indicators reported by the Maryland State Department of Education or to the academic requirements for taking college-credit courses in the public colleges in Maryland.

Students satisfy the requirements for a College Rigorous program by meeting at least four of the six rigor indicators established by the Maryland State Department of Education (MSDE).

- 1) Two credits of foreign language with grades of B or better.
- 2) One mathematics credit at a level higher than Algebra 2 with a grade of B or better.
- 3) Four credits of science with grades of B or better.
- 4) Two credits of advanced technology with grades of B or better.
- 5) An overall grade point average (GPA) of 3.0 or better.
- 6) A combined SAT score of 1000 or higher or an ACT score of 20 or higher.

To attain the level of College Ready, students must complete the University System of Maryland (USM) minimal course requirements for admission that apply for students seeking admission to any university in the USM system (e.g., UM-College Park, UM-Baltimore, UM-Eastern Shore) and must have a high school academic record that is strong enough to obviate the probability of being required to take remedial courses in college.

To be classified as College/Career Capable, students must complete either the USM minimal course requirements for admission or an approved career development program. Students who are College/Career Capable are likely to need remedial course work in college.

The Minimally Prepared category is defined for students who have fulfilled the high school diploma requirements but did not meet the requirements of the higher academic attainment levels.

Three SSA standards describe expectations about the percentage of graduating seniors who should complete each attainment level.

- 1) Standard 1: At least 40% of graduates complete a College Rigorous program.
- 2) Standard 2: At least 80% of graduates complete a College Rigorous or College Ready program.
- 3) Standard 3: 100% of graduates complete at least a College/Career Capable program.

The SSA annual improvement target for reducing the total distance from standards is cumulative, starting with baseline performance and increasing by 3 percentage points per year. Each school's baseline performance was established by averaging the school's performance levels for 3 years, from 1999 through 2001 (or fewer years for more recently opened schools with no prior data). Because annual improvement targets are added from one year to the next, the school's schedule of annual targets for 2003 was 3 percentage points higher than for 2002, and the school's challenge to remain on the schedule of targets increased. Each school's improvement for 2003 was expected to be 6 percentage points higher (2 years times 3 percentage points per year) than the baseline performance. While most schools scored within the margin of error for total distance from targets for 2003, only 8 improved by 6 percentage points or more from the baseline.

A review of the results suggests the following conclusions regarding the performance of 23 high schools on standards and improvement targets:

- 12 high schools met Standard 1.
- One high school met Standard 2.
- No school met Standard 3.
- 19 high schools met the 2003 target for improvement.

About 40% of graduates from 1999 to 2003 met the requirements for the College Rigorous classification, although those percentages varied significantly from school to school and by student subgroup. There has been some improvement in the percentage of graduates that attained the College Rigorous and College Ready classifications since 1999.

Appendix 1 contains stacked bar graphs showing trends in academic attainment for each of 23 high schools. Information for each school includes one graph showing aggregated data for all graduates in the baseline years (1999–2001), 2002, and 2003. Two additional graphs per school illustrate changes in academic attainment levels for students from different racial/ethnic groups and for students who receive free and reduced-price meal services (FARMS), instructional assistance because of limited English proficiency (ESOL), or special education services. Comparisons of the academic profiles of students who graduated from 23 high schools are provided in Appendix 2. Collectively, the graphs provide a tool for examining the relative performance of subgroups of students in the same school and for comparing outcomes for similar subgroups of students who attend different schools.

Recent findings suggest a trend toward more equitable distribution of High School Academic Attainment. Comparisons of the academic outcomes of students who graduated from 23 high schools are provided in Appendix 3. When results for the Class of 2003 were compared with results for classes for the four previous years, outcomes were statistically significantly higher for—

- African American graduates,
- graduates with histories of poor attendance or suspension,
- graduates who failed one or more courses as freshman,
- graduates whose Maryland Functional Test (MFT) scores were “in the middle,” and
- graduates who were enrolled in Algebra 1 in Grade 9.

Performance of High Schools on Standards and Targets for the System of Shared Accountability High School Academic Attainment Outcomes

On December 11, 2001, the Montgomery County Public Schools (MCPS) Board of Education adopted the High School Academic Attainment standards and targets of the System of Shared Accountability (SSA). This report presents the rationale underlying the SSA High School Academic Attainment (HSAA) model, describes HSAA, presents HSAA results for 2003, and summarizes trends in MCPS high school performance from 1999 to 2003. Results provide a snapshot of the levels of rigor of the courses of study completed by MCPS graduates, and analysis that can be used to guide interventions aimed at reducing the number of MCPS students that need remediation upon entry to college.

INTRODUCTION

An increasing number of high school students have college aspirations but are inadequately prepared to realize their dreams (Gerald & Hussar, 2001). While more students than ever are enrolling in postsecondary institutions, many of them are insufficiently prepared for the rigors of college course work (Arshat & Pimentel, 2002; Lewis & Farris, 1996; McCabe & Day, 1998; Spann, 2000; Trout, 2001; Thomas B. Fordham Foundation, 1998; Venezia, 2001; Venezia, Kirst, & Antonio, 2003; U.S. Department of Education, 2003). By and large, high school students assume that getting into college is the hardest part. But, for most graduates, staying in college and completing a degree is much harder (Astin, Tsui, & Avalos, 1996; Berkner, He, Cataldi, & Knepper, 2002; Krist & Venezia, 2001; National Library of Education, 1999; Smith et al., 1996; Stanfield, 1997). The attrition rate is greatest for students who need to take remedial courses (Boylan, et al., 1996; Kirst, 1998a; Rosenbaum, 2001; U.S. Department of Education, 2001). Therefore, efforts to enhance the college readiness of a more diverse group of students, including those from groups that traditionally have not attended college, are crucial.

One cause of these problems is the lack of alignment between pre-college and postsecondary academic expectations (Bueschel, 2003; Kirst, 1998b; Kirst & Venezia, 2001; Venezia, 2001). As a result, meeting minimum high school graduation requirements may not prepare students for college or the workplace adequately (Adelman, 1999; Horn & Kojaku, 2001). A significant number of the students who enroll in Maryland's four-year institutions are not fully prepared for college-level work, particularly in mathematics (Abell Foundation, 2002; Milton & Schmidlein, 2000; Venezia, Kirst, & Antonio, 2003). The high rate of remediation is not simply a matter of helping students who are "rusty" in mathematics, reading, or writing. Rather, the problem is that more and more students leave high school without having mastered these skills in the first place (Hoyt & Sorensen, 2001). The consequences of inadequate high school preparation are

expensive and time-consuming. Unprepared students must pay tuition for remedial courses but the credits earned are not applied toward a degree.

In an effort to foster better preparation of MCPS graduates and reduce the need for college remediation, the MCPS Board of Education adopted the System of Shared Accountability (SSA) model of High School Academic Attainment¹. The high school academic attainment categories represent the academic rigor of the courses of study that students have completed by the end of Grade 12. The academic attainment categories were determined by considering several performance indicators, not just a single criterion such as an SAT score. The SSA High School Academic Attainment Model described in the next section illustrates the importance of access to and successful completion of challenging and rigorous curriculum for preparing MCPS graduates for the rigors of postsecondary endeavors.

¹ A thorough discussion of this model appears in the Minutes of the December 11, 2001, MCPS Board of Education Meeting.

SSA HIGH SCHOOL ACADEMIC ATTAINMENT MODEL

The Maryland State Department of Education (MSDE) requires MCPS and other school districts to report the number of graduates who complete each of three types of programs: (1) the MSDE standards for a rigorous academic program; (2) the University of Maryland System (USM) course requirements; and (3) an approved sequence of career or technical/vocational courses. MCPS also reports the number of high school graduates who have met the minimal prerequisites for a diploma but have not completed any of these three program requirements. The SSA used these four reporting categories to define four levels of academic attainment.

Four Academic Attainment Categories

The level of rigor of the course of study completed by each graduating senior is described by one of four academic attainment categories—(1) College Rigorous; (2) College Ready; (3) College/Career Capable; or (4) Minimally Prepared. Trends in the Academic Attainment of graduates of each of 23 MCPS high schools are presented in Appendix 1.

College Rigorous

High school graduates earn the classification College Rigorous when they complete at least four of the six rigor indicators established by the MSDE. These six rigor indicators are: (1) completion of two credits of foreign language with grades of B or better; (2) one mathematics credit at a level higher than Algebra 2 with a grade of B or better; (3) four credits of science with grades of B or better; (4) two credits of advanced technology with grades of B or better; (5) an overall grade point average (GPA) of 3.0 or better; and (6) a combined SAT score of 1000 or higher or a score of at least 20 on the ACT. In MCPS, most students who earn the classification College Rigorous have GPAs of 3.6 or higher, complete Precalculus or higher, and take more than 12 Honors credits during four years of high school. They are unlikely to need college remediation.

College Ready

The College Ready category describes students who have not met the requirements for the College Rigorous classification but have completed the USM minimal course requirements for admission. Attainment at this level has an important implication for college preparation. Students in this category are unlikely to need remediation in college. Most of these students maintain academic GPAs of 2.6 or better, complete Precalculus, and take at least one Honors credit per year during high school. Many have combined SAT scores of 1000 or higher.

College/Career Capable

The College/Career Capable category describes students who have completed the USM minimal course requirements for admission but have a high likelihood of needing remedial course work upon college entry. A second group of students is also placed in this category, even though they have not met the USM course distribution requirements, because their college options are better

than those with no career or vocational preparation. Therefore, students who complete an approved sequence of career or technical courses also earn the classification College/Career Capable. Like other students in this group, those who complete an approved career or technical program are likely to need remedial course work should they decide to attend college. College/Career Capable students are alike in that most have academic GPAs of 2.5 or lower, do not complete mathematics courses higher than Algebra 2, and earn less than one Honors credit per year during high school. About half the graduates in this group take the SAT each year. Of those, the average combined SAT score is less than 900.

Minimally Prepared

The Minimally Prepared category is defined for students that have fulfilled the minimum requirements for a high school diploma but have neither met the USM course distribution requirements nor completed an approved career or technical course sequence. About two thirds of these students have an academic GPA of 1.5 or lower. Many of these students do not complete mathematics beyond Geometry, and few earn any Honors credits during high school. Individuals in this group who decide to pursue a postsecondary degree are likely to enroll first in a 2-year community college and almost certainly will be required to take one or more remedial classes upon college entry.

Grade 12 Profiles of High School Academic Attainment for the Class of 2003

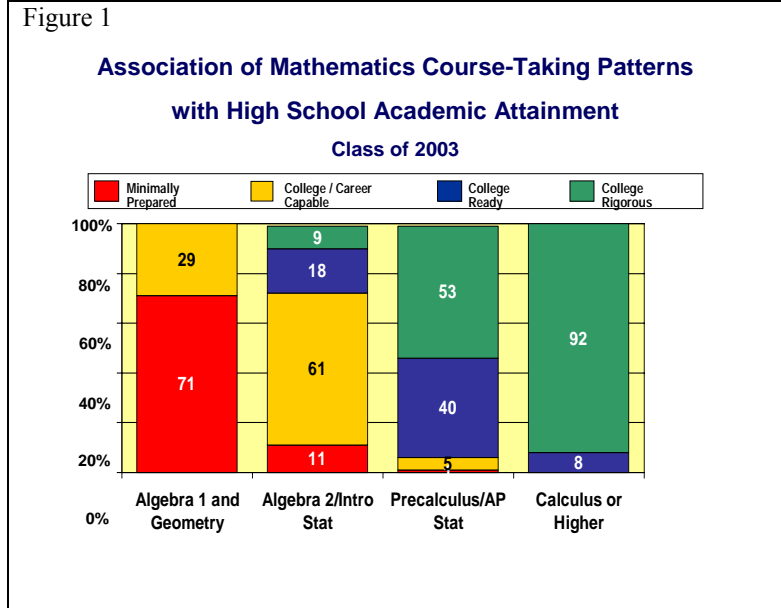
The MCPS High School Academic Attainment model considers several indicators of the need for remediation. Four of these are (1) the highest level of mathematics completed; (2) the average number of Honors credits per year; (3) academic GPA; and (4) SAT score. Student performance in these areas is related. However, each indicator also is individually predictive of the likelihood that students will be prepared for the rigor of college course work. The patterns of results presented in Figures 1 through 5 are based on results of 8,879 students who graduated from 23 MCPS high schools in 2003. Comparisons of the academic profiles of students who graduated from each high school are provided in Appendix 2.

Highest Math Level

As illustrated by Figure 1, the highest math level taken is one of the most important considerations in determining whether students will require college remediation. Ninety-three percent of students who completed Precalculus or AP Statistics, and 100% of students who completed Calculus or higher, were described as College Ready or College Rigorous. These students were unlikely to need college remediation.

Although minimum requirements for graduation do not include completion of Algebra 2, 71% of students who completed only Algebra 1 and Geometry were described as Minimally Prepared. These students were likely to be required to take one or more college remedial math courses.

Results for students who completed Algebra 2 were the most variable. Only 20 percent of students with this course history were classified as College Ready or College Rigorous. These students were less likely to need remediation when they had academic GPAs of 2.5 (B) or better, took one or more Honors courses per year, and had combined SAT scores of 1000 or higher.



Number of Honors Courses

Students need experience taking rigorous high school classes to be prepared for the rigor of college course work. Honors classes provide that challenge.

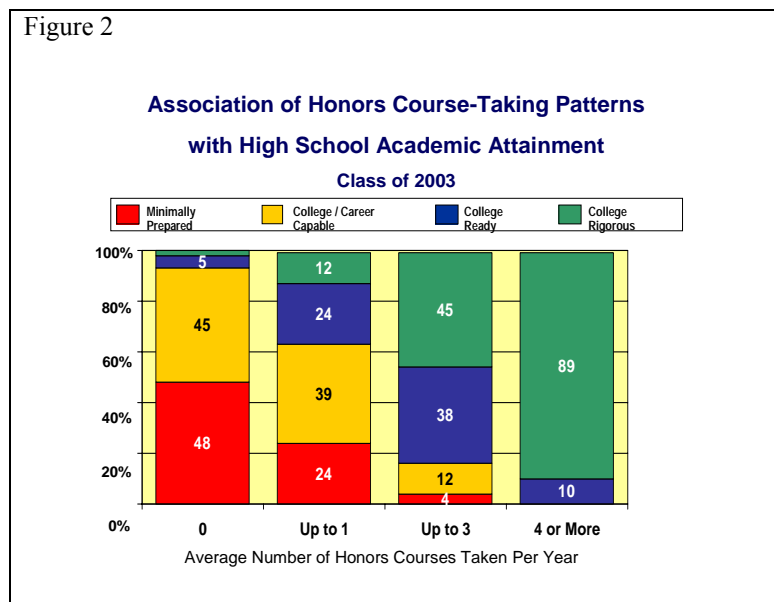


Figure 2 shows that over three fourths of the graduates who completed as many as 3 Honors courses per year and almost 100% of graduates who earned 4 or more Honors credits per year were described as College Ready or College Rigorous.

