

**FAIRFAX COUNTY PUBLIC SCHOOLS (FCPS):
AN INVESTIGATION OF THE GRADING POLICY**

Report Submitted to
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Table of Contents

List of Appendices	3
List of Tables	4
List of Figures	6
Executive Summary	7
I. Introduction.....	18
Grades and Grading Scale	19
Grade Weights for Advanced Courses	21
II. Grading Policies and the National Landscape	23
The Federal Perspective	23
The State Perspective	24
The School Division Perspective	25
School Divisions Outside the Commonwealth of Virginia	25
School Divisions Across the Commonwealth of Virginia	27
Development of Grading Policy in FCPS	28
III. Study Framework	30
Research Questions	30
Purpose of the Study.....	30
Study Design	30
Methods.....	31
Comparisons of FCPS and non-FCPS GPA Distributions.....	31
Transcript Study	32
FCPS Survey of College Admissions Practices	33
Consequences of Revising the Grading Policy	34
Limitations.....	35
IV. Findings.....	37
Comparisons of FCPS and non-FCPS GPA Distributions and Analyses	37
Transcript Study	44
Survey of College Admissions Practices.....	53
Context and Consequences of Revising the Grading Policy.....	57
Evidence to Support the Current FCPS Grading Policy.....	58
V. Investigation Summary and Analysis.....	59
References.....	66

List of Appendices

Appendix A: FCPS Grading Policy	68
Appendix B: FCPS History with Grading Scales and Weights.....	73
Appendix C: NACAC Data Tables	77
Appendix D: FCPS Survey of College Admission Practices	79
Appendix E: School Districts Converting to a 10-Point Grading Scale	84
Appendix F: Selected Grading Scales Across the Commonwealth	86
Appendix G: Detailed Data for the Grades/GPA Distribution Study.....	87
Appendix H: Detailed Data for the Pilot Transcript Study.....	93
Appendix I: Detailed Data for the Transcript Study	94
Appendix J: Summary Data for the Survey of College Admissions Practices	105
Appendix K: Glossary of Terms.....	120

List of Tables

Table 1.	High Schools Included in Grade Distribution Study	32
Table 2.	Selected and Responding Colleges	34
Table 3.	Mean GPA Percentage Points by which 10-Point Schools Exceeded FCPS High Schools for the Mean SAT Ranges and GPA Levels Shown	38
Table 4.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1200-1249, Math & Verbal)	39
Table 5.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1150-1199, Math & Verbal)	40
Table 6.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1100-1149, Math & Verbal)	41
Table 7.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1050-1099, Math & Verbal)	42
Table 8.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1000-1049, Math & Verbal)	43
Table 9.	Unweighted and Weighted GPAs under the Current FCPS Grading Policy at the Conclusion of Grades 11 and 12	45
Table 10.	Increase in Unweighted GPA When Grades Are Converted from a 6-Point Grading Scale to a 10-Point Grading Scale through Grade 11	46
Table 11.	Current Weighted 6-Point Scale GPA with 0.5 for AP, IB, and Dual Enrollment Courses by Increase when Changing Weights to 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment Courses for All Grades through Grade 11	47
Table 12.	Current Weighted 6-Point Scale GPA with 0.5 for AP, IB, and Dual Enrollment Courses by Increase when Changing to a 10-Point Grade Scale and Increasing Weights to 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment Courses for All Grades through Grade 11	48
Table 13.	Summary of Cases Crossing Various Thresholds for All Grades through Grade 11	50
Table C1.	Mean Ratio of Applications to Admission Officers by Institutional Characteristics: 2006	77
Table C2.	Percentage of Colleges Attributing “Considerable Importance” to Factors in the Admission Decision: 1993 to 2006	78
Table E1.	School Districts Converting to a 10-Point Grading Scale	84
Table F1.	Selected Grading Scales Across the Commonwealth	86
Table G1.	Sample Size for GPA Distribution Analyses	87
Table G2.	Differences between 10-Point and FCPS High Schools Percent of Classes with Unweighted GPAs “A-” and Above	88

Table G3. Differences between 10-Point and FCPS High Schools Percent of Classes with Unweighted GPAs 3.5 and Above	89
Table G4. Differences between 10-Point and FCPS High Schools Percent of Classes with Weighted GPAs 4.0 and Above	90
Table H1. Analysis of 19 Purposely Selected Transcripts from the Graduating Class of 2008 Grade Point Averages for All Courses through Grade 11	93
Table I1. Change in GPA from an Unweighted 6-Point Scale to an Unweighted 10-Point Scale for All Grades through Grade 11	94
Table I2. Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 6-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11	95
Table I3. Combined Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 10-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11	96
Table I4. Change in GPA from an Unweighted 6-Point Scale to an Unweighted 10-Point Scale for All High School Grades	100
Table I5. Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 6-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All High School Grades	101
Table I6. Combined Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 10-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All High School Grades	102
Table I7. Summary of Cases Crossing Various Thresholds for All High School Grades	104
Table J1. Grading Scales Commonly Used in Applicant Pool	105
Table J2. Weights Often Seen in College Admissions	106
Table J3. Methods of Recalculating GPA	107
Table J4. Methods of Comparing GPAs Based on Different Scales and Weights Without Recalculation	108
Table J5. Factors Considered for College Admissions	109
Table J6. Factors Considered for Honors Placement and Merit Scholarship	110
Table J7. Question 18 – Please identify how your decisions for <i>merit scholarships</i> differ from those used in the freshman admission process	112
Table J8. Question 14 – Please identify how your decisions for <i>honors placement</i> differ from those used in the freshman admissions	113
Table J9. Minimum GPA Required for Merit-based Scholarships and Placement into Honors Programs	114
Table J10. Comparison of Applicants	114
Table J11. Reaction to Different Grading Formats	115

List of Figures

Figure 1.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1200-1249, Math & Verbal).....	39
Figure 2.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1150-1199, Math & Verbal).....	40
Figure 3.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1100-1149, Math & Verbal).....	41
Figure 4.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1050-1099, Math & Verbal).....	42
Figure 5.	Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1000-1049, Math & Verbal).....	43
Figure 6.	Graphical Presentation of the Change in GPA Resulting from a Change in Scale, Change in Weight, and the Combined Change for All Grades through Grade 11	49
Figure 7.	Change in GPA Ranges from Unweighted 6-Point Scale to Unweighted 10-Point Scale through Grade 11	50
Figure 8.	Change in GPA Ranges in the Weighted 6-Point Scale from Weight of 0.5 points for AP, IB, and Dual Enrollment Courses to Weights of 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment Courses through Grade 11	51
Figure 9.	Change in GPA Ranges from a Weighted 6-Point Scale (0.5 for AP, IB, and Dual Enrollment) to Weighted 10-Point Scale (0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment) through Grade 11	51
Figure G1.	Percent of Class with Unweighted GPAs “A-” and Above	91
Figure G2.	Percent of Class with Unweighted GPAs 3.5 and Above.....	92
Figure G3.	Percent of Class with Weighted GPAs 4.0 and Above.....	92
Figure I1.	Graphical Presentation of the Change in GPA from an Unweighted 6-Point Scale to an Unweighted 10-Point Scale for All Grades through Grade 11.....	97
Figure I2.	Graphical Presentation of the Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 6-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11	98
Figure I3.	Graphical Presentation of the Combined Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 10-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11	99
Figure I4.	Graphical Presentation of the Change in GPA Resulting from a Change in Scale, Change in Weight, and the Combined Change for All High School Grades	103

EXECUTIVE SUMMARY

In recent years, concerns nationwide about the effects of course grades on college admissions, receipt of merit-based scholarships, and placement into college honors programs have prompted school divisions to examine their grading policies. Grading policies determine standards and procedures for measuring students' academic performance. In turn, colleges and universities use this information to evaluate high school candidates for admissions, scholarships, and honors programs. Grading policies, however, are not uniform. In fact, grading policies vary considerably across schools. How then might such variation affect a student's chances of gaining college admission and other awards? This report summarizes the results of an investigation conducted by Fairfax County Public Schools to address this question.

Fairfax County Public Schools (FCPS) is among those school divisions that use a hybrid 6/10-point grading scale, whereas other school divisions use a 10-point grading scale, often with pluses and minuses.

FCPS 6/10-point Grading Scale

A	94-100
B+	90-93
B	84-89
C+	80-83
C	74-79
D+	70-73
D	64-69
F	below 64

10-point Grading Scale

A	90-100
B	80-89
C	70-79
D	60-69
F	below 60

To calculate unweighted grade point average (GPA), FCPS assigns 4.0 quality points for an A, 3.5 points for a B+, 3.0 points for a B, 2.5 points for a C+, 2.0 points for a C, 1.5 points for a D+, and 1.0 point for a D. To calculate the weighted GPA, an additional weight of 0.5 points is awarded for successful completion of each Advanced Placement (AP), Higher Level International Baccalaureate (IB), Standard Level IB, and dual enrollment courses. In other school divisions, additional weights of 0.5 quality points for honors courses and 1.0 quality point for AP, IB, and dual enrollment courses are more common.

There is community concern that the FCPS grading policy (grading scale and weights) may affect FCPS students when it comes to college admissions, receipt of merit-based scholarships, and placement into college-level honors programs. Most recently, the parent advocacy group, FAIRGRADE, reports that based on its research, FCPS students are on an unequal playing field when compared to students from school divisions using a 10-point scale and greater weights for advanced courses.

The purpose of this study was to provide the Superintendent and School Board members with information on how the Division's current grading policy might affect students' college admissions outcomes vis-à-vis their peers in other school divisions. The findings will serve as a

basis for determining whether to make any adjustments to the policy. To this end, the investigation focused on three questions:

- 1. Is the distribution of grade point averages (weighted and unweighted) for FCPS high schools substantially different from those in comparable school systems that use a 10-point grading scale?*
- 2. What is the impact of different grading policies on college admissions, merit scholarships, and honors placement?*
- 3. What are the potential consequences of adjusting the FCPS grading policy? What evidence supports the current grading policy?*

In addition, four guidelines were used to direct the study's implementation. Specifically, any investigation of the current grading policy, or decision to alter it, should:

- Be based on accurate and objective information;
- Consider the potential effects across the range of academic performance of all students in FCPS;
- Take into account that admissions practices vary from one institution to the next; and
- Explore the historical and current contexts of the FCPS grading policy, as well as experiences of other school divisions.

METHODOLOGY

At the suggestion of the Superintendent, FCPS staff and FAIRGRADE formed a committee in the spring of 2008 to conduct an investigation.

To address question one, quantitative analyses were conducted to compare the distribution of GPAs among FCPS high school students with those from 35 other schools that use a 10-point grading scale. In addition, the FCPS distribution was reexamined after recalculating the grade point averages of 1,000 FCPS students who graduated in 2008, using a pure 10-point grading scale (with no pluses or minuses) and additional weights of 0.5 quality points for honors courses and 1.0 quality point for AP, Higher Level and Standard Level IB, and dual enrollment courses.

To address question two, FCPS surveyed admissions officers at 104 institutions that receive about 75 percent of college applications submitted by FCPS high school seniors. Complete responses were received from 64 colleges. Quantitative and qualitative analyses of survey results described how various institutions use grades and other factors in making decisions about admissions, merit scholarships, and honors programs.

To address question three, a literature/document review of national, state, and local sources, as well as FCPS records, provided the current context of grading policy concerns nationwide and a history of the FCPS grading policy. This literature review is also intended to identify the consequences associated with a change in grading policy.

LIMITATIONS OF THE STUDY

Given the constraints of feasibility, time, and resources, the scope of this investigation was limited to addressing the research activities proposed under the three study questions. Other than the FCPS student transcript study, nonrandom samples were used in all analyses (i.e., readily available data and/or participants that may or may not be representative of all students, schools, or colleges/universities). Although this study provides insight into the relationships among grading scales, course weights, and GPA, the results should be viewed within the context of the samples that were drawn.

In the FCPS transcript study, all current plus grades were converted to the next highest letter grade. The results show the increase in GPA when changing the current grading scale to a pure 10-point grading scale, without pluses and minuses. These estimates do not take into consideration other factors that might influence grades such as variations in teacher judgments.

Assessing the effects of grading policies on college admissions decisions requires an analysis of admissions inputs and outcomes. Factors that influence admissions decisions are inputs (e.g., students' grades, test scores, and courses.) In contrast, outcomes are the effects or results of admissions decisions (e.g., students' acceptance rates, numbers of scholarships awarded, and placements in honors programs). Based on our research, outcome data are not publicly available. For this reason, it was not feasible for the study at hand to determine whether grading policies actually impact college admissions decisions. Consequently, the analyses in this study provide descriptive information about admissions inputs and processes.

SUMMARY OF FINDINGS

Comparison of FCPS and non-FCPS GPA Distributions

In analyses of a purposeful sample of publicly available data, FCPS graduating classes had lower unweighted and weighted GPAs than classes at schools that use various types of 10-point grading scales and weighting policies.

The overall mean differences indicate that GPAs of non-FCPS classes exceeded those of FCPS classes for all three measures.

Specifically, the mean percent of non-FCPS classes with:

- Unweighted GPAs of A- and above exceeded those of FCPS classes by 15.4 percentage points.
- Unweighted GPAs of 3.5 and above exceeded those of FCPS classes by 10.9 percentage points.
- Weighted GPAs of 4.0 and above exceeded those of FCPS classes by 17.7 percentage points.

Recalculation of FCPS Transcripts

This component studied the FCPS grading policy by changing the grading scale, weights for advanced courses, and both.

- The mean unweighted GPA increase when changing the grading scale alone was 0.15 points for FCPS students. Students with a current unweighted GPA of 4.00 experienced no change while other students, especially those in the 2.25 to 3.50 range, experienced a mean increase in unweighted GPA of 0.17 points.
- Changing the current weighting policy to 0.5 points for honors courses and 1.0 for AP, Higher Level and Standard Level IB, and dual enrollment courses resulted in an average GPA increase of 0.10 points. Students who did not take any advanced courses did not receive any increase in GPA. Students with weighted GPAs of 4.00 and above had an average increase of 0.28 points.
- Changing the grading scale and increasing weights for advanced courses resulted in a mean increase in weighted GPA of 0.15 points for students with weighted GPAs below 2.0. The increase for students with weighted GPAs of 3.5 and above was 0.31 points.

Do FCPS grade point averages differ from those computed on various 10-point scales?

Yes. In a comparison with 35 high schools that use 10-point grading scales, the distribution of grade point averages (weighted and unweighted) in FCPS high schools was lower.

FCPS Survey of College Admissions Practices

The FCPS Survey of College Admissions Practices provides information regarding the factors that affect college admission decisions, awards of merit-based scholarships, and placement into college-level honors programs. Invitations to participate in the survey were sent to 104 colleges with complete responses returned by 64 colleges (response rate of 62 percent).

- The 10-point grading scale and letter grades are the most common grading scales observed in the applicant pools of colleges surveyed. The 6-, 7-, and 8-point grading scales are the least common grading scales seen by survey respondents. The 10-point grading scale is found more commonly by out-of-state colleges compared to Virginia colleges, by private colleges compared to public colleges, and by colleges with less than a 50 percent acceptance rate compared to less selective colleges.
- Fifty-five (55) percent of colleges responding do not recalculate GPAs. High school grading scales and weights, rigor of courses, and school GPA distribution are the most important factors considered by these colleges when comparing applicants for college admissions.
- Forty-five (45) percent of the colleges recalculate applicants' GPAs. Of these colleges, 62 percent use grades from core courses, and 38 percent drop the plus and minus from grades.

- Eighty-nine (89) percent of the respondents compare applicants to all other students in the applicant pool; 59 percent compare applicants within the same high school.
- Grades in core courses, rigor of curriculum, number of advanced courses, SAT/ACT scores, and weighted GPA are identified as the most important factors in college admissions. SAT/ACT scores and weighted GPA were the two key factors considered for merit-based scholarships and placement into honors programs.
- Of the 55 colleges that offer merit scholarships, 18 colleges (33 percent) require a minimum GPA ranging from 2.5 to 3.9 for merit scholarships.
- Of the 44 colleges that offer honors programs, 17 colleges (39 percent) require a minimum GPA ranging from 3.0 to 3.9 for placement into honors programs, with 3.5 as the most frequently used cutoff.

Do college admissions offices take any differences into account when evaluating candidates?

Yes. Based on the FCPS survey of admissions officers, colleges and universities use a variety of methods to account for different grading policies and other factors when evaluating high school candidates. However, when evaluating candidates for merit scholarships and honors programs, SAT/ACT scores and weighted GPA scores are the two most important factors.

Context and Consequences of Adjusting the Current FCPS Grading Policy

The FCPS historical documents and the current national landscape provide the context for determining if or to what extent the FCPS grading policy should be adjusted.

- Competition and rising higher education costs have raised concern nationwide about grading policies on college admissions, receipt of merit-based scholarships, and placement into honors programs.
- The top four factors in the admission process nationwide are (in order): grades in college preparatory courses, strength of curriculum, standardized admission test scores, and overall high school grade point average (The National Association for College Admission Counseling, 2007). This finding is consistent with that reported above in the FCPS survey of college admissions practices.
- Both the federal government and The College Board use a 10-point grading scale, sometimes with pluses and minuses, in the absence of information from schools for data gathering and program purposes.
- A few states have adopted specific grading scales, course weights, and/or methods for GPA calculation.
- At a local level, grading policies are being reviewed, and 75 out of 78 school divisions that have reviewed their grading policies made the decision to change to a 10-point grading scale. The trend seems to be moving in the direction of a 10-point

- grading scale with weighting for honors, AP, IB, dual enrollment, and other advanced courses to reflect their challenging nature.
- Since 1912, FCPS has used a variety of grading scales. These scales apparently were not applied uniformly across all schools. Parents and FCPS staff discussed grading policy issues during the late 1970s and early 1980s. In April 1981, the FCPS School Board voted to adopt a 6/10-point grading scale with pluses but not minuses, as well as the additional weights of 0.5 quality points for honors and advanced placement courses.

Evidence to Support the Current FCPS Grading Policy

Despite the growing attention to grading scales, a review of the literature finds no specific research regarding the effects of grading policies on college admissions outcomes.

- Betts and Grogger (2003) found that higher standards promote student achievement as measured by standardized test scores. The greatest effects were seen at the top end of the test score distribution.
- Betts and Grogger (2003) found that higher standards had no significant effect on educational attainment (i.e., high school graduation rates and college attendance.) However, the researchers found that higher standards had a negative effect on the graduation rates for black and Hispanic students.
- College admission decision-making approaches are complex and vary considerably across institutions so that there is no “best practice” that would apply to all situations. This finding is consistent with the FCPS Survey of College Admissions Practices and the literature.

Are there differences in actual admission, merit scholarships award, and honors placement successes?

College admissions: Unknown. Due to limited data, this study only provided descriptive information about factors that influence college admissions decisions. Actual outcomes were not observed.

Merit scholarships and honors programs: Probable. Based on the FCPS survey of admissions officers and literature reviews, grading policies could have a direct impact on merit-based scholarships and honors placements decisions.

Investigation Analysis

The purpose of this investigation was to provide the Superintendent and School Board members with information on how the Division’s current grading policy compares to other school divisions and the effect this may have on college admissions, honors programs, and merit scholarships for FCPS students. This information would serve as a basis for determining whether to make adjustments to the policy.

To facilitate the discussion, several options are listed below in sequential order from no change in current FCPS grading policy to changing both the FCPS grading scale and course weights.

Option A: Make no changes to the current FCPS grading policy.

Related Findings	Additional Considerations
<ul style="list-style-type: none">▪ Based on the FCPS admissions survey and literature reviews, high school grades in core courses are the most important factor in college admissions.▪ Based on the FCPS admissions survey and literature reviews, colleges evaluate applicants within a context of many factors.▪ Based on the FCPS admissions survey, 39 percent of the colleges with honors programs and 33 percent of the colleges that offer merit-based scholarships reported a minimum GPA requirement for those programs.▪ Based on literature reviews, one national study found that higher grading standards raise achievement; the study found no positive effect on educational attainment.	<ul style="list-style-type: none">▪ No implementation costs.

Option B: Alter the FCPS grading policy by changing the grade weights to 0.5 points for honors courses and 1.0 point for AP, IB, and dual enrollment courses, and leave the current grade scale structure in place.

Related Findings	Additional Considerations
<ul style="list-style-type: none"> ▪ Using publicly available data, FCPS students had lower weighted GPAs than students in other school divisions. ▪ Based on the FCPS admissions survey, colleges reported 0.5 and 1.0 as the most common weights reviewed. For example, 0.5 for honors (59 percent), 1.0 for AP (67 percent), 1.0 for Higher Level IB (58 percent), and 1.0 for Standard Level IB (47 percent). ▪ Based on the FCPS admissions survey and literature reviews, weighted GPA is among the important factors for college admissions. ▪ Based on the FCPS admissions survey, SAT/ACT scores and weighted GPA are the two most important factors in merit-based scholarship awards and honors placement. ▪ Based on the FCPS transcript and GPA distribution studies, changing weights for advanced courses has a greater increase on weighted GPAs for students with weighted GPAs of 3.50 and above. ▪ Based on the FCPS admissions survey, a change in weights will improve some FCPS students' eligibility for merit-based scholarships and honors programs. 	<ul style="list-style-type: none"> ▪ Added incentive for all students to take honors and advanced courses. ▪ One-time implementation costs. ▪ Timeline for implementation of the new policy. ▪ Communicate the changes to community stakeholders. ▪ Revise reporting documents (e.g., internal reports, transcripts, and profiles) and procedures. ▪ Compliance with state guidelines for providing weights for honors and some Standard Level IB courses.

Option C: Alter the FCPS grading policy by changing the grade scale to a 10-point scale, and leave the current grade weights structure in place.

Related Findings	Additional Considerations
<ul style="list-style-type: none"> ▪ Using publicly available data, FCPS students had lower unweighted GPAs than students in other school divisions. ▪ Based on transcript analyses, a change in grading scale increased unweighted GPAs by 0.17 points on average for students with unweighted GPAs between 2.25 and 3.50. ▪ Based on transcript analyses, a change in grading scale has less of an effect on GPA than a change in weights for students who completed advanced courses. ▪ Based on transcript analyses, a change in grading scale increases GPAs for a greater number of students than just a change in weights. ▪ Based on the FCPS admissions survey and literature reviews, high school grades in core courses are the most important factor for college admissions. ▪ Based on the FCPS admissions survey, a change in grading scale will improve some FCPS students' eligibility for merit-based scholarships and honors programs. 	<ul style="list-style-type: none"> ▪ One-time implementation costs. ▪ Timeline for implementation of the new policy. ▪ Train teachers and other instructional personnel in the implementation of the new grading scale. ▪ Revise reporting documents (e.g., internal reports, transcripts, and profiles) and procedures. ▪ Communicate the changes to community stakeholders.

Option D: Alter the current FCPS grading policy by changing the grade scale to a 10-point scale and the grade weights to 0.5 points for honors courses and 1.0 point for AP, IB, and dual enrollment courses.

Related Findings	Additional Considerations
<ul style="list-style-type: none"> ▪ Using publicly available data, FCPS students had lower unweighted and weighted GPAs than students in other school divisions. ▪ Based on transcript analyses, a change in grading scale and weights increases GPAs for the greatest number of students. ▪ Based on the FCPS admissions survey, colleges reported 0.5 and 1.0 as the most common weights that they review. For example, 0.5 for honors (59 percent), 1.0 for AP (67 percent), 1.0 for Higher Level IB (58 percent), 1.0 for Standard Level IB (47 percent). ▪ Based on the FCPS admissions survey and literature reviews, weighted GPAs are among the important factors for college admissions. ▪ Based on the FCPS admissions survey, SAT/ACT scores and weighted GPA are the two most important factors in merit-based scholarship awards and honors placement. ▪ Based on the FCPS admissions survey, a change in grading scale and weights will improve some FCPS students' eligibility for merit-based scholarships and honors programs. 	<ul style="list-style-type: none"> ▪ Added incentive for all students to take honors and advanced courses. ▪ One-time implementation costs. ▪ Timeline for implementation of the new policy. ▪ Train teachers and other instructional personnel in the implementation of the new grading scale. ▪ Communicate the changes to community stakeholders. ▪ Revise reporting documents (e.g., internal reports, transcripts, and profiles) and procedures. ▪ Compliance with state guidelines for providing weights for honors and some Standard Level IB courses.

FAIRFAX COUNTY PUBLIC SCHOOLS (FCPS): AN INVESTIGATION OF THE GRADING POLICY

The discussion about how to assess and report achievement for students, particularly high school students, has been at the forefront of educational policy for many years. Students, parents, and school district officials continue to search for methods that ensure fairness, high standards and postsecondary opportunities for students.

This report presents a summary of the investigation conducted by a collaborative team between FCPS staff and members of a parent advocacy group, FAIRGRADE, in the summer and fall of 2008. Section I presents an introduction to current discussion within the school division regarding the FCPS grading policy, or the regulations and procedures that guide teachers in assigning numeric and letter grades to student work, in assigning additional weights to grades for advanced coursework, and in calculating student grade point average (GPA). This introduction leads into a brief review of the literature. Section II discusses the national landscape, i.e., what is happening at the federal, state, and local/school division levels with regards to grading policy. Section III presents the study framework from which this investigation was conducted. Section IV presents the findings for the investigation as they relate to the various analyses undertaken for this study. The final section, Section V, Investigation Analysis, presents a summary of key points and four potential grading policy options.

I. INTRODUCTION

Fairfax County Public Schools (FCPS) has reviewed the issue of grading policy – grading scales and weighted grades – over 30 years (see Appendix A for current FCPS regulations governing grading policies; see Appendix B for a review of FCPS School Board meeting minutes related to grading policy and a review of *Washington Post* articles from 1978 to 1981).

Most recently, a parent advocacy group, FAIRGRADE, has suggested that the 10-point grading scale and increased weight for advanced courses would benefit FCPS students. Currently, FCPS students are graded on a 6/10-point grading scale that provides limited weights for advanced coursework [i.e., 0.5 additional points for Advanced Placement (AP) and International Baccalaureate (IB) courses and 0.0 points for honors courses rather than the more widely used 1.0 additional point for AP, IB, and dual enrollment courses and 0.5 additional points for honors courses]. Through their assessment, FAIRGRADE believes that FCPS students may be viewed less favorably than students graded on a 10-point scale with higher grade weights for advanced courses for college admission, merit-based scholarships, and placement into honors programs. FAIRGRADE’s research shows that FCPS students have higher-than-average SAT scores and lower GPAs when compared with students graded on a 10-point grading scale.

College admissions have become more competitive over the last decade due to various factors such as an increase in the number of high school graduates, an increase in the number of students attending college, and an increase in the number of college applications per student (NACAC, 2007; see Appendix C for detailed data tables.) In addition, NACAC reported that more than 60 percent of all high school graduates enroll in college courses within one year of graduation now, as opposed to 49 percent of high school graduates in the 1970s. In 2008, NACAC found that 31 percent of all college applications are submitted to selective schools, which admit less than 50 percent of their applicants. In addition, NACAC reported that the percentage of students applying to seven or more colleges has increased from 9 percent in 1990 to 19 percent in 2007. Recently, the *New York Times* reported that more students than ever have been placed on freshman admission waiting lists at elite colleges (Finder, 2008). Admission to college has become more competitive in the last several decades, specifically at selective colleges.

