

Indicators of College Readiness: A Comparison of High School and College Measures

Faith Connolly, Linda S. Olson, Rachel E. Durham, and Stephen B. Plank



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Indicators of College Readiness: A Comparison of High School and College Measures

Executive Summary

This report compares high school indicators of college readiness for the Baltimore City Schools Class of 2011 with actual readiness as determined by Maryland colleges. Each Maryland colleges determines its own criteria for entering credit bearing courses or taking developmental courses. As a result, findings are reported separately by college rather than the district or high school. We hope that examining the alignment between readiness indicators provides an opportunity for City Schools and local colleges to determine how best to support students in the transition through high school and into college. This analysis focuses on the four colleges in which most graduates enrolled, the Community College of Baltimore County (CCBC), Baltimore City Community College (BCCC), Morgan State and Coppin State Universities.

High School Indicators of College Readiness

Many students enter high school not proficient in math and English. Approximately one-third of the Class of 2011 was proficient in math and about half in reading. In addition, many had low rates of attendance with a quarter of the Class of 2011 chronically absent in eighth grade. As a result, the transition into high school was difficult. More than one-third failed at least one academic course during ninth grade with two-thirds failing at least one during high school. The end result was an average weighted GPA of 1.8, a GPA that limits the colleges and scholarships for which students qualify.

In this report we proffer some high school measures of college readiness for consideration:

Scoring 550 or higher on the SAT. CCBC and BCCC use this score as a proxy for college readiness. While City Schools pays for students to take the PSAT and SAT, not all graduates take it (79.7% took the PSAT and 68.3% took the SAT).

GPA of 3.0 or higher. Research has shown that GPA is a better predictor of college readiness and degree completion than admissions assessments like the SAT or other indicators (Belfield & Crosta, 2012; Roderick, Nagaoka, & Coca, 2009; Scott-Clayton, 2012). Less than 1 in 10 (7.1%) of City Schools' graduates in the Class of 2011 had a GPA of 3.0 or higher.

Advanced Placement (AP) or International Baccalaureate (IB). Students who pass AP or IB exams are considered by most to be ready to complete college level work; about 20% of AP exam takers passed the exam.

Attendance. More than one-third of the Class of 2011 was chronically absent senior year, including about a quarter of those who went on to college. These patterns of attendance can easily carry over into college, where attendance is far less likely to be monitored.

College Determinations of Readiness

Each college determines who can take credit-bearing courses. They set policy on who needs to take an assessment and what cut-score is needed to take credit-bearing courses. CCBC and BCCC use an SAT score of 550 while Coppin uses a 470. Yet, there were students above those scores who took the Accuplacer at CCBC, BCCC, and Coppin, as well as students at Coppin not taking the placement exam who did not have a 470 or higher SAT score. Nearly all students were assessed in all three subject areas at CCBC, BCCC and Morgan. At Coppin about half (50.8%) of students were assessed in math.

While most graduates were assessed as needing developmental courses in math, reading, and writing, the greatest need is in math. In contrast, Morgan State has the reverse pattern, with more students needing developmental courses in reading rather than math. This may be due to the fact that Morgan's Accuplacer cut-points in math are dependent on a student's major.

High School Performance

Analysis of graduates from different high school types provided some surprising findings depending on the college. Over three quarters of the students from the entrance criteria high schools who enrolled in CCBC and BCCC were assessed to need developmental math. Virtually all graduates from CTE and traditional high schools were assessed as needing math developmental courses, with more than half also needing reading and writing.

About a third of graduates from the entrance criteria and CTE high schools enrolled in Morgan were placed in developmental math, but had a greater need in developmental reading. Students from the traditional high schools were assessed to need math and reading equally. Graduates enrolled in Coppin who took the math assessment were identified as needing developmental courses regardless of high school type. Coppin has the highest cut score on the Accuplacer.

Next Steps

Graduates from City Schools are showing an increase in college readiness with increasing GPAs, passing scores on AP exams, and students scoring higher on the SAT. The one metric that still has not moved is ninth-grade course failure; more than one-third of students still struggle with their courses as they enter high school.

We hope this research will result in two overarching activities:

1. There is an extraordinary need for open and honest communication across local agencies to address the barriers and challenges for City Schools' graduates to successfully navigate the application process, enrollment, and assessment for developmental courses.
2. Establish MOUs with CCBC and BCCC to understand the connection between students' preparation and their course performance in college. This will enable us to explicitly prepare students for the expectations at these colleges, as well as identify best practice.

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Project Background

This report examines the extent to which indicators of college readiness for the Baltimore City Public Schools (City Schools) Class of 2011 measured during high school correspond with the results of college placement exams taken by these students at the four Maryland colleges in which most of the graduates enrolled. Each college uses different criteria to exempt enrollees from placement testing and establishes its own cut-score for college readiness on the placement tests, so all analyses are presented by college.

Enrollment in College

Historically, just under half of Baltimore City graduates enroll in either a two- or four-year college the fall after graduation. This is of the 60 to 74% of students who graduated from high school. As seen in Table 1 (Durham & Olson, 2013), as the graduation rate has increased, college enrollment rates have dipped as might be expected with increasing numbers of marginal students graduating but opting not to go to college. Additionally, there is presently no reliable source of information describing which students at graduation enter employment, the military or enroll in proprietary (for-profit) institutions.