This was true even if students earned grades of C or lower in those courses. Ninety-three percent of students who did not take at least one Honors credit per year were likely to need college remediation in one or more subjects. By taking even one

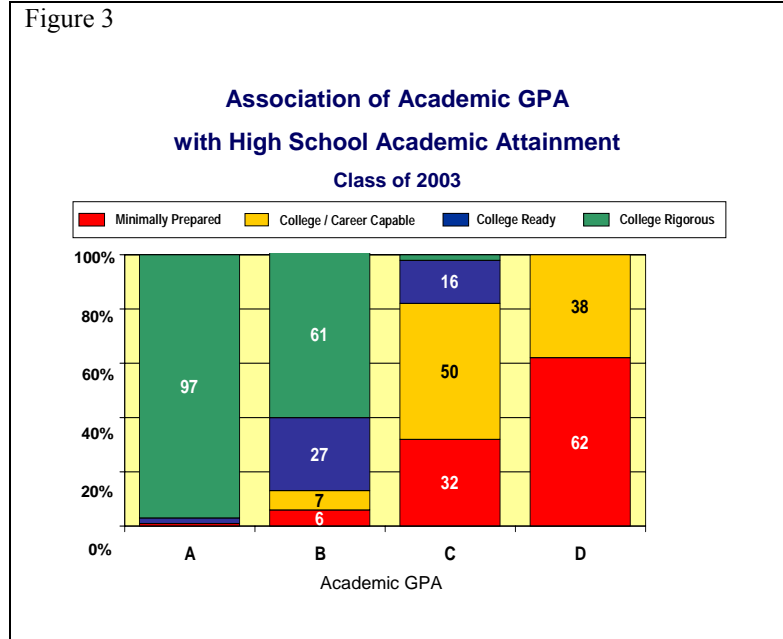
Honors class per year, students improved their chances of meeting the higher High School Academic Attainment requirements and reducing their risk of needing remediation upon entry to college.

Grade Point Average

As shown in Figure 3, getting good grades, even in regular classes, is associated with higher High School Academic Attainment. Students who earn As and Bs are unlikely to need to take remedial courses in college.

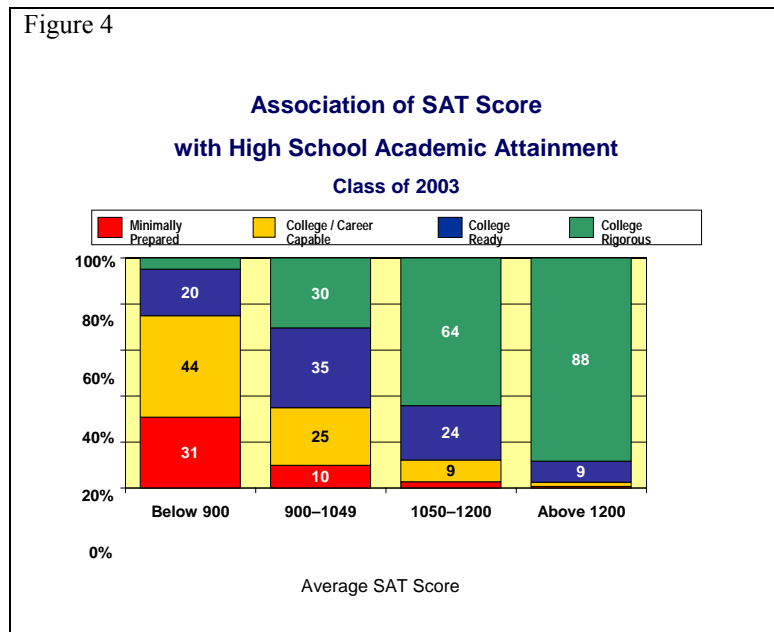
Countywide in 2003, 97% of the graduates who had academic GPAs above 3.5 (A averages) and 88% of the graduates with GPAs above 2.5 (B averages) met the requirements for the College Ready classification or higher, regardless of their standing on other indicators.

On the other hand, students with academic GPAs below 2.5 (C or D averages) were very likely to need remediation in college even if they took 2 or more Honors classes per year during high school and completed Algebra 2 or higher.



SAT Scores

Figure 4 shows the last reported combined SAT scores for the Class of 2003. Approximately two thirds of these scores were higher than 1000.



Countywide in 2003, 97% of the graduates with combined SAT scores above 1200 and 88% of the graduates with combined SAT scores between 1050 and 1200 met the requirements for the College Ready classification or higher, regardless of their standing on other indicators. These graduates were unlikely to need remediation.

About 35% of the graduates who had combined SAT scores between 900 and 1050, and 75% of the graduates with combined SAT scores below 900 were

described as College/Career Capable or Minimally Prepared. These graduates were likely to need remediation upon entry to college.

While students need combined SAT scores of 1000 or higher to meet the MSDE requirements for rigor, standards at Montgomery College (MC) are even higher. In order to be exempt from remediation and allowed to enroll in credit-bearing English courses without taking the placement tests, students need SAT Verbal scores of at least 500. Similarly, only students with SAT mathematics scores of at least 550 are permitted to take credit-bearing mathematics courses without taking the placement test.

According to MCPS data that has been matched with enrollment records from MC, average SAT scores of MCPS graduates who attend MC are close to 900. The low SAT scores account, in part, for why so many MCPS graduates are required to enroll in one or more remedial classes upon college entry.

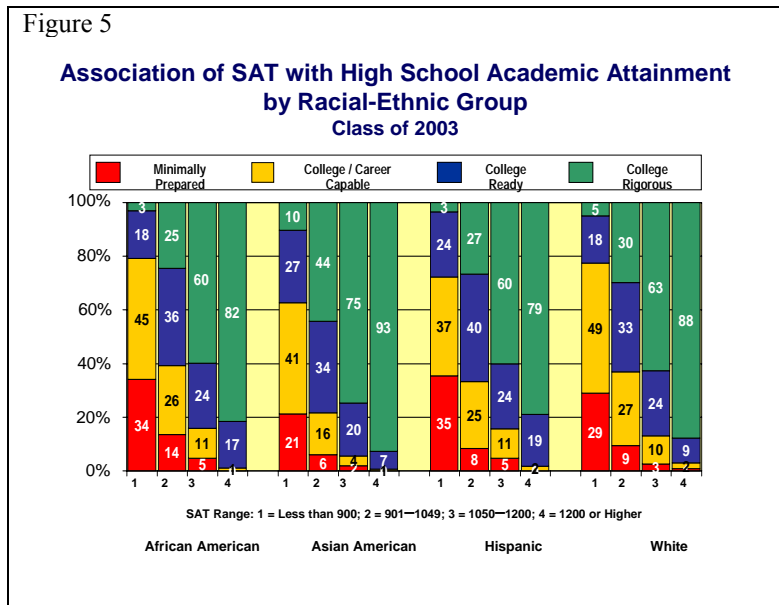
SAT and Academic Equity

High School Academic Attainment was comparable for groups of graduates with similar SAT scores (Figure 5).

More than 84% of all students—regardless of race or ethnicity—whose combined SAT scores were between 1050 and 1200 also had overall academic records that were sufficiently strong to meet the requirements for College Ready or College Rigorous.

For graduates with combined SAT scores above 1200, Academic Attainment outcomes were nearly identical. At other levels of SAT performance, High School Academic Attainment levels were most similar for African American, white, and Hispanic students with comparable SAT scores. However,

Asian American students were more likely than other groups to meet the requirements for College Ready, even if their combined SAT scores were less than 1050. One explanation for this may be that Asian American students more aggressively sought out other academic opportunities for college preparation such as taking more advanced math and science courses.



SSA Standards for Performance

The SSA has three performance standards for high schools that are based on the four academic attainment categories. These benchmarks are challenging, particularly for schools with large numbers of disadvantaged students. That notwithstanding, discussions with administrative staff, high school principals, and other stakeholders in the SSA led to specification of criteria that hold all MCPS high schools equally accountable for student performance.

- Standard 1 sets the benchmark that at least 40% of the graduates at each high school will meet the requirements for the College Rigorous category.
- Standard 2 sets the benchmark that at least 80% of the graduates at each high school will meet the requirements for the College Rigorous or College Ready categories.
- Standard 3 sets the benchmark that 100% of the graduates at each high school will meet the requirements for the College/Career Capable category or higher categories. Though not stated specifically, for schools to meet this standard, no graduate may remain in the Minimally Prepared category.

SSA Targets for Improvement

A second measure of school accountability is improvement toward attainment of the three standards. The annual target for improvement on these three standards is 3 percentage points. This value was identified by analyzing local and statewide high school data. Results of analysis conducted in 2001 showed that the improvements in net distance among the high schools were not systematically related to the schools' total distances from standards. That is, some schools with relatively lower levels of performance on the standards showed as much improvement as did other schools with relatively higher performance levels. Therefore, the annual improvement target for all schools was set to be the same value.

Calculating Distance from Standards

School improvement on these three standards is evaluated by adding together the school's distances from each of the three standards. The distance from standards can be a positive or a negative value. When a school exceeds a standard, the distance is positive. For example, in a school where 70% of students met Standard 1 (40% College Rigorous), the distance from Standard 1 is +30 percentage points ($70 - 40 = 30$). When a school does not meet a standard, the distance is a negative. For example if 90% of students meet Standard 3 (100% College/Career Capable or higher), then the distance from Standard 3 is -10 percentage points ($90 - 100 = -10$).

After the distance from each standard is calculated individually, those three distances are added to obtain the school's total distance from standards. The possible range of total distances from standards is -220 to +80 percentage points. The minimum value of -220 would occur in a school where 100% of students were classified as Minimally Prepared and no standards were met [$(0 - 40) + (0 - 80) + (0 - 100) = -220$]. The maximum value of 80 would occur in a school where 100% of students earned the classification College Rigorous and all standards were met or exceeded [$(100 - 40) + (100 - 80) + (100 - 100) = 80$].

Evaluating Improvement

There are many ways for schools to attain the target of a 3 percentage point improvement. For example, the annual target could be met if a school had a 1 point increase in the percentage of students that met each of the three standards. The target also could be met if schools had a 3 point improvement in the percentage of students that met one standard and no change in the percentage of students that met the other two. Schools can meet the target even if the number of students that meet one or two of the standards decreases. For example, a decrease of 1 point in the percentage of students that met Standard 1 could be offset by a 4 point increase in the percentage of students that met Standard 2 if there were no change in the percentage of students that met Standard 3.

The SSA annual improvement target of a 3 percentage point reduction in the total distance from standards presents a growing challenge when accumulated over several years. However, the practical implications vary for schools with different proportions of disadvantaged students and histories of academic attainment. As a rule, higher-performing schools that typically have fewer disadvantaged students and a higher proportion of prior graduates that met the requirements for College Ready or higher, face the dual challenge of maintaining a high level of performance and implementing a relatively narrow range of programs aimed at improving academic attainment outcomes of a small group of low achievers. In contrast, traditionally lower-performing schools, that typically have more diverse student populations, have the opportunity to implement a wide range of programs aimed at all levels of student performance.

2003 HIGH SCHOOL ACADEMIC ATTAINMENT RESULTS

The SSA High School Academic Attainment model evaluates annual school performance in two ways—performance on the standards and performance on the targets. School performance on the standards does not depend on prior performance. Performance on the standards in a given year depends only on whether schools met the benchmarks of 40% College Rigorous, 80% College Ready or higher, and 100% College/Career Capable or higher. In contrast, school performance on the targets for improvement takes into account prior school performance. All schools need to demonstrate an annual 3 percentage point increase in the number of students that meet one or more of the standards. Thus, schools that show 3 percentage point improvement or more will meet their target even if no standards are met. Likewise, schools that do not demonstrate a 3 percentage point improvement will not meet the annual target, even if a large number of students meet each standard.

School Performance on SSA Standards in 2003

School-by-school results for 2003 are shown in Table 1. Three observations regarding high school performance on SSA standards for 2003 are as follows:

- Twelve high schools met Standard 1.
- One high school met Standard 2.
- No school met Standard 3.

Meeting Standard 1

In 2003, 12 high schools met Standard 1. These schools are marked by an asterisk (*) in Table 1. The percentage of students meeting Standard 1 is equal to the percentage of students who attained the level of College Rigorous.

For example, in 2003, 50% of the graduates from Bethesda-Chevy Chase (B-CC) High School attained the level of College Rigorous, a value 10 percentage points higher than the value of 40% needed to meet Standard 1. Thus, B-CC met Standard 1 in 2003. In contrast, only 34.40% of graduates at Blake High School attained the level College Rigorous in 2003, a value 5.6 percentage points lower than the expected value of 40%. Therefore, Blake High School did not meet Standard 1 in 2003.

Meeting Standard 2

The high school that met Standard 2 in 2003 is marked by a double asterisk (**). The percentage of students meeting Standard 2 is calculated by adding the percentage of students who attained the level of College Rigorous with the percentage of students who attained the level of College Ready.

In 2003, 80.57% of the Whitman High School graduates attained the level of College Ready or better (68.21% College Rigorous + 12.36% College Ready). Thus, Whitman High School exceeded the requirement for Standard 2 by .57 percentage points. In contrast, only 55.47% of

the Blair High School Class of 2003 attained the level of College Ready or higher (41.52% College Rigorous + 13.97% College Ready), a value 24.53 percentage points lower than the benchmark of 80%. Therefore, Blair High School did not meet Standard 2 in 2003.

Meeting Standard 3

The percentage of students meeting Standard 3 is calculated by adding the percentages of students who attained the levels of College Rigorous, College Ready, and College/Career Capable. No school met Standard 3 in 2003. The school that came closest to meeting this standard was Wootton High School, where 92.83% of the graduates attained the level of College/Career Capable or higher (56.96% College Rigorous + 20.65% College Ready + 15.22% College/Career Capable). All MCPS high schools face the significant challenge of meeting this standard every year.

Table 1. School Performance on High School Academic Attainment Standards, 2003			
High School	% College Rigorous*	% College Ready**	% College/Career Capable***
B-CC	50.00*	20.51	12.50
Blair	41.52*	13.95	22.50
Blake	34.40	20.41	24.20
Churchill	63.88*	15.8	13.10
Damascus	44.22*	9.29	27.90
Einstein	24.07	28.65	22.07
Gaithersburg	37.50	21.99	27.32
Kennedy	26.11	22.93	28.03
Magruder	40.66*	15.38	26.60
Northwest	30.96	21.64	28.22
Paint Branch	35.01	17.24	22.29
Poolesville	45.14*	18.29	22.28
Quince Orchard	41.56*	18.89	23.18
R. Montgomery	53.97*	16.99	14.79
Rockville	35.68	19.09	23.65
Seneca Valley	26.53	18.37	24.49
Sherwood	46.77*	15.9	26.27
Springbrook	29.95	23.43	27.93
Walter Johnson	49.26*	21.08	16.42
Watkins Mill	36.19	18.82	25.19
Wheaton	17.01	16.67	25.70
Whitman	68.21*	12.36**	8.83
Wootton	56.96*	20.65	15.22
* Met Standard 1 ** Met Standard 2 *** Met Standard 3			

School Performance on SSA Targets for Improvement in 2003

Distance from Standards

School improvement in 2003 was calculated by adding the school's distances from each of the three standards using the procedure described earlier. In order for a school's distance from standards to be a positive number, at least one standard needed to be exceeded by an amount greater than the amount by which other standards were not met. For the schools described in Figure 6, when the distance from standards was a negative number, no standards were met.