In tandem with applying for college admission, high school students are considered for merit-based scholarships and/or placement into college honors programs. Receipt of merit-based scholarships and/or placement into honors programs may determine which college the high school student selects. Merit-based scholarships may be of particular importance as the cost of college tuition increases approximately 8 percent each year (Reuters, 2008). College honors programs may provide high-achieving students with increased academic challenges and other opportunities may lead to an “honors” designation at graduation given completion and/or attainment of specific requirements.

Although no direct research was found that evaluated specific grading scales or grade weights, researchers have assessed the impact grading standards have on achievement, educational attainment, and future earnings (Betts & Grogger, 2003). Using data collected through the U.S. Department of Education’s High School and Beyond Study, these researchers found that grading standards, defined as the achievement level a student must reach to earn a specific grade, influence academic achievement, as measured by standardized test scores. That is, students in a

school with higher grading standards had higher levels of achievement or higher standardized test scores. Betts and Grogger (2003) also found that students at the top of the GPA distribution tend to benefit most from higher grading standards.

Limited research was found that evaluated specific grading scales and weighting for advanced courses. These issues are relevant to college admissions, particularly the factors colleges use to determine whether or not high school students applying for admission are admitted to incoming freshman classes. Several factors emerged through this review of the literature. Namely, grade point average (GPA), both weighted for challenging courses and unweighted; standardized test scores; and rank-in-class were found to influence college admissions and scholarship decisions (Sadler and Tai, 2007; Partnership for Excellence, 2001; Vickers, 2000; Cross, 1996; Levy and Riordan, 1994). In addition, Lang (2007) reported that colleges use four main sources of information for college admission decisions: courses completed, college entrance exam test scores, rank-in-class, and GPA.

The College Board has examined issues related to the college admissions process and issued a series of reports. The 2003 report addresses specific selection processes and criteria used by more than 100 higher education institutions across the country (Rigol, 2003). Colleges and universities use a variety of factors to make admissions decisions and “one size does not fit all.” There seem to be as many “models” or processes used for admissions selection as there are colleges and universities, each with its own policies and selection processes. GPA, standardized test scores (e.g., SAT, ACT), curriculum quality, course load, scholastic awards and achievements, and class rank may all be considered. However, high school GPA is commonly listed as an important factor (Rigol, 2003, pp. 24-30). It was also noted that some colleges create an academic index for applicants based on GPA, class rank, and/or standardized test results, and they use this index to sort applications into decision or possible decision categories with some applicants getting little to no review beyond this prescreening (pp. 15-17).

NACAC (2008) collected and reviewed data for 15 years. Results indicate that four factors are primarily used in college admissions decisions (in order): grades in college preparatory courses, strength of the curriculum, standardized test scores, and high school GPA. Prior to this report, Vickers (2000) found that even small disparities in GPA may determine acceptance or rejection to a college (Vickers, 2000).

High school grades, weights for advanced courses, and GPA have been identified by the literature and FAIRGRADE as factors in the college admissions process. A discussion of grading policy components – grading scales and weights for advanced courses – follows.

Grades and Grading Scale

School divisions, and in some cases states, establish the grading scale against which students receive grades for achievement in specific courses. Grading scales define specific numeric values for the earning of letter grades. For example, in FCPS, students must earn the following numeric averages for specific grades:

- 94-100 A
- 90-93 B+
- 84-89 B
- 80-83 C+
- 74-79 C
- 70-73 D+
- 64-69 D
- ≤ 63 F

Technically, the FCPS grading scale is a combination scale with various ranges for various letter grades. It is referred to as a 6/10-point scale because the range for an A grade is deemed equal to six points (it is recognized that 94-100 range is seven points) while the range for B, C, and D grades spans 10 points. Students graded on a pure 10-point grading scale earn the following grades for specific numeric averages:

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- < 60 F

A 10-point scale that includes both pluses and minuses may be designated as follows:

- 98-100 A+
- 93-97 A
- 90-92 A-
- 87-89 B+
- 83-86 B
- 80-82 B-
- 77-79 C+
- 73-76 C
- 70-72 C-
- 67-69 D+
- 63-66 D
- 60-62 D-
- < 60 F

Some school divisions revise the lower end of the 10-point grading scale so that students earning a numeric average of 65-69 receive a “D,” and students earning a numeric average of 64 and below receive an “F.” Other school divisions have a full 10-point bracket for the D range. This lower end of the grading scale has been observed to fluctuate across school divisions that implement a 10-point grading scale. As with the FCPS grading scale, the 10-point scale has a range of 11 points for the A grade.

When students apply to college, their letter grades are translated into quality points, which are then averaged to calculate grade point averages. The unweighted quality points associated with the current FCPS letter grades are: A = 4.0; B+ = 3.5; B = 3.0; C+ = 2.5; C = 2.0; D+ = 1.5; D =

1.0; F = 0. The unweighted quality points associated with a 10-point scale, which includes both pluses and minuses, typically resemble the following: A+ = 4.3; A = 4.0; A- = 3.7; B+ = 3.3; B = 3.0; B- = 2.7; C+ = 2.3; C = 2.0; C- = 1.7; D+ = 1.3; D = 1.0; D- = 0.7; F = 0. In school districts with a pure 10-point scale that lacks pluses and minuses, unweighted quality points are: A = 4.0; B = 3.0; C = 2.0; D = 1.0; and F = 0.

Though research comparing the quality and/or validity of any grading scale is nonexistent, one research study was identified attempting to address this issue by examining the grade distributions across various grading scales. Driscoll and Fortune (1999) compared the grade distributions of 32 school divisions in the western part of Virginia. Results indicate that grade distributions did not differ significantly across the 17 different grading scales observed in school divisions participating in the research. However, using a subset of data, the researchers compared the grade distributions between one school division that used a 6- to 7-point grading scale and six school divisions using a 10-point grading scale. Two-thirds of the school divisions that used a 10-point grading scale reported a higher percentage of students receiving grades of “A” and “B” than those students who were graded on the 6- to 7-point grading scale.

Grade Weights for Advanced Courses

Students in high school often have many options for courses, not only in a given topic area, but also in the challenging nature of the course. FCPS and many school divisions across Virginia and the United States offer several levels of courses. The definitions below are taken from the Virginia Department of Education regulations, to the extent these terms are defined.

- ***Standard High School Courses*** – These courses are taught using a standard school division curriculum and are intended to address the instructional needs of most students.
- ***Honors-level Courses*** – These courses are “offered to academically advanced students to provide opportunities to study and learn with other advanced students and to accelerate their learning in a specific content area. These courses are designed to be more challenging by covering additional topics or some topics in greater depth.”
- ***Advanced Placement (AP) Courses*** – These courses are “advanced-level” courses “with a syllabus equivalent to a relevant Advanced Placement syllabus disseminated by The College Board.” Students must take an end-of-course examination to earn college credit. Exams are scored on a scale of 1 to 5. Colleges typically give students credit for scores of 3, 4, and 5.
- ***International Baccalaureate (IB) Courses*** – These courses are “advanced-level” courses “with a syllabus approved by the International Baccalaureate Organization (IBO) and meeting the criteria offered through the IBO program.” Students take Standard Level and Higher Level courses from six core curriculum areas and participate in a rigorous assessment program. Successful completion of the program requirements and examinations leads to an internationally recognized IB diploma.
- ***Post-Advanced Placement and Dual Enrollment Courses*** – These courses implement a specific college curriculum and are planned jointly between a school or

school division and a college or university. The courses are typically taught at the high school or at a local college campus (either a community college or a 4-year college/university). As technological advances are incorporated into high schools, these courses may be offered through distance education opportunities and/or virtual university experiences.

Recognizing the difficulty and challenging nature of advanced courses, school divisions often add weights for grades earned in advanced courses. Specifically, AP and Higher Level IB courses use a national curriculum and are considered college level courses with the potential for students to earn college course credit, provided students receive an acceptable score on the AP or Higher Level IB exam (Unionville-Chadds Ford School District, 2007). Often, grades for advanced courses (e.g., honors, AP, IB, and dual enrollment courses) are weighted by an additional 0.5 to 1.0 points, and sometimes more, to reflect the academically challenging nature of the course, which, in turn, results in higher weighted GPAs for students.

The research on weighted grades varies across studies. Sadler and Tai (2007) found that students who took AP and honors courses in high school performed better in college science classes. In their recommendations, the researchers suggest weighting AP courses by 1.0 point and weighting honors courses by 0.5 point. As early as the 1980s, Frechtling and Frankel (1985; as cited in Siegel and Anderson, 1991) found that weighting grades in advanced courses gave students an advantage in college admissions decisions. In a 1990 study by Ashenfeller, the author found evidence to support weighting AP and honors courses (as cited in Siegel and Anderson, 1991). Yet, Siegel and Anderson (1991) found that college admissions officers could not come to consensus as to the importance of weighted GPA. The authors also found that colleges preferred unweighted to weighted GPA for use in some admissions decisions.

II. GRADING POLICIES AND THE NATIONAL LANDSCAPE

In the absence of definitive research on grading policies at the school division level, schools and school divisions are examining their policies and making decisions to ensure their students have options in postsecondary education. In an attempt to investigate grading policies locally and across the country, information was gathered from a variety of sources that addresses three specific levels of educational policy: the federal perspective, the state perspective, and the school division perspective. Information was gathered from federal, state, school division, and school websites; published news articles from national and local newspapers; educational policy organizations; and telephone interviews with state and school division officials. Following is an overview of this information.

The Federal Perspective

While the federal government does not require school divisions to use specific grading policies, it uses the 10-point scale in absence of information from school divisions and for several of its program standards.

The U.S. Department of Education's Institute for Education Sciences NAEP High School Transcript Study converts numerical grades on report cards to a standard 10-point grading scale unless the high school reports an alternative scale (National Center for Education Statistics, 2007). The same holds true for the President's Education Awards Program. Students must earn an "A" to receive the President's Award for Educational Excellence. An "A" is defined as a 90 or above on a 100-point numerical scale, an "A" on a letter scale, and a 3.5 on a 4.0 scale (U.S. Department of Education, 2007). Though not required by school divisions, this President's Award for Educational Excellence is popular among both public and private schools and school divisions. Students often receive these awards at the end of the year based upon their final GPA for the year.

In addition, The College Board, a national testing organization, uses a 10-point grading scale for its own data gathering purposes. The College Board administers the Preliminary SAT (PSAT) and SAT, both standardized, national examinations offered to high school students preparing to attend college. In offering the PSAT and SAT, the College Board offers students an opportunity to self-report various information, including grade point average, on the Student Descriptive Questionnaire (The College Board, 2008). To report grade point average, the College Board provides students with a 10-point grading scale that uses pluses and minuses. For example, the Questionnaire asks students to rate their GPA on the following scale:

- | | |
|-------------|------------|
| ▪ 97-100 A+ | ▪ 77-79 C+ |
| ▪ 93-96 A | ▪ 73-76 C |
| ▪ 90-92 A- | ▪ 70-72 C- |
| ▪ 87-89 B+ | ▪ 67-69 D+ |
| ▪ 83-86 B | ▪ 65-66 D |
| ▪ 80-82 B- | ▪ ≤ 64 F |

Tables reporting descriptive data for the PSAT and SAT by state are available at <http://professionals.collegeboard.com/data-reports-research>.

The State Perspective

States are beginning to explore grading policies, and several states have turned to legislation to address uniform grading scale issues (Burke, 2005). As of October 2005, four states had uniform grading policies, namely Arkansas, Florida, South Carolina, and West Virginia. Florida converted to the current 10-point scale in 2001 to ensure Florida students could compete equitably for out-of-state college admissions and scholarships (Council for Lifelong Learning, 2001). Although all of these states have not adopted 10-point grading scales, the grading scale is consistent for all schools across their respective states. Of the states with uniform grading scales, Arkansas and Florida use a 10-point grading scale (Burke, 2005).

Since the 2005 publication by the Education Commission of the States, several other states have explored mandating uniform grading policies for all public school divisions in their respective states and have enacted legislation that addresses one or more components related to grading policies. In reference to grading scale:

- Tennessee mandated a uniform grading scale, requiring its use beginning August 2006. State officials felt a uniform grading scale would better ensure all students had equal and fair access to state scholarships.
- In April 2007, the New Mexico state legislature mandated the development of a standardized, statewide grading system for students in grades five through twelve (New Mexico Statutes and Court Rules 22-2-8.13). The grading system may be an alphabetic system or a numeric system that is based on a 4.0 scale or a 100 percent scale.

In reference to GPA calculations:

- The Texas legislature passed legislation in 2007 requiring a standard method for calculating GPA to be used across the state beginning with the Class of 2009. Currently, stakeholders are negotiating grade weights for advanced courses, defining which courses can be defined as advanced courses, and determining which courses will count toward GPA calculation (e.g., grades in nonacademic courses such as band, orchestra, and physical education). To date, no agreement or uniform policy has been established.
- Georgia recently passed legislation that establishes how high school grades are weighted as they compete for state-sponsored HOPE scholarships for postsecondary education. School divisions are required to submit unweighted grades for core curriculum courses. The state agency responsible for awarding HOPE scholarships independently weights core curriculum course grades based upon student scores on end-of-course state assessments. Students receiving an “Exceeds Expectations” score receive a 0.25 weight for the respective core curriculum course grade. These weights are then used to calculate student GPA for HOPE scholarships – students in an academic course of study must have a 3.0 GPA, and students in a career/technical course of study must have a 3.2 GPA to qualify for a HOPE scholarship.

As indicated above, states are beginning to address grading policy issues with a variety of solutions — from defining grading scales to defining weighting formulas for advanced courses or state assessment test scores.

The School Division Perspective

Most grading policies are determined at the school division level whether the school division includes one high school or more than forty high schools. As the college admissions landscape has changed, school divisions have begun reviewing and revising their grading policies. The trend seems to be moving in the direction of a 10-point grading scale with honors, AP, IB, dual enrollment, and other advanced courses weighted to reflect their challenging nature.

As school divisions address the needs of all their students and stakeholders, policies vary from school division to school division within and across states.

To gain a fuller understanding of the process and reasons for exploring grading policies, FCPS contacted several school divisions, reviewed school division websites, reviewed any available school division reports, and reviewed articles written by local newspapers reporting grading policy changes. School divisions were selected for review based on several criteria:

- Recent review of grading policy (within the past five years);
- Descriptive data similar to FCPS (e.g., similar SATs, “suburbanicity,” high percentage of students admitted to four-year colleges and universities); and/or
- Availability of written information describing the review and/or decision-making process undertaken by the school division.

Following is a discussion of selected school divisions that have maintained their current grading policies and school divisions that have revised their policies.

School Divisions Outside the Commonwealth of Virginia

Through investigation conducted for this project, it was learned that 75 school divisions in 12 states have revised their grading scales from 6-, 7-, and 8-point scales to a 10-point grading scale in the last three years (see Appendix D for a list of several of these school divisions). In addition, no school districts were identified that converted from a 10-point grading scale to another scale or reduced weights. These school divisions have explored the issues with relevant stakeholders (e.g., high school administrators, guidance counselors, central office staff, school board members, parents, community members) and often conducted surveys and/or interviews with college admission officials prior to making recommendations regarding their grading policies.

In a comprehensive review of grading scales and grading policy issues, one school division convened a committee of parents, teachers, counselors, and administrators to explore the issues. The committee found that the majority of high schools in their state used a 10-point grading scale and that 19 out of 26 nationally recognized high schools used a 10-point grading scale. College admissions officers reported that a change in grading scale would not affect how they considered the school division’s students for admission to their college (including Yale, Columbia, Notre

Dame, VMI, and the University of Pennsylvania). Through their review, the committee identified several advantages and disadvantages to revising their grading policies, including:

- Converting to a 10-point scale may “level the playing field” and enable students to better compete with students in the state, in neighboring states, and around the country.
- Students may be more likely to take advanced classes because the pressure for grades is somewhat reduced.
- Students may or may not be motivated to achieve at higher levels.
- The school division may be viewed as lowering its standards.
- The distribution of letter grades may not change substantially; however, numerical grades may be lower (Mountain Brook Schools, n.d.).

Considering these above factors, the committee in Mountain Brook Schools recommended revising the school division’s grading scale in grades 4 through 12 to be in line with a standard 10-point grading scale.

School divisions in Pennsylvania are reviewing grading policies, or have done so, in the last few years. The School District of Philadelphia uses a 10-point grading scale, and several school divisions have switched to a 10-point grading scale in the last two years. For example, West Chester Area Schools and Unionville-Chadds Ford School District (both suburban school divisions outside the greater Philadelphia area) recently revised their grading policies and adopted a 10-point grading scale with pluses and minuses. Both school districts met with teachers, guidance counselors, and/or administrators to explore the issues, and they conducted interviews and/or surveys of college admissions officials to determine the effect grading scale and/or GPA had on college admission decisions. Parents had opportunities to provide comments to the grading policy committee. Each school division made a recommendation to change the grading policy to the school board, and the board accepted the recommendation, specifically:

- In calculating and comparing students with the same grades, West Chester Area Schools found that GPA was higher for those students who were graded on a 10-point grading scale than for those students graded on the previous grading scale in West Chester Schools.
- Results from the West Chester survey of college admissions officials indicated that GPA was the first or second factor considered during the initial screening process for college admissions.
- Unionville-Chadds Ford School District also conducted a survey of college admissions officials and found that there was not a standard policy across colleges and universities with regards to the importance of GPA, grading scale, weighted vs. unweighted grades, etc., when considering college applications.

Both West Chester Area Schools and Unionville-Chadds Ford School District revised their grading policies and now use a 10-point grading scale. Unionville-Chadds Ford also changed the grade weights associated with AP and honors courses (i.e., adopted a 1.0 weight for AP courses and 0.5 weight for honors courses).

This movement to review grading policies and implement a 10-point grading scale is moving across Pennsylvania and into the Pittsburgh area. Most recently, five school divisions in Allegheny County, which encompasses Pittsburgh and the surrounding area, revised their grading policies to implement a 10-point grading scale. Of the 43 school divisions in Allegheny County, 33 use a 10-point grading scale (Kurutz, 2008).

Reviews of grading policies are also taking place in the Midwest and South. In Illinois, the Genoa-Kingston Community Unit School District, a suburb of Chicago, implemented a 10-point grading scale beginning in the 2008-2009 school year. The principal of the school district's high school led the investigation of the school district's grading policies. Interviews with college admissions officials, discussions with guidance counselors, and a review of Illinois school districts' grading scales were conducted. Both the Superintendent and principal reported that colleges review student GPA without considering the school's grading scale. The college admissions officials indicated that they could not consider grading scales given the number of candidates they review for admission each year (Braksick, 2008). Furthermore, approximately 70 percent of the school districts in Illinois were using a 10-point grading scale. The school board accepted the recommendation to revise the grading policies of the school division.

Mississippi school divisions have also seen a movement toward 10-point grading scales, following the pattern set by other southern states such as Florida and Arkansas. Of the 152 school divisions in Mississippi, 41 have implemented a 10-point grading scale. These small school divisions account for nearly one-fourth, or 20 out of 82, counties across the state of Mississippi.

In addition to Pennsylvania, Illinois, and Mississippi, school divisions in 9 other states recently revised their grading scale so that students are graded on a 10-point grading scale (Arkansas, Connecticut, District of Columbia, Florida, New Hampshire, New Jersey, Ohio, Oregon, and Wyoming).

School Divisions Across the Commonwealth of Virginia

As with school divisions across the country, school divisions within the Commonwealth have been examining grading policies over the last two years to ensure their students have the best postsecondary opportunities. (See Appendix E for an overview of the grading scales used by selected school divisions across the Commonwealth of Virginia.) Many Virginia school divisions, however, give higher weights for honors, AP, and other advanced courses than does FCPS.

In the northern Virginia region and surrounding school divisions, several use a 10-point grading scale. Arlington County Public Schools, Falls Church City Public Schools, District of Columbia Public Schools, Howard County Public Schools, Prince George's County Public Schools, and Montgomery County Public Schools use a 10-point grading scale for students. Loudon County Public Schools, Prince William County Public Schools, and Stafford County Public Schools are beginning to examine grading policies within their school divisions.

In the last two years, Albemarle Public Schools conducted a review of the school district's Program of Studies, and the issue of grading scale and grading policies emerged as an issue for further study. Once division staff recognized that grading policy was an added issue for review, a grading policy committee, including a student, parents, teachers, and administrators, was formed to conduct an investigation of Albemarle's grading policies. The committee found:

- A number of students in dual enrollment courses had to navigate two different grading scales – that of the school district and the 10-point grading scale for the college or university from which the course was delivered.
- The school district's superintendent contacted several college deans to discuss the issues related to grading policies and found that the deans felt "an A was an A was an A" regardless of grading scale.

Upon the recommendation of the grading scale committee, the superintendent and school board for Albemarle County Public Schools revised their grading policies to include a 10-point grading scale (implemented during the 2007-2008 school year) and revised course weights implemented during the 2008-2009 school year (adopted 1.0 weight for AP, honors, dual credit, and dual enrollment courses).

In contrast, three school divisions within the Commonwealth of Virginia have reviewed their grading policies and selected to keep their 6-, 7-, or 8-point combination grading scale. Radford City Schools, Chesapeake Public Schools, and most recently, Spotsylvania County Public Schools decided to keep their grading scales, though Spotsylvania revised their weighting policies. In Radford, a committee of K-12 teachers, parents, and administrators relied heavily on the findings of the Driscoll and Fortune (1999) study and updated the study by contacting several college admissions officials and conducting a brief student survey to determine if the results for the 1999 study still held true. The recommendation was made to the school board to keep the existing grading policies. In Chesapeake, an evaluation of the grading policies across grade levels was conducted using data collected from surveys of students, parents, teachers, guidance directors, and principals across all grade levels, as well as surveys conducted with college admissions officers. Though many teachers, parents, and students seemed to prefer the 10-point scale, guidance directors and administrators felt that the current grading scale was similar to those of surrounding school divisions and other similar school divisions in the state; therefore, the recommendation was made to keep the 8-point grading scale.

Development of Grading Policy in FCPS

Since 1912, FCPS has used a variety of grading scales. These scales were not always applied uniformly across all schools. Until 1978, no school board minutes were found that specifically addressed the FCPS grading policy. Records do reveal, however that parents and FCPS staff discussed the same concern presented in this study during the late 1970s and early 1980s.

In April 1981, the FCPS School Board voted to change to the current 6/10-point grading scale with pluses and with an additional weight of 0.5 points for honors and advanced placement courses. Although some School Board members favored switching to a 10-point scale, they were

outvoted. At some point thereafter, FCPS eliminated the 0.5 weight for honors courses and added a 0.5 point weight for most Standard Level IB and all Higher Level IB courses.

Summary of the National Landscape

The K-12 public school community continues to explore grading policy practices that provide postsecondary opportunities for their students. In doing so, many school divisions are rethinking how students are assessed and how their achievement is reported. School divisions across the country are reviewing grading policies and making changes to their grading scales and grade/course weights.

Competition and rising higher education costs have fueled concern nationwide about the effects of grading policies on college admissions, receipt of merit-based scholarships, and placement into honors programs. Consequently, over 75 school districts in 12 states have converted to the 10-point grading scale, often with pluses and minuses, in the last several years. However, this study did not find research literature on the direct relationship between grading policies and college admissions decisions, merit-based scholarship awards, and placement into honors programs.

Research indicates that the primary factors in the admission process nationwide are grades in college preparatory courses, strength of the high school curriculum, standardized admission test scores, and overall high school grade point average.

Both the federal government and The College Board report high school GPA using a 10-point grading scale in the absence of information from schools for data gathering and program purposes.

III. STUDY FRAMEWORK

As school divisions examine methods for assessing and evaluating students, general grading policies are reviewed for relevance. Grading policies address several areas including grading scale, course or grade weights, and methods for determining grade point average (GPA). The grading scale defines the cut scores for letter grades and whether pluses and/or minuses are used in GPAs. Grading scales range from a uniform 10-point grading scale to 8-point, 7-point, 6-point, or some combination thereof, often with pluses and minuses. Weights for advanced coursework also vary. In addition, discussions have begun within school divisions on how to determine GPA, i.e., which courses will be included in GPA calculations.

To address the issues raised by FAIRGRADE, a group of FCPS staff and FAIRGRADE members, referred to as the Grading Policy Committee (GPC), was convened to investigate the current FCPS grading policy, as well as possible changes and their effects. Specifically, this study addressed the following three questions.

Research Questions

Question 1

Is the distribution of grade point averages (weighted and unweighted) for FCPS high schools substantially different from those in comparable school systems that use a 10-point grading scale?

Question 2

What is the impact of different grading policies on college admissions, merit scholarships and placement into honors programs?

Question 3

What are the potential consequences of changing the FCPS grading policy? What evidence supports the current grading policies?

Purpose of the Study

The purpose of the study was to determine whether the FCPS grading policy (grading scale and weights) affected students' grade point averages, their options for college admissions, merit-based scholarships, and placement into college honors programs.

Study Design

FCPS employed a mixed-methods approach that included multiple sources of data and a variety of data collection methods. This study investigated various "inputs" or variables that go into the college admission decision. The study did not attempt to evaluate outcomes or how a change in these variables would directly affect the percent of FCPS students accepted at colleges (e.g., in-state vs. out-of-state colleges, public vs. private, more selective vs. less selective), the percent of FCPS students awarded merit-based scholarships, and/or the percent of students accepted into college honors programs.

Methods

The Grading Policy Committee used a variety of qualitative and quantitative methods to answer the research questions. Given various constraints, guidelines for collecting and analyzing data emphasized objectivity, validity, feasibility, and timeliness.

This investigation included three studies to determine whether FCPS students had lower unweighted and weighted GPAs than non-FCPS students in schools that used a 10-point grading scale with various weighting policies for advanced courses. First, data were gathered on grade/GPA distributions from 35 non-FCPS schools with a 10-point grading scale. Second, data from 1,000 randomly selected FCPS transcripts from the Class of 2008 were analyzed. Third, 104 colleges were surveyed to collect data on the college admissions process.

Comparisons of FCPS and non-FCPS GPA Distributions

This component compared unweighted and weighted grades for FCPS and non-FCPS graduating classes in schools that used 10-point or numerical grading scales. After substantial efforts to obtain comprehensive data about grade/GPA distributions in comparable school divisions were unsuccessful, the study shifted focus and compared FCPS GPA distributions to those of any other U.S. nonmagnet public high school that had the necessary data elements. A purposeful sample was used for analyses based on publicly available data. SAT scores were used to pair non-FCPS classes with FCPS classes.

For the investigation of GPA distribution, the Grading Policy Committee conducted a systematic search of public sources for high school grading information. Available data from more than 250 schools, representing approximately 25 states, were reviewed to determine whether or not all required data elements were present. Most of these schools used a 10-point (90-100 = A) or a modified 10-point grading scale with pluses and minuses (e.g., 90-92 = A-, 93-97 = A, 98-100 = A+) and traditional unweighted grade values (e.g., 4.0 = A, 3.0 = B, 2.0 = C, 1.0 = D, 0 = F). Several schools used numerical grades with 90-100 equal to 4.0 points, 80-90 equal to 3.0 points, etc. The final purposeful sample included the required data from 35 non-FCPS high schools that represented 12 states nationwide. Most schools were labeled as high-performing schools on one of several national high-performing schools or award lists. Schools were included in the sample if the following data elements were available:

- Identification of specific grading scale with numerical values and associated letter grades;
- Explanation of weights for advanced courses, including the actual weights and the associated courses for those weights;
- Class grade-point distribution (weighted, unweighted, or both); and
- Mean SAT scores (Reading and Mathematics) for the graduating class.