Table 1
Number and Percentage of City Schools Students Graduating and Enrollment in College the Fall after Graduation for the Classes of 2007 through 2012

Class	Graduate High School		Enroll Fall	
	N	Grad. Rate (Leaver)*	N	%
2007	4,111	60.1	2,008	48.9
2008	4,017	62.7	1,993	49.6
2009	4,277	62.7	2,131	49.8
2010	4,419	65.9	2153	48.7
2011	4,596	71.9	2,152	46.8
2012	4,633	74.0	2,053	44.3

Source: NSC/MSU data, received November 2012; *Leaver rate from MSDE mdreportcard.org used for comparable data for 2007 through 2012.

As seen in Table 2, for the last several years, the colleges in which most City Schools graduates enroll are the Community College of Baltimore County (CCBC) and Baltimore City Community College (BCCC), followed by the four-year colleges Morgan State and Coppin State.

Table 2
 Number of Students Enrolled in College Fall after Graduation
 by Higher Education Institution and Graduating Class

	Graduating Class					
	2007	2008	2009	2010	2011	2012
Comm. Coll. of Balt. County	245	309	433	603	606	671
Balt. City Comm. College	450	427	443	363	415	319
Morgan State University	123	147	152	166	143	131
Coppin State University	156	178	162	144	159	116
U of MD - Eastern Shore	140	89	68	84	61	66
U of MD - College Park	61	45	33	34	28	48
U of Baltimore	24	37	50	35	17	45
Frostburg State University	52	55	45	37	40	44
Bowie State University	79	77	47	40	49	41
Stevenson University	40	16	19	61	35	40
Towson University	118	92	80	57	61	36
Anne Arundel Comm. Coll.	5	12	21	12	28	23
Allegany College Of MD	--	--	--	12	27	21
McDaniel College	--	--	12	10	19	19
Johns Hopkins University	20	14	13	--	14	16
West Virginia University	12	--	26	14	--	15
Garrett College	--	--	--	--	--	14
U of MD - Balt. County	18	22	18	17	14	14
ITT Technical Institute	19	30	33	28	21	13
College Of Notre Dame of MD	--	20	13	12	16	12
Delaware State University	--	16	17	16	20	10
St Mary's College of MD	14	13	13	--	18	10
Total Enrolled	2,008	1,993	2,131	2,153	2,152	2,053

Source: Durham & Olson, 2013. NSC/MSU data, received November 2012.

Defining College Readiness

Students are ready for college when they can take college-level—rather than developmental or remedial—courses from the beginning of their enrollment (ACT, Inc. 2005; Conley 2007). Consequently, college ready students are likely to complete their degree. College readiness is associated with non-cognitive skills such as time- and conflict-management, tenacity, and sociability (Roderick, Nagaoka, & Coca, 2009) as well as academic indicators such as Grade Point Average (GPA) (Belfield & Crosta, 2012; Roderick et al, 2009; Scott-Clayton, 2012). The Maryland State Department of Education (MSDE) recommends that students complete challenging math courses in high school earning a grade of B or higher in order to successfully apply and enter college.¹

In this report we have operationalized college readiness measures as any of the following:

¹ mdreportcard.org/supporting/definitions.aspx

- Scoring 550 or higher on the SAT (used by CCBC and BCCC)
- High GPA, here operationalized as 3.0 or higher (MSDE recommendation)
- Receiving a B in a math course beyond Algebra II and geometry (MSDE recommendation).
- Passing an AP or IB course or scoring a 3 or higher on an AP exam (we do not have access to IB exam results so they could not be included).

Determining Need for Developmental Coursework

Most local institutions use the College Board Accuplacer computer-adaptive test. Accuplacer includes three subject areas: Math, Reading, and Writing. The Math portion of the test consists of Elementary Algebra (EA) and College-Level Math (CM). EA measures skills through intermediate algebra and CM assesses skills from intermediate algebra through pre-calculus (College Board, 2014).

As seen in Table 3, whether a student is assessed as needing developmental work depends on the institution at which he or she enrolls. For example, a score of 70 on the reading assessment will allow a student to take credit-bearing courses at Anne Arundel Community College (AACC), but not at CCBC or BCCC where a 79 and 80 are required, respectively.

Table 3
College Selectivity (Percent of Applications Accepted) and Accuplacer Score Required for College Credit-Bearing Courses, by College

College	% Applicants Accepted	Subject Area		
		Math	Reading	Writing
Two-Year				
CCBC	Not reported	45 (CM), 70 (EA)	79	90
BCCC	Not reported	45 (CM)	80	90
AACC	Not reported	45 (CM), 82 (EA)	68	73
Allegany	63.3	45 (CM), 60 (EA)	79	90
Four-Year				
Morgan	57.6	Major Dependent	89	98
Coppin	34.9	109 (EA)	88	Own
Frostburg	59.2	Own	Own	Own
Bowie	48.1	45 (CM), 75 (EA)	72	Own
Towson	52.2	109 (EA)	80	Own
UMES	57.5	63 (CM), 108 (EA)	Own	Own
UMCP	46.8	Own	None	None

Sources: Admissions statistics for Fall 2012 from IPEDS, Institute of Education Sciences, National Center for Education Statistics. Accuplacer cut score requirements obtained from college websites and personal communications with college admissions and testing office staff.
CM: College-level Math; EA: Elementary Algebra Own: College uses their own assessment

This report provides:

- A brief look at *all members of the City Schools Class of 2011* including a description of their high school and middle school indicators, demographic characteristics, and college-enrollment rates,
- A look at *the graduates who went to Maryland colleges* focusing on the colleges that enrolled at least 10 members of the City Schools Class of 2011,
- A look at *the graduates who, upon enrolling, were assessed for developmental course need, and then were deemed as needing developmental courses*, with a special focus on the match or mismatch between high school indicators of readiness and the colleges' assessment of students who needed developmental courses,
- A look at *the graduates who, upon enrolling, were not assessed for developmental course need, again* with a special focus on the match or mismatch between high school indicators of readiness and colleges' judgments about readiness.