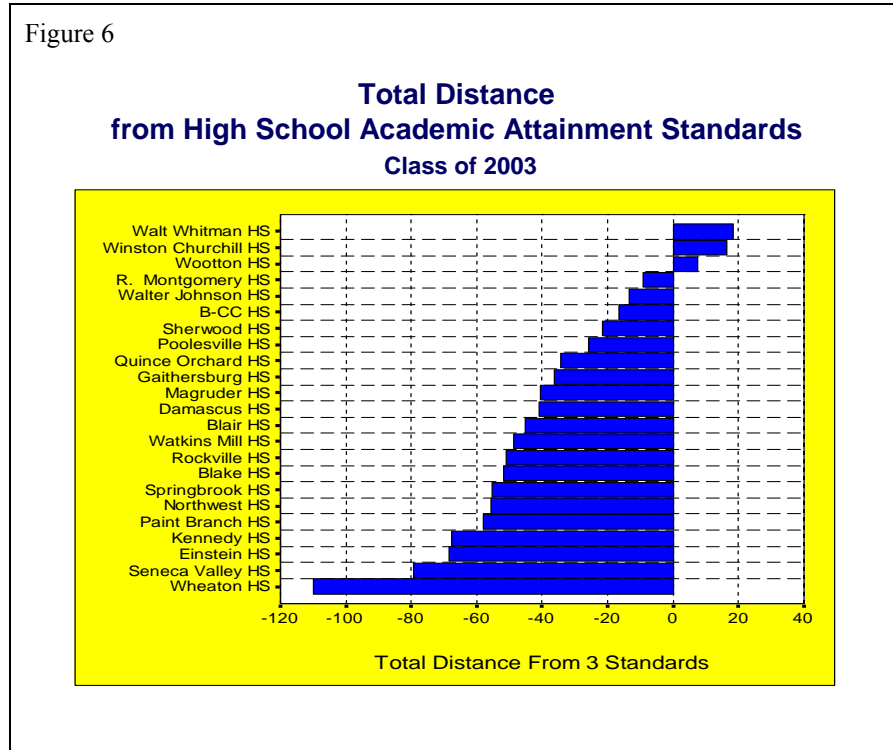


Figure 6 shows each school's total percentage point distance from the three standards. Three high schools, Walt Whitman, Winston Churchill, and Wootton, had total distances from standards that were positive values. The positive values were achieved because these schools exceeded Standard 1.

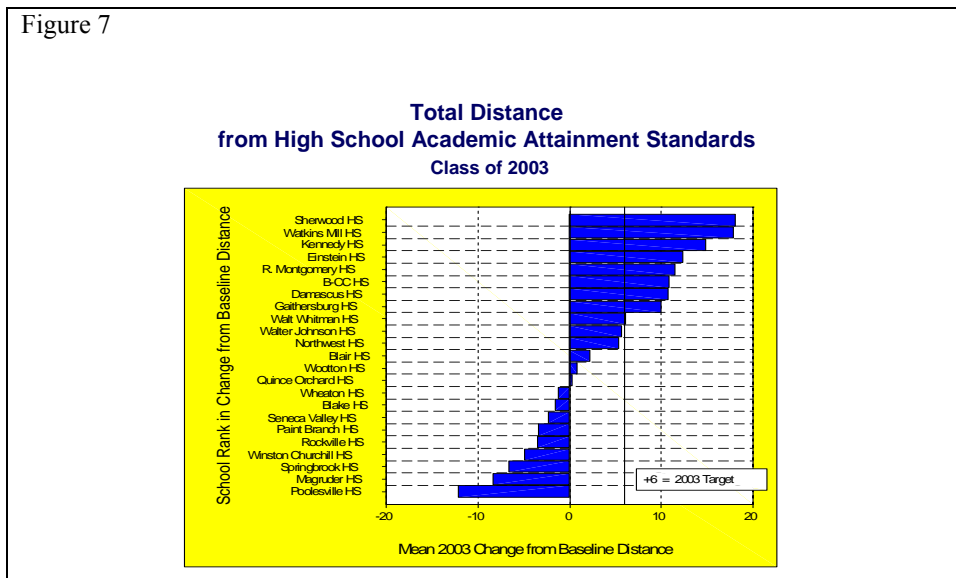
For example, in 2003, Churchill High School exceeded Standard 1 by +23.88 percentage points (63.88% - 40%). Churchill fell -.32 percentage points short of Standard 2 (79.68% - 80%). Churchill did not meet Standard 3 because 7.22% of the graduates (92.78% - 100%) were not College/Career Capable or higher. The sum of the total distance from standards for Churchill High School in 2003 was 16.34 (23.88% + -.32% + -7.22%).

Improvement from Baseline

Each school's baseline performance was established by averaging the school's performance levels for the three years, 1999 through 2001 (or fewer years for more recently opened schools

with no prior data). Because annual improvement targets are added from one year to the next, the school's schedule of annual targets for 2003 was 3 percentage points higher than for 2002, and the school's challenge to meet the target increased. Each school's improvement for 2003 was expected to be 6 percentage points higher (2 years times 3 percentage points per year) than the baseline performance.

The improvement results for 23 high schools are compared in Figure 7. The black vertical reference line shows the change from baseline distance that schools needed in order to show a 2-year improvement in the baseline distance from standards of six percentage points. Eight schools exceeded this target. Six schools showed improvement from the baseline that was less than 6 percentage points.



Nine schools showed changes from their baselines that were negative values. When a change from baseline was less than zero, the total distance from the standards was greater in 2003 than in the baseline years. For example, the total distance from standards for Magruder High School was -8.36, a value 8.6 percentage points lower in 2003 than in the baseline years.

Calculating Whether Targets Were Met

The change from the baseline is used to determine whether schools met the annual target for improvement. Schools could meet the target in two ways. The target was met if the 2003 change from the baseline distance from standards was greater than or equal to the target change of 6 percentage points. Schools also met their targets for 2003 when the change from baseline compared with the target was within or above the confidence interval for change. The confidence interval rule was applied to increase the certainty of making a correct decision about whether the target was met or not. Thus, some schools met the target even though the change from the baseline compared to the target was less than 6 percentage points.

Changes from baseline compared with the target were considered significantly different from 6 percentage points only if the values fell outside the range of the confidence interval. If the

change from the baseline compared with the target was greater than the upper limit of the confidence interval, the target was not only met, but exceeded, because the change was significantly higher than the target of 6 percentage points. Schools did not meet the target only when the change from baseline was below the lower limit of the confidence interval. A summary of high school performance is shown in Table 2.

School	Baseline Total Distance from Standards	2003 Total Distance from Standards	2003 Change From Baseline	Change from Baseline Compared with Target (+6)	2003 Confidence Interval for Change	Target Met?
B-CC	-27.35	-16.47	10.87	4.87	±12.27	Yes
Blair	-47.21	-45.04	2.17	-3.83	±8.58	Yes
Blake	-50.27	-51.78	-1.51	-7.51	±12.48	Yes
Churchill	21.22	16.34	-4.88	-10.88	±10.24	No
Damascus	-51.63	-40.86	10.77	4.77	±10.56	Yes
Einstein	-80.73	-68.42	12.31	6.31	±11.65	Yes
Gaithersburg	-46.15	-36.20	9.95	3.95	±10.36	Yes
Kennedy	-82.64	-67.77	14.87	8.87	±12.12	Yes
Magruder	-32.30	-40.66	-8.36	-14.36	±10.30	No
Northwest	-60.95	-55.62	5.34	-.66	±11.70	Yes
Paint Branch	-54.81	-58.20	-3.39	-9.39	±10.90	Yes
Poolesville	-13.55	-25.71	-12.16	-18.16	±16.57	No
Quince Orchard	-34.66	-34.36	.31	-5.69	±10.60	Yes
R. Montgomery	-20.76	-9.32	11.45	5.45	±11.08	Yes
Rockville	-47.60	-51.12	-3.52	-9.52	±13.56	Yes
Seneca Valley	-76.91	-79.18	-2.27	-8.27	±11.48	Yes
Sherwood	-39.65	-21.61	18.04	12.04	±10.25	Yes
Springbrook	-48.76	-55.36	-6.60	-12.60	±9.96	No
Walter Johnson	-19.29	-13.63	5.67	-.33	±10.61	Yes
Watkins Mill	-66.46	-48.61	17.86	11.86	±10.50	Yes
Wheaton	-108.67	-109.93	-1.26	-7.26	±12.55	Yes
Whitman	12.08	18.19	6.11	.11	±10.13	Yes
Wootton	6.60	7.39	.79	-5.21	±10.11	Yes

Nineteen of 23 high schools met the target for 2003. Eight high schools showed a 2-year improvement greater than 6 percentage points. Improvement at two of these schools—Sherwood and Watkins Mill—was significantly above the target. Nine high schools were farther below the benchmarks for the standards in 2003 than in the baseline years. Four schools—Churchill, Magruder, Poolesville, and Springbrook—improved significantly less than six percentage points.

Results for Damascus High School can be used to demonstrate the calculation for determining whether a change from the baseline fell within the confidence interval range. In 2003, the change from baseline distance from standards for Damascus High School was 10.77%, an amount 4.77 percentage points higher than the target improvement. The confidence interval for

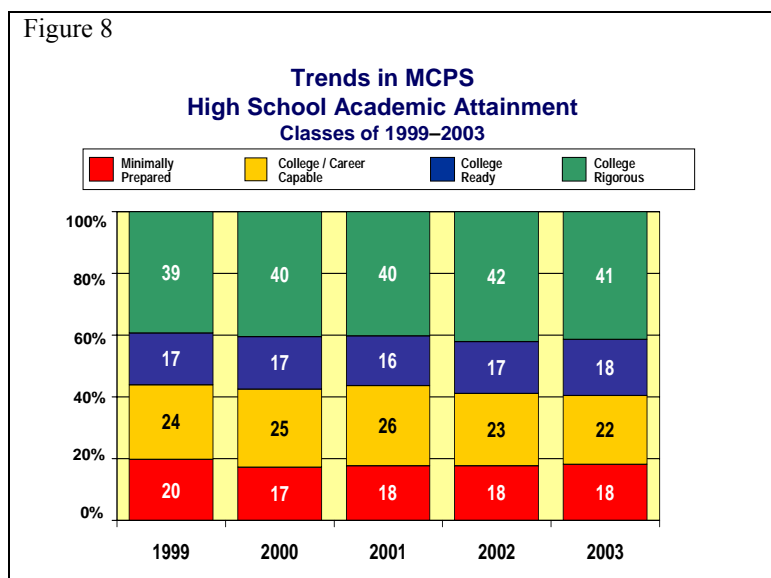
change for Damascus High School was ± 10.56 percentage points. Because the value of 4.77 is less than 10.56 but greater than -10.56, this change fell within the confidence interval. Damascus High School met the High School Academic Attainment target for 2003, but did not exceed it.

Results for Sherwood High School can be used to illustrate an example of a school that not only met, but exceeded, the High School Academic Attainment target for 2003. The improvement in the distance from standards for Sherwood graduates was 18.04, an amount 12.04 percentage points higher than the target. The confidence interval for change for Sherwood was ± 10.25 . Because the value 12.04 was above the upper limit of the confidence interval, the change from the baseline compared with the target was significantly higher than 6 percentage points.

In contrast, Poolesville High School was one of four schools that did not meet the target in 2003. The total change in the distance from baseline for Poolesville High School was -12.16, an amount 18.16 percentage points less than the target of +6. The confidence interval for change for Poolesville High School was ± 16.57 . The value of -18.16 is significantly below the lower limit of the confidence interval. Therefore, Poolesville High School did not meet the High School Academic Attainment target for 2003.

Trends in High School Academic Attainment

The stacked bars in Figure 8 show countywide trends performance of graduates in all schools. Between 1999 and 2003 there has been a small increase in the percentage of graduates that attained the levels College Rigorous and College Ready. By 2003 41% of graduates were described as College Rigorous, 59% were described as College Ready or higher, and 82% were described as College/Career Capable or higher.

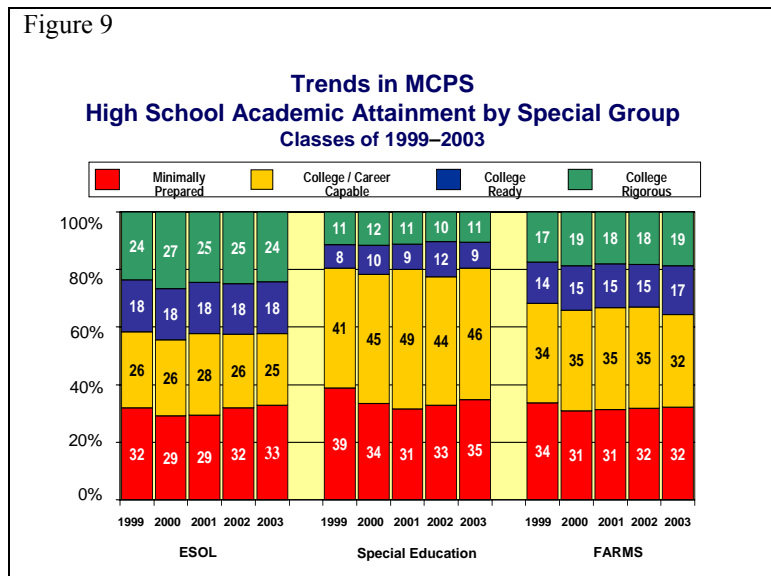


Each year, the percentage of graduates described by each High School Academic Attainment category varied significantly from the county average for groups of students who received

special services (i.e., ESOL, special education, or FARMS) during Grade 12, and for students of different race/ethnicities. Annual fluctuations in overall performance for most subgroups of students were not statistically significant.

Special Services Groups

Figure 9 shows the High School Academic Attainment levels for members of the Classes of 1999–2003 who received ESOL, special education, or FARMS services during Grade 12.



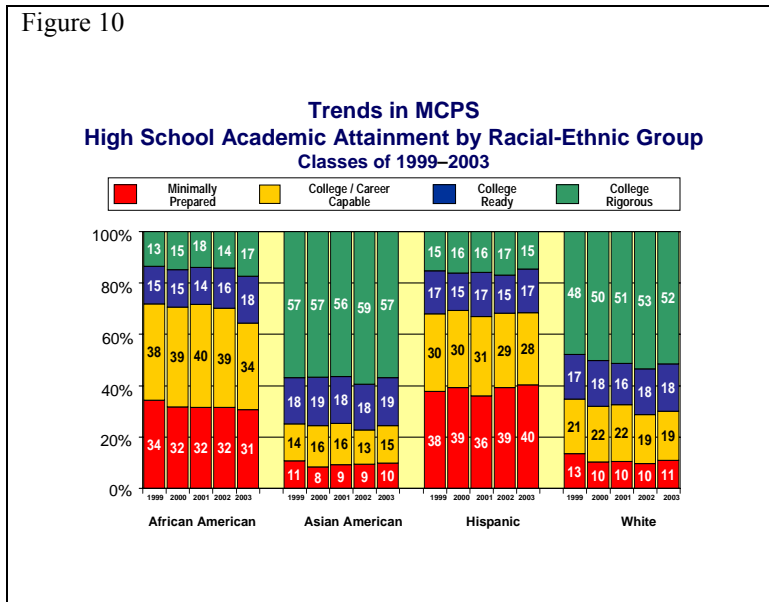
Graduates who receive ESOL services are significantly less likely to attain the College Rigorous level and more likely to be described as Minimally Prepared. However, the percentage of ESOL students who are described as College Ready or College/Career Capable is not significantly different from the country average percentages.

High School Academic Attainment of special education students is less rigorous than for other MCPS graduates. About 80% of graduates who receive special education services are described as College/Career Capable or Minimally Prepared. Only 20% of these students are likely to be sufficiently prepared for the rigors of college course work.

About two thirds of graduates who receive free and reduced-price meals (FARMS) services are described as College/Career Capable or Minimally Prepared. Since 1999, there has been a small but steady increase in the percentage of FARMS students who attain the College Ready or College Rigorous levels. Although not statistically significant, the combined improvement of 3% for 2003 compared with 2002 is encouraging.