To improve comparability, all schools were public, general admission high schools. That is, no private, charter, magnet, or selective admission schools were part of the analysis. For this reason,

Thomas Jefferson High School for Science and Technology in FCPS was excluded from these analyses. Non-FCPS schools represented 12 states (see Table 1.)

Table 1 High Schools Included in Grade Distribution Study	
State	Number of Schools (n=35)
California	3
Massachusetts	1
Maryland	8
Minnesota	1
New Jersey	1
New York	9
Ohio	2
Pennsylvania	4
Texas	2
Virginia	1
Washington	1
Wisconsin	2

Transcript Study

The purpose of the transcript study was to determine the effects that revising the current FCPS grading policy – both the grading scale and additional weights for advanced courses – would have on a series of existing FCPS student transcripts. It is recognized that a high degree of variability exists as to how grades and grading policies are applied, particularly for some assignments (e.g., essays, projects, participation). Since this type of variability could not be controlled for statistically, all plus grades were converted to the next highest grade (e.g., B+ became an A, C+ became a B, D+ became a C) for the purposes of the transcript study; therefore, results indicate the maximum adjustments to GPA calculations. This part of the study included the full GPA distribution.

The transcript analyses were done in a series of steps. In the first step, 19 transcripts were purposely selected to represent specific grade ranges in specific schools across the spectrum in FCPS. In the second analysis, 1,000 transcripts were randomly selected by computer from the graduating class of 2008. This sample size (n=1,000) represented approximately 8 percent of the FCPS Class of 2008. With this larger sample, analyses were conducted with high school grades at the end of grade 11 (i.e., grades that are typically sent with college admissions applications) and at the end of grade 12 (i.e., complete high school transcripts). All FCPS high schools were included in the analyses. The actual number of transcripts randomly selected from each high school was compared with the expected number, and no high school was found to be oversampled or undersampled. The random sample of FCPS transcripts was representative of the full population of FCPS students who graduated in Spring 2008.

For both analyses, courses were classified as honors (including Pre-AP and Pre-IB), AP, Standard Level and Higher Level IB, dual enrollment, or regular classes. Courses with a grade point value of 0, primarily Driver's Education, were eliminated from the analyses, as these grades were included in another course. (In the case of Drivers Education, the grade was included with Health and PE.)

Two grading scales were considered:

- 6-point grading scale with an A defined numerically as 94 to 100, and
- 10-point grading scale with an A defined numerically as 90 to 100.

In converting FCPS student grades from the existing 6-point grading scale to a 10-point scale, the decision was made to convert all plus (+) grades to the next highest letter grade.

To pilot the transcript study with 19 selected transcripts, the following weighting conditions for each scale (dual enrollment courses were treated as AP and Higher Level IB courses) were used:

- Unweighted grades;
- No points (0) for honors courses and one-half (0.5) point for AP, IB, and dual enrollment (the current FCPS weights); and
- One-half (0.5) point for honors courses and one (1.0) point for AP, IB, and dual enrollment courses.

FCPS Survey of College Admissions Practices

The intent of this component and subsequent survey were to provide information on college admissions practices specifically related to various grading policies. The focus was on the varying practices across the higher education institutions to which more than 75 percent of FCPS high school seniors apply each year.

Development of the survey was spearheaded by the FCPS Department of Accountability, with input from FAIRGRADE and the FCPS Office of School Counseling. Survey items addressed factors in college admission decisions such as the influence of student GPA, both weighted and unweighted; standardized test scores; identified high school grading scale; successful completion of advanced courses; etc. The survey also included items that allowed college admissions officials to describe how decisions are made regarding the award of merit-based scholarships and placement into college-level honors programs. (See Appendix C for a copy of the survey.)

The online survey was piloted with 30 colleges. Feedback from 15 of these 30 colleges was received and was positive regarding the quality and relevance of the survey (e.g., applicable questions, appropriate response choices, clear instruction, and nonleading questions). Minor editorial changes were incorporated into the survey before it was released for administration.

The full sample was selected from colleges to which FCPS students applied for admissions. These colleges were arranged by the number of applications students submitted between 2006

and 2008, within each of four categories: in-state public, in-state private, out-of-state public, and out-of-state private. The 104 schools selected to participate in the study represented 95,153 applications submitted by FCPS high school seniors, or 76 percent of all applications over the three-year period.

To ensure that the most accurate information was collected, an electronic invitation to participate in the survey was sent via email to the Director of Admissions for each selected institution. The survey was conducted over a two-week period using Survey Monkey, a self-administered online survey format. Follow-up reminders encouraging admissions directors to participate were sent three times to increase response rate. Usable data from 64 of the 104 colleges were obtained, resulting in a response rate of 62 percent. Like the original 104 institutions targeted in the survey, these 64 colleges and universities represented in-state and out-of-state colleges, public and private institutions, as well as institutions with varying selectivity rates and student populations. Table 2 presents summary information on the respondents.

Table 2			
Selected and Responding Colleges			
		Number of Colleges Selected for the Survey (n=104)	Number of Colleges Completing the Survey (Percent of Targeted) (n=64)
In-State vs. Out-of-State	Virginia	27	20 (74%)
	Non-Virginia	77	44 (57%)
Public vs. Private	Public	49	29 (59%)
	Private	55	35 (64%)
College Selectivity (Applicant Acceptance Rate)	25% or Less	11	6 (55%)
	25% - 50%	34	18 (53%)
	50% -75%	38	26 (68%)
	75% or More	21	14 (67%)
Number of Enrolled Students	3000 or Less	11	10 (91%)
	3000 – 5000	17	8 (47%)
	5000 – 10000	26	16 (62%)
	10000 or More	50	30 (60%)

Note: Unless specified otherwise, the numbers in Table 2 represent frequencies.

Upon receipt of the data, each record was checked for accuracy and completeness. Several colleges responded with incomplete data and were deleted from the sample, leaving a final sample size of 64 respondents.

Consequences of Revising the Grading Policy

The research literature was reviewed, local and out-of-state school divisions were contacted, and written materials posted on school and school division websites were identified in an attempt to determine the consequences associated with a change in grading policy.

To provide context for the current grading policy, a comprehensive search of FCPS records and School Board minutes since 1910 was conducted. Qualitative methods were used to summarize salient and relevant points, activities, and events. In addition, a review of the literature was conducted by identifying journal articles, books, book chapters, policy papers, final reports, etc., through detailed searches of educational and social science databases. An in-depth search of the Internet was also conducted to identify fugitive literature (i.e., literature that is difficult to locate and access because it is not disseminated through traditional methods; may include working papers, theses and dissertations, research and technical reports, conference proceedings, status reports to funding agencies, committee reports and memoranda). The search strategy used to identify the literature was also used to identify information related to the federal, state, and local perspective and policies related to grading policy.

Since the written literature was very limited, telephone interviews were conducted with state education officials, education specialists with the National Conference of State Legislatures, and school division staff. In addition, newspaper articles from local newspapers in various communities were reviewed to identify local school divisions in the Commonwealth and around the country that recently reviewed their grading policies. Historical records, including School Board minutes, old transcripts, and conversations with retired FCPS staff were used to gather information regarding the development of the current grading policy and the reasons for the specific components of the grading policy (i.e., grading scale and course weights).

Limitations

This study provides contextual and historical information for the Superintendent and School Board members to use when examining the grading policy for FCPS. Given the constraints of feasibility, time, and resources, the scope of this investigation was limited to addressing the research activities proposed under the three study questions. This study provides insight into the relationships among grading scale, course weights, and GPA, and results may be indicative of a trend; however, they should be viewed within the context of which the sample was selected.

To investigate grade/GPA distribution, a purposeful sample was used for analyses (i.e., readily available data and/or participants that may or may not be representative of the full student and/or college populations). Grading across schools was expected to be varied as the “grading culture” of a school or school division may affect how loosely or strictly grades are awarded. This could account for variability in how grades and weighting policies were applied to student grades, and, in turn, affected mean GPA for specific schools. As stated earlier, non-FCPS schools did not all use a pure 10-point grading scale; therefore, results may be skewed. In addition, mean SAT scores were used to improve comparability across school divisions, states, and grading cultures. The percent of students taking the SATs differed substantially among the schools selected. As a result, those school divisions with higher SAT participation rates (e.g., FCPS high schools) may have lower SAT averages since most of their students take the SATs rather than just those students who are high achieving or are most likely to attend and complete higher education opportunities.

Results from the transcript study present the maximum effects on GPA. Specifically, it adjusted all “plus grades” to the next highest letter grade. For example, a grade of B+ was changed to an A rather than an A-. Further, each year of a two-year IB course was given a weight of 1.0 for both years rather than considering the first year in the sequence to be an honors-level course in

which the additional course weight would be 0.5. The study does not take into account variability among teachers in implementing the grading policy.

In addition, identifying information to determine the consequences of revising the FCPS grading policies proved difficult. Generally, information could not be identified for a cross-section or representative sample of school divisions reviewing their grading policies, to include school divisions that changed their grading scales to a 10-point scale and school divisions that elected not to change their grading policies. Furthermore, identifying school division-based reports is difficult since many school division reports are not published or placed in the public information arena.

The findings provide information solely for FCPS to use in assessing the effects of the current grading policy that may influence college admissions and awards for FCPS students. It is intended to provide the Superintendent and School Board members with information on which decisions can be based regarding the FCPS grading policy.

IV. FINDINGS

Analyses were conducted to answer the three research questions and provide the FCPS Superintendent and School Board with information as they review the grading policy. Findings from the analyses are presented in several sections below.

Comparisons of FCPS and non-FCPS GPA Distributions and Analyses

The objective of this analysis was to determine whether there were differences in the grade/GPA distributions between FCPS and those non-FCPS schools that used 10-point grading scales. Graduating classes from the sampled schools were compared in groups according to class mean SAT scores. Mean SAT scores provided a national standard for grouping. Publicly available data were used for this analysis.

Five ranges of SAT scores (math plus verbal) were defined according to the data available:

- 1200 – 1249
- 1150 – 1199
- 1100 – 1149
- 1050 – 1099
- 1000 – 1049

The analysis utilized class mean SAT scores to individually pair and compare graduating classes from FCPS and non-FCPS high schools. Finally, the total data were compared to identify any overall differences between the 10-point and FCPS school information. Eight unmatched non-FCPS schools with SATs above 1250 were also included in the overall analysis.

The GPA distribution measures used for comparative purposes were:

- Unweighted A- and Above (according to the school's own grading scale)
- Unweighted 3.5 and Above
- Weighted 4.0 and Above

Unweighted GPAs of 3.75 and above and weighted GPAs of A- and above were also considered, but the data available were insufficient to support these analyses. The intent was to select metrics that would approximate critical thresholds in college admission, merit-based scholarship award, and honors program placement assessments.

The results of these analyses are summarized in Table 3 below. The detailed school-level data supporting this summary are included in Appendix F.

Table 3
Mean GPA Percentage Points by which 10-Point Schools
Exceeded FCPS High Schools for the Mean SAT Ranges and GPA Levels Shown

35 10-Point Schools and All FCPS High Schools (Except Thomas Jefferson)	% Pt Diffs UnWtd A- & ABOVE	% Pt Diffs UnWtd 3.5 & ABOVE	% Pt Diffs Wtd 4.0 & ABOVE
Mean (SATs 1200 to 1249)	16.9	9.3	21.6
Mean (SATs 1150 to 1199)	12.0	3.3	19.0
Mean (SATs 1100 to 1149)	18.3	8.9	16.9
Mean (SATs 1050 to 1099)	4.5	-3.9	14.8
Mean (SATs 1000 to 1049)	6.2	0.2	11.7
Overall Means	15.4	10.9	17.7
Mean Diffs, Paired Schools	12.3	5.6	12.6

Note: Data from 8 non-FCPS schools with SAT means above 1250 were deleted from the SAT range analyses. For detailed information on the sample size for each calculation, see Appendix G.

The overall mean differences in these data indicate that GPAs of non-FCPS graduating classes exceeded those of FCPS classes for all three measures.

Specifically, the mean percent of non-FCPS classes with:

- Unweighted GPAs of A- and above exceeded those of FCPS classes by 15.4 percentage points.
- Unweighted GPAs of 3.5 and above exceeded those of FCPS classes by 10.9 percentage points.
- Weighted GPAs of 4.0 and above exceeded those of FCPS classes by 17.7 percentage points.

Differences were noted between matched pairs of FCPS and non-FCPS classes as well. Specifically, the mean percent of non-FCPS classes with:

- Unweighted GPAs of A- and above exceeded the matched FCPS class by 12.3 percentage points.
- Unweighted GPAs of 3.5 and above exceeded the matched FCPS class by 5.6 percentage points.
- Weighted GPAs of 4.0 and above exceeded the matched FCPS class by 12.6 percentage points.

Analyses were also conducted to determine differences within the SAT ranges defined above. The following bar charts illustrate detailed results for the three grade thresholds in each SAT range.

Table 4 Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1200-1249, Math & Verbal)				
State	Mean SAT	Percent Unweighted GPA A- and above	Percent Unweighted GPA 3.5 and above	Percent Weighted GPA 4.0 and above
NJ	1225			19.0
MD	1221	37.0	37.0	36.0
NY	1220			10.0
FCPS	1219	17.3	28.5	4.9
MA	1214			32.4
MD	1205	37.0	37.0	35.0
NY	1205	28.7	39.4	
Mean FCPS and non-FCPS Groups				
Non-FCPS		34.2	37.8	26.5
FCPS		17.3	28.5	4.9
Differences (in percentage points)		16.9	9.3	21.6

Figure 1
Mean Percent of Graduating Classes with GPAs Shown
(Mean SAT Range of 1200-1249, Math & Verbal)

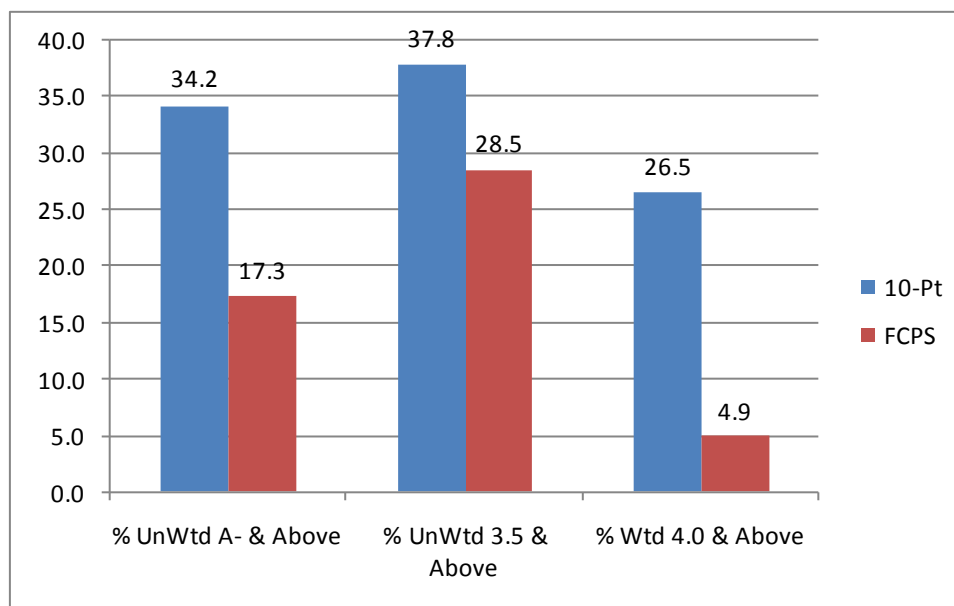


Table 5 Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1150-1199, Math & Verbal)				
State	Mean SAT	Percent Unweighted GPA A- and above	Percent Unweighted GPA 3.5 and above	Percent Weighted GPA 4.0 and above
FCPS	1196	14.9	26.0	3.0
NY	1196	31.4	31.4	
MD	1194	30.0	30.0	37.0
NY	1192	35.7	35.7	
NY	1180	21.1	36.6	16.6
FCPS	1174	16.7	27.0	5.6
MD	1167	23.0	23.0	24.0
NY	1165	23.9	23.9	
OH	1165			12.6
TX	1163			10.0
MD	1162	27.0	27.0	29.0
PA	1156			52.7
PA	1155			13.7
FCPS	1154	14.6	26.2	2.8
TX	1150			10.0
Mean FCPS and non-FCPS Groups				
Non-FCPS		27.4	29.7	22.8
FCPS		15.4	26.4	3.8
Differences (in percentage points)		12.0	3.3	19.0

Figure 2
Mean Percent of Graduating Classes with GPAs Shown
(Mean SAT Range of 1150-1199, Math & Verbal)

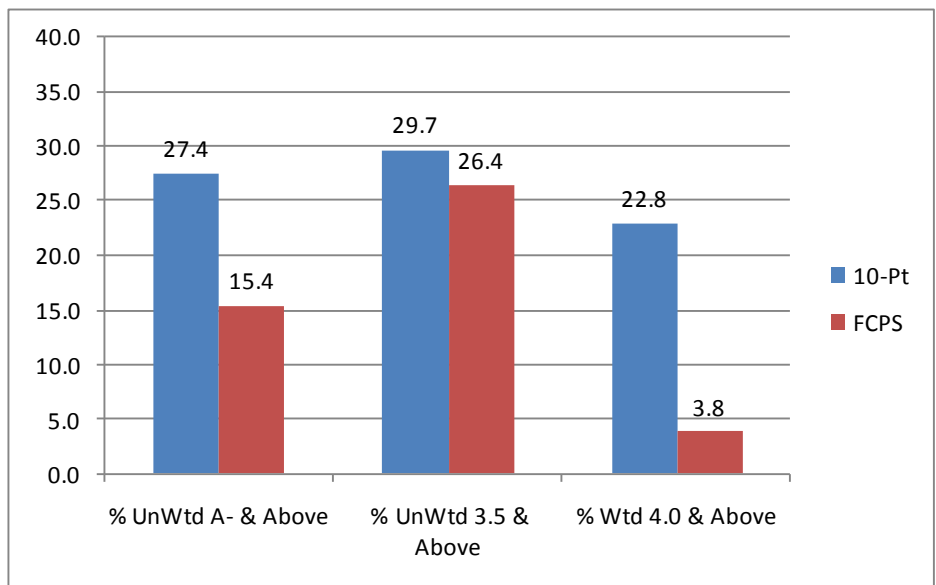


Table 6 Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1100-1149, Math & Verbal)				
State	Mean SAT	Percent Unweighted GPA A- and above	Percent Unweighted GPA 3.5 and above	Percent Weighted GPA 4.0 and above
FCPS	1149	18.1	28.7	7.2
VA	1149			24.0
FCPS	1145	16.0	24.5	4.9
WA	1137	30.0	30.0	
OH	1132			13.4
FCPS	1129	14.5	23.8	6.0
MD	1126	25.4	25.4	30.2
FCPS	1116	15.9	27.0	5.3
FCPS	1116	14.7	22.7	7.5
PA	1112	46.0	46.0	
FCPS	1111	16.6	27.4	4.2
FCPS	1109	12.7	20.3	4.0
Mean FCPS and non-FCPS Groups				
Non-FCPS		33.8	33.8	22.5
FCPS		15.5	24.9	5.6
Differences (in percentage points)		18.3	8.9	16.9

Figure 3
Mean Percent of Graduating Classes with GPAs Shown
(Mean SAT Range of 1100-1149, Math & Verbal)

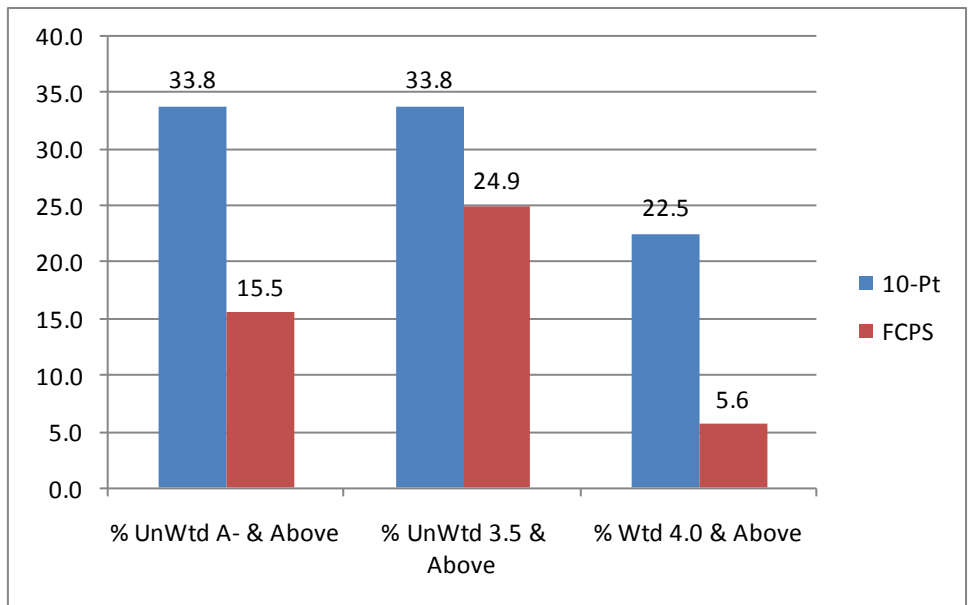


Table 7 Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1050-1099, Math & Verbal)				
State	Mean SAT	Percent Unweighted GPA A- and above	Percent Unweighted GPA 3.5 and above	Percent Weighted GPA 4.0 and above
FCPS	1093	11.5	21.2	3.8
FCPS	1092	15.8	23.3	7.9
MD	1092	16.2	16.2	18.8
FCPS	1087	15.0	24.2	5.1
FCPS	1079	10.9	20.4	2.2
FCPS	1069	9.1	17.1	2.7
FCPS	1066	12.6	21.3	3.2
FCPS	1053	7.2	13.2	3.4
Mean FCPS and non-FCPS Groups				
Non-FCPS		16.2	16.2	18.8
FCPS		11.7	20.1	4.0
Differences (in percentage points)		4.5	-3.9	14.8

Figure 4
Mean Percent of Graduating Classes with GPAs Shown
(Mean SAT Range of 1050-1099, Math & Verbal)

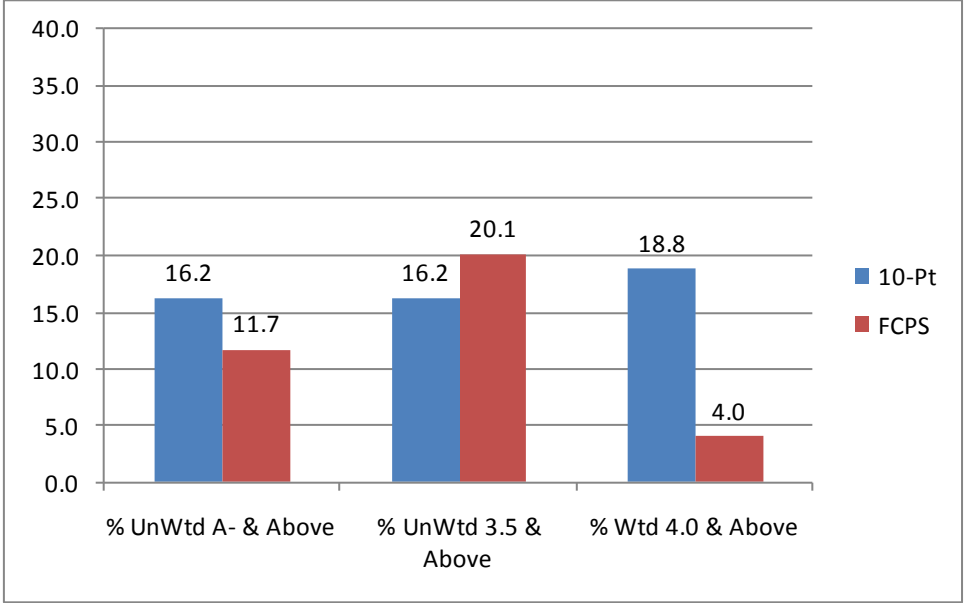
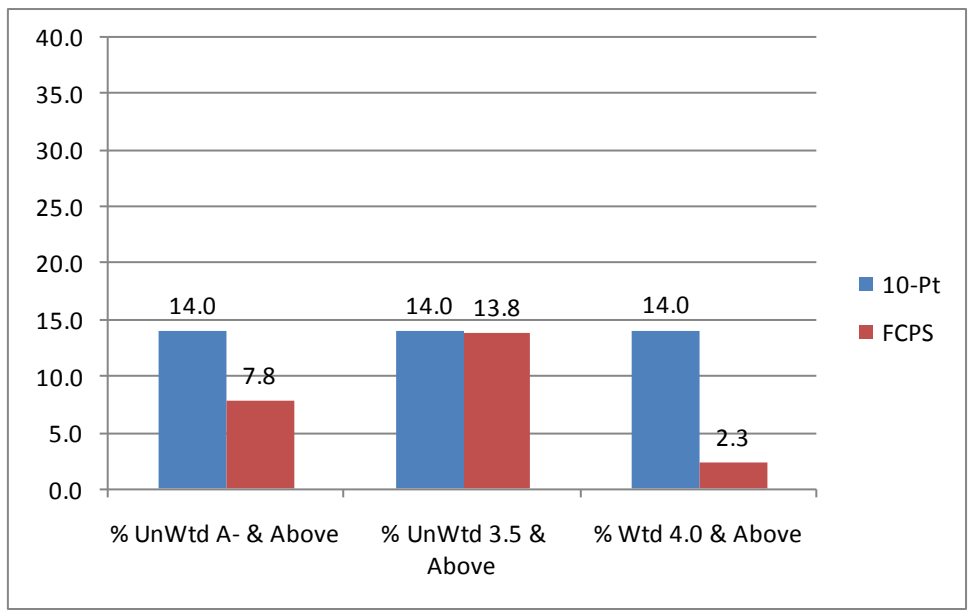


Table 8 Mean Percent of Graduating Classes with GPAs Shown (Mean SAT Range of 1000-1049, Math & Verbal)				
State	Mean SAT	Percent Unweighted GPA A- and above	Percent Unweighted GPA 3.5 and above	Percent Weighted GPA 4.0 and above
PA	1040			20.4
FCPS	1037	6.6	12.1	2.0
FCPS	1027	8.7	14.4	2.9
FCPS	1026	8.3	14.7	2.0
FCPS	1024	7.0	13.9	0.8
FCPS	1017	8.7	16.0	2.7
FCPS	1017	7.6	11.7	3.5
NY	1010			6.7
MD	1005	14.0	14.0	15.0
Mean FCPS and non-FCPS Groups				
Non-FCPS		14.0	14.0	14.0
FCPS		7.8	13.8	2.3
Differences (in percentage points)		6.2	0.2	11.7

Figure 5
Mean Percent of Graduating Classes with GPAs Shown
(Mean SAT Range of 1000-1049, Math & Verbal)



Findings include:

- In comparing FCPS and non-FCPS classes with mean SAT scores of 1200-1249, 4.9 percent of the FCPS classes had weighted GPAs of 4.0 and above, compared with 26.5 percent of non-FCPS classes. Similarly, 28.5 percent of the FCPS classes had unweighted GPAs of 3.5 and above, compared with 37.8 percent of non-FCPS classes.
- In comparing FCPS and non-FCPS classes with mean SAT scores of 1150-1199, 3.8 percent of the FCPS classes had weighted GPAs of 4.0 and above, compared with 22.8 percent of non-FCPS classes. Similarly, 26.4 percent of the FCPS classes had unweighted GPAs of 3.5 and above, compared with 29.7 percent of non-FCPS classes.
- In comparing FCPS and non-FCPS classes with mean SAT scores of 1100-1149, 5.6 percent of the FCPS classes had weighted GPAs of 4.0 and above, compared with 22.5 percent of non-FCPS classes. Similarly, 24.9 percent of the FCPS classes had unweighted GPAs of 3.5 and above, compared with 33.8 percent of non-FCPS classes.
- In comparing FCPS and non-FCPS classes with mean SAT scores of 1050-1099, 4.0 percent of the FCPS classes had weighted GPAs of 4.0 and above, compared with 18.8 percent of non-FCPS classes. Similarly, 20.1 percent of the FCPS classes had unweighted GPAs of 3.5 and above, compared with 16.2 percent of non-FCPS classes.
- In comparing FCPS and non-FCPS classes with mean SAT scores of 1000-1049, 2.3 percent of the FCPS classes had weighted GPAs of 4.0 and above, compared with 14.0 percent of non-FCPS classes. Similarly, 13.8 percent of the FCPS classes had unweighted GPAs of 3.5 and above, compared with 14.0 percent of non-FCPS classes.