Methodology

This report builds upon an earlier BERC report (Durham & Olson, 2013) that used National Student Clearinghouse (NSC) data to describe the enrollment of City Schools graduates in college the fall after high school graduation and their subsequent degree completion. Low degree completion rates, especially for City Schools graduates attending CCBC and BCCC (approximately 10% after six years), raised questions about the role of developmental course-taking and degree completion, specifically, whether relatively low rates of degree completion might have been a result of relatively high developmental needs upon arrival at college. As a result, this report examines indicators of college readiness as signaled in high school and assessed by local colleges.

This report addresses the following questions:

- What are the characteristics of graduates from the Class of 2011 who enrolled in a Maryland college or university in fall 2011?
- Of those enrolled, which students were assessed (i.e., screened or tested) for developmental course need?
- Of those assessed, who was identified as needing developmental coursework and in what subjects? How many had multiple needs, and did need vary by high school type?
- What was the reported developmental need by high school type?
- What were the high school indicators of readiness of students assessed as needing developmental courses?
- Who were the students with no assessment data?
- Who were the students who did not have assessment data, yet took developmental courses?

Data Sources

MHEC. The Maryland Higher Education Commission (MHEC) provided data for the City Schools Class of 2011 graduates who enrolled in Maryland colleges in fall 2011. Unlike the NSC, the MHEC data include an indicator of assessed need for developmental coursework in math, reading and writing. In addition, some students were coded “No assessment” or “No assessment but took developmental courses.”

City Schools. The district provided demographic information on students’ attendance, suspensions, mobility, academic performance, service receipt, high school coursework, weighted GPA, and assessments, including AP exams but not IB. Data on USM Admissions Requirements such as *Math beyond Algebra II & Geometry with B or Better* and successful completion of two years of foreign language which is often a requirement or recommendation to applicants to four-year colleges come from the MSDE High School Status and Completers file.

Definitions

College enrollees are City Schools graduates who enrolled in a Maryland college the fall after graduation for whom we have MHEC data. Colleges where at least 10 graduates enrolled are featured in the report. Names of colleges included in the report are abbreviated as follows:

- Community College of Baltimore County – CCBC
- Baltimore City Community College – BCCC
- Anne Arundel Community College – AACC
- Allegany College of Maryland – Allegany
- Coppin State University – Coppin
- Morgan State University – Morgan
- University of Maryland, Eastern Shore – UMES
- Towson University – Towson
- Bowie State University – Bowie
- Frostburg State University – Frostburg
- Stevenson University – Stevenson
- McDaniel College – McDaniel
- University of Maryland, College Park – UMCP
- College of Notre Dame of Maryland – Notre Dame
- Capitol College – Capitol College
- St. Mary’s College of Maryland – St. Mary’s

To minimize confusion, throughout this report developmental courses will be described as math, reading and writing even though some schools offer English developmental courses.

Limitations

Data Biases – Missing Data. The merged data file is limited to colleges in Maryland. Review of students enrolled out-of-state indicated they were similar in academic preparation. Out-of state enrollees had somewhat higher SAT scores and in-state students had higher GPAs. See Table A.4 in Appendix A.

Students with missing IDs and therefore excluded from the study, had higher high school GPAs, attended Entrance Criteria high schools, and enrolled in a four-year college (see Tables A.2, A.3). In contrast, students with potentially incorrect IDs had lower GPAs, took fewer AP/IB courses, and enrolled in community colleges. As a result, caution must be used in generalizing findings.

Missing Data. See Appendix A Table A.5 for further detail on missing data and population coverage within tables.

Findings

The findings section responds in turn to each of the questions stated in the methodology: an overview of the Class of 2011, followed by a description of those students who enrolled in Maryland colleges, then a review of who was assessed by the college and then the results of those assessments.

Characteristics of the Graduates from the Class of 2011

Middle School Performance. As seen in Table 4, many students who went on to graduate as members of the Class of 2011 entered high school not proficient on state assessments. One quarter of eighth grade students were chronically absent. Only one third (30.4%) were proficient in math and half (51.3%) were proficient in reading.

Table 4
Performance in Middle Grades for the Class of 2011 and
Students Enrolled in a Maryland College Fall 2011

	Class of 2011 <i>N = 4596</i>	Enrolled in MD College <i>N = 1344</i>
Seventh Grade		
Average Daily Attendance	92.4	93.9
Missed More than 20 days*	22.8%	16.6%
<i>MSA Proficient or Advanced:</i>		
Math	30.4%	40.2%
Reading	53.7%	62.2%
Eighth Grade		
Average Daily Attendance	91.6	93.1
Missed More than 20 days*	25.0%	18.1%
<i>MSA Proficient or Advanced:</i>		
Math	30.4%	40.1%
Reading	51.3%	61.3%

* Missed more than 20 days or more than 1/9 (20/180) of days on roll

Retention/Overage. As shown in Table 5, nearly one-quarter (23.9%) of the Class of 2011 entered high school overage, and being overage is often an indicator of an earlier retention. In fact, 3.1% of entering freshmen were two or more years overage. Students who went on to enroll in a Maryland college were less often overage.