Racial-Ethnic Groups

Figure 10 shows trends in the High School Academic Attainment of students of different race or ethnicity. In 2003, academic attainment levels of African American and Hispanic graduates remained less rigorous than those of Asian American or white graduates. From 1999 to 2003, more than 70% of Asian American and white students completed academic programs that were classified as College Ready or higher. About two thirds of African American and Hispanic graduates were described as College/Career Capable or Minimally Prepared. This finding suggests that, like their counterparts nationally, MCPS students of color will be more likely to need remediation upon entry to college than will other students.



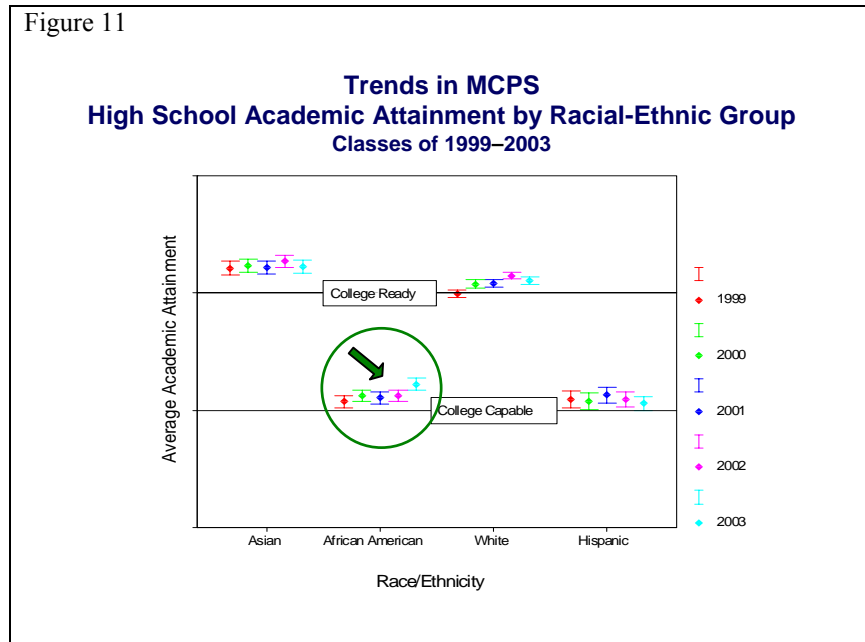
Performance of African Americans graduates was significantly improved in 2003. Five percent more African American students completed programs that earned the classifications of either College Rigorous or College Ready in 2003 than in 2002.

Error bars are useful for better understanding whether differences observed in the stacked bar graphs are statistically significant. The error bars in Figure 11 reveal the 5-year trend in the High School Academic Attainment² of groups of students of different races and ethnicities. The \diamond at the center of each error bar shows the average academic attainment level for each racial/ethnic group in the years 1999 through 2003. The vertical error band is a 95% confidence interval that shows the certainty of the estimate of average academic attainment. Annual differences in average academic attainment of subgroups of students are statistically significant if the confidence intervals do not overlap.

An example of a nonsignificant change is illustrated by trends in the performance of white students. In 2003, a smaller percentage of white students exceeded the requirements for the

² For purposes of this analysis, the four High School Academic Attainment categories—Minimally Prepared, College/Career Capable, College Ready, and College Rigorous—were assigned values from 1 to 4, respectively, to represent increasing levels of academic rigor.

College Ready classification than was the case in 2002. However, because the confidence intervals for these two years overlapped, the change was not significantly different. Rather, it should be interpreted as part of a natural fluctuation from one year to the next.



In contrast, results for 2003 show a statistically significant improvement in the academic attainment of African American graduates. The lower limit of the confidence interval for 2003 was higher than the upper limit of the confidence intervals for the previous four years. Thus, a greater percentage of African Americans exceeded the requirements for the College/Career Capable classification than did previous cohorts. For the first time, High School Academic Attainment of African Americans graduates in 2003 was higher, on average, than that of Hispanic students.

USING ACADEMIC ATTAINMENT DATA TO GUIDE PROGRAM PLANNING

Grade 9 Leading Indicators of High School Academic Attainment

Graduating seniors are most likely to be prepared for college and/or a career if they begin as early as Grade 8 or 9 to focus on what they need to do to achieve that goal. Grade 9 leading indicators can be used by high school principals, school leaders, and counselors to identify students at risk of low performance, and to design school improvement plans that will support higher, and more equitable, academic attainment outcomes at their schools. Appendix 3 provides cluster group and school-by-school descriptions of the associations of leading indicators with High School Academic Attainment for the Class of 2003.

The trend analysis presented in this section is based on the academic records of the most recent five cohorts of MCPS graduates. All of these students entered one of 23 MCPS high schools as ninth graders and graduated from the same high school four years later. The years 1996 through 2000 represent the fiscal years during which each cohort was in Grade 9.

The graphic illustrations shown in Figures 12 through 16 are included to better illuminate understanding of the relationships between leading indicators of student risk in Grade 9 and High School Academic Attainment in Grade 12. For purposes of this analysis, the four High School Academic Attainment categories—Minimally Prepared, College/Career Capable, College Ready, and College Rigorous—were assigned values from 1 to 4, respectively, to represent increasing levels of academic rigor. The vertical axes shown in the graphs in Figures 12 through 17 represent the average attainment levels on this 4-point scale.

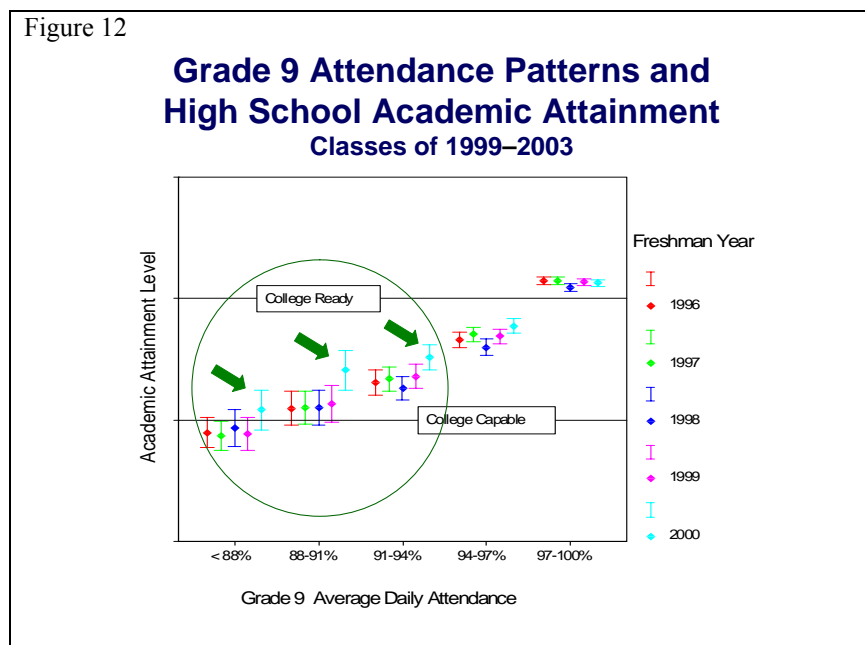
The horizontal reference lines shown on the graphs in Figures 12 through 16 correspond to points on the vertical axis that represent the High School Academic Attainment levels College Ready and College/Career Capable. If the senior year High School Academic Attainment level for a group of students was above the College Ready reference line, then a majority of individuals in that group attained the level of College Ready or College Rigorous when they graduated. Likewise, if the average attainment level of a group was below the College Capable reference line, the majority of individuals in that group were classified as Minimally Prepared. When the average attainment level for a group was between the two reference lines, most individuals in that group exceeded the requirements for College/Career Capable but, on average, group members did not meet the requirements for College Ready or College Rigorous.

Interpretation of the error bars is similar to that described for Figure 11. For Figures 12 through 16, the error bars reveal trends in the High School Academic Attainment of groups of students who entered one of 23 MCPS high schools as freshman and graduated from the same school four years later. The \diamond at the center of each error bar shows the average High School Academic Attainment level for a group of freshmen. The vertical error band is a 95% confidence interval that shows the certainty of the estimate of average High School Academic Attainment. Annual differences in the performance of subgroups of students are statistically significant if the confidence intervals do not overlap.

Attendance Record

Attendance matters. High School Academic Attainment is statistically significantly higher for students who attend school more often, regardless of whether absences are excused or not. Figure 12 illustrates the strength of the relationship between average daily attendance in Grade 9 and High School Academic Attainment in Grade 12.

Student attendance was classified into five groups to facilitate interpretation. On average, only groups of students whose daily attendance in Grade 9 was more than 97% were able to attain a level of College Ready or higher. At the other extreme, students who were absent more than 10% of the time were likely, on average, to be classified as College/Career Capable or Minimally Prepared.



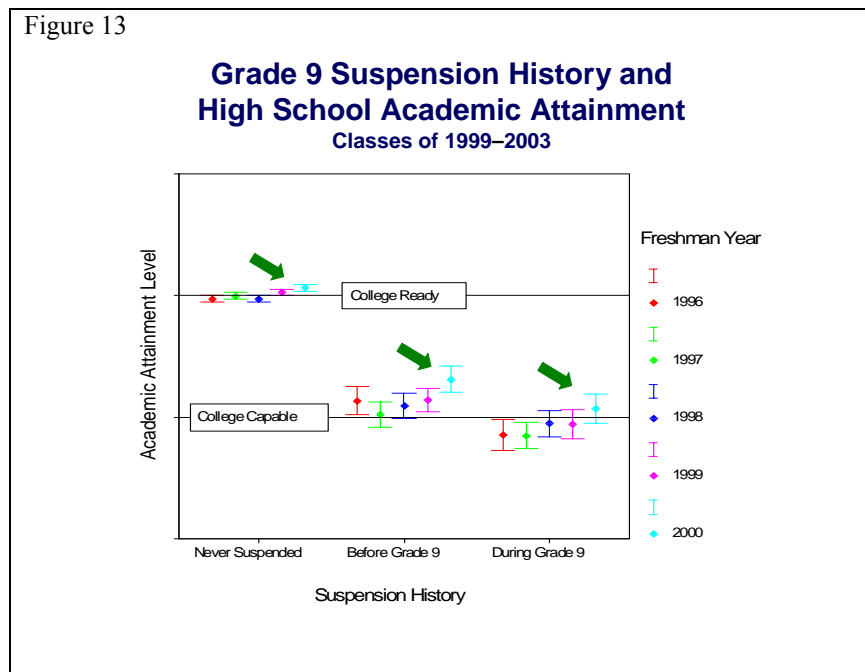
In 2003, students who were absent 21 days or more (more than 12% of the time) were more likely, on average, to meet the requirements for College/Career Capable than were comparable students in prior years. Likewise, in 2003, average High School Academic Attainment for seniors who were absent between 10 to 20 days in Grade 9 had academic profiles that were closer to those of students who were absent between 5 and 10 days. While none of the comparisons are statistically significant, the upward trends are suggestive of countywide improvements in the High School Academic Attainment of groups of students with poor attendance histories. More of these students were able to attain the College/Career Capable level or higher. Results provide preliminary evidence that school efforts to raise High School Academic Attainment for students at risk because of poor attendance are beginning to pay off.

Suspension History

One indicator of school engagement is student behavior. Students' suspension records offer clues as to whether students buy into the importance of school and academic achievement.

Students were assigned to one of three groups based on their suspension history—never suspended, suspended before Grade 9, or suspended during Grade 9. A history of school suspension by Grade 9 is associated with significantly lower High School Academic Attainment, regardless of when students were suspended.

Figure 13 illustrates the strong relationship between students’ Grade 9 suspension histories and High School Academic Attainment in Grade 12. On average, students who were never suspended attained the level College Ready. In contrast, most students with any record of suspension were classified as College/Career Capable or lower. Students suspended before Grade 9 who attained the levels College Ready or higher were exceptions. Most students met only the requirements for the College/Career Capable category. Students who were suspended during Grade 9 were most at risk for being classified as Minimally Prepared. The results for freshman cohorts from 1996 to 2000 show that the risks associated with suspension are real and persistent. Some encouraging trends in High School Academic Attainment warrant comment.

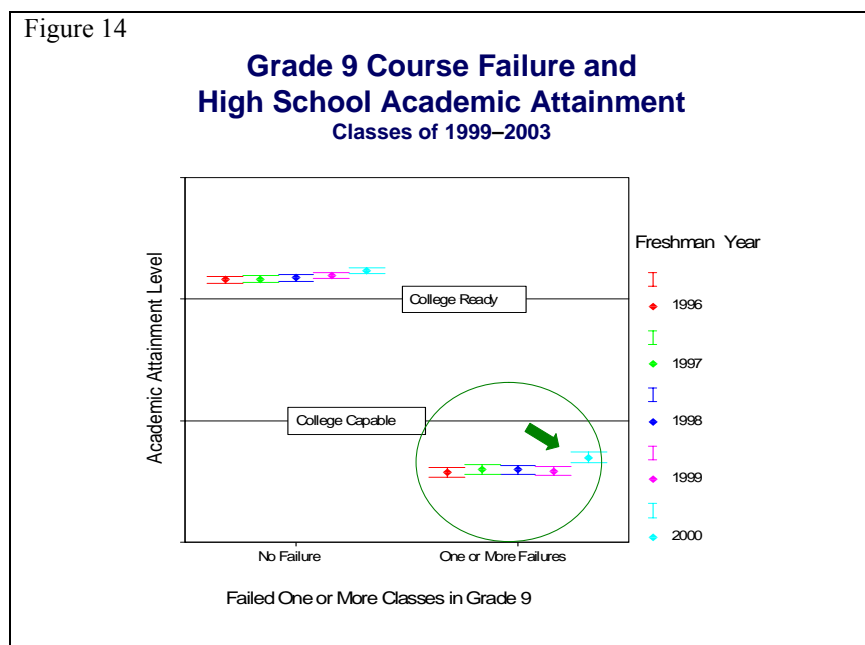


In all years, High School Academic Attainment of freshman with no history of suspension was positive. But in 2000 academic performance of this group was significantly higher than in earlier years. In addition, the lower limit of the error band was completely above the College Ready benchmark for the first time. On average, never-suspended students who were freshman in 2000 and graduated from the same high school in 2003 were unlikely to need college remediation.

Likewise, the upward trend of the error bars for students who were suspended before or during Grade 9, while not yet statistically significant, is showing sustained improvement over the past 5 years. Altogether, these results suggest that school efforts to raise High School Academic Attainment for all students, especially those with histories of suspension, may be making a difference.

Course Failure

Figure 14 shows the relationship between students' Grade 9 course failure and High School Academic Attainment in Grade 12. Student course failure was classified into two groups—no failures during Grade 9 or one or more course failures during Grade 9. On average, Grade 9 students who passed all of their classes attained the College Ready level or higher. In contrast, most students who failed even one course in their freshman year were not able to meet the requirements for College/Career Capable or higher.