Scatter diagrams present a different view showing the relationship between class mean SAT scores and the percent of graduating classes meeting or exceeding each of the three GPA measures in Appendix G.

Transcript Study

To examine the effects specific changes (i.e., change in grading scale, change in weights, change in both) would have on the GPA distribution in FCPS, a transcript analysis was conducted. The transcript analysis consisted of two parts. First, a pilot study of 19 transcripts was intended to see how the proposed grading policy revisions affected student transcripts across various GPA ranges. The primary result of this analysis was that the changes were a function of the earned grade and the type of course taken (see Appendix H for more detailed information regarding the pilot study.) Data from the pilot study indicate that changes in the grading scale are independent of changes in the weighting scheme. That is, the change in the grading scale affected those with

the largest number of “plus” grades (B+, C+, or D+). Changes in the weighting scheme affected students who take the largest number of honors, AP, IB, and dual enrollment courses.

Table 9 presents both the unweighted and weighted GPA distribution for the 1,000 transcripts that were analyzed at the end of Grade 11 and at the end of Grade 12. Since this is a random sample of transcripts, results are considered representative of the population (FCPS class of 2008 graduates) out of 11,280 students who graduated from FCPS high schools in 2008, including Thomas Jefferson High School for Science and Technology.

GPA Range	Conclusion of Grade 11		Conclusion of Grade 12	
	Unweighted ¹	Weighted	Unweighted ¹	Weighted
4.000 - 4.249	1.5%	4.6%	1.2%	5.8%
3.750 - 3.999	11.6%	11.9%	10.5%	11.1%
3.500 - 3.749	15.4%	14.2%	15.2%	14.6%
3.250 - 3.499	17.3%	17.3%	16.1%	15.2%
3.000 - 3.249	13.7%	12.9%	15.0%	13.6%
2.750 - 2.999	10.7%	9.6%	12.8%	11.2%
2.500 - 2.749	9.7%	9.8%	9.7%	9.6%
2.250 - 2.499	8.3%	8.0%	6.7%	6.3%
2.000 - 2.249	4.6%	4.5%	6.1%	5.9%
Lowest - 1.999	7.2%	7.2%	6.7%	6.7%
Total	100.0%	100.0%	100.0%	100.0%

¹ Unweighted GPA upper limit is 4.000.

Note: The effect of the weighted grades is overstated as both years of the 2-year IB courses were given a weight of 1.0 rather than considering the first year to be an honors course.

The analysis of the 1,000 transcripts was limited to only one weighting scheme where grades for honors classes were increased by one-half (0.5) point, and the grades for AP, IB, and dual enrollment courses were increased by one (1.0) point rather than the current 0.5 additional weight for AP, IB, and dual enrollment courses. The distribution of unweighted GPAs for Grade 11 and Grade 12 appear similar.

Table 10 presents results of analyses conducted to determine the extent to which GPA increased when current grades were converted from a 6-point grading scale to a 10-point grading scale. The analyses assumed all “plus” grades were increased to the next highest letter grade (e.g., B+ to A, C+ to B, D+ to C).

Table 10											
Increase in Unweighted GPA When Grades Are Converted											
from a 6-Point Grading Scale to a 10-Point Grading Scale through Grade 11											
Increase in GPA when using a 10-point scale	Unweighted 6-point scale										Total
	Lowest - 1.999	2.000 - 2.249	2.250 - 2.499	2.500 - 2.749	2.750 - 2.999	3.000 - 3.249	3.250 - 3.499	3.500 - 3.749	3.750 - 3.999	4.000	
0.000 to 0.049	0	2	1	0	1	0	4	6	34	15	63
0.050 to 0.099	17	11	6	9	12	13	16	28	33	0	145
0.100 to 0.149	24	13	30	22	34	33	45	45	38	0	284
0.150 to 0.199	23	12	21	32	32	53	64	47	11	0	295
0.200 to 0.249	6	8	22	23	20	25	33	20	0	0	157
0.250 to 0.299	2	0	2	10	6	11	10	8	0	0	49
0.300 +	0	0	1	1	2	2	1	0	0	0	7
Total	72	46	83	97	107	137	173	154	116	15	1,000
Mean increase	0.138	0.142	0.165	0.178	0.166	0.172	0.165	0.147	0.086	0.000	0.150

The analyses indicate that approximately 98 percent of the sample population experienced an increase in their unweighted GPA. The largest increase (0.178) occurred among students who had an unweighted GPA of 2.500 to 2.749. A similar (0.172) increase was observed in students with an unweighted GPA of 3.000 to 3.249. A mean GPA increase of 0.150 points was found when grades were changed from an unweighted 6-point grading scale to an unweighted 10-point grading scale. Mean GPA increases ranged from 0.000 to 0.353 points.

Table 11 presents data showing that when the FCPS grading scale is held constant and weights are increased to 0.5 points for honors courses and 1.0 point for AP, IB, and dual enrollment courses, weighted GPAs increase for approximately 70 percent of the students. The mean increase in weighted GPA ranged from 0.005 to 0.279, depending on the number of honors, AP, IB, and dual enrollment courses taken. Approximately 30 percent of the students did not take any honors, AP, IB, or dual enrollment courses so their weighted GPAs were not affected. Overall for the full sample, the mean increase in weighted GPA was 0.098 points and ranged from 0.000 to 0.469.

Table 11
Current Weighted 6-Point Scale GPA with 0.5 for AP, IB, and Dual Enrollment Courses
by Increase when Changing Weights to 0.5 for Honors and 1.0 for AP, IB,
and Dual Enrollment Courses for All Grades through Grade 11

Increase in GPA when Weights Increase to 0.5 for Honors/1.0 for AP, IB, and Dual Enrollment	Current Weighted 6-Point Scale – 0.0 for Honors/0.5 for AP, IB, and Dual Enrollment										Total
	Lowest - 1.999	2.000 - 2.249	2.250 - 2.499	2.500 - 2.749	2.750 - 2.999	3.000 - 3.249	3.250 - 3.499	3.500 - 3.749	3.750 - 3.999	4.000 - 4.249	
0.000	59	36	55	45	39	30	23	4	4	1	296
0.001 to 0.049	12	7	13	25	29	34	24	12	7	0	163
0.050 to 0.099	1	2	4	19	12	20	43	26	11	3	141
0.100 to 0.149	0	0	4	8	8	19	34	28	18	1	120
0.150 to 0.199	0	0	1	1	2	17	31	32	20	7	111
0.200 to 0.249	0	0	2	0	3	6	10	24	26	9	80
0.250 to 0.299	0	0	1	0	3	1	5	10	15	10	45
0.300 to 0.399	0	0	0	0	0	0	1	2	4	1	8
0.400 +	0	0	0	0	0	2	2	4	14	14	36
Total	72	45	80	98	96	129	173	142	119	46	1,000
Mean increase	0.005	0.006	0.026	0.034	0.047	0.080	0.108	0.152	0.203	0.279	0.098

Table 12 shows the combined impact of changing both the grading scale and weighting policies on students' weighted GPA. The combined effect of converting grades from a 6-point grading scale to a 10-point grading scale and increasing grade weights (i.e., 0.5 points for honors courses and 1.0 point for AP, IB, and dual enrollment courses) produced a mean increase in weighted GPA of 0.248 points. Increases ranged from 0.000 points to 0.708 points.

Table 12
Current Weighted 6-Point Scale GPA with 0.5 for AP, IB, and Dual Enrollment Courses
by Increase when Changing to a 10-Point Grade Scale and Increasing Weights to 0.5 for
Honors and 1.0 for AP, IB, and Dual Enrollment Courses for All Grades through Grade 11

Combined Increase from Changing Grading Scale and Increasing Weights	Current Weighted 6-Point Scale - grouped data										Total
	Lowest - 1.999	2.000 - 2.249	2.250 - 2.499	2.500 - 2.749	2.750 - 2.999	3.000 - 3.249	3.250 - 3.499	3.500 - 3.749	3.750 - 3.999	4.000 - 4.249	
0.000 to 0.049	0	2	0	0	1	0	1	1	2	1	8
0.050 to 0.099	14	9	6	5	8	2	7	1	3	2	57
0.100 to 0.149	27	12	25	16	18	17	8	8	8	1	140
0.150 to 0.199	22	13	15	20	20	20	27	11	10	4	162
0.200 to 0.249	6	7	22	27	17	25	29	25	19	8	185
0.250 to 0.299	3	2	6	18	14	30	40	24	16	8	161
0.300 to 0.349	0	0	2	8	11	22	29	22	23	5	122
0.350 to 0.399	0	0	3	3	3	9	15	24	12	1	70
0.400 or more	0	0	1	1	4	4	17	26	26	16	95
Total	72	45	80	98	96	129	173	142	119	46	1,000
Mean increase	0.143	0.149	0.190	0.211	0.217	0.246	0.272	0.310	0.311	0.307	0.248

Figure 6
Graphical Presentation of the Change in GPA Resulting from a Change in Scale, Change in Weight, and the Combined Change for All Grades through Grade 11

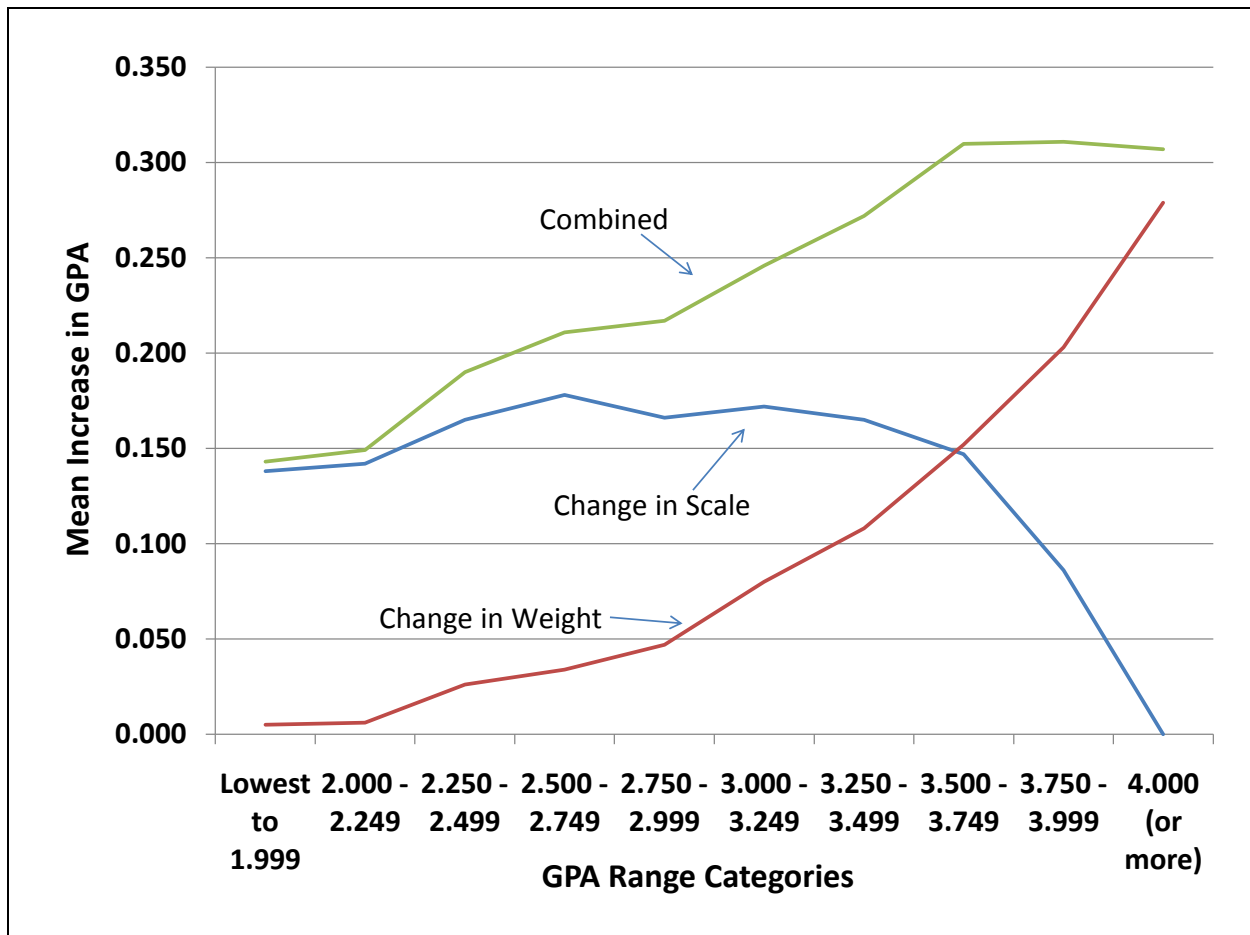


Figure 6 illustrates that changing from a 6-point grading scale to a 10-point grading scale primarily affects students with a GPA of 3.750 and below because these students are most likely to have “plus” grades. Alternatively, a change in weights has the greatest effect on students with a GPA of 3.750 and above, as they are most likely to take more advanced courses. Changing both the grading scale and the weights appears to affect nearly all students; the size of the effect is relatively small for students with lower GPAs and increases steadily with the effect maximized for students with GPAs of 3.500, where it plateaus through the remainder of the scale.

Table 13 presents the percentage of students who moved from one GPA category to another. The data suggest that a larger percentage of students moved to higher GPAs at the 3.5 and Above level than did students with lower GPA. (For a detailed discussion of the number of students who moved from one GPA range to another, see Appendix I.)

Table 13				
Summary of Cases Crossing Various Thresholds for All Grades through Grade 11				
Conditions of Change	Thresholds			
	3.750	3.500	3.000	2.500
Grading Scale – From 6-Point Scale to 10-Point Scale	9.2%	10.0%	6.0%	8.0%
Weights – From 0.5 for AP, IB, and Dual Enrollment Courses to 0.5 for Honors Courses; 1.0 for AP, IB, and Dual Enrollment Courses	8.9%	6.6%	2.2%	5.9%
Grading Scale and Weights – From 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to 10-Point Scale with 0.5 for Honors Courses; 1.0 for AP, IB, and Dual Enrollment Courses	16.8%	16.8%	7.9%	6.3%

A different way to represent the same data is shown in Figures 7 thru 9. These figures show the proportion of cases in each grade range under the three conditions: changing only the scale, changing only the weights, and changing both the scale and the weights.

Figure 7
Change in GPA Ranges from Unweighted 6-Point Scale to Unweighted 10-Point Scale through Grade 11

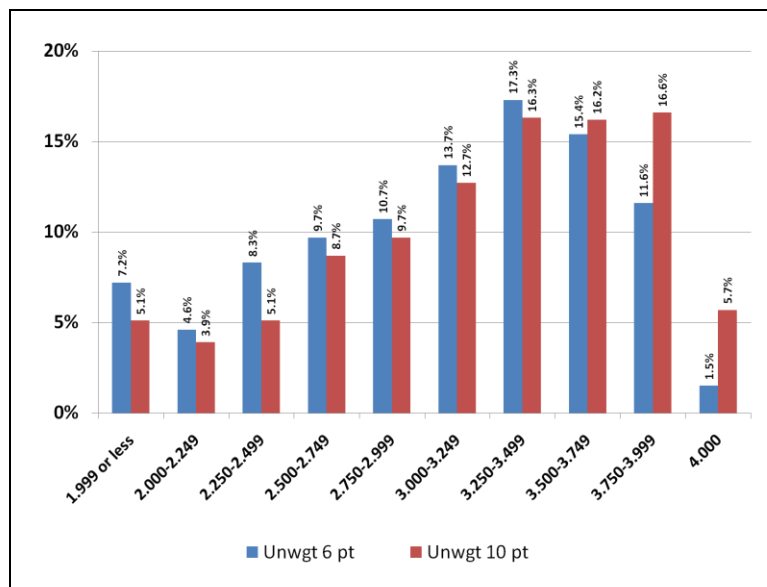


Figure 8
Change in GPA Ranges in the Weighted 6-Point Scale from Weight of 0.5 points for AP, IB, and Dual Enrollment Courses to Weights of 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment Courses through Grade 11

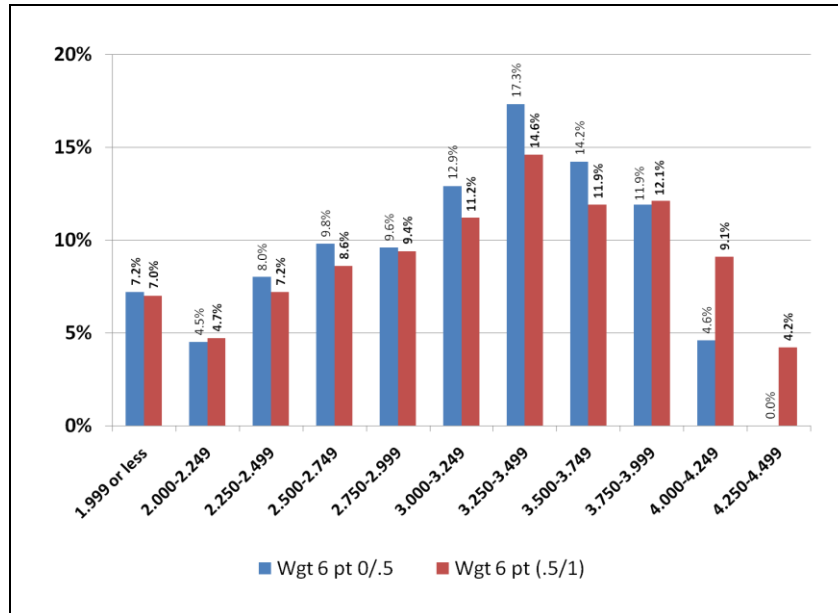
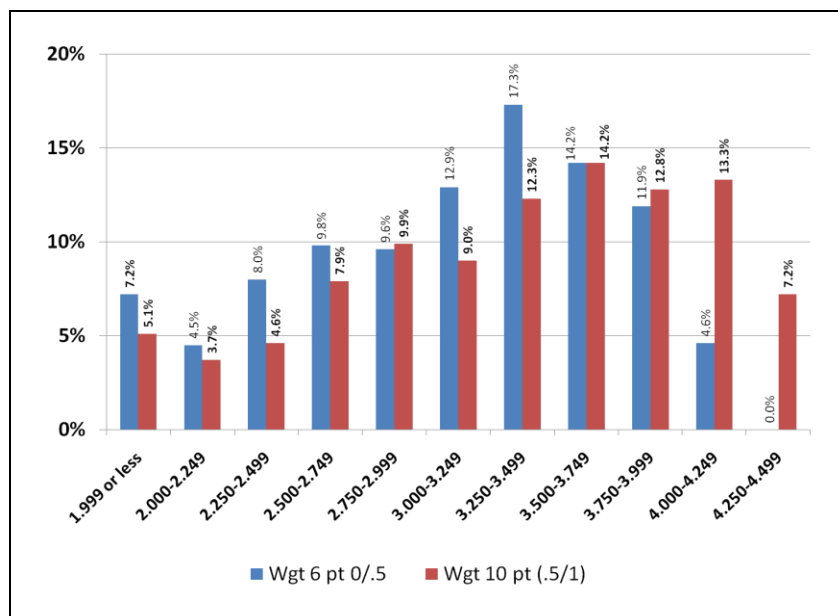


Figure 9
Change in GPA Ranges from a Weighted 6-Point Scale (0.5 for AP, IB, and Dual Enrollment) to Weighted 10-Point Scale (0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment) through Grade 11



Data analyses to this point are reflective of student grades through the end of Grade 11. This limit was selected as these are the grades submitted with college applications. Additional analyses were conducted to determine if GPA distributions changed when grade 12 grades were added. The results of this analysis indicate that grades/GPA did not change when senior year grades are included. Detailed results of analyses using data thru grade 12 can be found in Appendix I.

Summary of Findings for Distribution of Grades/GPA and Review of Transcripts

Results from various analyses conducted to investigate the relationships among grading scale, weights, and GPA suggest that there may be a difference between the GPA distributions of FCPS students and students from school divisions that use a 10-point grading scale and/or higher grade weights.

- The mean increase in GPA was 0.15 for FCPS students when changing the grading scale from a 6-point scale to a 10-point scale. The largest increase was among students with GPAs in the 2.25 to 3.50 range with a mean increase of 0.17 points.
- A change in weights from 0.5 points for AP, IB, and dual enrollment courses to 0.5 points for honors courses and 1.0 point for AP, IB, and dual enrollment courses resulted in a 0.10 points mean increase in weighted GPA for FCPS students. Students who did not take any advanced courses did not receive any increase in GPA, while the largest increase was seen among students with weighted GPAs of 4.00 and above with an increase of 0.28 points on average.
- Changing the current weighting policy to 0.5 points for honors courses and 1.0 for AP, Higher Level and Standard Level IB, and dual enrollment courses resulted in an average GPA increase of 0.10 points. Students who did not take any advanced courses did not receive any increase in GPA. Students with weighted GPAs of 4.00 and above had an average increase of 0.28 points.
- Changing the grading scale and increasing weights for advanced courses resulted in a mean increase in weighted GPA of 0.15 points for students with weighted GPAs below 2.0. The increase for students with weighted GPAs of 3.5 and above was 0.31 points.

It is important to note that these findings are estimates of the maximum adjustments possible when revising the grading policy based on calculations keeping all other factors that influence GPAs constant.

Survey of College Admissions Practices

The Survey of College Admissions Practices was used to examine the effect of different grading policies on college admissions, merit scholarships, and placement into honors programs. To analyze the survey data, various descriptive analyses were used to identify frequencies and to determine the response patterns for the total group as well as for subgroups of respondents (e.g., in-state vs. out-of-state, public vs. private, high selectivity vs. low selectivity), where appropriate.

Rather than presenting the findings by actual survey question, overarching questions that represent the major issues addressed by the survey are presented below. Following the overarching questions are the survey questions from which data were used to report results.

- What grading scales and weights are commonly used in the applicant pool?
(Survey Q3, Q5)
- How important a factor is GPA in college admissions, merit scholarships, and placement into honors programs?
(Survey Q2, Q10, Q12, Q14, Q15, Q18)
- How do colleges use GPA when evaluating applicants?
(Survey Q6, Q7, Q8, Q9)
- Do colleges require a minimum GPA for merit scholarships and placement into honors programs?
(Survey Q13, Q16, Q17)
- How do colleges compare applicants?
(Survey Q1)
- How do colleges react to different grading formats?
(Survey Q4, Q11)

For each question, summary analyses are presented along with findings. Data tables for corresponding questions can be found in Appendix J.

What grading scales and weights are commonly used in the applicant pool?

College admissions officials receive applications from students who attend a variety of high schools with varying grading policies. Information was obtained in an attempt to determine how common certain grading scales are and which, if any, seem to be the most prevalent.

Data indicate that the 10-point grading scale and letter grades are the most common grading scales seen by respondents; the 6-, 7-, and 8-point grading scales are the least common grading scales seen by these respondents. The 10-point scale is found more commonly with out-of-state colleges compared to in-state colleges, by private colleges compared to public colleges, and by more selective colleges (below 50 percent acceptance rate) compared to less selective colleges (above 50 percent acceptance rate).

High schools weight advanced courses differently; however, data indicate that 0.5 is the most common weight seen by respondents for honors courses, and 1.0 is the most common weight seen for AP, Standard Level and High Level IB courses. This observation holds true for both the total group of respondents as well as for the subgroups' analyses. The survey found 59 percent of the colleges see 0.5 quality points awarded for honors courses. Over two-thirds (67 percent) indicated that AP courses received 1.0 quality points. For IB courses, 58 percent of the colleges reported that Higher Level IB courses received 1.0 quality points; 47 percent of the colleges reported that Standard Level IB courses received 1.0 quality points.

How important a factor is GPA in college admissions, merit-based scholarships, and placement into honors programs?

Both academic factors and other factors were considered on the survey. For academic factors, grades in core courses, rigor of curriculum, and the number of advanced courses taken were the top three factors in terms of influence in college admissions. SAT/ACT scores and weighted GPA were additional factors that seem to influence college admissions. This pattern holds true for the total group of respondents as well as for most of the subgroup analyses.

Additional questions addressed the award of merit-based scholarships and placement into honors programs. Academic factors that influence scholarships and honors programs include SAT/ACT scores, weighted GPA, and the number of advanced courses. As with college admission decisions, these observations are true for the total group of respondents and subgroups with a few exceptions (e.g., compared to weighted GPA, the number of advanced courses taken seems to be a more important factor for merit scholarships among private colleges and highly selective colleges).

Factors in the Award of Merit-Based Scholarships. Responses related to the award of merit-based scholarships illustrate the very different approaches to this issue, particularly, when differentiated by institutional acceptance rate. Of the 55 colleges responding to this section, 29 percent of the more selective (acceptance rate under 50 percent) reported information about merit scholarships. In the less selective group (acceptance rate above 50 percent), 71 percent provided responses about merit scholarships.

It was reported that 88 percent of the more selective group of colleges and 100 percent of the less selective group indicate that SAT/ACT test scores are used in the award of merit-based scholarships. The second most important factor for merit-based scholarships was weighted GPAs. Forty-four (44) percent of the selective college group reported that weighted GPA was used in scholarship decisions, whereas 71 percent of less selective colleges used weighted GPA in scholarship decisions. Although use of unweighted GPA was similar for selective and less selective colleges (25 percent and 23 percent, respectively), the number of advanced courses (81 percent vs. 41 percent) and geographic region (31 percent vs. 15 percent) indicate varied use of these factors.

Factors in Placement into Honors Programs. As with merit-based scholarships, placement into honors programs varied across colleges, particularly between selective and less selective colleges. Of the 44 colleges responding to this section, 33 percent of the more selective colleges reported information about honors placement. In the less selective group, 90 percent of the colleges provided responses about honors placement.

Both groups (selective and less selective colleges) report using SAT/ACT test scores as a factor in their honors placement decisions (88 percent for more selective colleges and 92 percent for less selective colleges). Weighted GPA also seemed to be a factor in honors placement. Nearly two-thirds (63 percent) of the less selective colleges reported using weighted GPA for honors placement decisions, and 72 percent of the more selective colleges used weighted GPA. The greatest difference was reported in the “Other” category, with 63 percent of the more selective group, contrasted to 36 percent of the less selective group, considering other factors in their honors placement decisions.

Respondents also provided additional information in an open-ended question regarding merit-based scholarships and placement into honors programs, as summarized in Tables J7 and J8 in Appendix J.

How do colleges use GPA when evaluating applicants?

The literature and data from this survey indicate that high schools use a variety of grading scales to report academic achievement. To account for different grading policies, some colleges recalculate student GPAs through a variety of methods.