Table 5
Demographics and Service Receipt for the Class of 2011 and
Students Enrolled in a Maryland College Fall 2011

	Class of 2011 <i>N</i> = 4596	Enrolled in MD College <i>N</i> = 1344
<i>Race</i>		
African American	91.4%	93.2%
White	7.3%	5.5%
Other/Multi-Race	1.3%	1.3%
<i>Ethnicity</i>		
Hispanic	1.8%	0.9%
<i>Gender</i>		
Female	56.7%	63.1%
Male	43.3%	36.9%
<i>Overage at Entry into Grade 9</i>		
Age Beginning of Grade 9	14.6	14.4
One Year Overage,	23.9%	15.7%
Two or More Years Overage	3.1%	1.4%
<i>Service Receipt</i>		
FARMS	70.6%	70.3%
Special Education	10.1%	6.3%
ELL	1.0%	0.0%
<i>Number of High Schools Attended</i>		
One	70.3%	75.4%
Two	21.5%	19.3%
Three or More	8.1%	5.4%
<i>High School Completion</i>		
Completed in 4 Years	87.7%	95.5%
Completed in 5 or More	12.3%	4.5%

Service Receipt. Most graduates qualified for Free/Reduced Price Meals (FARMS) (70.6%), one in ten (10.1%) received special education services, and 1.0% of graduates were English Language Learners (ELL). Students who later enrolled in a Maryland college qualified for FARMS at a similar rate as the full class but fewer received special education services and none was ELL. These numbers can be compared to the overall demographic and service-receipt profile of students in Baltimore City in 2010-11, where 69.4% of high school students qualified for FARMS, 16.7% for special education services, and less than 5.0% were ELL (MSDE, 2012).

Mobility. Most of the class graduated from the high school in which they enrolled as freshmen. Approximately one in five (21.5%) attended two schools, and less than one in ten (8.1%) were enrolled in three or more. Students who enrolled in a Maryland college were slightly less mobile.

Time to Graduation. Most (87.7%) completed high school in four years, 12.3% took five or more years (Table 5). Students enrolled in Maryland colleges had more often finished in four years than the class as a whole.

Attendance. As seen in Table 6, one-quarter (25.1%) of the Class of 2011 were chronically absent their freshman year, which increased to more than one-third (36.5%) during their senior year. Of those enrolled in a Maryland college, the rate was lower but still almost a quarter entered college with a pattern of low attendance.

Suspensions. More than 13% of the Class of 2011 were suspended during ninth grade, amounting to an average of 8.7 days of school missed by those who were suspended that year. During senior year, suspensions accounted for, on average, 7.2 missed days of school for the small percentage of students suspended (6.7%). For the subset enrolled in a Maryland college, the suspension rate was lower, impacting 9.3% of freshmen and 6.0% of seniors who were suspended an average of 8.6 days or 5% of the school year.

Table 6
Behaviors in Grade 9 and Senior Year for the Class of 2011 and
Students Enrolled in a Maryland College Fall 2011

	Class of 2011 N = 4596	Enrolled in MD College N = 1344
<i>Grade 9 Behaviors</i>		
Missed More than 20 days*	25.1%	17.1%
Suspension		
Students Suspended	13.2%	9.3%
Days Missed among Suspended	8.7	7.5
<i>Senior Year Behaviors</i>		
Average Daily Attendance	88.8%	91.7%
Missed More than 20 days*	36.5%	24.1%
Suspension		
Students Suspended	6.7%	6.0%
Days Missed among Suspended	7.2	8.6

* Missed more than 20 days or more than 1/9 (20/180) of days on roll

Academic Course Performance. As seen in Table 7, over a third (35.8%) of the 2011 graduates failed a course as a ninth grader. Two-thirds (65.3%) failed at least one academic course during their high school career. Overall grades in academic courses were in the low C range, which led to an average weighted GPA of 1.8 for the graduates. Recall that MSDE recommends a GPA of

3.0 or higher in order to be considered college ready. The similarity in the course performance suggests that something besides preparation may be driving the decision to go to college, as those that go perform similarly to those that do not.

Courses for Maryland University Admissions Requirements. More than one-quarter of the Class of 2011 took math beyond Algebra II and geometry and earned a B or better (28.7%), and slightly less than one-quarter (24.0%) completed two credits of a foreign language with a B or better. For the subset that enrolled in a Maryland college, about one-third took a math course beyond Algebra II (35.6%) and completed two credits in a foreign language (32.3%) and earned at least a B. With the new graduation requirements, current (2015) graduates should have the right allocation of credits to meet USM admission requirements, as long as they take foreign language and don't substitute technology for the requirement.