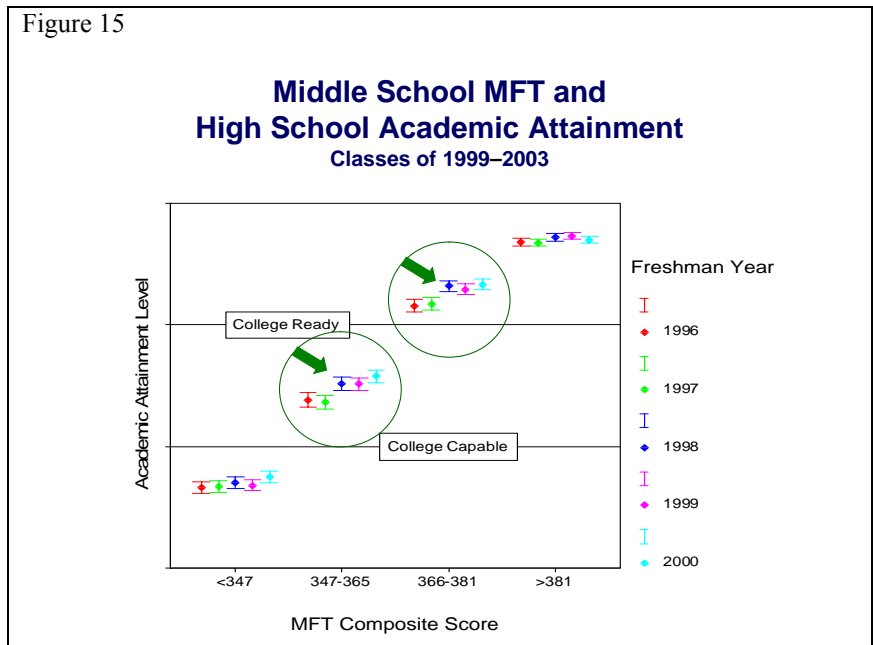
The academic profiles of groups of freshmen with different histories of course failure was virtually unchanged from 1996 to 1999. High School Academic Attainment was higher for seniors who were freshmen in 2000.

The improvement for groups of freshmen who failed one or more courses in Grade 9 was statistically significant. Members of the Class of 2003 who failed one or more courses as freshman were significantly closer to attaining the level College/Career Capable than were earlier cohorts. This result provides evidence that school efforts to provide early interventions for all students, but particularly those at risk because of course failure are producing positive results.

Maryland Functional Tests

Prior to 2004, the MSDE required all school districts to administer the Maryland Functional Tests (MFT) in reading, mathematics, and writing in Grades 7 and 8. Figure 15 shows the relationship between students' achievement on the MFT administered in middle school and High School Academic Attainment in Grade 12. Students' MFT composite scale scores were classified into four groups to facilitate interpretation.

On average, MFT scores from 1996 to 2000 were highly predictive of High School Academic Attainment. On average, students with composite scores above 366 on the MFT were very likely to meet the requirements of College Ready or higher. As a group, students whose scores were between 357 and 365 exceeded the requirements for College/Career Capable. On average, students who were Minimally Prepared at the end of their senior year scored below 346 on MFTs administered in middle school.



Improvement of High School Academic Attainment of seniors “in the middle” was significantly higher for students who were freshmen after 1997. Academic attainment of the freshmen with the lowest MFT scores was not significantly higher in 2000. However, the gradual upward trend is a good sign. Results suggest that MFT scores are being used to identify academic needs so that students can receive additional support if needed.

The MFT will not be administered after 2003. Thus, results will not be available for students entering Grade 9 after 2004. However, the Maryland School Assessment (MSA) administered in Grade 8 in 2003 and in Grades 6, 7, and 8 in 2004 can be used in future years in place of the MFT to provide guidance for identifying individuals who need additional support in high school to be prepared for college.

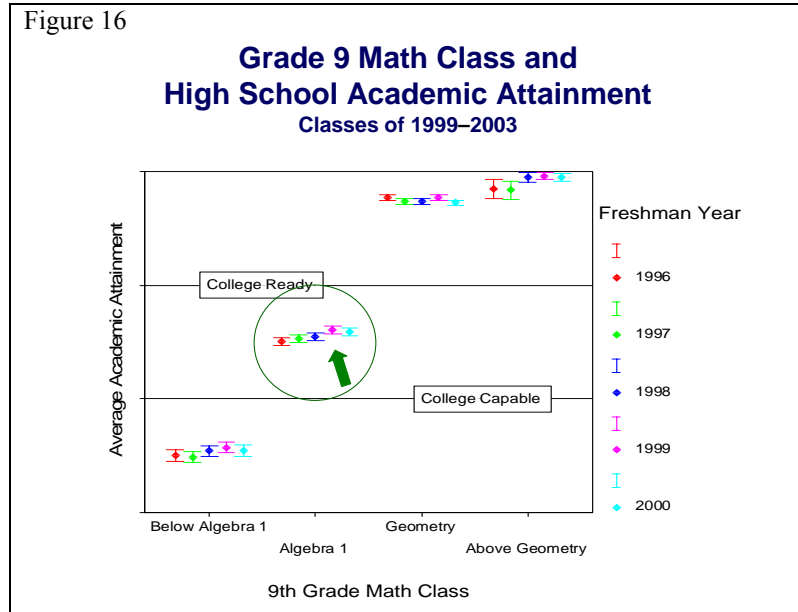
Grade 9 Math Class

Of all the academic subjects, math is gatekeeper of High School Academic Attainment. Figure 16 illustrates the strength and consistency of this association over the past 5 years. Over the past 2 years, the High School Academic Attainment of seniors who took a math class beyond Geometry as freshman has climbed.

Nearly all students who completed Calculus or higher also met the requirements for the College Rigorous category. Of the freshmen who enrolled in Geometry (or Honors Geometry), about

half attained College Ready and half attained College Rigorous levels. Both groups represent the graduates who were unlikely to need remediation upon entry to college.

Figure 16



Grade 9 students who were enrolled in below grade-level math classes were very likely to need college remediation. Almost half of the freshmen enrolled in a math class below the level of Algebra 1 were not able to meet the requirements College/Career Capable or higher.

Outcomes were most varied for students enrolled in Algebra 1 in Grade 9. Each year, about 25% of these students are classified as College Rigorous and another 25% are classified as College Ready. This result suggests that

approximately 50% of these students will be likely to need remediation upon entry to college.

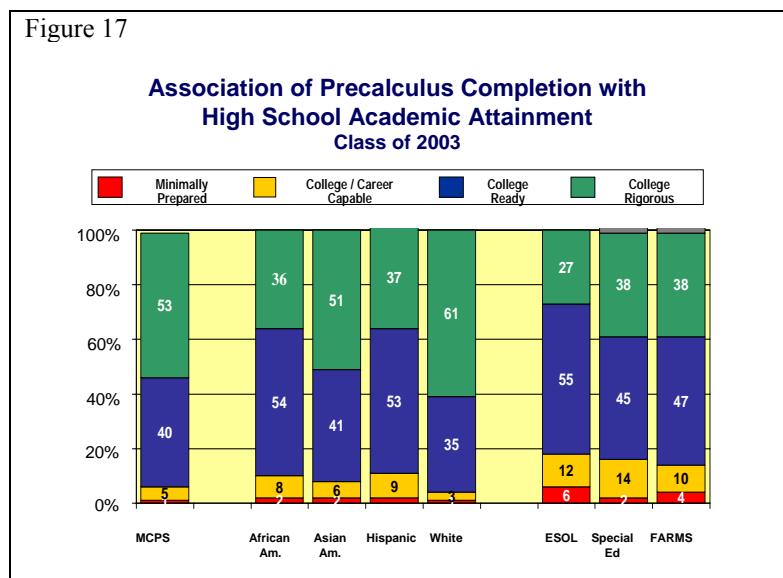
Over the past 2 years there has been improvement in the High School Academic Attainment of seniors who were enrolled in Algebra 1 as freshmen. A small, but significant percentage of students have been able to persist in math course-taking and attain the level College Ready.

Academic attainment of all students can be improved through interventions designed to increase student engagement, student commitment, and student access to academic opportunities. Prior math performance is predictive of High School Academic Attainment but it is not prescriptive.

Figure 17 shows the High School Academic Attainment outcomes for the most recent cohort of students who completed the traditional math sequence of Algebra 1, Geometry, Algebra 2, and Precalculus or AP Statistics.

Approximately 90% of freshmen enrolled in Algebra 1 in 2000 who continued to take math through Precalculus or AP Statistics were classified as College Ready or College Rigorous upon graduation from high school in 2003.

Figure 17



This finding is particularly heartening because the results are consistent for all subgroups of students, regardless of race/ethnicity or participation in special services. Students not in a math “fast track” by Grade 9 still have the opportunity to complete a rigorous high school program that adequately prepares them for the challenges of college. Freshman Algebra 1 students who earned one credit in mathematics above the level of Algebra 2 were unlikely to need remediation upon entry to college, even though they did not take Calculus or higher-level math classes.

CONCLUSION

The primary goals of the SSA High School Academic Attainment model are to reduce the need for college remediation and to improve MCPS graduates' chances of completing their college degrees. MCPS high schools are largely accountable for meeting standards and annual targets for performance of their graduating classes. But attaining SSA standards and targets is a shared process that requires the joint efforts of clusters of elementary, middle, and high school leaders and central office staff. Individualized school improvement plans are under way to better align pre-college and postsecondary academic expectations and to address the needs of students with different probabilities of academic risk.

The process of continuous improvement is slow and challenging. But promising results are emerging just 2 years after implementation of the SSA. A greater percentage of students are completing rigorous programs that will reduce their need for remediation upon entry to college. Results are most encouraging for students at risk because of low school engagement, poor prior achievement, and social disadvantage. Greater percentages of these students are graduating with the skills they need to be successful in the workplace or to be capable of succeeding in college with proper remedial support.

Another encouraging sign is the more equitable distribution of outcomes among students with equal access to educational opportunities. In MCPS, countywide and school-specific initiatives are leveling the playing field so that all students can compete. While longstanding gaps in achievement remain, the High School Academic Attainment profiles of subgroups of students who take the same number of Honors courses, earn the same grades, and complete equally rigorous curricula in math and science show fewer discrepancies.

REFERENCES

- Abell Foundation. (2002). *Baltimore city community college at the crossroads*. Baltimore, Maryland: The Abell Foundation.
- Adelman, C. (1999). *Answers in the tool box: Academic intensity, attendance patterns and bachelor's degree attainment*. Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Arsht, L. A., & Pimentel, S. (2002). Driving student success: Using multiple measures of student achievement to analyze performance. *Proceedings of The Results Card Conference*. Washington, DC: StandardsWork. www.standardswork.org.
- Astin, A. W., Tsui, L., & Avalos, J. (1996). Degree attainment rates at American colleges and universities. Los Angeles, CA: University of California, Los Angeles, Graduate School of Education, Higher Education Research Institute.
- Berkner, L., He, S., Cataldi, E. F., & Knepper, P. (2002). *Descriptive summary of 1995–96 beginning postsecondary students: Six years later*. Washington, DC: National Center for Education Statistics.
- Boylan, H., Abraham, A., Allen, B., Anderson, J., Bonham, B., Bliss, L., Morante, E., Ramirez, G., & Vadillo, M. (1996). *An evaluation of the Texas academic skills program*. Austin, TX: Texas Higher Education Coordinating Board.
- Bueschel, A. C. (2003). *The missing link: The role of community colleges in the transitions between high school and college*. A report for the Bridge Project: Strengthening K–16 Transition Policies. Stanford University.
- Gerald, D. E., & Hussar, W. J. (2001). *Projections of education statistics to 2011*. Washington, DC: National Center for Education Statistics U.S. Department of Education Office of Educational Research and Improvement
- Horn, L., & Kojaku, L. K. (2001). *High school academic curriculum and the persistence path through college: Persistence and transfer behavior of undergraduates 3 years after entering 4-year institutions*. Washington, DC: National Center for Education Statistics.
- Hoyt, Jeff E.; Sorensen, Colleen T. (2001). High school preparation, placement testing, and college remediation. *Journal of Developmental Education*, 5(2), 26–34.
- Kirst, M. W. (1998a). Bridging the remediation gap. *Education Week*, 18(1), 76, 52.
- Kirst, M. W. (1998b). *Improving and aligning K–16 standards, admissions, and freshman placement policies*. Stanford, CA: National Center for Postsecondary Improvement.
- Kirst, M., & Venezia, A. (2001). Bridging the great divide between secondary schools and postsecondary education. *Phi Delta Kappan*, 83 (1), 92–97.
- Lewis, L., & Farris, E. (1996). *Remedial education at higher education institutions in fall 1995*. Washington, DC: National Center for Education Statistics.
- McCabe, R., & Day, P. (Eds). (1998). *Developmental education: A twenty-first century social and economic imperative*. Mission Viejo, CA: League for Innovation in the Community College and The College Board.
- Milton, T. H., & Schmidlein, F. A. (2000) *The bridge project: Strengthening K–16 transition policies*. Maryland Case Study Technical Report from Stanford University's Bridge Project.
- National Library of Education. (1999.) *College for all? Is there too much emphasis on getting a 4-year college degree?* Washington, DC: U.S. Department of Education. <http://www.ed.gov/pubs/CollegeForAll>.

- Rosenbaum, James (2001). *Beyond college for all*. New York: Russell Sage.
- Smith, T.M., Young B.A., Bae, Y., Choy, S.P., & Alsalam, N. (1997). *The condition of education 1997*. Washington, DC: U.S. Department of Education.
- Spann, M. G. (2000). *Remediation: A must for the 21st century learning society*. Denver: The Education Commission of the States.
- Thomas B. Fordham Foundation. (1998). *A Nation Still at Risk: an Education Manifesto*. Document resulting from the proceedings of Nation Still At Risk Summit, Washington, D.C. <http://edexcellence.net/library/manifes.html> .
- Trout, P. (2001). Remediation and the dumbing down of campus standards. *The Montana Professor*, 11(3) <http://mtprof.msun.edu/Fall2001/TrtArt.html>
- U.S. Department of Education (2001). *Digest of education statistics: 2000*. Washington, DC: National Center for Education Statistics.
- U.S. Department of Education (2003). *The condition of education 2003: Immediate transition to college*. Washington, DC: National Center for Education Statistics
- Venezia, A. (2001). *A student-centered P-16 accountability model: Encouraging high standards, equitable educational opportunities and outcomes, and flexibility within a seamless system of education*. Denver: The Education Commission of the States.
- Venezia, A., Kirst, M. W., & Antonio, A. L. (2003). *Betraying the college dream: How disconnected K-12 and postsecondary education systems undermine student aspirations*. Final Report from Stanford University's Bridge Project.

Appendix 1

Because of the large file size (16.5 MB), the detailed graphics presented in Appendix 1 are available on the OSA web site (www.mcps.k12.md.us/departments/accountability/performance.shtm) separately by school, as well as collectively.

The average school file size is approximately 1 MB per file.