More than half (55 percent) of the respondents indicated that they do not recalculate GPA. Data also indicate that all of the colleges (n=35) that do not recalculate GPA compare applicants’ GPAs by considering grading scales and how the high school weighs advanced courses. Furthermore, these colleges review the rigor of courses taken by applicants. The majority of these colleges also consider high school GPA distribution in the decision-making process. This observation holds true for the group as a whole (n=35) as well as for subgroups (e.g., in-state vs. out-of-state, public vs. private, level of selectivity).

Nearly half (45 percent) of the respondents indicated that they recalculate GPAs before making admission decisions. Most of these 29 colleges recalculate GPAs to include only grades from academic courses. More than one-third of the respondents report that they recalculate GPA by adding or removing course weights, dropping pluses and minuses, and/or converting grades to a different grading scale. Subgroup analyses indicate that more private colleges than public colleges and more out-of-state colleges than in-state colleges remove course weights to recalculate GPA.

Do colleges require a minimum GPA for merit-based scholarships and placement into honors programs?

Survey respondents reported their standard practices with regards to minimum GPAs as a requirement for merit-based scholarships and placement into honors programs. This may be thought of as a “cut” score or GPA when reviewing applications for scholarships and honors programs.

Of the 55 colleges that offer merit-based scholarships, 18 (33 percent) indicated that they require a minimum GPA. Minimum GPAs for merit-based scholarships ranged from 2.5 to 3.9. Of the 44 colleges that offer honors programs, 17 (39 percent) indicated that they require a minimum GPA ranging from 3.0 to 3.9, though most colleges required a 3.5 for honors programs.

How do colleges compare applicants?

Given the wide variability in the methodology used to calculate weighted and unweighted GPA as well as many other factors, colleges compare applicants when making admissions decisions. Colleges may compare applicants to all applicants, only those from the same high school, from the same state, etc.

Most colleges (89 percent) compare applicants with the entire applicant pool for admission to the same freshman class; over half of the respondents (59 percent) compare applicants within the same high school. This holds true both in total and subgroup analyses.

How do colleges react to different grading formats?

Forty-five (45) percent of colleges consider both cumulative GPA and letter grades equally important when making college admission decisions. Nearly one-third (33 percent) consider cumulative GPA as playing a greater role than letter grades in the applicant review process. The remaining 22 percent rely upon individual letter grades in reviewing their applicant pool. The majority of colleges (69 percent) do not perceive a numeric grade of 93 to be more competitive than a letter grade of B+. The pattern holds true for most subgroup analyses.

Summary of Findings from the Survey of College Admission Practices

The Survey of College Admissions Practices provided valuable information into the decision-making process with regards to who is offered admission to colleges. Specifically, data provide information on the importance and influence of grades in core courses, rigor of courses taken by applicants, standardized test scores, GPA, and other factors that influence college admissions, merit scholarships, and placement into honors programs. Following is a summary of findings.

- The 10-point grading scale and letter grades are the most common grading scales observed in the applicant pools of colleges surveyed. The 10-point grading scale is more commonly found by out-of-state colleges compared to Virginia colleges, by private colleges compared to public colleges, and by colleges with less than a 50 percent acceptance rate compared to more selective colleges.
- Fifty-five (55) percent of colleges indicate that they do not recalculate GPAs. High school grading scales and weights, rigor of courses, and school GPA distribution are the most important factors considered by these colleges when comparing applicants for college admissions.
- Forty-five (45) percent of the colleges recalculate applicants' GPAs. Of these colleges, 62 percent of colleges use grades from core courses and 38 percent drop the plus and minus from grades.
- Eighty-nine (89) percent of the respondents compare applicants to all other students in the applicant pool; 59 percent compare applicants within the same high school.
- Grades in core courses, rigor of curriculum, number of advanced courses, SAT/ACT scores, and weighted GPA are the most important factors in college admissions.

- Of the 55 colleges that offer merit scholarships, 18 colleges (33 percent) require a minimum GPA ranging from 2.5 to 3.9 for merit scholarships; 96 percent use SAT/ACT scores and 64 percent use weighted GPA for merit-based scholarships.
- Of the 44 colleges that offer honors programs, 17 colleges (39 percent) require a minimum GPA ranging from 3.0 to 3.9 for placement into honors programs, with 3.5 as the most frequently used cutoff; 91 percent use SAT/ACT scores, and 70 percent use weighted GPA for placement into honors programs.
- Within the context of evaluating an applicant’s academic achievement in a given course, the majority of the colleges (69 percent) do not perceive a numeric grade of 93 as more competitive than a letter grade of B+, a finding true both for total and subgroup analyses.

Context and Consequences of Revising the Grading Policy

Ongoing literature and information searches were conducted to obtain the most comprehensive information available to identify the consequences of changing the current FCPS grading policy. Grading policies in more than 12 states and 78 school divisions were reviewed and found to have changed in the past five years. The large majority (75 out of 78) of school divisions revised their policies to include a 10-point grading scale or a modified 10-point grading scale. If modified, school divisions adjusted the lower end to the grading scale for an “F” (e.g., 64 and below).

Given the recent nature of many grading policy changes and the limited information, school divisions have not reported nor do they have data available associated with the consequences of revising their grading policies (e.g., change in college admissions percentages, change in admissions percentages by college selectivity, difference in merit-based scholarship awards). Many school divisions have just begun to implement the new grading policies with the new grading scales and/or weights implemented during the 2007-2008 school year or during the 2008-2009 school year. In addition, some school divisions that revised their grading scale and weights have phased in changes over several school years. This phase-in may apply to the policies (e.g., grading scale and weights) or to graduating classes. As such, some school divisions implement the grading policy changes across grade levels resulting in cumulative student GPAs based on different grading scales and/or weights. Other school divisions are phasing in the changes by class (e.g., the freshman class implements the new grading policy, whereas, the sophomore, junior, and senior classes continue to use the prior grading policy through graduation).

As grading policy revisions are implemented, several consequences can be anticipated. A change in grading scale and/or weights will require the student report card to be changed. This new information (i.e., grading scale and/or weights) will need to be printed on the report card. If letter grades are calculated from numerical grades and automatically generated, formulas and calculations will need to be changed.

In addition to student report cards, school and school division “report cards” would change. It is in this type of document that grading policies may be explained and grade/GPA distributions for the school and/or school division provided. This investment may also include the dissemination of information to in-state and out-of-state colleges to inform them of the new policies.

Teacher training may also be required should a school division revise one or more components of its grading policy. Such training could focus on the new grading policy and how to standardize implementation across schools. Training may also limit variability in applying the grading policy across schools.

Implementing new grading policies may also require future evaluation of the outcomes associated with the new policy. For example, data on the impact on students and their admission to college, receipt of merit-based scholarships, and placement into honors programs may be studied.

Evidence to Support the Current FCPS Grading Policy

Despite growing attention to grading scales, our review of the literature found no specific research regarding the effects of grading policies on college admissions outcomes.

- Betts and Grogger (2003) found that higher standards promote student achievement as measured by standardized test scores. The greatest effects were seen at the top end of the test score distribution.
- Betts and Grogger (2003) found that higher standards had no significant effect on educational attainment (i.e., high school graduation rates and college attendance.) The researchers found that higher standards had a negative effect on the graduation rates for black and Hispanic students.

The study used a national probability sample so the findings can be generalized to U.S. schools and students. Notwithstanding these attributes, the study provides evidence that higher grading standards support the educational development of students.

In addition, colleges and universities use a variety of factors to make admissions decisions and “one size does not fit all.” There seem to be as many “models” or processes used for admissions selection as there are colleges and universities, each with its own policies and selection processes.

V. INVESTIGATION SUMMARY AND ANALYSIS

The purpose of this investigation was to provide the Superintendent and School Board members with information on how the Division’s current grading policy compares to other school divisions and the effect this may have on college admissions, honors programs, and merit scholarships for FCPS students. This information would serve as a basis for determining whether to make adjustments to the policy.

To facilitate the discussion, a summary of the key points organized by study question is presented. The paper presents this information with considerations affecting the assessment of four possible action alternatives. These are listed as options A through D, in sequential order from “no change in policy” to the most extensive degree of change (i.e., grade scale and weights). Each option includes a list of related findings from the investigation and a list of additional factors that decision-makers may wish to consider.

Research Question #1:

Is the distribution of grade point averages (weighted and unweighted) for FCPS high schools substantially different from those in comparable school systems that use a 10-point grading scale?

Key Points:

To address this question, the study’s original intent was to compare the grade point averages of FCPS high schools to those of high schools in other school divisions. Data necessary for such an analysis, however, were not publicly available. Consequently, the only alternative was to use available data, which, in turn, compromised the validity of the results. The reader, therefore, should use caution in interpreting results from this component of the study.

The findings suggest that the distribution of grade point averages (GPAs) in FCPS classes is lower than those in divisions that use a 10-point grading scale. For example, a greater proportion of students in graduating classes earned GPAs 3.50 and above among schools using a 10-point scale. This first component of the study, however, only examined the upper end of the achievement distribution.

In the second component of this study, investigators drew a random sample of 1,000 FCPS transcripts to recalculate GPAs. Changing the grading scale increased the GPAs of students across the board (except for the 15 students with unweighted GPAs of 4.0). Changing the grading scale for students with unweighted GPAs between 2.25 and 3.50 increased an average of 0.17 points.

Changing the weights for honors, AP, Standard Level and Higher Level IB, and dual enrollment courses only increased weighted GPAs among students who took these advanced courses. By increasing the weights, students with GPAs of 3.5 and above increased 0.19 points on average.

Based on the findings of these two components, changes in grading policy would increase the GPAs of FCPS students and reduce differences in GPA distributions between FCPS and other school divisions. Changing the weights has a greater impact on students with GPAs of 3.50 and above, while changing the scale has a greater impact on students with GPAs below 3.50.

Do FCPS grade point averages differ from those computed on various 10-point scales?

Yes. In a comparison with 35 high schools that use 10-point grading scales, the distribution of grade point averages (weighted and unweighted) in FCPS high schools was lower.

Research Question #2:

What is the impact of different grading policies on college admissions, merit-based scholarships, and honors placement?

Key Points:

Given the diverse nature of college admissions processes, as well as the limited data available, it was not feasible to determine the impact of grading policies on students' chances of gaining admission to college, merit-based scholarships, and honors programs in college. The FCPS College Admissions Survey and NACAC (2008) indicate that grades in college preparatory/core courses are an important factor in college admissions. It should be noted that this factor directly influences unweighted and weighted GPA.

The FCPS Survey found that 89 percent of respondents compared applicants to the entire applicant pool in their evaluation process. In addition, they use grades in core courses, rigor of the curriculum, number of advanced courses, SAT/ACT scores, and weighted GPA to evaluate students. Among those colleges that offer merit-based scholarships and honors programs, SAT/ACT scores and weighted GPA scores were identified as the two most important factors. Respondents to the survey also indicated that they either recalculate GPAs in various ways, or take grading policy differences into account.

Do college admissions offices take any differences into account when evaluating candidates?

Yes. Based on the FCPS survey of admissions officers, colleges and universities use a variety of methods to account for different grading policies and other factors when evaluating high school candidates. However, when evaluating candidates for merit scholarships and honors programs, SAT/ACT scores and weighted GPA scores are the two most important factors.

Research Question #3:

What are the potential consequences of adjusting the FCPS grading policy?

Key Points:

Literature reviews found that 78 school divisions in 12 states have adjusted their grading policies in the past five years. Of these, 75 school divisions adopted the 10-point grading scale, and three Virginia school districts kept their original grading scale. The actual effects of these policy changes on admissions, merit scholarship, and honors programs have not been studied.

Additional considerations must be taken into account. These include but are not limited to: training teachers and other staff; modifying technology; revising report documents and procedures; communicating with parents, students, staff, other community stakeholders, colleges and universities; implementing changes; and budgeting for associated costs.

What evidence supports the current grading policy?

Key Points:

Given the 6/10-point scale that FCPS uses to assign letter grades, the Division's grading policy establishes a higher standard of academic achievement compared to other school divisions. Although this FCPS investigation found no evidence of any effects of grading scales on actual admissions outcomes, Betts and Grogger (2003) concluded that higher grading standards do promote student achievement, especially among students at the upper end of the GPA distribution. Higher grading standards, however, had no positive effects on educational attainment for students.

Are there differences in actual admission, merit scholarships award, and honors placement successes?

College admissions: Unknown. Due to limited data, this study only provided descriptive information about factors that influence college admissions decisions. Actual outcomes were not observed.

Merit scholarships and honors programs: Probable. Based on the FCPS survey of admissions officers and literature reviews, grading policies could have a direct impact on merit-based scholarships and honors placements decisions.

Option A: Make no changes to the current FCPS grading policy.

Related Findings	Additional Considerations
<ul style="list-style-type: none">▪ Based on the FCPS admissions survey and literature reviews, high school grades in core courses are the most important factor in college admissions.▪ Based on the FCPS admissions survey and literature reviews, colleges evaluate applicants within a context of many factors.▪ Based on the FCPS admissions survey, 39 percent of the colleges with honors programs and 33 percent of the colleges that offer merit-based scholarships reported a minimum GPA requirement for those programs.▪ Based on literature reviews, one national study found that higher grading standards raise achievement; the study found no positive effect on educational attainment.	<ul style="list-style-type: none">▪ No implementation costs.

Option B: Alter the FCPS grading policy by changing the grade weights to 0.5 points for honors courses and 1.0 point for AP, IB, and dual enrollment courses, and leave the current grade scale structure in place.

Related Findings	Additional Considerations
<ul style="list-style-type: none"> ▪ Using publicly available data, FCPS students had lower weighted GPAs than students in other school divisions. ▪ Based on the FCPS admissions survey, colleges reported 0.5 and 1.0 as the most common weights reviewed. For example, 0.5 for honors (59 percent), 1.0 for AP (67 percent), 1.0 for Higher Level IB (58 percent), and 1.0 for Standard Level IB (47 percent). ▪ Based on the FCPS admissions survey and literature reviews, weighted GPA is among the important factors for college admissions. ▪ Based on the FCPS admissions survey, SAT/ACT scores and weighted GPA are the two most important factors in merit-based scholarship awards and honors placement. ▪ Based on the FCPS transcript and GPA distribution studies, changing weights for advanced courses has a greater increase on weighted GPAs for students with weighted GPAs of 3.50 and above. ▪ Based on the FCPS admissions survey, a change in weights will improve some FCPS students' eligibility for merit-based scholarships and honors programs. 	<ul style="list-style-type: none"> ▪ Added incentive for all students to take honors and advanced courses. ▪ One-time implementation costs. ▪ Timeline for implementation of the new policy. ▪ Communicate the changes to community stakeholders. ▪ Revise reporting documents (e.g., internal reports, transcripts, profiles) and procedures. ▪ Compliance with state guidelines for providing weights for honors and some Standard Level IB courses.

Option C: Alter the FCPS grading policy by changing the grade scale to a 10-point scale, and leave the current grade weights structure in place.

Related Findings	Additional Considerations
<ul style="list-style-type: none"> ▪ Using publicly available data, FCPS students had lower unweighted GPAs than students in other school divisions. ▪ Based on transcript analyses, a change in grading scale increased unweighted GPAs by 0.17 points on average for students with unweighted GPAs between 2.25 and 3.50. ▪ Based on transcript analyses, a change in grading scale has less of an effect on GPA than a change in weights for students who completed advanced courses. ▪ Based on transcript analyses, a change in grading scale increases GPAs for a greater number of students than just a change in weights. ▪ Based on the FCPS admissions survey and literature reviews, high school grades in core courses are the most important factor for college admissions. ▪ Based on the FCPS admissions survey, a change in grading scale will improve some FCPS students' eligibility for merit-based scholarships and honors programs. 	<ul style="list-style-type: none"> ▪ One-time implementation costs. ▪ Timeline for implementation of the new policy. ▪ Train teachers and other instructional personnel in the implementation of the new grading scale. ▪ Revise reporting documents (e.g., internal reports, transcripts, profiles) and procedures. ▪ Communicate the changes to community stakeholders.

Option D: Alter the current FCPS grading policy by changing the grade scale to a 10-point scale and the grade weights to 0.5 points for honors courses and 1.0 point for AP, IB, and dual enrollment courses.

Related Findings	Additional Considerations
<ul style="list-style-type: none"> ▪ Using publicly available data, FCPS students had lower unweighted and weighted GPAs than students in other school divisions. ▪ Based on transcript analyses, a change in grading scale and weights increases GPAs for the greatest number of students. ▪ Based on the FCPS admissions survey, colleges reported 0.5 and 1.0 as the most common weights that they review. For example, 0.5 for honors (59 percent), 1.0 for AP (67 percent), 1.0 for Higher Level IB (58 percent), 1.0 for Standard Level IB (47 percent). ▪ Based on the FCPS admissions survey and literature reviews, weighted GPA is among the important factors for college admissions. ▪ Based on the FCPS admissions survey, SAT/ACT scores and weighted GPA are the two most important factors in merit-based scholarship awards and honors placement. ▪ Based on the FCPS admissions survey, a change in grading scale and weights will improve some FCPS students' eligibility for merit-based scholarships and honors programs. 	<ul style="list-style-type: none"> ▪ Added incentive for all students to take honors and advanced courses. ▪ One-time implementation costs. ▪ Timeline for implementation of the new policy. ▪ Train teachers and other instructional personnel in the implementation of the new grading scale. ▪ Communicate the changes to community stakeholders. ▪ Revise reporting documents (e.g., internal reports, transcripts, profiles) and procedures. ▪ Compliance with state guidelines for providing weights for honors and some Standard Level IB courses.

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APPENDIX A
FCPS Grading Policies

Grading Scale

High School Teacher's Guide: Grading and Reporting to Parents

<http://www.fcps.edu/ss/StudentServices/Guidance/HSGrReporting.pdf>

SPECIAL SERVICES

Promotion, Retention, Grading, and Graduation Requirements

High School Teacher's Guide: Grading and Reporting to Parents

This regulation supersedes Regulation 2430.4P.

I. PURPOSE

To establish specific procedural guidelines that must be followed in grading and in reporting to the parents or guardians of Fairfax County Public Schools (FCPS) high school students and to ensure continual and consistent written and oral communication with parents or guardians.

II. SUMMARY OF CHANGES SINCE LAST PUBLICATION

Section III.C. has been changed to reflect that the *High School Teacher's Guide: Grading and Report to Parents* is now available online.

III. REPORTING TO PARENTS OR GUARDIANS

- A. High school students shall be formally evaluated every nine-week grading period in accordance with established policy for all FCPS students.
- B. High schools shall use approved report cards each nine weeks for reporting student achievement.
- C. Report card grades shall not deviate from those specified in the *High School Teacher's Guide: Grading and Reporting to Parents*, which is available online for reference or review.
- D. Teachers shall not deviate from the guidelines for determining grades as specified in the *High School Teacher's Guide: Grading and Reporting to Parents*.
- E. High schools shall use the approved interim each nine weeks to notify parents or guardians of students whose performance warrants a D+, a D, or an F or whose performance drops two grades below previously reported progress.

- F. Teachers shall adhere to the current version of Regulation 2430 for courses taken for high school credit by middle school students.

FAIRFAX COUNTY PUBLIC SCHOOLS

Weights and GPA Calculation
FCPS Regulation 2462.5

Regulation 2462.5
Special Services
School Counseling Services
Effective 01-17-07

SPECIAL SERVICES

Promotion, Retention, Grading, and Graduation Requirements

Grade Point Average and Class Rank

This regulation supersedes Regulation 2462.4.

I. PURPOSE

To establish procedures for determining a student's grade point average (GPA) in high school and to clarify class rank.

II. PROCEDURES FOR DETERMINING GRADE POINT AVERAGE

- A. GPA shall be calculated on the basis of all courses for which credit has been earned, or attempted, including repeated courses previously passed. This calculation includes grades for courses taken in the sixth, seventh, and eighth grades for high school credit.
- B. Students entering high school and students entering the sixth, seventh, and eighth grades and enrolled in a high school course shall be advised of the method of determining GPA during the spring orientation and academic advising sessions.
- C. Quality points are numerical values assigned to grades for the purpose of determining a numerical average. Quality points shall be assigned to grades earned in all courses for which credit is received, as follows:

A - 4.0	D+ - 1.5
B+ - 3.5	D - 1.0
B - 3.0	F - .0
C+ - 2.5	P - .0
C - 2.0	

Advanced Placement (AP) courses and specified International Baccalaureate (IB) courses shall be weighted for students who pass the course and sit for the appropriate AP or IB exam by applying an additional .5 quality point to the quality point value assigned to the final

grade. Courses for which Advanced Placement are a prerequisite also will receive an additional .5 quality point. An exception occurs if a grade of F is assigned. For example, a final grade of A in an AP course shall receive 4.5 quality points for purposes of calculating GPA.

- D. The pass grade for pass-fail courses shall not be included in the computation of GPA; the fail grade shall be included. Courses dropped shall be included in the computation of GPA in accordance with the current version of Regulation 2445.
- E. A student's GPA shall be determined by dividing the total number of quality points earned by the number of courses attempted. The GPA shall be reported to three decimal places (thousandths).
- F. Each high school will be provided with a percentile rating of GPAs for estimating class rank for individual scholarships or military applications that require this information. High schools will not calculate a numerical class rank other than this percentile ranking.

III. COMMUNICATION WITH COLLEGES AND UNIVERSITIES

The principal and director of Student Services shall provide written communication with colleges and universities to which students apply through the following:

1. Explanation of the class rank policy provided on the Fairfax County Public Schools' profile, which can be accessed at <http://www.fcps.edu/ss/StudentServices>.
2. Explanation of the class rank policy provided on each school profile, which can be accessed at <http://www.fcps.edu/profiles>.

See also the current version of:

Regulation 2445,
Rules and Procedures for Students
Dropping High School Courses

FAIRFAX COUNTY PUBLIC SCHOOLS

APPENDIX B

FCPS History with Grading Scales and Weights

Grading policy has been a concern of the FCPS School Board for many years. By reviewing School Board minutes, it is clear that this issue has come forward several times. Following is an overview of relevant School Board minutes and other documents related to grading policy.

A review of available FCPS transcripts from early 1910 to the present indicates that the grading policy has changed over the years. A transcript from 1912 indicates that FCPS used a modified 10-point grading scale:

- 90-100 A
- 80-90 B
- 75-80 C
- 65-75 D
- < 65 E

The next available transcript from 1929 presents a modified 6-point grading scale:

- 95-100 A
- 88-94 B
- 81-87 C
- 75-80 D
- < 75 R (for repeat)

From 1929 to 1932, it seems the lower end of the grading scale was revised so that a grade average of 60-74 percent received an “E,” and grades lower than 60 percent received an “F.” The grading scale was changed again after this time period. From the 1930s through 1958, transcripts indicate that several letter grading scales were used:

- Excellent H
- Satisfactory S
- Passing P
- Unsatisfactory U

- Excellent E
- Good Progress G
- Medium Progress M
- Little Progress L
- Unsatisfactory Progress U

- Excellent A
- Above Average B
- Average C
- Below Average D
- Failure F

By the early 1960s, the grading scale reverted to letter grades based on numerical averages. Records indicate that the following grading scale was used from 1961 to 1978:

- 94-100 A
- 87-93 B
- 80-86 C
- 70-79 D
- < 70 F

Grade values also have been observed on transcripts from 1969 to 1973:

- 4.0 A
- 3.0 B
- 2.0 C
- 1.0 D
- 0 F

A review of FCPS School Board minutes also provides insight into the discussions that have occurred over the years regarding grading scales. Until 1978, no School Board minutes were located that addressed the grading policy in FCPS. From 1978 to present, discussions are summarized below. As is apparent, grading policy came under great debate in the late 1970s and early 1980s. The issue has not been raised in a public forum from the early 1980s to the present time.

The Late 1970s and Early 1980s

By the 1978-1979 school year, the debate regarding the school division's grading scale was brought before the School Board. Several parents reported that FCPS students graded on the "restrictive" 6- to 7-point grading scale were at a disadvantage when competing for college admissions with students from other school divisions that used a 10-point grading scale. These parents presented specific examples of students from FCPS and students from a school division that used a 10-point grading scale. Using numerical averages in specific subjects, the FCPS students had a GPA of up to 1.0 point lower than students from a school division using a 10-point grading scale. Parents also presented results of conversations with college admissions officials that indicated GPA and grades were viewed as absolute rather than in the context of the school division's grading scale.

Late in 1978 during a presentation to the Superintendent and the School Board, a high school teacher reported that teachers across the school division were not applying the grading scale consistently. It seemed that teachers used their own grading scale when assigning letter grades. Furthermore, a representative of the Fairfax Education Association questioned the grading system as presented in the proposed FCPS Six-Year Plan, as it related to grading criterion-referenced tests and teacher's required work.

This discussion continued into 1979 with several points that highlighted the debate on grading scale specifically, and grading policy in general:

- Teacher discretion should be used in assigning grades. This issue was brought forward by both parents and students.
- Comparisons between FCPS students and students from school divisions using a 10-point grading scale place the FCPS students at a disadvantage when applying for college admission. Specifically, a school-based PTA found that over a 4-5 year period when teachers began implementing the grading policy consistently, there was a 164 percent increase in the number of Fs awarded, a 42 percent increase in the number of Ds awarded, and an 11 percent to 14 percent decrease in the number of As, Bs, and Cs awarded.
- Parental discussions with college admissions officials indicated that grades/GPA were not considered in the context of the school division's grading scale. FCPS found different results (i.e., grading scale was considered in review of college applications) when they conducted a survey of college admissions officials.
- Recommendations of the Student Advisory Council included the reporting of numerical averages for grades on report cards in combination with letter grades.
- The FCPS 6-point grading scale was not comparable to other school divisions around the country.
- Concerns arose regarding average and struggling students, as they would be disadvantaged the most by the restrictive or 6-point grading scale.

By early 1980, a recommendation was made to retain the current grading system that included letter symbols, a numerical scale, and class rank quality-point values. An outside consultant was hired to review the FCPS grading policy, and again, the recommendation was made to retain the grading policy with the 6-point grading scale. Several School Board members seemed to recommend or were advocating for a 10-point grading scale with pluses and an additional 0.5 weight for honors and AP courses.

Newspaper reports chronicled the debate as well; the *Washington Post* ran many articles summarizing activities and events relating to the grading policy debate. Coverage seemed to begin in the fall of 1978 with an article discussing the implementation of the grading scale that had been in effect since 1963 (Locke, 1978). Up until this time, teachers had implemented the grading scale inconsistently, and by 1978, they were expected to use the scale for all intermediate and high school grades.

By January 1979, the *Washington Post* reported that the FCPS School Board met and agreed to establish a committee to examine the grading scale issue (Locke, 1979). Upon completion of the report, the FCPS Grading Review Committee recommended an optional system that allowed teachers to use plus and minus grades for quarter, semester, and final grades (Moskowitz, 1979). The Fairfax County Council of PTAs did not support this recommendation; rather the council advocated for a 10-point grading scale with mandatory plus and minus grades (Hodge, 1981a). In April 1981, the FCPS School Board addressed the grading policy issue by voting to add plus grades (B+, C+, D+) on a combination 6-point grading scale (Hodge, 1981b). Though plus

grades were added to the grading scale, the scale itself did not change to a 10-point grading scale.