Table 7
High School Academic Performance for the Class of 2011
Students Enrolled in a Maryland College Fall 2011

	Class of 2011 N = 4596	Enrolled in MD College N = 1344
<i>Academic Performance</i>		
Weighted GPA	1.83	2.09
Mean Math Grade	70.2	72.4
Mean English Grade	72.5	74.9
Mean Social Studies Grade	72.8	75.3
Mean Science Grade	71.2	73.8
<i>Course-Taking</i>		
Beyond Algebra II & Geometry with B or better	28.7%	35.6%
Foreign Language, 2 credits B or better	24.0%	32.3%
Took Math Senior Year	61.5%	61.7%
<i>Course Failures</i>		
Failed Any Academic Course	65.3%	52.6%
Number of Academic Courses Failed	5	4
Failed Any Academic Course, Grade 9	35.8%	26.6%
Number of Courses Failed, Grade 9	3	3
Ever Failed Math Course	43.6%	31.0%
Ever Failed English Course	40.2%	27.3%
<i>AP/IB Enrollment</i>		
Any AP/IB Course	29.9%	39.3%
AP/IB Math	12.9%	16.5%
AP/IB English	18.5%	25.2%

AP and IB Courses. As seen in Table 7, more than one-quarter (29.9%) of the Class of 2011 took at least one AP or IB course. Most students (87% - 96%) who took AP courses passed the course, and between 76% and 86% both passed the course and took the AP exam. However, only 14.8% of students who took the math AP course achieved a score of 3 or higher (a score generally required to receive college credit), 18.1% scored 3 or higher on the English exam, and among those who took other AP courses 21.6% scored at least a 3 (see Table 8).

Pass rates varied by high school. At the Entrance Criteria high schools 34.3% of the high school graduates who were enrolled in AP English passed the AP exam in English, but only 7.1% of students at CTE schools passed the AP English exam and none of the AP English students at the traditional high schools (see Appendix Table B.2 for definition of high school types).

Table 8
Number and Percent of Class of 2011 Taking AP Course and Exam, and Scoring 3 or Higher

	<u>Took Math</u> (N=345)		<u>Took English</u> (N=609)		<u>Took Other AP Course</u> (N=638)	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Passed Course	<u>302</u>	<u>87.5</u>	<u>583</u>	<u>95.7</u>	<u>580</u>	<u>90.1</u>
Passed Course & Took Exam	<u>264</u>	<u>76.5</u>	<u>527</u>	<u>86.5</u>	<u>487</u>	<u>76.3</u>
Passed Course, Took Exam Scoring 3+	<u>51</u>	<u>14.8</u>	<u>110</u>	<u>18.1</u>	<u>138</u>	<u>21.6</u>

College Admissions Test-Taking. Students take the Preliminary SAT (PSAT) and SAT as an early indicator of college interest. These tests also provide a snapshot of academic readiness. PSATs are administered in school during school hours and the SAT is administered on Saturdays.

PSAT Participation. For the Class of 2011, 79.7% took the PSAT and 68.3% took the SAT (see Table 9). Overall, graduates took the PSAT twice (1.8) on average and the SAT at a similar rate (1.6). Roughly two-thirds of graduates took the SAT prior to their senior year, which suggests that most graduates did not leave their college preparations until their final year of high school.

To understand why some students may not be taking a PSAT during with their sophomore or junior year we examined a snapshot of test taking for Fall 2012. As seen in Appendix C, participation in PSAT varies by high school. Even though the district pays for students in grades 10 and 11 to take the test, not all do. In Fall 2012, the most recent year for which data are available, 63% of all City Schools sophomores and 61% of all City Schools juniors took the exam.

Expecting test-taking rates to be aligned to average daily attendance, we identified some schools with test-taking rates higher than average daily attendance. These are Baltimore Polytechnic, Western, Dunbar, School for the Arts, and Vivian T. Thomas Medical Arts Academy. In contrast, some schools have participation rates lower than average daily attendance. For example, ConneXions, had an average daily attendance of over 95%, yet between 50.9 and

56.1% of sophomores and juniors took the test. Some schools did not administer the PSAT. These include Baltimore Liberation Diploma Plus, Antioch Diploma Plus, and City Neighbors High School.

Table 9
College Admissions Exams Participation and Performance for the Class of 2011

	Class of 2011 <i>N</i> = 4596	Enrolled in MD College <i>N</i> = 1344
<i>PSAT</i>		
Took	79.7%	86.8%
Number of Times Took	1.8	1.9
Performance (Range: 20-80)		
Highest Math Score	37.7	38.8
Highest Critical Reading Score	36.8	38.2
Highest Writing Score	36.8	38.2
Highest Combined Score (Range: 60-240)	109.5	113.2
<i>SAT</i>		
Took	68.3%	87.0%
Number of Times Took SAT	1.6	1.7
Of SAT Takers, Took Prior to Senior Year	66.0%	70.2%
Performance (Range: 200-800)		
Highest Math	387.5	395.4
Highest Critical Reading	399.3	406.8
Highest Writing	386.3	394.8
Highest Combined Score (Range: 600-2400)	1158.0	1180.1

PSAT and SAT Performance. Average PSAT scores, shown in Table 9, would correspond to the 29th, 31st, and 21st national percentiles for 11th-graders in math, critical reading, and writing, respectively. Average scores on the SAT correspond to the 12th national percentile in math, 18th percentile in critical reading, and 17th percentile in writing. Overall performance is low, and declines in percentile rankings from PSAT to SAT are a surprise as a smaller percent take the SAT; one might expect these students are more academically inclined and more likely to apply to a four-year college.

One might expect taking the PSAT and possibly test prep courses or activities would lead to higher scores. As seen in Table 10, students who had taken the PSAT had significantly higher scores on their math and writing SAT compared to similar students who did not take the PSAT, although this difference is small when Grade 8 MSA performance—which strongly predicts SAT scores—is accounted for.