Appendix 2

Grade 12 Profiles of High School Academic Attainment Class of 2003							
MCPS Results			Number of Graduates	Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared
Class of 2003 (8,879 Graduates)	Highest Math Level	Algebra 1 and Geometry	1,838	0	0	28	72
		Algebra 2/Intro Stat	2,116	9	18	61	11
		Precalculus/AP Stat	2,674	53	40	5	1
		Calculus or Higher	2,251	92	8	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	2,264	2	5	45	49
		Up to 1 Per Year	1,686	13	24	39	24
		Up to 3 Per Year	2,178	45	38	12	4
		More than 3 Per Year	2,751	89	10	0	0
	Academic GPA	A Average	1137	97	2	0	1
		B Average	3655	61	27	7	5
		C Average	2621	2	16	50	32
		D Average	646	0	0	38	62
Blair/Einstein/Kennedy Clusters			Number of Graduates	Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared
Blair HS	Highest Math Level	Algebra 1 and Geometry	149	0	0	23	77
		Algebra 2/Intro Stat	171	12	16	60	12
		Precalculus/AP Stat	116	52	41	3	4
		Calculus or Higher	195	93	7	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	194	2	4	42	53
		Up to 1 Per Year	91	13	12	45	30
		Up to 3 Per Year	107	35	40	19	7
		More than 3 Per Year	239	88	11	0	1
	Academic GPA	A Average	98	97	2	0	1
		B Average	230	62	20	8	10
		C Average	192	2	16	48	34
		D Average	55	0	0	38	62
Einstein HS	Highest Math Level	Algebra 1 and Geometry	110	0	0	26	74
		Algebra 2/Intro Stat	62	2	32	58	8
		Precalculus/AP Stat	126	33	56	10	2
		Calculus or Higher	51	82	18	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	89	0	4	39	56
		Up to 1 Per Year	91	7	30	29	35
		Up to 3 Per Year	83	18	57	18	7
		More than 3 Per Year	86	73	26	1	0
	Academic GPA	A Average	13	100	0	0	0
		B Average	134	43	44	5	7
		C Average	137	4	22	39	35
		D Average	36	0	0	42	58
Kennedy HS	Highest Math Level	Algebra 1 and Geometry	90	0	0	37	63
		Algebra 2/Intro Stat	103	8	28	50	14
		Precalculus/AP Stat	69	42	52	4	1
		Calculus or Higher	52	87	13	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	86	2	0	48	50
		Up to 1 Per Year	59	3	15	42	39
		Up to 3 Per Year	63	8	51	33	8
		More than 3 Per Year	106	69	29	1	1
	Academic GPA	A Average	20	95	0	0	5
		B Average	125	42	37	11	10
		C Average	103	1	13	55	31
		D Average	34	0	0	35	65

Appendix 2

Churchill/ Richard Montgomery/ Rockville/ Wootton Clusters			Number of Graduates	Percent College Rigorous	Percent College Ready	Percent College/ Career Capable	Percent Minimally Prepared
Churchill HS	Highest Math Level	Algebra 1 and Geometry	18	0	0	11	89
		Algebra 2/Intro Stat	91	11	14	59	15
		Precalculus/AP Stat	147	65	33	1	1
		Calculus or Higher	187	95	5	0	1
	Average Number of Honors Credits	Less than 1 in 4 Years	69	7	7	49	36
		Up to 1 Per Year	73	27	36	27	10
		Up to 3 Per Year	130	73	24	3	0
		More than 3 Per Year	171	95	5	0	0
	Academic GPA	A Average	90	97	2	0	1
		B Average	235	71	23	4	2
		C Average	58	2	14	60	24
		D Average	14	0	0	43	57
Richard Montgomery HS	Highest Math Level	Algebra 1 and Geometry	68	0	0	35	65
		Algebra 2/Intro Stat	43	2	23	63	12
		Precalculus/AP Stat	114	54	42	3	2
		Calculus or Higher	140	96	3	0	1
	Average Number of Honors Credits	Less than 1 in 4 Years	69	3	6	39	52
		Up to 1 Per Year	50	8	30	34	28
		Up to 3 Per Year	67	45	40	13	1
		More than 3 Per Year	179	90	9	1	1
	Academic GPA	A Average	74	96	3	1	0
		B Average	161	70	20	4	6
		C Average	92	1	21	42	36
		D Average	15	0	0	47	53
Rockville HS	Highest Math Level	Algebra 1 and Geometry	56	0	0	21	79
		Algebra 2/Intro Stat	58	0	21	67	12
		Precalculus/AP Stat	82	52	39	7	1
		Calculus or Higher	45	96	4	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	74	0	7	39	54
		Up to 1 Per Year	49	12	22	43	22
		Up to 3 Per Year	66	44	44	11	2
		More than 3 Per Year	52	98	2	0	0
	Academic GPA	A Average	21	100	0	0	0
		B Average	94	62	30	4	4
		C Average	74	1	14	49	36
		D Average	29	0	0	38	62
Wootton HS	Highest Math Level	Algebra 1 and Geometry	30	0	0	17	83
		Algebra 2/Intro Stat	78	6	15	68	10
		Precalculus/AP Stat	172	49	44	7	0
		Calculus or Higher	180	96	4	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	44	0	7	52	41
		Up to 1 Per Year	89	13	34	38	15
		Up to 3 Per Year	150	55	35	9	1
		More than 3 Per Year	177	95	5	0	0
	Academic GPA	A Average	96	100	0	0	0
		B Average	207	69	27	3	1
		C Average	96	3	28	55	14
		D Average	21	0	0	19	81

Appendix 2

Northwest/Poolesville/ Quince Orchard/Seneca Valley Clusters			Number of Graduates	Percent College Rigorous	Percent College Ready	Percent College/ Career Capable	Percent Minimally Prepared
Northwest	Highest Math Level	Algebra 1 and Geometry	88	0	0	31	69
		Algebra 2/Intro Stat	106	7	17	68	8
		Precalculus/AP Stat	107	48	49	4	0
		Calculus or Higher	64	86	14	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	120	3	5	50	43
		Up to 1 Per Year	77	16	21	43	21
		Up to 3 Per Year	99	37	49	10	3
		More than 3 Per Year	69	88	12	0	0
	Academic GPA	A Average	31	97	3	0	0
		B Average	137	55	34	7	4
		C Average	136	0	18	54	29
		D Average	26	0	0	27	73
Poolesville HS	Highest Math Level	Algebra 1 and Geometry	35	0	0	34	66
		Algebra 2/Intro Stat	53	13	34	49	4
		Precalculus/AP Stat	32	63	34	3	0
		Calculus or Higher	55	95	5	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	36	0	8	50	42
		Up to 1 Per Year	25	8	20	52	20
		Up to 3 Per Year	41	29	39	20	12
		More than 3 Per Year	73	89	11	0	0
	Academic GPA	A Average	26	100	0	0	0
		B Average	78	56	28	10	5
		C Average	47	2	11	55	32
		D Average	4	0	0	0	100
Quince Orchard HS	Highest Math Level	Algebra 1 and Geometry	66	0	0	24	76
		Algebra 2/Intro Stat	99	5	11	73	11
		Precalculus/AP Stat	124	53	41	3	2
		Calculus or Higher	108	87	12	0	1
	Average Number of Honors Credits	Less than 1 in 4 Years	121	1	8	46	45
		Up to 1 Per Year	64	14	30	45	11
		Up to 3 Per Year	88	49	39	8	5
		More than 3 Per Year	124	90	10	0	0
	Academic GPA	A Average	51	94	6	0	0
		B Average	162	64	27	5	4
		C Average	132	1	19	50	30
		D Average	27	0	0	41	59
Seneca Valley HS	Highest Math Level	Algebra 1 and Geometry	117	0	0	21	79
		Algebra 2/Intro Stat	78	1	22	62	15
		Precalculus/AP Stat	97	47	41	11	0
		Calculus or Higher	51	86	12	2	0
	Average Number of Honors Credits	Less than 1 in 4 Years	115	1	2	32	65
		Up to 1 Per Year	83	6	18	43	33
		Up to 3 Per Year	78	35	47	14	4
		More than 3 Per Year	67	87	13	0	0
	Academic GPA	A Average	29	93	7	0	0
		B Average	98	51	32	10	7
		C Average	139	3	16	42	40
		D Average	38	0	0	24	76

Appendix 2

Damascus/Gaithersburg/Magruder/ Watkins Mill Clusters			Number of Graduates	Percent College Rigorous	Percent College Ready	Percent College/ Career Capable	Percent Minimally Prepared
Damascus HS	Highest Math Level	Algebra 1 and Geometry	118	1	0	37	62
		Algebra 2/Intro Stat	147	29	13	52	6
		Precalculus/AP Stat	87	78	20	2	0
		Calculus or Higher	89	94	6	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	149	7	3	54	37
		Up to 1 Per Year	106	24	17	37	23
		Up to 3 Per Year	102	77	16	4	3
		More than 3 Per Year	84	96	4	0	0
	Academic GPA	A Average	44	100	0	0	0
		B Average	190	69	16	11	4
		C Average	152	1	5	57	38
		D Average	26	0	0	50	50
Gaithersburg HS	Highest Math Level	Algebra 1 and Geometry	81	0	0	38	62
		Algebra 2/Intro Stat	90	4	8	81	7
		Precalculus/AP Stat	151	43	47	9	1
		Calculus or Higher	110	85	15	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	117	1	6	53	40
		Up to 1 Per Year	80	6	29	54	11
		Up to 3 Per Year	111	38	50	12	1
		More than 3 Per Year	124	92	8	0	0
	Academic GPA	A Average	52	100	0	0	0
		B Average	167	60	31	6	3
		C Average	132	1	23	54	23
		D Average	41	0	0	61	39
Magruder HS	Highest Math Level	Algebra 1 and Geometry	108	0	0	40	60
		Algebra 2/Intro Stat	100	10	13	65	12
		Precalculus/AP Stat	140	57	32	9	1
		Calculus or Higher	107	89	11	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	157	2	4	56	38
		Up to 1 Per Year	91	22	27	31	20
		Up to 3 Per Year	106	66	28	5	1
		More than 3 Per Year	101	91	9	0	0
	Academic GPA	A Average	53	100	0	0	0
		B Average	185	61	22	11	6
		C Average	129	1	16	56	28
		D Average	41	0	0	46	54
Watkins Mill HS	Highest Math Level	Algebra 1 and Geometry	115	0	0	42	58
		Algebra 2/Intro Stat	87	3	22	61	14
		Precalculus/AP Stat	102	43	53	2	2
		Calculus or Higher	105	96	4	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	119	1	3	50	45
		Up to 1 Per Year	83	6	34	35	25
		Up to 3 Per Year	113	46	36	12	5
		More than 3 Per Year	94	96	4	0	0
	Academic GPA	A Average	42	95	2	2	0
		B Average	165	56	30	7	6
		C Average	135	1	14	46	39
		D Average	27	0	0	59	41

Appendix 2

Sherwood/NE Consortium			Number of Graduates	Percent College Rigorous	Percent College Ready	Percent College/ Career Capable	Percent Minimally Prepared
Blake HS	Highest Math Level	Algebra 1 and Geometry	70	0	0	20	80
		Algebra 2/Intro Stat	100	7	16	63	14
		Precalculus/AP Stat	113	50	43	5	2
		Calculus or Higher	60	92	8	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	103	1	5	41	53
		Up to 1 Per Year	76	11	33	39	17
		Up to 3 Per Year	83	43	40	13	4
		More than 3 Per Year	81	90	9	0	1
	Academic GPA	A Average	41	98	2	0	0
		B Average	129	53	36	5	5
		C Average	99	1	14	56	29
		D Average	38	0	0	32	68
Paint Branch HS	Highest Math Level	Algebra 1 and Geometry	113	0	0	32	68
		Algebra 2/Intro Stat	98	16	19	48	16
		Precalculus/AP Stat	95	53	44	1	2
		Calculus or Higher	71	93	6	0	1
	Average Number of Honors Credits	Less than 1 in 4 Years	126	2	4	37	57
		Up to 1 Per Year	75	19	19	37	25
		Up to 3 Per Year	91	41	44	10	5
		More than 3 Per Year	85	93	7	0	0
	Academic GPA	A Average	37	95	3	0	3
		B Average	155	54	28	11	6
		C Average	127	0	10	40	50
		D Average	24	0	0	33	67
Sherwood HS	Highest Math Level	Algebra 1 and Geometry	55	0	0	42	58
		Algebra 2/Intro Stat	123	6	15	69	10
		Precalculus/AP Stat	157	64	29	4	3
		Calculus or Higher	99	96	4	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	104	2	8	63	27
		Up to 1 Per Year	81	14	21	48	17
		Up to 3 Per Year	117	55	32	8	5
		More than 3 Per Year	132	95	5	0	0
	Academic GPA	A Average	54	96	2	0	2
		B Average	215	63	21	8	7
		C Average	105	4	10	71	15
		D Average	21	0	0	48	52
Springbrook HS	Highest Math Level	Algebra 1 and Geometry	96	0	0	23	77
		Algebra 2/Intro Stat	131	3	18	73	6
		Precalculus/AP Stat	138	48	47	4	1
		Calculus or Higher	79	80	20	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	114	0	3	46	51
		Up to 1 Per Year	96	6	22	48	24
		Up to 3 Per Year	114	28	48	22	2
		More than 3 Per Year	120	79	21	0	0
	Academic GPA	A Average	34	94	6	0	0
		B Average	159	52	36	6	6
		C Average	151	3	23	52	22
		D Average	53	0	0	49	51

Appendix 2

B-CC/Walter Johnson/Wheaton/Whitman			Number of Graduates	Percent College Rigorous	Percent College Ready	Percent College/ Career Capable	Percent Minimally Prepared
Bethesda-Chevy Chase HS	Highest Math Level	Algebra 1 and Geometry	49	0	0	8	92
		Algebra 2/Intro Stat	43	5	21	60	14
		Precalculus/AP Stat	145	59	34	6	1
		Calculus or Higher	75	92	7	0	1
	Average Number of Honors Credits	Less than 1 in 4 Years	45	2	9	27	62
		Up to 1 Per Year	47	9	21	32	38
		Up to 3 Per Year	76	38	37	16	9
		More than 3 Per Year	144	85	15	0	0
	Academic GPA	A Average	33	100	0	0	0
		B Average	146	69	24	3	4
		C Average	82	4	26	34	37
		D Average	13	0	0	8	92
Walter Johnson HS	Highest Math Level	Algebra 1 and Geometry	44	0	0	14	86
		Algebra 2/Intro Stat	110	15	22	53	11
		Precalculus/AP Stat	136	57	40	2	1
		Calculus or Higher	118	92	7	0	2
	Average Number of Honors Credits	Less than 1 in 4 Years	53	0	9	40	51
		Up to 1 Per Year	69	9	26	38	28
		Up to 3 Per Year	128	42	38	16	5
		More than 3 Per Year	158	89	9	0	1
	Academic GPA	A Average	82	98	1	0	1
		B Average	182	59	34	3	4
		C Average	100	1	18	52	29
		D Average	13	0	0	31	69
Wheaton HS	Highest Math Level	Algebra 1 and Geometry	130	0	0	19	81
		Algebra 2/Intro Stat	68	4	16	63	16
		Precalculus/AP Stat	68	38	51	9	1
		Calculus or Higher	22	91	9	0	0
	Average Number of Honors Credits	Less than 1 in 4 Years	122	0	3	29	68
		Up to 1 Per Year	72	3	17	40	40
		Up to 3 Per Year	52	27	44	19	10
		More than 3 Per Year	42	79	21	0	0
	Academic GPA	A Average	10	100	0	0	0
		B Average	78	38	38	8	15
		C Average	129	2	12	42	45
		D Average	44	0	0	18	82
Walt Whitman HS	Highest Math Level	Algebra 1 and Geometry	32	0	0	22	78
		Algebra 2/Intro Stat	77	21	16	40	23
		Precalculus/AP Stat	156	71	25	1	3
		Calculus or Higher	188	97	3	0	1
	Average Number of Honors Credits	Less than 1 in 4 Years	38	3	8	32	58
		Up to 1 Per Year	59	25	22	29	24
		Up to 3 Per Year	113	57	25	10	9
		More than 3 Per Year	243	94	5	0	1
	Academic GPA	A Average	106	98	2	0	0
		B Average	223	78	14	3	5
		C Average	74	8	20	36	35
		D Average	6	0	0	17	83

Appendix 3

Grade 9 Leading Indicators of High School Academic Attainment for the Class of 2003