Even into the late 1980s, the uniform grading issue surfaced again. In the fall of 1987, the Virginia School Superintendent (i.e., the FCPS Superintendent during the above grading policy discussions) proposed adding numerical grades to high school transcripts sent to colleges for admission decisions (Cohn, 1987). Rather than requiring each school division in Virginia to adopt a uniform grading scale, the Virginia School Superintendent proposed adding numerical averages for each course to the high school transcript.

APPENDIX C
NACAC Data Tables

Table C1
Mean Ratio of Applications to Admission Officers
by Institutional Characteristics: 2006

	Applications per admission officer
Total	393
Control	
Public	741
Private	279
Enrollment	
Fewer than 3,000 students	251
3,000 to 9,999	593
10,000 or more	961
Selectivity	
Accept fewer than 50 percent of applicants	649
50 to 70 percent	434
71 to 85 percent	339
More than 85 percent	233
Yield	
Enroll fewer than 30 percent of admitted students	469
30 to 45 percent	408
46 to 60 percent	402
More than 60 percent	162

SOURCE: NACAC Admission Trends Survey, 2006.

Reprinted with permission from the **State of College Admission 2007** by the National Association for College Admission Counseling, 2008.

Table C2
Percentage of Colleges Attributing “Considerable Importance”
to Factors in the Admission Decision: 1993 to 2006

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Grades in college prep/ strength of curriculum ¹	82%	83%	80%	78%	81%	79%	84%	78%	80%	76%	78%	80%	74%	--
Grades in college prep	--	--	--	--	--	--	--	--	--	--	--	--	--	76
Strength of curriculum	--	--	--	--	--	--	--	--	--	--	--	--	--	62
Admission test scores	46	43	47	48	50	51	54	58	52	57	61	60	59	60
Grades in all courses	39	37	41	38	41	44	42	43	45	50	54	57	54	51
Essay	14	17	21	20	18	19	19	20	20	19	23	25	23	28
Class rank	42	40	39	36	34	32	32	34	31	35	33	28	31	23
Counselor rec.	22	20	19	17	20	16	18	16	17	16	17	18	17	21
Demonstrated interest	--	--	--	--	--	--	--	--	--	--	7	7	15	21
Teacher rec.	21	19	18	19	19	16	14	14	16	14	18	18	17	20
Interview	12	12	15	13	11	11	9	11	11	10	9	9	9	10
Extracurricular activities/work ²	6	6	7	6	6	4	5	7	6	7	7	8	8	--
Extracurricular activities	--	--	--	--	--	--	--	--	--	--	--	--	--	8
Work	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Subject tests (AP, IB)	--	--	--	--	--	--	--	--	--	6	7	5	7	8
State exams	--	--	--	--	--	--	--	--	--	6	7	6	7	6
SAT II scores	--	--	--	--	--	--	--	--	--	--	--	--	--	5

-- Data are not available.

¹ On the 2006 survey, grades in college prep courses and strength of curriculum were listed as two separate factors. In previous years, one factor was listed as grades in college prep courses/strength of curriculum.

² On the 2006 survey, extracurricular activities and work were listed as two separate factors. In previous years, one factor was listed as work/extracurricular activities.

SOURCE: NACAC Admission Trends Surveys, 1993 through 2006.

Reprinted with permission from the **State of College Admission 2007** by the National Association for College Admission Counseling, 2008.

APPENDIX D
FCPS Survey of College Admission Practices

Welcome to the Survey of College Admission Practices sponsored by Fairfax County Public Schools.

This survey seeks information on the evaluation of candidates for freshman admission, honors placement, and merit scholarships. Pilot tests have shown that about 15 minutes will be required to complete the survey. To ensure that all of your responses are saved, please do not exit the survey until you have responded appropriately to all of the items. The survey results will be reported publicly only in aggregate terms, thus ensuring the anonymity of your institution. Please complete the survey by October 14.

For the purpose of this survey, honors programs refer to a variety of enriched opportunities offered to select students in recognition of their high school academic achievement. Merit scholarships are grants to students based on their academic performance with no financial need requisite.

We look forward to receiving your valuable contribution to this project.

General Background Information

(a) How would you describe your institution? Select all that apply.

- | | |
|----------------------------------|---------------------------------------|
| <input type="checkbox"/> Public | <input type="checkbox"/> Virginia |
| <input type="checkbox"/> Private | <input type="checkbox"/> Non-Virginia |

(b) From what region(s) are the applications that you *personally* review on behalf of your college/university? Select all that apply.

- | | | | |
|--------------------------------|--------------------------------|-------------------------------|--|
| <input type="checkbox"/> North | <input type="checkbox"/> South | <input type="checkbox"/> East | <input type="checkbox"/> West and Mid-West |
|--------------------------------|--------------------------------|-------------------------------|--|

(c) Which of the following best describes the most recent acceptance rate of applicants in your institution?

- | | | | |
|--|---------------------------------|---------------------------------|--|
| <input type="checkbox"/> Less than 25% | <input type="checkbox"/> 25-50% | <input type="checkbox"/> 50-75% | <input type="checkbox"/> More than 75% |
|--|---------------------------------|---------------------------------|--|

(d) Which of the following best describes the size of the undergraduate population at your institute?

- | | |
|---|--|
| <input type="checkbox"/> Less than 3,000 students | <input type="checkbox"/> 3,000 to 5,000 students |
| <input type="checkbox"/> 5,000 to 10,000 students | <input type="checkbox"/> More than 10,000 students |

Part I: Freshman Admissions

1. When evaluating freshmen applicants for college admission, with whom are they compared? Please select all that apply.

- Same high school
- Same school district
- Same state
- Same geographic region
- Same declared major
- Entire applicant pool

2. Please rate in whole numbers the relative influence of the following factors on your decisions about freshman admissions, using “4” as the highest and “1” as the lowest. Select all that apply.

- Rigor of School/District Curriculum
- Grades in Core Courses (i.e., English, Math, Science, Social Studies, Foreign Language)
- Number of Advanced Courses (e.g., AP, IB, Honors)
- Unweighted Overall GPA
- Weighted Overall GPA
- High School GPA Distribution (e.g., Percent of 4.0 and above)
- SAT/ACT Scores
- Other (please specify): _____

3. As you know, high schools calculate GPA using different grading and weighting scales. Please rate from 1 – 4 (4 indicating most common) each type of scale comprising your applicant pool. Rate all that apply.

- _____ 10-point scale (i.e., 90-100 = A)
- _____ 6-point scale, 7-point scale, 8-point scale
- _____ Numeric scale (e.g., 92.5% overall average)
- _____ Letter Grades
- _____ Other

4. With respect to an applicant’s letter grades versus cumulative GPA, which plays a greater role in your admissions review process?

- Individual Letter Grades
- Cumulative GPA
- Both equally

5. Please check the weights you see most often added for the following advanced programs.

	0 pts	0.5 pts	1.0 pts	other
Honors:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AP:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IB SL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IB HL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Does your college recalculate GPAs before making admission decisions?

- Yes
- No (Skip to Question 8)

7. Please indicate how you recalculate applicants’ GPAs. Select all that apply.

- Drop pluses and minuses from letter grades
- Recalculate GPA using grades from academic courses only
- Convert to a different scale (please specify): _____
- Add weights for advanced courses (e.g., AP, IB)
- Add weights for Honors courses
- Remove weights
- Other (please specify): _____

8. If you do NOT recalculate GPA, do you use the weighted or unweighted GPA?

- Not applicable (we *do* recalculate)
- Weighted
- Unweighted
- Both

9. If you do NOT recalculate GPA, how do you compare applicants' GPAs that are based on *different grading scales* and weights? Select all factors that you take into account.

- Not applicable (we recalculate)
- Grading scales and weights
- Rigor of courses taken by students
- Percent of graduates attending four-year colleges
- Mean SAT/ACT average of high school
- High school GPA distribution (e.g., percent of 4.0 and above)
- No extra considerations
- Other (please specify): _____

10. Please rate in whole numbers the influence of *other factors* on your decisions about freshman admissions, using "4" as the highest and "1" as the lowest. Select all that apply.

- Academic reputation of school or school district
- Geographic region of school
- Extracurricular activities
- Community service
- Employment
- Personal essays
- Letters of recommendation
- Other (please specify): _____

11. If a high school does not offer an official grading scale, does an applicant's academic achievement in a particular course appear more competitive if the transcript shows a numerical grade of 93 versus a letter grade of B+?

- Yes No

Part II: Honors Placement

12. When reviewing freshman applications, what factors do you consider for *Honors placement*? Select all that apply.

- Not applicable, no honors programs (*skip to Part III below*)
- Weighted GPA
- Unweighted GPA
- Recalculated GPA
- SAT/ACT
- Number of advanced courses
- Geographic region
- Others

13. Does your college require a minimum high school GPA for *Honors placement*? If “yes”, please specify the minimum requirement. Leave blank any that do not apply.

- Not applicable (no minimum required)
- Minimum unweighted GPA required for *honors placement* = _____
- Minimum weighted GPA required for *honors placement* = _____
- Minimum recalculated GPA required for *honors placement* = _____

14. Please identify how your decisions for *honors placement* differ from those used in the freshman admissions. Please consider all the factors identified in Part I above.

Part III: Merit Scholarships

15. When reviewing freshman applications, what factors do you consider for *merit scholarships*? Select all that apply.

- Not applicable, no merit scholarships (*skip to Part IV below*)
- Weighted GPA
- Unweighted GPA
- Recalculated GPA
- SAT/ACT
- Number of advanced courses
- Geographic region
- Others

16. With respect to academic merit scholarships, which of the following does your college/university offer? Please select all that apply.

- “Automatic” merit scholarships (no separate application required/non-financial aid based)
- Merit scholarships (separate application required for consideration/non-financial aid based)
- Do not offer merit scholarships

17. Does your college require a minimum high school GPA for *merit scholarship awards*? If yes, please specify the minimum requirement. Leave blank any that do not apply.

- Not applicable (no minimum required)
- Minimum unweighted GPA required for *merit scholarship* = _____
- Minimum weighted GPA required for *merit scholarship* = _____
- Minimum recalculated GPA required for *merit scholarship* = _____

18. Please identify how your decisions for *merit scholarships* differ from those used in the freshman admission process. Please consider all the factors identified in Part I above.

Part IV: Additional Information

19. Please provide any additional comments that might help us better understand your candidate evaluation methods and/or the impact of grade-point averaging methods on them.

Thank you for your assistance!

APPENDIX E

Table E1 School Districts Converting to a 10-Point Grading Scale				
School District	Location	School Year Grading Scale Changed¹	Student Enrollment²	Number of High Schools²
Albemarle County Public Schools	Charlottesville, Virginia	2007-2008	12,766	4
Ball Chatham School District No. 5	Chatham, Illinois	2006-2007	4,127	1
Big Horn County School District No. 2	Lovell, Wyoming	2008-2009	667	1
District of Columbia Public Schools	Washington, DC	2007-2008	59,616	32 (includes charter schools)
Dublin City Schools	Dublin, Ohio	2008-2009	12,939	3
Forest Municipal School District	Forest, Mississippi	2008-2009	1,609	1
Genoa-Kingston Community Unit School District No. 424	Genoa, Illinois	2008-2009	1,940	1
North Hunterdon-Voorhees Regional High School District	Annandale, New Jersey	2007-2008	2,915	2
Oyster River Cooperative School District	Durham, New Hampshire	2008-2009	2,060	1
Princeton Regional Schools	Princeton, New Jersey	2007-2008	3,370	1
Simsbury Public Schools	Simsbury, Connecticut	2005-2006	5,057	1
Sisters School District No. 6	Sisters, Oregon	2008-2009	1,360	1
Springfield School District No. 186	Springfield, Illinois	2007-2008	15,097	4

Table E1 School Districts Converting to a 10-Point Grading Scale				
School District	Location	School Year Grading Scale Changed¹	Student Enrollment²	Number of High Schools²
Unionville-Chadds Ford School District	Kennett Square, Pennsylvania	2007-2008	3,974	1
Upper Freehold Regional School District	Allentown, New Jersey	2005-2006	2,261	1
Walnut Hills High School	Cincinnati, Ohio	2005-2006		1
West Chester Area School District	West Chester, Pennsylvania		11,729	2

¹ Data collected and reported by FAIRGRADE.

² Data gathered from U.S. Department of Education, National Center for Education Statistics Common Core Data for 2005.

APPENDIX F

Table F1 Selected Grading Scales Across the Commonwealth						
School Division	Grading Scale					Weighting Policy¹
	A	B	C	D	F	
Accomack						
Albemarle	90-100	80-89	70-79	60-69	59 or below	Advanced Courses = 0.5 Honors, AP = 1.0
Arlington ¹	90-100	80-89	70-79	60-69	59 or below	AP= 1.0
Chesapeake	94-100	86-93	78-85	70-77	69 or below	Honors = 0.25 AP = 0.5
Chesterfield	94-100	84-93	74-83	64-73	63 or below	Honors, AP = 1.0 A+ (99-100) = 0.5
Fairfax	94-100	84-93	74-83	64-73	63 or below	
Falls Church ¹	90-100	80-89	70-79	60-69	59 or below	Grading Scale includes + and -
Giles ¹	90-100	80-89	70-79	60-69	59 or below	
Hampton	93-100	85-92	75-84	68-74	67 or below	
Henrico	93-100	85-92	77-84	70-76	69 or below	0.17 x #honors, AP courses passed / # years
Loudoun ¹	93-100	85-92	77-84	70-76	69 or below	AP = 0.7 Grading Scale includes +; + grade = 0.3
Newport News	92-100	83-91	74-82	65-73	64 or below	Honors = 0.5 AP = 1.0
Portsmouth	94-100	84-93	74-83	68-73	67 or below	Honors = 0.5 AP = 1.0
Prince William ¹	93-100	84-92	74-83	65-73	64 or below	Honors, pre-AP = 0.5 AP = 1.0
Pulaski ¹	90-100	80-89	70-79	60-69	59 or below	AP = 1.0
Stafford	94-100	86-93	78-85	70-77	69 or below	AP, IB, DE = 1.0 A+ (98-100) = 0.5
Suffolk	94-100	86-93	78-85	70-77	69 or below	Honors = 0.5 AP, IB = 1.0
Virginia Beach ¹	94-100	86-93	78-85	70-77	69 or below	
Williamsburg-James City ¹	90-100	80-89	70-79	60-69	59 or below	AP = 1.0

¹Data provided by FAIRGRADE.

APPENDIX G
Detailed Data for the Grades/GPA Distribution Study

Public Source GPA Distribution Analyses – Observations Included in Each Analysis

Data collected for all 35 10-point schools for which the required data could be found were used in the GPA distribution analyses. However, some 10-point schools reported only un-weighted GPAS, others reported only weighted data, and some reported both. These differences resulted in differing numbers of 10-point school observations for each measure analyzed, according to the GPA data reported. The number of observations for FCPS schools was the same for most analyses since both weighted and un-weighted data were available for all FCPS schools.

FCPS and 10-point schools were also “matched” according to class mean SAT scores. Five ranges of class mean SAT scores were defined. The mean GPA performance measure of all 10-point schools that fell within each range was computed and compared with the mean FCPS GPA performance for the same interval. Since differing numbers of both 10-point and FCPS schools fell within respective SAT intervals, differing numbers of observations were reflected in each.

Finally, 10-point and FCPS schools were also “paired” individually according to class mean SAT scores. SAT scores needed to match within 2 points for a 10-point school to be paired with an FCPS school for purposes of this analysis. Again the number of paired observations varied according to whether the 10-point schools provided weighted, un-weighted, or both types of GPA data.

The resulting number of observations for each analysis was as follows:

Table G1			
Sample Size for GPA Distribution Analyses			
ANALYSIS (10-Point / FCPS Observations)	Un-Weighted A- and Above	Un-Weighted GPA 3.5 & Above	Weighted GPA 4.0 & Above
Overall Mean Differences	23 / 24	23 / 24	22 / 24
Mean Diffs, SAT 1200-1249	3 / 1	3 / 1	5 / 1
Mean Diffs, SAT 1150-1199	7 / 3	7 / 3	9 / 3
Mean Diffs, SAT 1100-1149	3 / 7	3 / 7	3 / 7
Mean Diffs, SAT 1050-1099	1 / 7	1 / 7	1 / 7
Mean Diffs, SAT 1000-1149	1 / 6	1 / 6	3 / 6
Mean Diffs, Paired Schools	5 / 5	5 / 5	8 / 8

Table G2
Differences between 10-Point and FCPS High Schools
Percent of Classes with Unweighted GPAs “A-” and Above

Sch #	STATE	MEAN SATs	% UnWtd A- & Above	FCPS HIGH SCHOOLS	MEAN SATs	% UnWtd A- & Above (> 3.67)	% Pt Diffs UnWtd A- & Above
1	WI	1279	21.6				
2	CA	1273	20.0				
3	NY	1269	34.0				
4	CA	1262	22.0				
5	WI	1261	29.0				
6	CA	1254	30.0				
7	MN	1254	27.0				
8	NY	1251	33.0				
9	NJ	1225	INA				
10	MD	1221	37.0				
11	NY	1220	INA	LANGLEY	1219	17.3	INA
12	MA	1214	INA				
13	MD	1205	37.0				
14	NY	1205	28.7				
15	NY	1196	31.4	MCLEAN	1196	14.9	16.5
16	MD	1194	30.0				
17	NY	1192	35.7				
18	NY	1180	21.1	WOODSON	1174	16.7	4.4
19	MD	1167	23.0				
20	NY	1165	23.9				
21	OH	1165	INA				
22	TX	1163	INA				
23	MD	1162	27.0				
24	PA	1156	INA				
25	PA	1155	INA	OAKTON	1154	14.6	INA
26	TX	1150	INA				
27	VA	1149	INA	MADISON	1149	18.1	INA
				LAKE BRADDOCK	1145	16.0	
28	WA	1137	30.0				
29	OH	1132	INA				
30	MD	1126	25.4	ROBINSON	1129	14.5	10.9
				CHANTILLY	1116	15.9	
				MARSHALL	1116	14.7	
31	PA	1112	46.0	WESTFIELD	1111	16.6	29.4
				WEST SPRINGFIELD	1109	12.7	
32	MD	1092	16.2	FAIRFAX	1093	11.5	
				SOUTH LAKES	1092	15.8	0.4
				CENTREVILLE	1087	15.0	
				HERNDON	1079	10.9	
				WEST POTOMAC	1069	9.1	
				SOUTH COUNTY	1066	12.6	
				STUART	1053	7.2	
33	PA	1040	INA	FALLS CHURCH	1037	6.6	INA
				LEE	1027	8.7	
				ANNANDALE	1026	8.3	
				HAYFIELD	1024	7.0	
				EDISON	1017	8.7	
34	NY	1010	INA	MOUNT VERNON	1017	7.6	INA
35	MD	1005	14.0				
Mean (SATs 1200 to 1249)			34.2			17.3	16.9
Mean (SATs 1150 to 1199)			27.4			15.4	12.0
Mean (SATs 1100 to 1149)			33.8			15.5	18.3
Mean (SATs 1050 to 1099)			16.2			11.7	4.5
Mean (SATs 1000 to 1049)			14.0			7.8	6.2
Overall Means			28.0			12.5	15.4
					Mean Diffs Paired Schs		12.3

Tables G3
Differences between 10-Point and FCPS High Schools
Percent of Classes with Unweighted GPAs 3.5 and Above

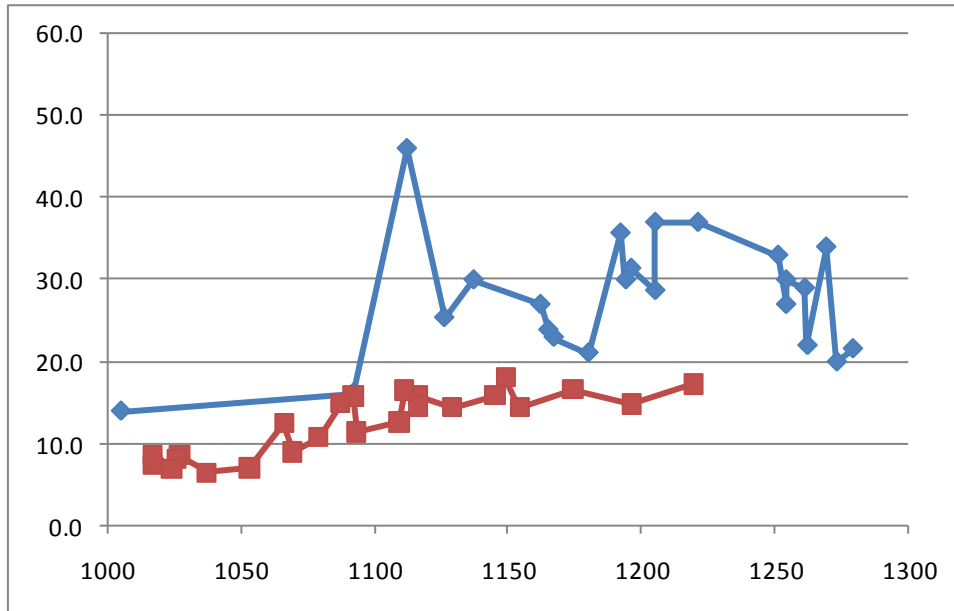
Sch #	STATE	MEAN SATs	% UnWtd 3.5 & Above	FCPS HIGH SCHOOLS	MEAN SATs	% UnWtd 3.5 & Above	% Pt Diffs UnWtd 3.5 & Above
1	WI	1279	21.6				
2	CA	1273	31.8				
3	NY	1269	34.0				
4	CA	1262	48.3				
5	WI	1261	29.0				
6	CA	1254	52.0				
7	MN	1254	27.0				
8	NY	1251	39.3				
9	NJ	1225	INA				
10	MD	1221	37.0				
11	NY	1220	INA	LANGLEY	1219	28.5	INA
12	MA	1214	INA				
13	MD	1205	37.0				
14	NY	1205	39.4				
15	NY	1196	31.4	MCLEAN	1196	26.0	5.4
16	MD	1194	30.0				
17	NY	1192	35.7				
18	NY	1180	36.6	WOODSON	1174	27.0	9.6
19	MD	1167	23.0				
20	NY	1165	23.9				
21	OH	1165	INA				
22	TX	1163	INA				
23	MD	1162	27.0				
24	PA	1156	INA				
25	PA	1155	INA	OAKTON	1154	26.2	INA
26	TX	1150	INA				
27	VA	1149	INA	MADISON	1149	28.7	INA
				LAKE BRADDOCK	1145	24.5	
28	WA	1137	30.0				
29	OH	1132	INA				
30	MD	1126	25.4	ROBINSON	1129	23.8	1.6
				CHANTILLY	1116	27.0	
				MARSHALL	1116	22.7	
31	PA	1112	46.0	WESTFIELD	1111	27.4	18.6
				WEST SPRINGFIELD	1109	20.3	
				FAIRFAX	1093	21.2	
32	MD	1092	16.2	SOUTH LAKES	1092	23.3	-7.1
				CENTREVILLE	1087	24.2	
				HERNDON	1079	20.4	
				WEST POTOMAC	1069	17.1	
				SOUTH COUNTY	1066	21.3	
				STUART	1053	13.2	
33	PA	1040	INA	FALLS CHURCH	1037	12.1	INA
				LEE	1027	14.4	
				ANNANDALE	1026	14.7	
				HAYFIELD	1024	13.9	
				EDISON	1017	16.0	
34	NY	1010	INA	MOUNT VERNON	1017	11.7	INA
35	MD	1005	14.0				
Mean (SATs 1200 to 1249)			37.8			28.5	9.3
Mean (SATs 1150 to 1199)			29.7			26.4	3.3
Mean (SATs 1100 to 1149)			33.8			24.9	8.9
Mean (SATs 1050 to 1099)			16.2			20.1	-3.9
Mean (SATs 1000 to 1049)			14.0			13.8	0.2
Overall Means			32.0			21.1	10.9
					Mean Diffs Paired Schs		5.6

Table G4
Differences between 10-Point and FCPS High Schools
Percent of Classes with Weighted GPAs 4.0 and Above

Sch #	STATE	MEAN SATs	% Wtd 4.0 & Above	FCPS HIGH SCHOOLS	MEAN SATs	% Wtd 4.0 & Above	% Pt Diffs Wtd 4.0 & Above
1	WI	1279	INA				
2	CA	1273	INA				
3	NY	1269	INA				
4	CA	1262	INA				
5	WI	1261	INA				
6	CA	1254	INA				
7	MN	1254	13.0				
8	NY	1251	INA				
9	NJ	1225	19.0				
10	MD	1221	36.0				
11	NY	1220	10.0	LANGLEY	1219	4.9	5.1
12	MA	1214	32.4				
13	MD	1205	35.0				
14	NY	1205	INA				
15	NY	1196	INA	MCLEAN	1196	3.0	INA
16	MD	1194	37.0				
17	NY	1192	INA				
18	NY	1180	16.6	WOODSON	1174	5.6	11.0
19	MD	1167	24.0				
20	NY	1165	INA				
21	OH	1165	12.6				
22	TX	1163	10.0				
23	MD	1162	29.0				
24	PA	1156	52.7				
25	PA	1155	13.7	OAKTON	1154	2.8	10.9
26	TX	1150	10.0				
27	VA	1149	24.0	MADISON	1149	7.2	16.8
				LAKE BRADDOCK	1145	4.9	
28	WA	1137	INA				
29	OH	1132	13.4				
30	MD	1126	30.2	ROBINSON	1129	6.0	24.2
				CHANTILLY	1116	5.3	
				MARSHALL	1116	7.5	
31	PA	1112	INA	WESTFIELD	1111	4.2	INA
				WEST SPRINGFIELD	1109	4.0	
				FAIRFAX	1093	3.8	
32	MD	1092	18.8	SOUTH LAKES	1092	7.9	10.9
				CENTREVILLE	1087	5.1	
				HERNDON	1079	2.2	
				WEST POTOMAC	1069	2.7	
				SOUTH COUNTY	1066	3.2	
				STUART	1053	3.4	
33	PA	1040	20.4	FALLS CHURCH	1037	2.0	18.4
				LEE	1027	2.9	
				ANNANDALE	1026	2.0	
				HAYFIELD	1024	0.8	
				EDISON	1017	2.7	
34	NY	1010	6.7	MOUNT VERNON	1017	3.5	3.2
35	MD	1005	15.0				
Mean (SATs 1200 to 1249)			26.5			4.9	21.6
Mean (SATs 1150 to 1199)			22.8			3.8	19.0
Mean (SATs 1100 to 1149)			22.5			5.6	16.9
Mean (SATs 1050 to 1099)			18.8			4.0	14.8
Mean (SATs 1000 to 1049)			14.0			2.3	11.7
Overall Means			21.8			4.1	17.7
					Mean Diffs Paired Schs		12.6

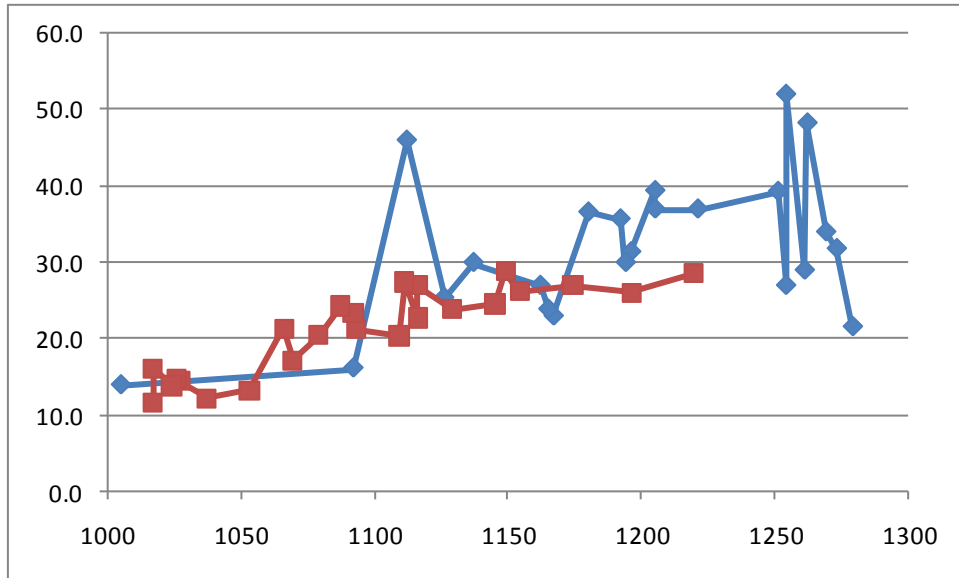
All of the observed 10-point and FCPS school data are represented in these diagrams. For FCPS graduating classes, they illustrate a close relationship between GPA measures (or grading) and SAT performance, suggesting a consistent grading culture. However, those for the 10-point schools evidence an inconsistent pattern, demonstrating one reason for reservations about relying on this highly limited, selected information. Consistent grading cultures cannot be expected when comparing schools from differing districts and differing parts of the country.