Table 10
 SAT Scores Predicted by PSAT Participation for City Schools Class of 2011
 First SAT Scores by Content

	Math	Critical Reading	Writing
Academic Indicators			
Grade 8 Math MSA	.69**	-	-
Grade 8 Reading MSA	-	.64**	.59**
Took PSAT	.03*	.02	.03 ⁺
<i>Adj R</i> ²	.56	.49	.48
(N)	(N=2394)	(N=2401)	(N=2401)

** $P \leq .01$ * $P \leq .05$ + $P \leq .10$

Note. Models included controls for gender, race/ethnicity, FARM status, and special education status.

Of Enrolled, Who Was Assessed for Developmental Course Need

As a policy, several colleges indicate that all arriving freshmen will take a placement assessment. In practice, the data suggest this is not always the case. (See Appendix, Table A.1 for a list by college of SAT cut-scores that exempt students from taking placement assessments.)

Assessed Students. As seen in Table 11, almost all students in community colleges were assessed, with rates ranging from 97% to 100%. At four-year colleges, non -assessed rates ranged from 11% to 90%.

Table 11
 Number and Percent of the Class of 2011 Enrolled in a Maryland College Fall 2011
 with Assessment Data by College

Colleges	Enrolled N	Assessment by Content					
		Math		Reading		Writing	
		N	%	N	%	N	%
Two-Year							
CCBC	417	411	98.6	414	99.3	414	99.3
BCCC	354	342	96.6	342	96.6	341	96.3
AACC	21	21	100.0	21	100.0	21	100.0
Allegany	17	17	100.0	17	100.0	17	100.0
Four-Year							
Coppin	118	60	50.8	-	-	-	-
Morgan	103	103	100.0	103	100.0	103	100.0
Towson	37	22	59.5	25	67.6	24	64.9
Bowie	36	32	88.9	14	38.9	32	88.9
Frostburg	34	34	100.0	34	100.0	34	100.0
Stevenson	22	-	-	2	9.1	1	4.5
UMCP	15	15	100.0	-	-	-	-
Capitol	11	11	100.0	-	-	11	100.0

- no data

Of Assessed, Who Was Identified as Needing Developmental Courses

This section considers only those students who were formally assessed upon college enrollment and determined to need developmental courses.

Two-Year Colleges. Despite colleges’ different cut-scores, almost all students at two-year colleges were deemed to need developmental courses in math, regardless of where they enrolled. At **CCBC** and **BCCC** more than one-half also were directed to developmental work in reading or writing; both schools had similar cut-scores: 79 (CCBC) and 80 (BCCC) in reading and 90 in writing (CCBC and BCCC).

Four-Year Colleges. As seen in Table 12, math was the area with the greatest assessed need for developmental courses. Every student who took the assessment at **Coppin** and **Towson** was determined to need a developmental math course, and these schools have the highest cut-score. In contrast, at Bowie, with the lowest cut-score, 87.5% of those assessed were placed in developmental math.

Morgan’s determination for credit-bearing math courses is dependent on a student’s major. As a result, more students needed developmental courses in reading (67.0%), followed by math (48.5%) and writing (24.3%).

Table 12
Number and Percent of Baltimore City Class of 2011 Enrolled in a Maryland College Fall 2011
Who Were Assessed As Needing Developmental Courses by Content and College

Maryland College	Enrolled	Needing Developmental					
		Math		Reading		Writing	
		Assessed	% Need Dev.	Assessed	% Need Dev.	Assessed	% Need Dev.
Two-Year Colleges							
CCBC	417	391	95.1	292	70.5	292	70.5
BCCC	354	341	99.7	213	62.3	285	83.6
AACC	21	19	90.5	9	42.9	5	23.8
Allegany	17	17	100.0	16	94.1	16	94.1
Four-Year Colleges							
Coppin	118	60	100.0	-	-	-	-
Morgan	103	50	48.5	69	67.0	25	24.3
UMES	45	-	-	-	-	-	-
Towson	37	22	100.0	14	56.0	0	0.0
Bowie	36	28	87.5	14	100.0	12	37.5
Frostburg	34	11	32.4	-	-	0	-
	22	-	-	2	100.0	0	0.0
Stevenson							
UMCP	15	15	26.7	-	-	-	-
Capitol	11	7	63.3	-	-	5	45.5
College							

- no data

Needing Multiple Developmental Courses. At the community colleges, most students needed developmental courses in all three areas (see Table 13), with two-thirds of the students (62.8%) enrolled at CCBC and 60.6% at BCCC. Fewer students were identified at four-year colleges as needing three developmental courses (50.0% of the assessed students at Bowie and 24.3% of the assessed students at Morgan).

Table 13
Number and Percent of the Class of 2011 Enrolled in a Maryland College Fall 2011 by Number of Content Areas Assessed as Needing Developmental Courses by College

Colleges	Enrolled	Assessed in All 3 Areas	Number of Assessed Dev. Needs					
			1 Area		2 Areas		All 3	
			N	%	N	%	N	%
Two-Year								
CCBC	417	411	73	17.8	62	15.1	258	62.8
BCCC	354	340	47	13.8	86	25.3	206	60.6
AACC	21	21	10	47.6	4	19.0	5	23.8
Allegany	17	17	1	5.9	0	0.0	16	94.1
Four-Year								
Morgan	103	103	33	32.0	18	17.5	25	24.3
Towson	37	15	8	53.3	7	46.7	0	0.0
Bowie State	36	14	1	7.1	6	42.9	7	50.0
Frostburg	34	34	11	32.4	0	0.0	0	0.0

Note: Data are only for students who received assessments in all 3 content areas.