Grade 9 Leading Indicators by High School Cluster Group			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared
Blair/ Einstein/ Kennedy	Race/ Ethnicity	Asian American	55.21	20.25	17.79	6.75
		African American	18.98	23.36	36.50	21.17
		White	59.35	22.49	11.92	6.23
		Hispanic	13.73	18.14	28.92	39.22
	Free and Reduced Meals (FARMS)	Never	55.96	22.02	13.94	8.07
		Before Grade 9	25.94	20.28	33.49	20.28
		During Grade 9	11.46	21.34	33.60	33.60
	ESOL Services	Never	45.33	21.47	21.47	11.73
		Before Grade 9	28.77	26.03	25.34	19.86
		During Grade 9	6.14	15.79	29.82	48.25
	Special Education Services 15 hours per week or more	Never	39.96	22.15	21.33	16.56
		Before Grade 9	25.00	12.50	37.50	25.00
During Grade 9		2.78	5.56	63.89	27.78	
Churchill/ Richard Montgomery/ Rockville/ Wootton	Race/ Ethnicity	Asian American	71.01	14.86	10.87	3.26
		African American	24.24	19.70	31.82	24.24
		White	61.21	19.46	14.04	5.30
		Hispanic	28.21	21.79	25.64	24.36
	Free and Reduced Meals (FARMS)	Never	64.37	18.24	13.23	4.16
		Before Grade 9	33.62	20.69	23.28	22.41
		During Grade 9	18.97	20.69	31.03	29.31
	ESOL Services	Never	60.70	18.45	14.58	6.27
		Before Grade 9	54.63	16.67	18.52	10.19
		During Grade 9	35.00	27.50	17.50	20.00
	Special Education Services 15 hours per week or more	Never	60.94	18.94	13.72	6.40
		Before Grade 9	33.33	13.33	46.67	6.67
During Grade 9		6.90	6.90	51.72	34.48	
Northwest/ Poolesville/ Quince Orchard/ Seneca Valley	Race/ Ethnicity	Asian American	58.47	21.19	11.02	9.32
		African American	12.05	20.48	36.75	30.72
		White	44.91	18.78	24.57	11.74
		Hispanic	15.73	20.22	31.46	32.58
	Free and Reduced Meals (FARMS)	Never	47.28	19.67	22.04	11.02
		Before Grade 9	21.28	18.09	36.17	24.47
		During Grade 9	10.28	20.56	30.84	38.32
	ESOL Services	Never	39.82	19.91	26.10	14.17
		Before Grade 9	34.52	14.29	22.62	28.57
		During Grade 9	17.95	20.51	20.51	41.03
	Special Education Services 15 hours per week or more	Never	40.10	20.21	24.66	15.03
		Before Grade 9	25.00	.00	12.50	62.50
During Grade 9		2.56	5.13	51.28	41.03	
Damascus/ Gaithersburg/ Magruder/ Watkins Mill	Race/ Ethnicity	Asian American	65.00	15.63	15.00	4.38
		African American	19.70	17.68	43.43	19.19
		White	49.09	16.29	23.11	11.50
		Hispanic	16.92	15.38	45.38	22.31
	Free and Reduced Meals (FARMS)	Never	50.71	17.12	22.80	9.37
		Before Grade 9	30.34	12.39	35.90	21.37
		During Grade 9	13.97	16.91	44.85	24.26
	ESOL Services	Never	45.72	15.97	25.93	12.38
		Before Grade 9	32.73	21.82	34.55	10.91
		During Grade 9	9.09	12.12	45.45	33.33

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	Special Education Services 15 hours per week or more	Never	46.05	16.63	25.35	11.97	
		Before Grade 9	7.14	25.00	39.29	28.57	
		During Grade 9	2.17	2.17	69.57	26.09	
Sherwood/ NE Consortium	Race/ Ethnicity	Asian American	51.31	26.18	17.80	4.71	
		African American	23.47	18.97	36.98	20.58	
		White	53.04	18.75	21.47	6.73	
		Hispanic	17.82	13.86	36.63	31.68	
	Free and Reduced Meals (FARMS)	Never	49.56	20.79	22.65	7.00	
		Before Grade 9	29.11	13.92	32.91	24.05	
		During Grade 9	13.55	18.06	39.35	29.03	
	ESOL Services	Never	44.02	19.56	25.30	11.12	
		Before Grade 9	35.92	18.45	32.04	13.59	
		During Grade 9	17.78	22.22	31.11	28.89	
	Special Education Services 15 hours per week or more	Never	43.13	20.02	25.46	11.39	
		Before Grade 9	36.36	9.09	45.45	9.09	
		During Grade 9	4.55	.00	50.00	45.45	
	B-CC/ Walter Johnson/ Wheaton/ Whitman	Race/ Ethnicity	Asian American	67.36	14.58	9.03	9.03
			African American	20.00	19.09	27.27	33.64
White			66.62	15.16	10.57	7.64	
Hispanic			13.73	20.26	26.14	39.87	
Free and Reduced Meals (FARMS)		Never	66.27	15.20	10.60	7.92	
		Before Grade 9	14.62	20.00	28.46	36.92	
		During Grade 9	19.53	18.75	23.44	38.28	
ESOL Services		Never	60.75	15.78	12.13	11.34	
		Before Grade 9	27.42	16.94	25.81	29.84	
		During Grade 9	24.07	20.37	20.37	35.19	
Special Education Services 15 hours per week or more		Never	57.80	16.74	13.48	11.98	
		Before Grade 9	26.67	6.67	13.33	53.33	
		During Grade 9	7.14	2.38	26.19	64.29	

Appendix 3

Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared
B-CC HS	9th Grade Average Attendance	< 88%	12.50	37.50	25.00	25.00
		88-91%	16.67	33.33	33.33	16.67
		91.1-94%	42.86	21.43	14.29	21.43
		94.1-97%	46.15	19.23	11.54	23.08
		>97%	63.53	18.24	8.24	10.00
	Suspension History	Never	60.99	18.83	9.87	10.31
		Before Grade 9	17.65	23.53	17.65	41.18
		During Grade 9	10.00	30.00	10.00	50.00
	Failed Any Course in Grade 9	None	63.47	21.00	8.68	6.85
		One or More	.00	10.00	23.33	66.67
	MFT Composite Score	<347	3.33	16.67	20.00	60.00
		347-365	31.71	24.39	24.39	19.51
		366-381	72.58	20.97	3.23	3.23
		>381	80.00	15.29	3.53	1.18
	9th Grade Math Class	Below Algebra 1	.00	.00	20.83	79.17
		Algebra 1	33.01	33.01	20.39	13.59
Geometry		86.11	12.04	.00	1.85	
Above Geometry		85.71	14.29	.00	.00	
Blair HS	9th Grade Average Attendance	< 88%	10.00	10.00	40.00	40.00
		88-91%	.00	14.29	57.14	28.57
		91.1-94%	16.67	20.83	37.50	25.00
		94.1-97%	31.08	22.97	24.32	21.62
		>97%	53.77	13.57	19.10	13.57
	Suspension History	Never	49.69	15.87	20.25	14.20
		Before Grade 9	8.33	8.33	50.00	33.33
		During Grade 9	13.64	4.55	36.36	45.45
	Failed Any Course in Grade 9	None	56.64	17.30	15.40	10.66
		One or More	3.30	5.49	50.55	40.66
	MFT Composite Score	<347	1.61	6.45	53.23	38.71
		347-365	23.38	29.87	31.17	15.58
		366-381	61.54	24.18	8.79	5.49
		>381	85.54	9.64	3.61	1.20
	9th Grade Math Class	Below Algebra 1	1.20	3.61	43.37	51.81
		Algebra 1	16.37	22.81	39.77	21.05
Geometry		77.50	17.50	3.50	1.50	
Above Geometry		98.31	1.69	.00	.00	
Blake HS	9th Grade Average Attendance	< 88%	.00	20.00	.00	80.00
		88-91%	25.00	25.00	50.00	.00
		91.1-94%	17.65	17.65	52.94	11.76
		94.1-97%	42.31	19.23	17.31	21.15
		>97%	46.78	20.47	23.39	9.36
	Suspension History	Never	44.83	19.83	23.71	11.64
		Before Grade 9	7.69	30.77	46.15	15.38
		During Grade 9	25.00	12.50	12.50	50.00
	Failed Any Course in Grade 9	None	53.77	25.13	16.58	4.52
		One or More	.00	1.85	53.70	44.44
	MFT Composite Score	<347	2.94	5.88	50.00	41.18
		347-365	25.45	27.27	38.18	9.09
		366-381	55.22	22.39	17.91	4.48
		>381	73.58	16.98	5.66	3.77
	9th Grade Math Class	Below Algebra 1	.00	.00	37.50	62.50

Appendix 3

Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared
Churchill HS		Algebra 1	22.82	26.17	36.91	14.09
		Geometry	83.33	13.10	1.19	2.38
		Above Geometry	75.00	25.00	.00	.00
	9th Grade Average Attendance	< 88%	33.33	33.33	.00	33.33
		88-91%	16.67	16.67	50.00	16.67
		91.1-94%	50.00	17.86	21.43	10.71
		94.1-97%	57.14	20.00	17.14	5.71
		>97%	74.42	15.12	8.53	1.94
	Suspension History	Never	68.88	16.14	11.53	3.46
		Before Grade 9	46.15	23.08	23.08	7.69
		During Grade 9	60.00	20.00	.00	20.00
	Failed Any Course in Grade 9	None	72.65	16.76	9.12	1.47
		One or More	4.00	12.00	48.00	36.00
	MFT Composite Score	<347	6.25	.00	68.75	25.00
		347-365	30.19	32.08	30.19	7.55
		366-381	81.32	14.29	4.40	.00
		>381	81.88	14.38	3.75	.00
9th Grade Math Class	Below Algebra 1	.00	.00	40.00	60.00	
	Algebra 1	47.34	25.53	21.81	5.32	
	Geometry	91.87	7.50	.00	.63	
	Above Geometry	100.00	.00	.00	.00	
Damascus HS	9th Grade Average Attendance	< 88%	8.33	.00	58.33	33.33
		88-91%	27.27	.00	27.27	45.45
		91.1-94%	16.67	16.67	23.33	43.33
		94.1-97%	40.96	12.05	32.53	14.46
		>97%	54.75	8.37	24.71	12.17
	Suspension History	Never	50.84	9.55	24.72	14.89
		Before Grade 9	17.39	4.35	47.83	30.43
		During Grade 9	10.00	10.00	50.00	30.00
	Failed Any Course in Grade 9	None	55.56	10.51	23.42	10.51
		One or More	3.03	3.03	46.97	46.97
	MFT Composite Score	<347	.00	5.41	54.05	40.54
		347-365	22.64	8.49	42.45	26.42
		366-381	53.78	10.08	23.53	12.61
		>381	79.63	10.19	8.33	1.85
	9th Grade Math Class	Below Algebra 1	.00	2.70	43.24	54.05
		Algebra 1	30.74	11.26	38.10	19.91
		Geometry	88.19	7.87	3.94	.00
Above Geometry		100.00	.00	.00	.00	
Einstein HS	9th Grade Average Attendance	< 88%	11.11	11.11	55.56	22.22
		88-91%	.00	20.00	60.00	20.00
		91.1-94%	10.00	.00	40.00	50.00
		94.1-97%	10.00	34.00	32.00	24.00
		>97%	36.08	32.47	15.98	15.46
	Suspension History	Never	30.96	30.54	20.92	17.57
		Before Grade 9	11.76	29.41	35.29	23.53
		During Grade 9	8.33	33.33	25.00	33.33
	Failed Any Course in Grade 9	None	33.04	33.91	18.26	14.78
		One or More	2.63	10.53	44.74	42.11
	MFT Composite Score	<347	2.00	22.00	44.00	32.00
		347-365	18.87	43.40	20.75	16.98
		366-381	40.38	38.46	11.54	9.62
		>381	78.57	16.67	2.38	2.38

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Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared	
	9th Grade Math Class	Below Algebra 1	.00	7.89	26.32	65.79	
		Algebra 1	5.88	38.66	36.13	19.33	
		Geometry	61.68	30.84	5.61	1.87	
		Above Geometry	100.00	.00	.00	.00	
Gaithersburg HS	9th Grade Average Attendance	< 88%	12.50	37.50	37.50	12.50	
		88-91%	15.38	30.77	46.15	7.69	
		91.1-94%	35.00	25.00	35.00	5.00	
		94.1-97%	36.36	21.21	28.79	13.64	
		>97%	47.11	19.01	26.45	7.44	
	Suspension History	Never	45.95	18.77	26.54	8.74	
		Before Grade 9	16.67	29.17	41.67	12.50	
		During Grade 9	12.50	43.75	43.75	.00	
	Failed Any Course in Grade 9	None	48.68	22.70	24.01	4.61	
		One or More	.00	6.82	56.82	36.36	
	MFT Composite Score	<347	7.55	13.21	56.60	22.64	
		347-365	25.00	30.26	36.84	7.89	
		366-381	50.56	28.09	19.10	2.25	
	9th Grade Math Class	>381	81.18	11.76	4.71	2.35	
		Below Algebra 1	.00	4.65	65.12	30.23	
		Algebra 1	16.78	28.67	44.06	10.49	
		Geometry	76.10	18.24	4.40	1.26	
			Above Geometry	100.00	.00	.00	.00
	Kennedy HS	9th Grade Average Attendance	< 88%	.00	14.29	14.29	71.43
			88-91%	14.29	14.29	42.86	28.57
91.1-94%			21.05	26.32	31.58	21.05	
94.1-97%			25.58	27.91	32.56	13.95	
>97%			35.90	24.36	24.36	15.38	
Suspension History		Never	33.49	24.53	25.47	16.51	
		Before Grade 9	5.26	21.05	42.11	31.58	
		During Grade 9	.00	100.00	.00	.00	
Failed Any Course in Grade 9		None	39.78	30.39	20.44	9.39	
		One or More	.00	3.92	49.02	47.06	
MFT Composite Score		<347	4.88	7.32	48.78	39.02	
		347-365	24.59	24.59	32.79	18.03	
		366-381	37.78	40.00	20.00	2.22	
		>381	78.95	18.42	2.63	.00	
9th Grade Math Class		Below Algebra 1	.00	.00	47.06	52.94	
		Algebra 1	13.53	24.81	38.35	23.31	
		Geometry	54.24	38.98	5.08	1.69	
	Above Geometry	95.65	4.35	.00	.00		
Magruder HS	9th Grade Average Attendance	< 88%	12.50	.00	62.50	25.00	
		88-91%	33.33	22.22	33.33	11.11	
		91.1-94%	16.00	40.00	32.00	12.00	
		94.1-97%	38.16	15.79	36.84	9.21	
	Suspension History	>97%	51.44	14.81	22.63	11.11	
		Never	49.21	16.83	24.44	9.52	
		Before Grade 9	21.05	.00	52.63	26.32	
	Failed Any Course in Grade 9	During Grade 9	11.11	25.93	44.44	18.52	
		None	57.76	19.49	18.41	4.33	
	MFT Composite Score	One or More	2.38	7.14	57.14	33.33	
		<347	1.75	3.51	70.18	24.56	
		347-365	21.05	17.11	44.74	17.11	
			366-381	57.43	26.73	12.87	2.97