Figure G1
Percent of Class with
Unweighted GPAs “A-” and Above



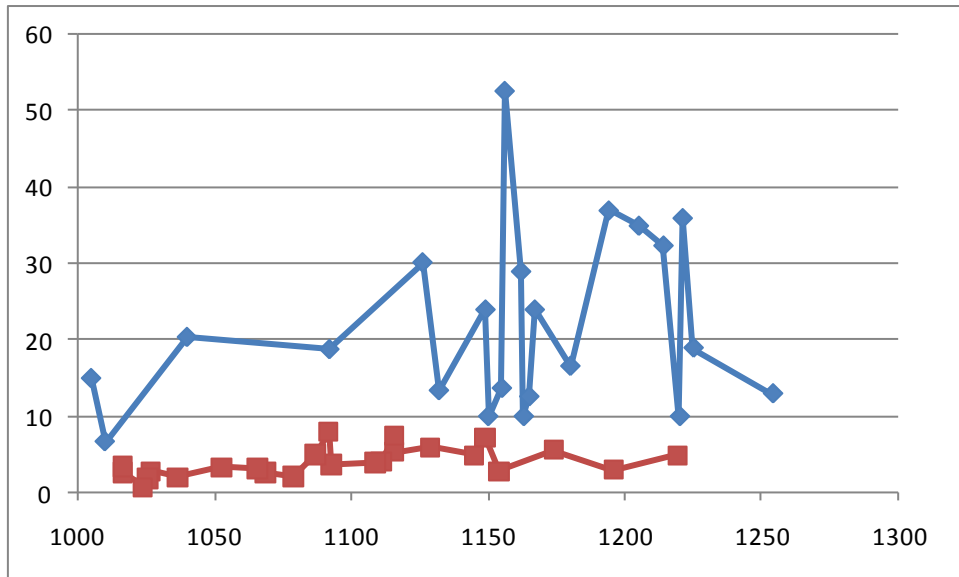
Note: Class Mean SATs (Math and Verbal);
 (Blue = 10 Point Schools, N = 23; Red = FCPS Schools, N = 24)

Figure G2
Percent of Class with Unweighted GPAs 3.5 and Above



Note: Class Mean SATs (Math and Verbal);
 (Blue = 10 Point Schools, N = 23; Red = FCPS Schools, N = 24)

Figure G3
Percent of Class with Weighted GPAs 4.0 and Above



Note: Class Mean SATs (Math and Verbal);
 (Blue = 10 Point Schools, N = 22; Red = FCPS Schools, N = 24)

APPENDIX H
Detailed Data for the Pilot Transcript Study

Table H1									
Analysis of 19 Purposely Selected Transcripts from the Graduating Class of 2008									
Grade Point Averages for All Courses through Grade 11									
Honors	Un- weighted	0 + 0.5	+ 0.5 + 0.5	+ 0.5 + 1.0	Honors	Un- weighted	0 + 0.5	+ 0.5 + 0.5	+ 0.5 + 1.0
Transcript 1					Transcript 11				
6-point	3.857	3.929	4.095	4.167	6-point	3.398	3.398	3.420	3.420
10-point	3.905	3.976	4.143	4.214	10-point	3.545	3.545	3.568	3.568
Transcript 2					Transcript 12				
6-point	3.740	3.800	3.880	3.940	6-point	3.227	3.318	3.409	3.500
10-point	3.800	3.860	3.940	4.000	10-point	3.409	3.500	3.591	3.682
Transcript 3					Transcript 13				
6-point	3.571	3.571	3.571	3.571	6-point	3.348	3.457	3.609	3.717
10-point	3.667	3.667	3.667	3.667	10-point	3.391	3.500	3.652	3.761
Transcript 4					Transcript 14				
6-point	2.390	2.470	2.610	2.690	6-point	3.756	3.756	3.779	3.779
10-point	2.560	2.640	2.780	2.860	10-point	3.767	3.767	3.791	3.791
Transcript 5					Transcript 15				
6-point	2.62	2.62	2.62	2.62	6-point	3.833	3.833	3.833	3.833
10-point	2.79	2.79	2.79	2.79	10-point	4.000	4.000	4.000	4.000
Transcript 6					Transcript 16				
6-point	2.865	2.969	3.281	3.385	6-point	3.880	3.946	4.293	4.359
10-point	3.042	3.146	3.458	3.563	10-point	3.957	4.022	4.370	4.435
Transcript 7					Transcript 17				
6-point	2.455	2.455	2.455	2.455	6-point	4.000	4.063	4.208	4.271
10-point	2.682	2.682	2.682	2.682	10-point	4.000	4.063	4.208	4.271
Transcript 8					Transcript 18				
6-point	2.207	2.207	2.207	2.207	6-point	3.978	4.087	4.326	4.435
10-point	2.390	2.390	2.390	2.390	10-point	4.000	4.109	4.348	4.457
Transcript 9					Transcript 19				
6-point	2.534	2.534	2.625	2.625	6-point	4.000	4.115	4.423	4.538
10-point	2.636	2.636	2.727	2.727	10-point	4.000	4.115	4.423	4.538
Transcript 10									
6-point	2.881	2.929	2.976	3.024					
10-point	3.071	3.119	3.167	3.214					

Note: DE = dual enrollment; this small number of cases did not allow for an analysis of the proportion of FCPS students that would be affected by the specific changes in the grading policy. Since this type of analysis required a relatively large sample, a random sample of 1,000 transcripts was drawn out of the total sample of 11,280 students who graduated from FCPS in spring 2008.

APPENDIX I
Detailed Data for the Transcript Study

Tables I1, I2, and I3 present detailed information on the number of transcripts that crossed the 3.500 and 3.750 thresholds. These two thresholds were chosen since they were believed to be important in the overall college admissions process for admissions in general, as well as for the awarding of merit scholarships and selection for college and university honors programs in particular.

Table I1 shows that by changing from a 6-point grading scale to a 10-point grading scale, 92 of the transcripts in this study went over the 3.750 threshold. Movement across this threshold came for all group categories including two that had an initial GPA of less than 3.500. Ten percent of the transcripts in this study crossed the 3.500 threshold, including the two that crossed both thresholds.

Table I1 Change in GPA from an Unweighted 6-Point Scale to an Unweighted 10-Point Scale for All Grades through Grade 11								
Unweighted 6-Point Grade Scale	Unweighted 10-Point Grade Scale							Total
	3.750 or more	3.700 - 3.749	3.650 - 3.699	3.600 - 3.649	3.550 - 3.599	3.500 - 3.499	3.499 or less	
3.750 or more	131	0	0	0	0	0	0	131
3.700 to 3.749	27	1	0	0	0	0	0	28
3.650 to 3.699	27	3	0	0	0	0	0	30
3.600 to 3.649	16	6	3	0	0	0	0	25
3.550 to 3.599	17	5	7	2	0	0	0	31
3.500 to 3.549	3	5	20	7	4	1	0	40
3.499 or less	2	3	14	24	29	28	615	715
Total	223	23	44	33	33	29	615	1,000

Table I2 shows the movement of GPAs when only the weights were changed from 0.5 for AP, IB, and dual enrollment to 0.5 for Honors and 1.0 for AP, IB, and dual enrollment. Under this scenario, 89 cross the 3.750 threshold. This number includes four GPAs that started out below 3.500. In addition, 66 GPAs crossed the 3.500 threshold, including the four which also crossed the 3.650 threshold.

Table I2								
Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 6-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11								
Weighted 6-Point Grade Scale - 0.5 for AP, IB, and Dual Enrollment	Weighted 6-Point Grade Scale – 0.5 for Honors; 1.0 for AP, IB, and Dual Enrollment							Total
	3.750 or more	3.700 - 3.749	3.650 - 3.699	3.600 - 3.649	3.550 - 3.599	3.500 - 3.499	3.499 or less	
3.750 or more	165	0	0	0	0	0	0	165
3.700 to 3.749	24	3	0	0	0	0	0	27
3.650 to 3.699	30	3	1	0	0	0	0	34
3.600 to 3.649	15	2	4	0	0	0	0	21
3.550 to 3.599	13	3	7	1	0	0	0	24
3.500 to 3.549	3	4	10	8	8	3	0	36
3.499 or less	4	1	7	9	19	26	627	693
Total	254	16	29	18	27	29	627	1,000

Table I3 shows the combined effect of changing the grading scale and the weights. Under this scenario, 168 GPAs crossed the 3.750 threshold including 36 that crossed the 3.500 threshold as well. In addition, another 168 GPAs crossed the 3.500 threshold including 36 that crossed the 3.750 threshold as well.

Table I3								
Combined Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 10-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11								
Weighted 6-Point Grade Scale - 0.5 for AP, IB, and Dual Enrollment	Weighted 10-Point Grade Scale – 0.5 for Honors; 1.0 for AP, IB, and Dual Enrollment							Total
	3.750 or more	3.700 - 3.749	3.650 - 3.699	3.600 - 3.649	3.550 - 3.599	3.500 - 3.499	3.499 or less	
3.750 or more	165	0	0	0	0	0	0	165
3.700 to 3.749	27	0	0	0	0	0	0	27
3.650 to 3.699	34	0	0	0	0	0	0	34
3.600 to 3.649	21	0	0	0	0	0	0	21
3.550 to 3.599	23	1	0	0	0	0	0	24
3.500 to 3.549	27	6	2	1	0	0	0	36
3.499 or less	36	19	20	27	25	41	525	693
Total	333	26	22	28	25	41	525	1,000

Figures I1 thru I3 correspond to the data shown in Tables I1 thru I3. These figures present a graphic rather than a tabular presentation of the movement from grade category to grade category for the cases under each condition: change in scale, change in weight, and the combined change. From these figures, it is possible to observe the number of cases that move from grade range to grade range as well as to determine the number of cases that cross the 3.500 and 3.750 thresholds.

Figure I1
Graphical Presentation of the Change in GPA from an Unweighted 6-Point Scale to an Unweighted 10-Point Scale for All Grades through Grade 11

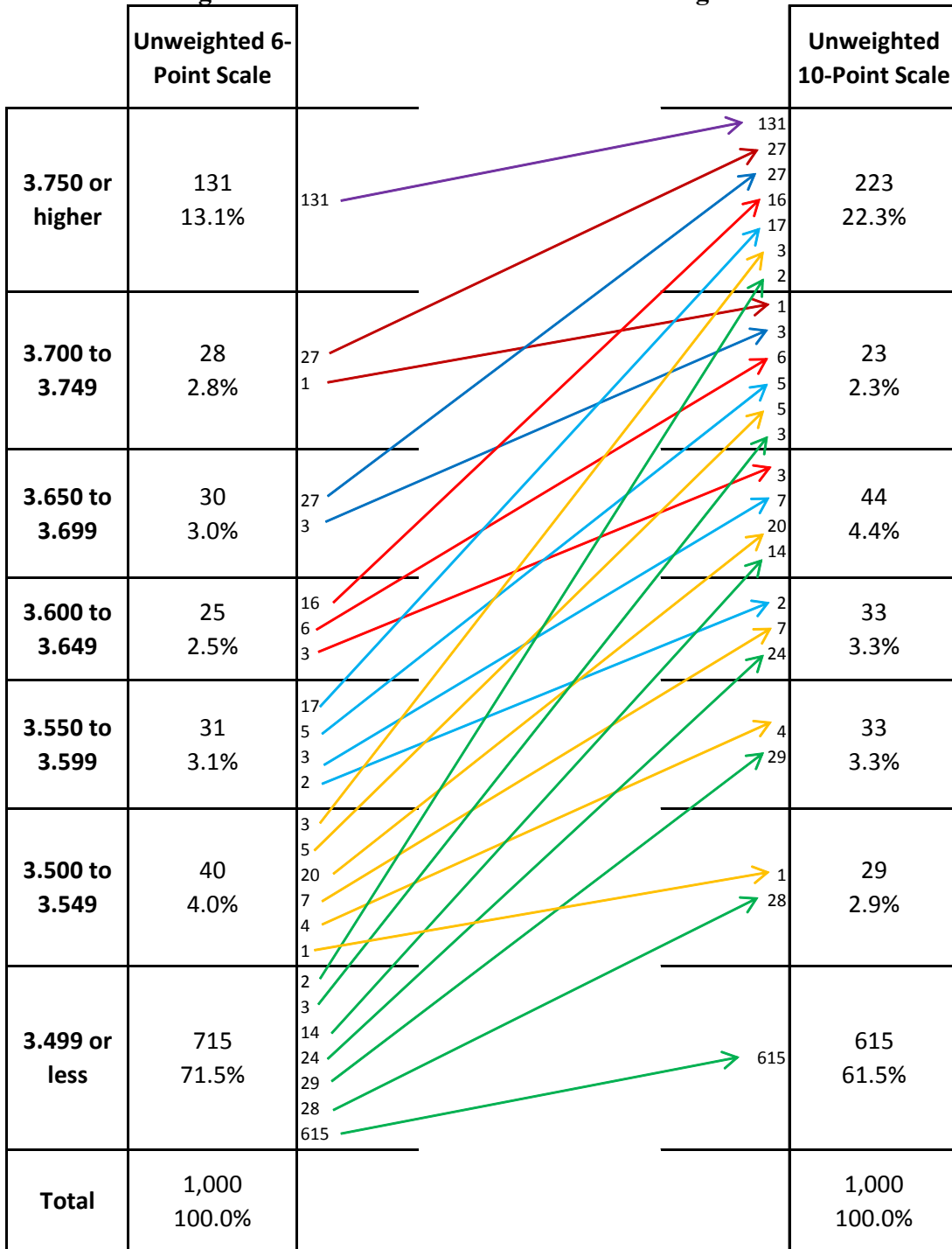


Figure I2

Graphical Presentation of the Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 6-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11

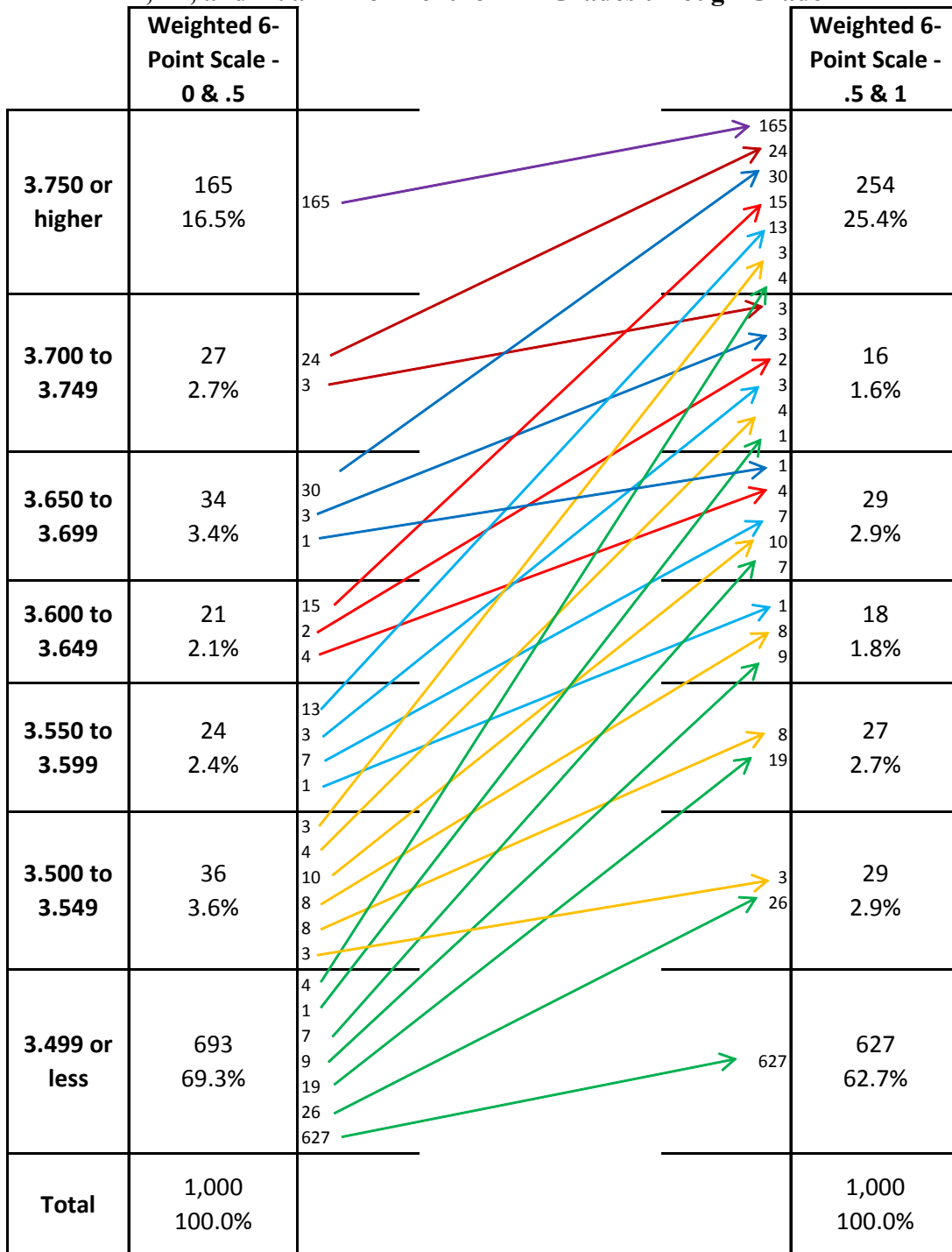
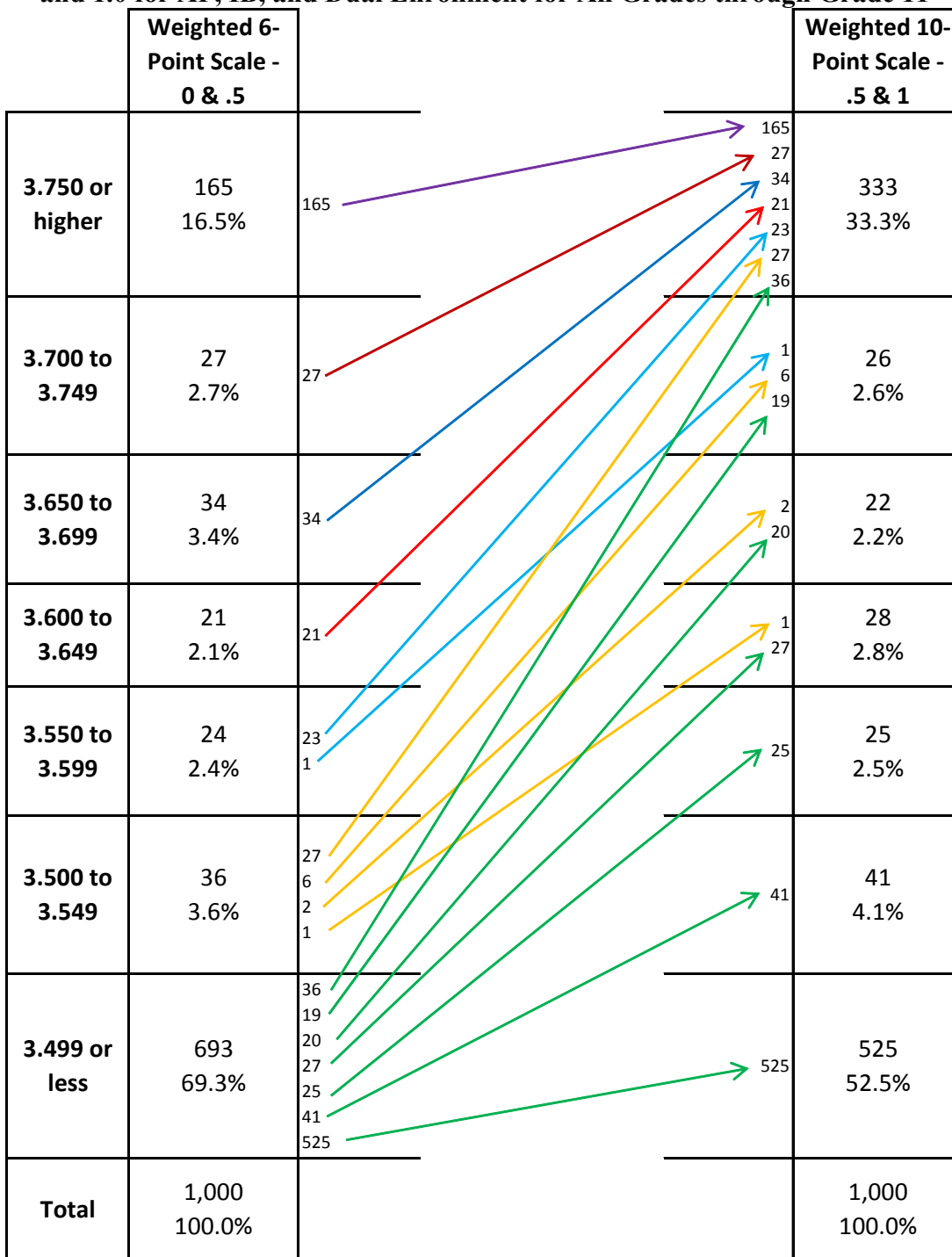


Figure I3
Graphical Presentation of the Combined Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 10-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All Grades through Grade 11



The key finding from Figure I3 was that the combination of changing the scale and increasing the weights doubles the proportion of transcripts with GPAs of 3.750 or higher.

Table I4 shows the change in GPAs for complete high school transcripts when changing from an unweighted 6-point grade scale to an unweighted 10-point grade scale. Two transcripts in five, 40.6%, did not change GPA range. That is, of the 150 transcripts that were in the 3.000 to 3.249 GPA range, 40 remained in that range after converting to the 10-point scale. The largest changes took place below GPS of 3.750. The mean increase for changing from an unweighted 6-point scale to an unweighted 10-point scale course was 0.150 of a grade point. The range was from 0.000 to 0.313 grade points.

Table I4											
Change in GPA from an Unweighted 6-Point Scale to an Unweighted 10-Point Scale for All High School Grades											
Unweighted 10-point scale	Unweighted 6-Point Scale										Total
	Lowest - 1.999	2.000 - 2.249	2.250 - 2.499	2.500 - 2.749	2.750 - 2.999	3.000 - 3.249	3.250 - 3.499	3.500 - 3.749	3.750 - 3.999	4.000	
Lowest - 1.999	54	0	0	0	0	0	0	0	0	0	54
2.000 - 2.249	13	21	0	0	0	0	0	0	0	0	34
2.250 - 2.499	0	40	20	0	0	0	0	0	0	0	60
2.500 - 2.749	0	0	46	31	0	0	0	0	0	0	77
2.750 - 2.999	0	0	1	66	35	0	0	0	0	0	102
3.000 - 3.249	0	0	0	0	91	40	0	0	0	0	131
3.250 - 3.499	0	0	0	0	2	109	57	0	0	0	168
3.500 - 3.749	0	0	0	0	0	1	104	61	0	0	166
3.750 - 3.999	0	0	0	0	0	0	0	91	75	0	166
4.000	0	0	0	0	0	0	0	0	30	12	42
Total	67	61	67	97	128	150	161	152	105	12	1,000
Mean Increase	0.133	0.158	0.158	0.173	0.171	0.171	0.159	0.149	0.083	0.000	0.150

Table I5 shows that three transcripts in five, 60.2%, stayed in the same GPA range with the largest changes taking place in the ranges of 3.750 or above.

Table I5											
Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 6-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All High School Grades											
Weighted 6-point scale 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment	Weighted 6-point scale 0.5 for AP, IB, and Dual Enrollment										Total
	Lowest - 1.999	2.000 - 2.249	2.250 - 2.499	2.500 - 2.749	2.750 - 2.999	3.000 - 3.249	3.250 - 3.499	3.500 - 3.749	3.750 - 3.999	4.000 - 4.249	
Lowest - 1.999	67	0	0	0	0	0	0	0	0	0	67
2.000 - 2.249	0	52	0	0	0	0	0	0	0	0	52
2.250 - 2.499	0	7	53	0	0	0	0	0	0	0	60
2.500 - 2.749	0	0	9	83	0	0	0	0	0	0	92
2.750 - 2.999	0	0	1	13	83	0	0	0	0	0	97
3.000 - 3.249	0	0	0	0	29	89	0	0	0	0	118
3.250 - 3.499	0	0	0	0	0	44	73	0	0	0	117
3.500 - 3.749	0	0	0	0	0	3	77	53	0	0	133
3.750 - 3.999	0	0	0	0	0	0	2	85	32	0	119
4.000 - 4.249	0	0	0	0	0	0	0	8	67	12	87
4.250 - Highest	0	0	0	0	0	0	0	0	12	46	58
Total	67	59	63	96	112	136	152	146	111	58	1,000
Mean Increase	0.005	0.013	0.022	0.037	0.058	0.085	0.124	0.171	0.221	0.287	0.109

The mean increase for changing from a weighted 6-point scale with 0.5 added for each AP/IP course to a weighted 6-point scale with 0.5 added for each honors course and 1.0 added for each AP/IP course was 0.109 of a grade point. The range was from 0.000 to 0.476 grade points.

Table I6 shows the effect of changing both the scale and the weights. Less than one transcript in five, 17.2%, was in the same GPA range after changing both the scale and the weights.

Table I6											
Combined Change in GPA from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 10-Point Scale with 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment for All High School Grades											
Weighted 10-point scale 0.5 for Honors and 1.0 for AP, IB, and Dual Enrollment	Weighted 6-point scale 0.5 for AP IB and Dual										Total
	Lowest - 1.999	2.000 - 2.249	2.250 - 2.499	2.500 - 2.749	2.750 - 2.999	3.000 - 3.249	3.250 - 3.499	3.500 - 3.749	3.750 - 3.999	4.000 - 4.249	
Lowest - 1.999	52	0	0	0	0	0	0	0	0	0	52
2.000 - 2.249	15	19	0	0	0	0	0	0	0	0	34
2.250 - 2.499	0	39	16	0	0	0	0	0	0	0	55
2.500 - 2.749	0	1	45	21	0	0	0	0	0	0	67
2.750 - 2.999	0	0	2	70	21	0	0	0	0	0	93
3.000 - 3.249	0	0	0	5	78	20	0	0	0	0	103
3.250 - 3.499	0	0	0	0	13	93	8	0	0	0	114
3.500 - 3.749	0	0	0	0	0	21	112	3	0	0	136
3.750 - 3.999	0	0	0	0	0	2	31	92	6	0	131
4.000 - 4.249	0	0	0	0	0	0	1	45	62	6	114
4.250 - Highest	0	0	0	0	0	0	0	6	43	52	101
Total	67	59	63	96	112	136	152	146	111	58	1,000
Mean Increase	0.138	0.172	0.175	0.212	0.227	0.256	0.283	0.330	0.331	0.334	0.259

The mean increase for changing from a weighted 6-point scale with 0.5 added for each AP/IP course to a weighted 10-point scale with 0.5 added for each honors course and 1.0 added for each AP/IP course was 0.259 points. The range was from 0.000 to 0.677 grade points.