Developmental Need by High School Type

The next section will present summary information on assessed need for developmental courses by high school type.

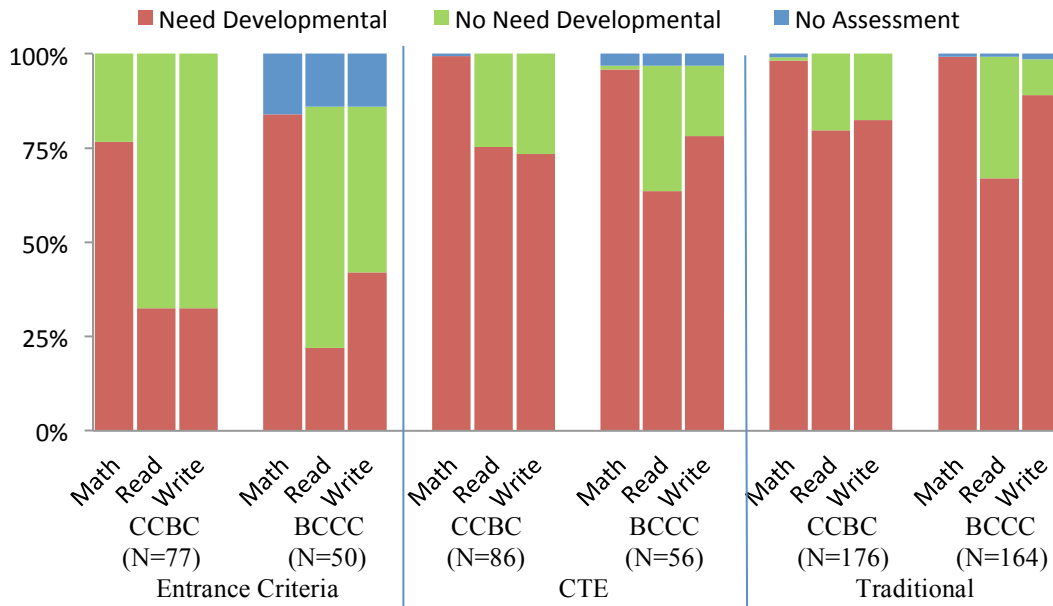
In each content area, students are classified as:

- Assessed as needing developmental courses
- Assessed as not needing developmental courses
- Not assessed

Two-Year Colleges: CCBC and BCCC

Entrance Criteria High School Graduates. As seen in Figure 1, panel 1, all students enrolled in CCBC were assessed. Three-quarters (76.6%) were assessed as needing math developmental courses and 32.5% in reading and writing. At BCCC, 14.0% of students were not assessed. Of those assessed, 100% were placed into developmental math, 25.6% in developmental reading and 48.8% in writing.

Figure 1. Percent of Class of 2011 enrolled in CCBC and BCCC fall 2011 by assessed need and high school type.



CTE High School Graduates. As seen in the entrance criteria high schools, all CTE graduates attending BCCC and most at CCBC were assessed in all three content areas. Virtually all needed developmental math, more than half (75.3% at CCBC and 63.5% at BCCC) needed developmental reading, with even higher rates in writing (73.4% at CCBC and 78.1% at BCCC).

Traditional High School Graduates. Almost all students at CCBC and BCCC were assessed and determined to need developmental math. At CCBC, four out of five needed both developmental reading and writing, and at BCCC, 66.9% in reading and 88.1% in writing.

An interesting pattern emerged comparing CCBC’s and BCCC’s rates of developmental need in reading and writing. At BCCC, the rate was lower for reading than for writing for each high school type, whereas at CCBC the rates were the same in both reading and writing. This was despite the fact that CCBC and BCCC had the same cut-score in writing, and CCBC set its cut-score one point lower in reading. This suggests possible sorting into the two schools.

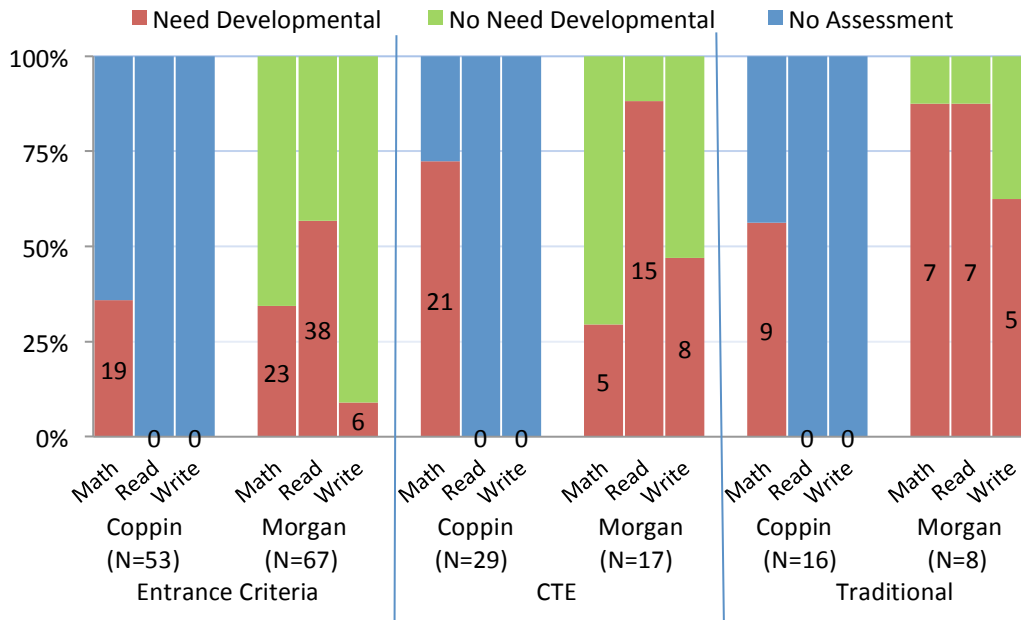
Four-Year Colleges: Coppin and Morgan

Review of assessed need by high school type provides a different look at the data and some new patterns emerge. For all high school types, Coppin provides assessment data for math only and Morgan provides assessment data all three content areas.