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Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared	
	9th Grade Math Class	>381	79.35	13.04	5.43	2.17	
		Below Algebra 1	2.27	2.27	61.36	34.09	
		Algebra 1	24.68	23.42	37.34	14.56	
		Geometry	75.97	14.29	8.44	1.30	
		Above Geometry	100.00	.00	.00	.00	
Northwest HS	9th Grade Average Attendance	< 88%	.00	37.50	37.50	25.00	
		88-91%	.00	20.00	60.00	20.00	
		91.1-94%	15.00	20.00	40.00	25.00	
		94.1-97%	20.63	25.40	33.33	20.63	
		>97%	42.86	19.43	26.86	10.86	
	Suspension History	Never	35.56	22.59	28.87	12.97	
		Before Grade 9	20.00	8.00	36.00	36.00	
		During Grade 9	14.29	28.57	57.14	.00	
	Failed Any Course in Grade 9	None	40.54	23.87	26.58	9.01	
		One or More	2.08	10.42	47.92	39.58	
	MFT Composite Score	<347	.00	6.67	46.67	46.67	
		347-365	17.91	32.84	40.30	8.96	
		366-381	60.34	22.41	15.52	1.72	
		>381	61.22	24.49	12.24	2.04	
	9th Grade Math Class	Below Algebra 1	2.56	5.13	43.59	48.72	
		Algebra 1	21.09	21.88	42.19	14.84	
		Geometry	59.18	28.57	11.22	1.02	
		Above Geometry	100.00	.00	.00	.00	
	Paint Branch HS	9th Grade Average Attendance	< 88%	.00	.00	50.00	50.00
			88-91%	.00	25.00	25.00	50.00
91.1-94%			20.00	16.67	26.67	36.67	
94.1-97%			33.33	16.67	29.17	20.83	
>97%			49.73	17.84	22.16	10.27	
Suspension History		Never	43.14	18.04	23.53	15.29	
		Before Grade 9	16.67	16.67	33.33	33.33	
		During Grade 9	33.33	.00	33.33	33.33	
Failed Any Course in Grade 9		None	49.13	20.87	20.00	10.00	
		One or More	2.33	.00	46.51	51.16	
MFT Composite Score		<347	2.04	6.12	48.98	42.86	
		347-365	27.59	18.97	36.21	17.24	
		366-381	60.81	24.32	10.81	4.05	
		>381	72.73	14.55	7.27	5.45	
9th Grade Math Class		Below Algebra 1	3.33	.00	50.00	46.67	
		Algebra 1	23.57	22.14	34.29	20.00	
		Geometry	77.45	16.67	2.94	2.94	
		Above Geometry	100.00	.00	.00	.00	
Poolesville HS		9th Grade Average Attendance	< 88%	16.67	33.33	16.67	33.33
			88-91%	50.00	50.00	.00	.00
	91.1-94%		25.00	.00	50.00	25.00	
	94.1-97%		37.21	23.26	25.58	13.95	
	>97%		61.70	14.89	14.89	8.51	
	Suspension History	Never	55.32	17.73	18.44	8.51	
		Before Grade 9	14.29	14.29	42.86	28.57	
		During Grade 9	.00	11.11	33.33	55.56	
	Failed Any Course in Grade 9	None	55.71	17.86	16.43	10.00	
		One or More	5.88	11.76	52.94	29.41	
	MFT Composite Score	<347	.00	.00	50.00	50.00	
		347-365	29.73	21.62	32.43	16.22	

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Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared	
		366-381	67.44	9.30	13.95	9.30	
		>381	76.32	18.42	5.26	.00	
	9th Grade Math Class	Below Algebra 1	.00	7.14	28.57	64.29	
		Algebra 1	25.71	24.29	35.71	14.29	
		Geometry	83.33	12.50	4.17	.00	
		Above Geometry	100.00	.00	.00	.00	
Quince Orchard HS	9th Grade Average Attendance	< 88%	16.67	33.33	50.00	.00	
		88-91%	20.00	20.00	40.00	20.00	
		91.1-94%	60.00	6.67	26.67	6.67	
		94.1-97%	29.82	19.30	35.09	15.79	
		>97%	50.00	18.75	19.64	11.61	
	Suspension History	Never	49.64	18.71	20.14	11.51	
		Before Grade 9	9.09	22.73	59.09	9.09	
		During Grade 9	.00	.00	57.14	42.86	
	Failed Any Course in Grade 9	None	54.09	21.01	18.29	6.61	
		One or More	2.00	6.00	52.00	40.00	
	MFT Composite Score	<347	6.52	8.70	54.35	30.43	
		347-365	28.12	20.31	45.31	6.25	
		366-381	62.50	22.22	9.72	5.56	
		>381	80.00	17.14	2.86	.00	
	9th Grade Math Class	Below Algebra 1	.00	3.85	46.15	50.00	
		Algebra 1	19.55	21.05	43.61	15.79	
		Geometry	75.00	20.45	2.27	2.27	
		Above Geometry	93.75	6.25	.00	.00	
	Richard Montgomery HS	9th Grade Average Attendance	< 88%	33.33	.00	66.67	.00
			88-91%	60.00	20.00	20.00	.00
91.1-94%			38.89	11.11	11.11	38.89	
94.1-97%			55.00	18.33	16.67	10.00	
>97%			65.59	16.67	10.75	6.99	
Suspension History		Never	64.43	16.60	11.07	7.91	
		Before Grade 9	27.27	18.18	45.45	9.09	
		During Grade 9	9.09	9.09	36.36	45.45	
Failed Any Course in Grade 9		None	64.59	17.51	11.28	6.61	
		One or More	5.56	.00	44.44	50.00	
MFT Composite Score		<347	.00	14.29	52.38	33.33	
		347-365	28.57	23.81	16.67	30.95	
		366-381	64.10	23.08	12.82	.00	
		>381	82.91	10.26	5.13	1.71	
9th Grade Math Class		Below Algebra 1	.00	5.88	47.06	47.06	
		Algebra 1	30.39	26.47	26.47	16.67	
		Geometry	83.76	13.68	1.71	.85	
		Above Geometry	97.44	2.56	.00	.00	
Rockville HS		9th Grade Average Attendance	< 88%	.00	.00	50.00	50.00
			88-91%	20.00	20.00	20.00	40.00
	91.1-94%		18.18	9.09	36.36	36.36	
	94.1-97%		25.93	27.78	24.07	22.22	
	>97%		49.58	18.49	21.01	10.92	
	Suspension History	Never	44.51	21.95	21.95	11.59	
		Before Grade 9	22.22	.00	22.22	55.56	
		During Grade 9	5.00	15.00	35.00	45.00	
	Failed Any Course in Grade 9	None	48.39	22.58	19.35	9.68	
		One or More	2.63	10.53	39.47	47.37	
	MFT Composite	<347	7.41	11.11	37.04	44.44	

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Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared	
	Score	347-365	16.00	28.00	30.00	26.00	
		366-381	51.16	32.56	9.30	6.98	
		>381	82.86	8.57	8.57	.00	
	9th Grade Math Class	Below Algebra 1	.00	8.00	40.00	52.00	
		Algebra 1	20.37	29.63	32.41	17.59	
		Geometry	89.83	8.47	.00	1.69	
		Above Geometry	100.00	.00	.00	.00	
Seneca Valley HS	9th Grade Average Attendance	< 88%	.00	12.50	37.50	50.00	
		88-91%	28.57	21.43	35.71	14.29	
		91.1-94%	9.09	22.73	31.82	36.36	
		94.1-97%	21.82	14.55	25.45	38.18	
		>97%	34.64	21.79	24.02	19.55	
	Suspension History	Never	31.43	20.82	25.31	22.45	
		Before Grade 9	8.70	17.39	30.43	43.48	
		During Grade 9	10.00	10.00	30.00	50.00	
	Failed Any Course in Grade 9	None	37.62	24.26	22.77	15.35	
		One or More	5.26	9.21	34.21	51.32	
	MFT Composite Score	<347	.00	7.41	33.33	59.26	
		347-365	17.81	19.18	36.99	26.03	
		366-381	39.06	29.69	18.75	12.50	
		>381	66.07	16.07	14.29	3.57	
	9th Grade Math Class	Below Algebra 1	.00	18.52	22.22	59.26	
		Algebra 1	12.84	14.86	37.84	34.46	
		Geometry	60.00	27.00	10.00	3.00	
		Above Geometry	33.33	66.67	.00	.00	
	Sherwood HS	9th Grade Average Attendance	< 88%	.00	.00	75.00	25.00
			88-91%	20.00	20.00	40.00	20.00
91.1-94%			25.00	15.00	40.00	20.00	
94.1-97%			46.34	10.98	35.37	7.32	
>97%			57.20	16.80	22.80	3.20	
Suspension History		Never	52.30	15.23	27.01	5.46	
		Before Grade 9	37.50	12.50	37.50	12.50	
		During Grade 9	.00	50.00	50.00	.00	
Failed Any Course in Grade 9		None	57.68	16.30	22.57	3.45	
		One or More	4.55	9.09	65.91	20.45	
MFT Composite Score		<347	3.33	6.67	80.00	10.00	
		347-365	30.00	20.00	42.86	7.14	
		366-381	58.00	22.00	19.00	1.00	
		>381	78.81	7.63	11.02	2.54	
9th Grade Math Class		Below Algebra 1	.00	.00	85.71	14.29	
	Algebra 1	24.48	20.83	45.83	8.85		
	Geometry	83.66	10.46	4.58	1.31		
	Above Geometry	100.00	.00	.00	.00		
Springbrook HS	9th Grade Average Attendance	< 88%	.00	.00	50.00	50.00	
		88-91%	
		91.1-94%	12.50	37.50	25.00	25.00	
		94.1-97%	13.89	25.00	36.11	25.00	
		>97%	35.96	25.34	26.03	12.67	
	Suspension History	Never	33.33	26.28	26.28	14.10	
		Before Grade 9	27.78	22.22	33.33	16.67	
		During Grade 9	25.00	.00	50.00	25.00	
	Failed Any Course in Grade 9	None	48.21	32.14	16.96	2.68	
		One or More	2.63	12.28	47.37	37.72	

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Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared	
	MFT Composite Score	<347	1.92	7.69	42.31	48.08	
		347-365	14.81	28.40	46.91	9.88	
		366-381	45.33	32.00	18.67	4.00	
		>381	64.47	26.32	9.21	.00	
	9th Grade Math Class	Below Algebra 1	.00	3.33	33.33	63.33	
		Algebra 1	18.18	28.28	38.38	15.15	
		Geometry	66.99	27.18	5.83	.00	
		Above Geometry	85.71	14.29	.00	.00	
	Walter Johnson HS	9th Grade Average Attendance	< 88%	60.00	.00	.00	40.00
			88-91%	.00	30.00	40.00	30.00
91.1-94%			42.86	21.43	14.29	21.43	
94.1-97%			41.07	21.43	23.21	14.29	
>97%			61.38	17.07	13.01	8.54	
Suspension History		Never	56.87	18.53	13.42	11.18	
		Before Grade 9	22.22	11.11	66.67	.00	
		During Grade 9	33.33	11.11	33.33	22.22	
Failed Any Course in Grade 9		None	61.41	19.46	11.07	8.05	
		One or More	.00	6.25	56.25	37.50	
MFT Composite Score		<347	9.52	4.76	47.62	38.10	
		347-365	34.62	21.15	26.92	17.31	
		366-381	56.10	25.61	17.07	1.22	
		>381	80.77	12.50	2.88	3.85	
9th Grade Math Class		Below Algebra 1	.00	11.11	5.56	83.33	
		Algebra 1	35.90	21.79	30.77	11.54	
	Geometry	80.56	16.67	1.39	1.39		
	Above Geometry	91.67	.00	.00	8.33		
Watkins Mill HS	9th Grade Average Attendance	< 88%	11.11	11.11	44.44	33.33	
		88-91%	.00	28.57	57.14	14.29	
		91.1-94%	11.76	23.53	41.18	23.53	
		94.1-97%	40.68	11.86	32.20	15.25	
		>97%	48.11	21.70	18.40	11.79	
	Suspension History	Never	44.29	21.79	21.43	12.50	
		Before Grade 9	22.73	9.09	36.36	31.82	
		During Grade 9	10.53	5.26	63.16	21.05	
	Failed Any Course in Grade 9	None	48.51	23.13	18.66	9.70	
		One or More	1.89	3.77	56.60	37.74	
	MFT Composite Score	<347	.00	5.45	69.09	25.45	
		347-365	24.05	31.65	26.58	17.72	
		366-381	48.75	22.50	16.25	12.50	
		>381	82.54	9.52	6.35	1.59	
	9th Grade Math Class	Below Algebra 1	2.50	7.50	60.00	30.00	
		Algebra 1	19.63	29.45	31.90	19.02	
Geometry		82.61	11.30	3.48	2.61		
Above Geometry		100.00	.00	.00	.00		
Wheaton HS	9th Grade Average Attendance	< 88%	.00	33.33	66.67	.00	
		88-91%	.00	.00	100.00	.00	
		91.1-94%	.00	.00	50.00	50.00	
		94.1-97%	13.04	8.70	13.04	65.22	
		>97%	22.34	21.81	24.47	31.38	
	Suspension History	Never	22.83	22.28	22.83	32.07	
		Before Grade 9	9.52	9.52	47.62	33.33	
		During Grade 9	7.14	7.14	14.29	71.43	
	Failed Any Course in	None	30.56	27.78	24.31	17.36	

Appendix 3

Grade 9 Leading Indicators by High School			Percent College Rigorous	Percent College Ready	Percent College/Career Capable	Percent Minimally Prepared
	Grade 9	One or More	1.35	5.41	25.68	67.57
	MFT Composite Score	<347	4.48	8.96	26.87	59.70
		347-365	10.20	18.37	38.78	32.65
		366-381	45.71	28.57	14.29	11.43
		>381	51.61	38.71	3.23	6.45
	9th Grade Math Class	Below Algebra 1	.00	4.00	16.00	80.00
		Algebra 1	12.10	21.66	31.21	35.03
		Geometry	71.43	25.71	2.86	.00
		Above Geometry	100.00	.00	.00	.00
	Whitman HS	9th Grade Average Attendance	< 88%	20.00	.00	20.00
88-91%			50.00	16.67	.00	33.33
91.1-94%			57.69	11.54	15.38	15.38
94.1-97%			61.84	10.53	18.42	9.21
>97%			81.49	9.96	5.69	2.85
Suspension History		Never	76.55	9.97	8.09	5.39
		Before Grade 9	57.89	15.79	15.79	10.53
		During Grade 9	.00	.00	50.00	50.00
Failed Any Course in Grade 9		None	77.72	9.81	7.69	4.77
		One or More	11.76	17.65	35.29	35.29
MFT Composite Score		<347	6.67	6.67	60.00	26.67
		347-365	47.46	22.03	16.95	13.56
		366-381	76.84	13.68	5.26	4.21
		>381	88.55	6.63	2.41	2.41
9th Grade Math Class		Below Algebra 1	5.56	.00	38.89	55.56
		Algebra 1	59.66	19.32	14.77	6.25
	Geometry	94.22	2.89	1.16	1.73	
	Above Geometry	96.30	3.70	.00	.00	
Wootton HS	9th Grade Average Attendance	< 88%	33.33	33.33	16.67	16.67
		88-91%	50.00	33.33	16.67	.00
		91.1-94%	44.00	40.00	16.00	.00
		94.1-97%	43.42	28.95	23.68	3.95
		>97%	66.67	17.01	12.50	3.82
	Suspension History	Never	62.60	21.22	12.73	3.45
		Before Grade 9	28.57	14.29	50.00	7.14
		During Grade 9	10.00	30.00	50.00	10.00
	Failed Any Course in Grade 9	None	63.49	21.43	12.96	2.12
		One or More	4.35	17.39	47.83	30.43
	MFT Composite Score	<347	6.67	13.33	33.33	46.67
		347-365	22.06	42.65	27.94	7.35
		366-381	60.18	20.35	17.70	1.77
		>381	78.24	15.88	5.88	.00
	9th Grade Math Class	Below Algebra 1	.00	7.14	35.71	57.14
		Algebra 1	33.14	35.50	27.81	3.55
Geometry		83.82	11.76	3.92	.49	
Above Geometry		100.00	.00	.00	.00	