Figure I7 shows the mean differences graphically reported in Tables I4 through I6. The change in scale primarily affects those with GPAs of less than 3.750, while the change in weights primarily affects those with GPAs of 3.750 or more. The effect of changing both the scale and the weights has only a modest effect on GPAs as a group even though the change may be large for a small number of students.

Figure I4
Graphical Presentation of the Change in GPA Resulting from a Change in Scale, Change in Weight, and the Combined Change for All High School Grades

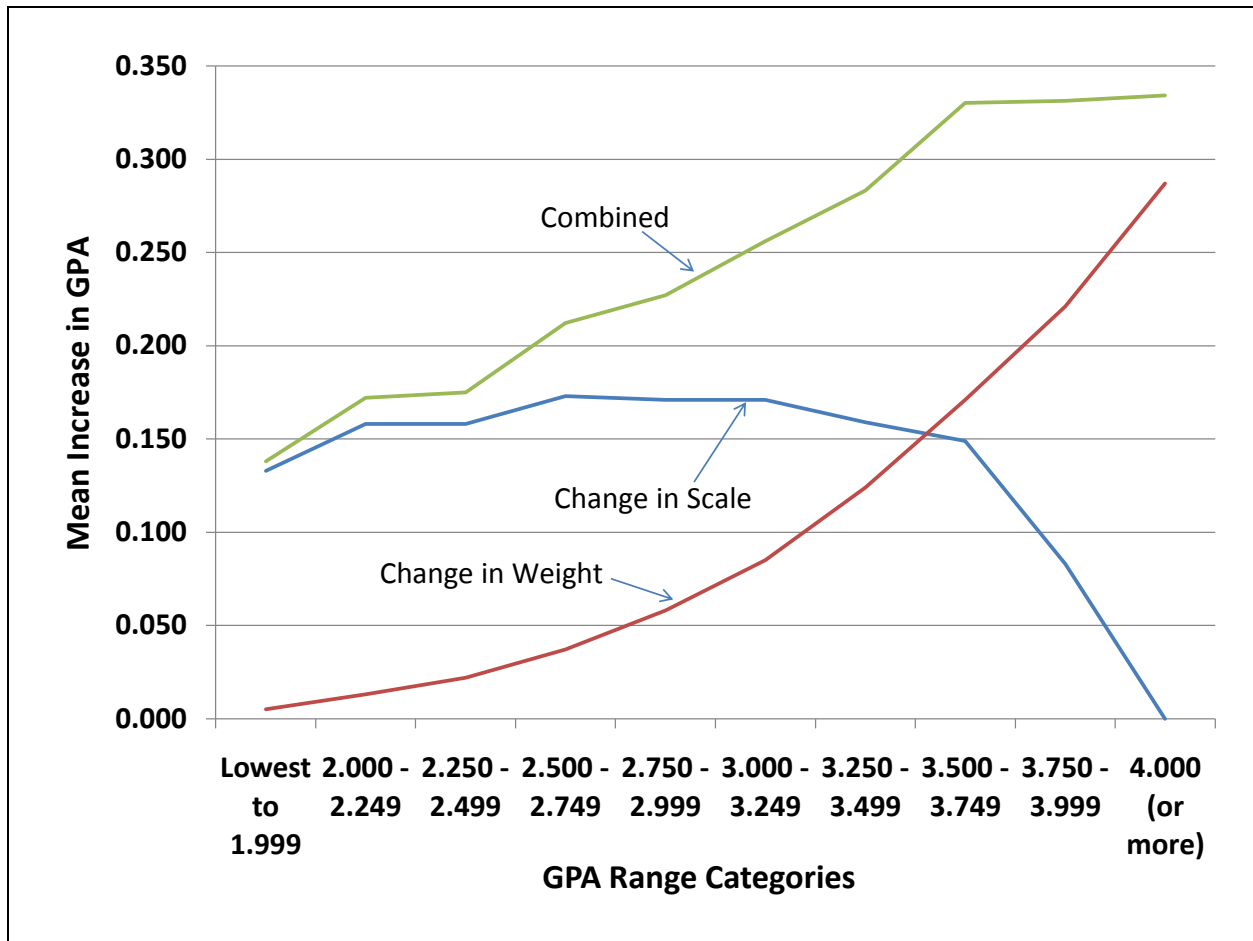


Table I7 shows the proportion of transcripts that crossed the four important thresholds of 3.750, 3.500, 3.000, and 2.500.

Table I7				
Summary of Cases Crossing Various Thresholds for All High School Grades				
Conditions of Change	Thresholds			
	3.750	3.500	3.000	2.500
Change from an Unweighted 6-Point Scale to an Unweighted 10-Point Scale	9.1%	10.5%	9.2%	4.7%
Change from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 6-Point Scale with .05 for Honors and 1.0 for AP, IB, and Dual Enrollment	9.5%	8.2%	2.9%	1.0%
Change from a Weighted 6-Point Scale with 0.5 for AP, IB, and Dual Enrollment to a Weighted 10-Point Scale with .05 for Honors and 1.0 for AP, IB, and Dual Enrollment	17.7%	16.6%	9.6%	4.7%

APPENDIX J
Summary Data for the Survey of College Admissions Practices

What grading scales and weights are commonly used in the applicant pool?

Table J1							
Grading Scales Commonly Used in Applicant Pool							
	Total (n=64)	VA (n=20)	Non-VA (n=44)	Public (n=29)	Private (n=35)	Acceptance Below 50% (n=24)	Acceptance Above 50% (n=40)
10-point Scale	3.1	2.7	3.2	2.8	3.2	3.4	2.9
Letter Grades	3.1	3.2	3.0	2.9	3.2	3.1	3.1
Numeric Scale	2.6	2.3	2.8	2.2	2.9	2.8	2.5
6-, 7-, or 8-point Scale	2.3	2.8	2.0	2.5	2.0	1.8	2.5
Other	2.1	1.4	2.5	2.3	1.9	2.2	1.9

Note: Unless specified otherwise, the numbers represent average ratings on a scale from 1 to 4 with 4 representing the most common grading scale seen in admissions.

Table J2								
Weights Often Seen in College Admissions								
	Total (n=64)							
	0 pts	0.5 pts	1.0 pts	Other	0 pts	0.5 pts	1.0 pts	Other
Honors	6	38	13	4	[Hatched Area]			
AP	0	13	43	8				
IB Standard Level	5	17	30	8				
IB High Level	2	10	37	10				
	Virginia (n=20)				Non-Virginia (n=44)			
Honors	4	15	1	0	2	23	12	4
AP	0	8	12	0	0	5	31	8
IB Standard Level	2	8	9	0	3	9	21	8
IB High Level	0	6	10	2	2	4	27	8
	Public (n=29)				Private (n=35)			
Honors	3	17	7	0	3	21	6	4
AP	0	6	20	3	0	7	23	5
IB Standard Level	2	6	18	2	3	11	12	6
IB High Level	0	5	19	3	2	5	18	7
	Acceptance Rate Below 50% (n=24)				Acceptance Rate Above 50% (n=40)			
Honors	2	13	4	3	4	25	9	1
AP	0	2	19	3	0	11	24	5
IB Standard Level	4	6	9	4	1	11	21	4
IB High Level	2	2	17	3	0	8	20	7

Note: pts = points; unless specified otherwise, the numbers represent frequencies.

How do colleges use GPA when evaluating applicants?

Table J3 Methods of Recalculating GPA							
	Total (n=29)	VA (n=9)	Non-VA (n=20)	Public (n=14)	Private (n=15)	Acceptance Below 50% (n=9)	Acceptance Above 50% (n=20)
Use grades from academic courses only	18	7	11	10	8	6	12
Add weights for advanced courses (e.g., AP, IB)	13	5	8	8	5	2	11
Remove weights	12	3	9	3	9	8	4
Drop pluses and minuses from letter grades	11	6	5	7	4	3	8
Convert to a different scale	11	2	9	4	7	4	7
Add weights for honors courses	11	4	7	6	5	2	9
Other ¹							

¹ See below for additional comments/open-ended responses for Question 7; unless specified otherwise, the numbers represent frequencies.

Table J4 Methods of Comparing GPAs Based on Different Scales and Weights Without Recalculation							
	Total (n=35)	VA (n=12)	Non-VA (n=23)	Public (n=15)	Private (n=20)	Acceptance Below 50 Percent (n=15)	Acceptance Above 50 Percent (n=20)
Grading Scales and Weights	35	12	23	15	20	15	20
Rigor of Courses Taken	35	12	22	13	22	15	20
School GPA Distribution	22	5	17	8	14	11	11
Percent Graduates for 4-Year College	15	4	11	6	9	8	7
School Average SAT/ACT	7	2	5	5	2	3	4
No Extra Considerations	0	0	0	0	0	0	0
Other ¹	11	4	7	8	3	5	6

¹ See below for additional comments/open-ended responses for Question 8; unless specified otherwise, the numbers represent frequencies.

Question 7. Please indicate how you recalculate applicants' GPAs.

- Verify and convert, if needed, 4.00 = "A" in college prep level
- While remove [sic] weights from the GPA, our evaluation DOES calculate the difficulty of the curriculum elsewhere and includes that as a very important factor
- Convert all to 4.0 scale
- Convert to a 4.0 scale
- Convert to a standard 4.0 scale
- UVA-Wise weights classes according to each high school's weighted grading scale

Question 8. If you do NOT recalculate GPA, do you use the weighted or unweighted GPA?

- If both are given, we use weighted
- We will give benefit of weighted grade above the 4.00 college prep level if student has earned higher grades
- Prefer weighted, but will use either
- We only look at grades in core courses

How important a factor is GPA in college admissions, merit-based scholarships, and placement into honors programs?

Table J5							
Factors Considered for College Admissions							
	Total (n=64)	VA (n=20)	Non-VA (n=44)	Public (n=29)	Private (n=35)	Acceptance Below 50% (n=24)	Acceptance Above 50% (n=40)
<i>Factors</i>							
Grades in Core Courses	3.6	3.7	3.5	3.5	3.6	3.4	3.6
Rigor of Curriculum	3.3	3.4	3.3	3.2	3.4	3.5	3.2
Number of Advanced Courses	3.3	3.4	3.3	3.3	3.3	3.4	3.3
SAT/ACT Scores	3.1	3.4	3.0	3.1	3.2	3.0	3.2
Weighted Overall GPA	3.1	3.3	3.0	3.3	2.9	2.6	3.3
Unweighted Overall GPA	2.7	2.8	2.6	2.8	2.6	2.2	2.9
High School GPA Distribution	2.4	2.5	2.3	2.1	2.6	2.5	2.3
Other	2.6	2.4	2.7	2.5	2.7	2.9	2.3
<i>Other Factors</i>							
Extracurricular Activities	2.8	2.4	2.9	2.4	3.0	3.3	2.4
Personal Essays	2.8	2.9	2.8	2.5	3.0	3.1	2.6
Letters of Recommendation	2.8	2.7	2.9	2.3	3.2	3.1	2.6
Academic Reputation of School or School District	2.7	2.6	2.8	2.9	2.6	2.5	2.8
Community Service	2.6	2.3	2.8	2.3	2.9	3.1	2.3
Employment	2.2	1.8	2.4	2.1	2.3	2.5	2.0
Geographic Region of School	2.1	2.0	2.1	2.3	1.9	1.9	2.2
Other	2.4	2.3	2.5	2.1	2.8	3.0	2.3

Note: Unless specified otherwise, the numbers represent average ratings on a scale from 1 to 4 with 4 representing highest influence.

Table J6							
Factors Considered for Honors Placement and Merit Scholarship							
	<i>Merit-based Scholarships</i>						
	Total (n=55)	VA (n=19)	Non-VA (n=36)	Public (n=28)	Private (n=27)	Acceptance Below 50 Percent (n=16)	Acceptance Above 50 Percent (n=39)
SAT/ACT Scores	53	19	34	28	25	14	39
Weighted GPA	35	13	22	19	16	7	28
Number of Advanced Courses	29	8	21	10	19	13	16
Recalculated GPA	19	6	13	10	9	7	12
Unweighted GPA	13	2	11	5	8	4	9
Geographic region of school	11	2	9	6	5	5	6
Other ¹							
	<i>Placement into Honors Programs</i>						
	Total (n=44)	VA (n=16)	Non-VA (n=28)	Public (n=29)	Private (n=15)	Acceptance Below 50 Percent (n=8)	Acceptance Above 50 Percent (n=36)
SAT/ACT Scores	40	15	25	28	12	7	33
Weighted GPA	31	13	18	20	11	5	26
Number of Advanced Courses	27	9	18	18	9	7	20
Unweighted GPA	10	3	7	7	3	3	7
Recalculated GPA	10	3	7	7	3	2	8
Geographic region of school	3	0	3	2	1	2	1
Other	18	5	13	13	5	5	13

¹ See below additional comments/open-ended responses for Question 15; unless specified otherwise, the numbers represent frequencies.

Question 15. When reviewing freshman applications, what factors do you consider for merit scholarships?

- Interview
- Class rank, leadership
- Class rank
- Cocurricular activities, recommendations, writing, interview
- Leadership and extracurricular participation
- Essays, extracurricular achievements (including employment, service, artistic talent, etc.), evidence of academic passion, letters of recommendation, intangible qualities

- Class rank, either actual or estimated
- The entire application
- Major leadership
- Letters of recommendation
- Very, very limited merit awards
- Extra curriculum
- Leadership, essays, recommendations
- Transcript, essay, extracurriculars, essay
- Class rank (if provided)
- Academic program of interest
- Special talents -- such as strong leadership or community service
- Intended major
- Everything presented in the application is considered
- Recommendation letters; extracurricular activities; resume
- Other factors that make the student stand out, whether they are leadership roles, community service, special talents, internships or volunteer work, etc.
- Grades in core courses

Question 16. With respect to academic merit scholarships, which of the following does your college/university offer?

- Interview required
- Ours are non-financial based, but they do NOT require an additional application form
- No separate application required, not automatic
- One application for our full-ride scholarship. All admission applicants considered for all other merit money.
- Students wishing to be considered must meet an earlier application deadline, but no additional or different application is required.
- Prospective freshmen who apply for admission on or before January 15 of their senior year are automatically reviewed on the basis of their admissions applications.
- Some scholarships require a separate application; some use the application for admissions.

Responses to Open-Ended Question on Merit Scholarship

Table J7		
Question 18. Please identify how your decisions for <i>merit scholarships</i> differ from those used in the freshman admission process. (n=39)		
Topic	Frequency	Comment Text
Grade Point Average	1	Minimum 3.3
	1	Minimum 3.35 weighted
	1	Minimum 3.4
	1	Only factor used
	1	Use recalculated, varies depending on award
Rank in class	1	Top 20%
	1	Top 5%
	1	Specific for some scholarships
SAT/ACT	2	Minimum SAT 1100/ 24 ACT
	1	Specific for some scholarships
	1	Used for all, varies, depending on award
	1	Minimum SAT 1200/ 27 ACT
	1	Only factor used
Academics	3	College Major
	1	Rigorous curriculum
	1	Considered
	1	Academic passion
Personal Credentials	2	Talent
	2	Residency
	1	Considered
	1	Diversity
	1	Creativity
	1	Resiliency
	1	World View

Responses to Open-Ended Question on Honors Placement

Table J8		
Question 14. Please identify how your decisions for <i>honors placement</i> differ from those used in the freshman admissions. (n=36)		
Topic	Frequency	Comment Text
Grade Point Average	4	More competitive
	3	Considered
	2	Top of pool
	2	Recalculated
	1	3.5 unweighted cutoff
	1	Unidentified minimum for invitation
Rank in class	2	Top 10 % expectation
	1	Top 5% for consideration
	1	Actual or estimated used in decision
	1	Larger factor than for admission
SAT/ACT	4	Considered
	3	More emphasis
	3	More competitive
	2	Top of pool
	1	1250 cutoff
	1	1400 for consideration
	1	Unidentified minimum for invitation
Application Process	7	Essay required
	6	Honors Scholars Program Committee selection
	4	Recommendation required
	3	Interview required
	2	Faculty Committee selection
	2	All admits invited to apply
	2	Reviewed on student request
	2	Separate application
	1	Reviewed on admission committee recommendation
	1	Any interested student may participate
	1	Writing Sample required
Academics	4	Advanced Coursework
	1	Demonstrated interest in research
	1	Promising high school record
	1	Rigor of curriculum
	1	Most rigorous curriculum
	1	AP/IB Scores
Activities	4	Related Activities
	3	Leadership

Do colleges require a minimum GPA for merit scholarships and placement into honors programs?

Table J9 Minimum GPA Required Merit-based Scholarships and Placement into Honors Programs						
	Minimum Requirement for Honors Placement (n=17) ¹			Minimum Requirement for Merit Scholarship (n=18) ²		
GPA Cutoff	Unweighted GPA	Weighted GPA	Recalculated GPA	Unweighted GPA	Weighted GPA	Recalculated GPA
2.50	/			1		
2.75	/			1	1	
3.00	1	1	1	1	3	1
3.30		1	1		1	1
3.35					1	1
3.40		1		1	1	1
3.50	2	7	4	1	2	1
3.70		1				1
3.75		1				
3.80		1		1		
3.90			1			1

Note: Unless specified otherwise, the numbers reported in the table represent frequencies.

¹For honors placement, 12 of the 17 colleges reported one minimum GPA requirement; four colleges reported two minimum GPA requirements; one college reported three minimum GPA requirements.

²For merit scholarships, 12 of the 18 colleges reported one minimum GPA requirement; two colleges reported two minimum GPA requirements; two colleges reported three minimum GPA requirements.

How do colleges compare applicants?

Table J10 Comparison of Applicants							
	Total (n=64)	VA (n=20)	Non-VA (n=44)	Public (n=29)	Private (n=35)	Acceptance Below 50% (n=24)	Acceptance Above 50% (n=40)
Entire applicant pool	57	17	40	26	31	21	36
Same high school	38	12	26	17	21	18	20
Same declared major	15	4	11	9	6	6	9
Same state	11	5	6	6	5	6	5
Same geographic region	9	5	4	5	4	5	4
Same school district	6	4	2	2	4	2	4

Note: Unless specified otherwise, the numbers represent frequencies.

How do colleges react to different grading formats?

Table J11							
Reaction to Different Grading Formats							
	Total (n=64)	VA (n=20)	Non-VA (n=44)	Public (n=29)	Private (n=35)	Acceptance Below 50% (n=24)	Acceptance Above 50% (n=40)
<i>Which plays a greater role, letter grades or cumulative GPA?</i>							
Both equally	29	6	23	11	18	15	14
Cumulative GPA	21	8	13	12	9	2	19
Individual Letter Grades	14	6	8	6	8	7	7
<i>Does an applicant's academic achievement in a particular course appear more competitive if the transcript shows a numerical grade of 93 versus a letter grade of B+?</i>							
No	44	14	30	21	23	18	26
Yes	19	6	13	8	11	6	13

Note: Unless specified otherwise, the numbers represent frequencies.

Responses to Final Open-Ended Question

Question 19. Please provide any additional comments that might help us better understand your candidate evaluation methods and/or the impact of grade-point averaging methods on them.

Respondents were able to provide additional qualitative information regarding their college admissions practices through Question 19. Twenty-two (22) comments were identified and reviewed on the survey in response to the open-ended question. Responses are provided verbatim. For the readers' convenience, comments have been organized under broad headings.

Rank (1 comment)

We utilize class rank, as provided by the school or if not provided, as estimated by our staff. This is used instead of GPA. We do not consider high school GPA, but rather how a student ranks against his/her peers.

Grade Point Average (5 comments)

Recalculated

We recalculate GPAs in order to make the applicant pool more consistent, but we rely on the integrity of the school's grading policies. We will adjust to high schools' grading scales, but we have great relationships with our school systems. Therefore, we know which school systems have the more academic challenging grading system and scales.

Weighted

We read each application file in its entirety; at least two admission officers read and evaluate each file. All files are brought through the admission committee. We use the cumulative weighted GPA earned through 11th grade as reported by the Guidance Counselor, and we compare the individual applicant's GPA to the highest GPA of that class.

Both Recalculated and Weighted

Note that in some cases, we work directly with the schools-reported weighted GPA. However, some schools "over-weigh" GPAs, and some schools don't weigh at all. In those cases, we do recalculate the GPA according to provide [sic] fair weight.

Matrix

Admissions evaluations take into consideration 20 core high school courses and a sliding scale matrix of core GPA and test scores.

Low Impact GPA

The impact of grade-point averaging methods on our admissions process is nil. The staff knows that any small statistical difference between different methods is not significant, and so we do not make evaluations on such data. Scholarships are not wholly, or even mostly, dependent on GPA, nor is admission, in general.

Courses (2 comments)

Preeminent in our review of files is course selection, rigor and performance – followed closely by the combination of extracurricular involvement and achievement.

One factor that is used in the decision-making process is the applicant's academic trend. We feel that an upward trend is a good predictor of success.

Context (5 comments)

We interpret students' GPA in the context of their school, and because we are competitive for admission, the more information we have, the better. Many Fairfax county students are at a disadvantage in our applicant pool because we often lack context for their academic performance. In the absence of relative standing in the class or cumulative grade distributions, our admission committee is less likely to "take a chance" on a student when limited offers of admission are available and when it is unclear how strong a student is in the context of their school.

We compare students not to each other but to an idealized version of what the best students from a particular high school should have been able to achieve. In essence, we ask the following question of each applicant: "Given the opportunities that this person had in high school (factoring known outside influences such as having to work many hours to support the family), did this person seek out one of the more challenging course schedules and do well, or did this person seek an easier path through school?" If the answer to that question is "Yes" then we look to see how this student might add to the life of the university (in the classroom and outside of it). Assuming that the student has taken full advantage of the academic offerings in high school and is likely to contribute to our campus outside of class, too, then, he/she will be a competitive candidate in our pool. Beyond that, we will need to see how the rest of the pool of candidates looks in any given year. That last part is where the greatest uncertainty comes into play.

The more information we have the better. The school profile should be substantive and help us understand how a student is doing relative to what resources are available to him/her.

The context in which a student is succeeding is important of our evaluation of candidates. Thanks for sending us your great students!

All applicants are evaluated on an individual basis within the context of their high school.

Holistic Review (4 comments)

We read each application individually and consider all elements of application. We are used to dealing with many different grading systems. We appreciate as much information as possible from the high school so we can understand how a student has challenged himself/herself and performed compared with other candidates. Grade distribution charts, class rank, weighted GPA are all useful. Having more information like this only helps admissions officers consider students in an equitable manner. We also use talent-based components, auditions or portfolio reviews for several of our programs.

Use an admissions committee and take a holistic approach in evaluating each individual applicant.

The evaluation process is holistic, and we do not compare applicants. Last year, we reviewed more than 30,000 applications. Each student is admitted based upon individual promise and merit, not on how they compare to others.

Student self-presentation is a factor in our review process. We 'holistically' review each student individually from an expected pool of over 21,000 applications. Students who choose to submit the voluntary essay and voluntary letters of recommendation help differentiate themselves from other candidates.

Other (5 comments)

School districts (and their parents) seem to care a lot more about grading scales than do college admissions committees. If you implement a grading scale that produces an inordinate number of "A" averages for your students, then your transcripts will no longer be credible, and you will hurt your very best students because they will be indistinguishable from your weaker ones. The irony is that Fairfax Co. students already have a huge advantage. We realize that you have some of the best schools in the nation, and we will gladly take Fairfax Co. kids with lower GPAs over kids from other districts that have higher GPAs so long as they are taking a reasonable number of your most challenging courses. Unfortunately, parents want districts to manipulate grading scales to make every study look equally good, and all too often, school boards cave into them. Instead of inflating your grades, trust us to know that a "B" in Fairfax Co. is better than an "A" at most other schools.

If this survey was to see if Fairfax should convert to the grading scale that has an 80-89 as a B and 90-100 as an A, I fully support that change! I feel that Fairfax kids may be at a disadvantage when they apply as some schools who are not familiar with the region and may not realize that a 92 is a B, but at most other schools, a 92 is an A. If you know the area and its grading scale well, then you can make amends for this, but not all schools do.

All applications are read by readers familiar with the school and all readers have a profile of the school with them when they read. The school's curriculum, grading scale, and college going rate are known to the initial reader and the admissions committee. Unfortunately, 85 percent of our applicants are qualified and we are only able to admit 57 percent. We disappoint applicants from throughout the state.

80-85 percent of the students that apply are academically qualified, yet our admission rate is under 30 percent. Being qualified is important, but it is not the determining factor in admission decisions. We are looking for students who will thrive academically and enrich the academic experience for other students. Similarly, we are looking for students who will take full advantage of the co-curricular opportunities and enhance the co-curricular experience of other students. Finally, we are looking for students who have done enough personal reflection to have a good idea of what they are looking for and have done enough research about institutions in general, and our institution in particular, to be able to articulate why this would be a good fit.

I'm sorry that your district is going through this process as I know it is wrenching to all of you. No matter what you come up with, there will be winners and losers—you will not escape criticism. Therefore you just have to come up with a system that is educationally sound and

internally consistent. That's the way to have integrity with all of this. Colleges are going to use a million different methodologies no matter what you do, and you won't be able to control for all of them.

APPENDIX K

Glossary of Terms

Core Courses – High school academic courses in mathematics, science, social studies/history, English/language arts, and foreign language.

FAIRGRADE – FAIRGRADE is a group of Fairfax County parents and community members formed in January 2008 to advocate for revision to the current Fairfax County Public Schools grading policy.

Grading Policies – Grading Policies are formal, division-wide procedures and regulations that guide teachers and school staff in reporting student grades and in calculating student grade point average (GPA). Grading policies include specific guidelines for applying the established grading scale (i.e., conversion of numeric grades to letter grades for the purpose of report cards), weights added to letter grades for advanced courses, and formula or guidelines for calculating student GPA.

Grading Policy Committee – The Grading Policy Committee was formed in June 2008 for the purpose of investigating the FCPS grading policy. The Committee included staff from the FCPS Department of Accountability, FCPS Department of Special Services, and FAIRGRADE members.

Probability Sample – A Probability Sample is a sample of study participants selected to reflect the characteristics of the population being studied. Most often, a random selection method is used in probability sampling to ensure all members of the population are represented in the sample.

Purposeful Sample – A Purposeful Sample is a subset of a larger population and is used when a specific group of participants is of interest. For the present study, a purposeful sample of college admissions officers was selected to represent the large majority of colleges to which FCPS seniors apply for admission each year.

Random Sample – When a Random Sample is used, each individual in the population of interest has an equal chance of being selected to participate in the study. Due to the random nature of selection, the sample is representative of the entire population, and results can be generalized to the population. In this study, the random sample of transcripts selected for the Transcript Study is representative of all 2008 FCPS graduates; therefore, the results can be generalized to all 2008 FCPS graduates.