Entrance Criteria High School Graduates. One-third of students (35.8%) attending Coppin were assessed in math with all of them needing developmental math (see Figure 2). [Reminder: Coppin had the highest reported cut-score for math.] At Morgan, every student was assessed; 34.3% of those were identified as needing developmental math, 56.7% reading and 8.9% writing.

CTE High School Graduates. About two-thirds of CTE students attending Coppin were assessed in math and again *all* were assigned to developmental math. All Morgan enrollees were assessed in all three areas with 29.4% indicating a need for developmental math, 47.1% in writing, and 88.2% needing development reading, making it the only school identifying a developmental need greater in reading than math.

Figure 2. Percent of Class of 2011 enrolled in Coppin and Morgan fall 2011 by assessed need and high school type.



Traditional High School Graduates. Less than one-half (43.8%) of Coppin enrollees from traditional high schools were not assessed in math, but among those assessed, *all* needed a developmental course. At Morgan all students were assessed in all three areas and 87.5% were assessed as needing developmental math or reading, and 62.5% writing.

High School Indicators for Students Assessed as Needing Developmental Courses

Are there high school indicators suggesting readiness that align with these college assessment patterns? We examined:

- Scoring 550 or higher on the SAT (note: Coppin uses 470 and Towson uses 500)
- Earning a high GPA, here operationalized as 3.0 or higher
- Receiving a B in a math course beyond Algebra II and geometry
- Passing an AP or IB course, or scoring a 3 or higher on an AP exam

Table 14
 Percent of Students Assessed as Needing Developmental Courses with High School Indicators of College Readiness by Content and College (Abridged, see Appendix D for full table)

Math		Math SAT 550+	GPA 3.0 +	Beyond Alg II/Geom w/ B or higher	Passed AP/IB Math Course	3+ on AP Exam	Took Math Senior Year
	N						
Two-Year College							
CCBC	391	0.0	2.1	22.8	8.4	0.0	55.8
BCCC	340	0.0	1.8	23.2	3.8	0.0	47.9
Four-Year College							
Coppin	60	1.7 [†]	6.7	45.0	20.0	0.0	61.7
Morgan	50	2.0	12.0	30.0	26.0	0.0	68.0
Bowie	28	0.0	7.1	35.7	17.9	0.0	78.6
Towson	22	0.0 [†]	68.2	72.7	9.1	0.0	45.5
Reading		Reading SAT 550+	GPA 3.0 +	Passed AP/IB English Course	3+ on English AP Exam		
	N						
Two-Year College							
CCBC	292	0.0	0.7	8.6	0.0		
BCCC	212	0.0	0.9	6.1	0.0		
Four-Year College							
Morgan State	69	1.5	11.6	37.7	1.5		
Bowie State	14	7.7	14.3	57.1	0.0		
Towson	14	0.0 [†]	78.6	42.9	0.0		
Writing							
Two-Year College							
CCBC	292	0.0	0.7	8.6	0.0		
BCCC	284	0.0	1.8	7.7	0.0		
Four-Year College							
Morgan State	25	0.0	8.0	44.0	0.0		
Bowie State	12	0.0	8.3	58.3	0.0		

[†] Table reflects Coppin's 470 SAT cut score and Towson's 500.

Taking math senior year was included to determine if it might be an explanatory variable for low performance on the Accuplacer, i.e., students' skills got rusty with a year of non-use.

Two-Year Colleges. As seen in Table 14, no student assessed as needing developmental courses scored 550 or higher on the SAT. About one-quarter had earned a B or better on a math course beyond Algebra II and geometry. Also, less than one-tenth had passed an AP/IB course in the corresponding subject, and none passed the AP exam. A small percentage had GPAs of 3.0 or higher.

Four-Year Colleges. All students enrolled in a four-year college had to meet admission requirements to even enroll. In addition to this, some schools assessed further for college readiness. A handful of these students assessed as needing developmental courses scored 550 (or

their applicable SAT cut score) or higher on the SAT. Many had earned a GPA of 3.0 or better, including 68.2% of Towson students who needed developmental math.

Assessed Math Need. Many of the students assessed as needing math developmental courses had earned a B or better in a math class beyond Algebra II and geometry, including 30.0% at Morgan, 45.0% at Coppin, 72.7% at Towson and 100.0% of students at UMCP. This indicates a misalignment between students' college readiness as indicated by their high school record and the colleges' assessment of their readiness for college work. Not taking math during senior year did not explain the high rates of need for developmental, as 50% to 75% of students needing math developmental courses had taken math during their senior year.

Students with No Assessment Data

In Table 15, students with no assessment data are described by whether they had high school indicators of readiness that might explain why they were not assessed.

Two-year Colleges. Most students enrolled in the community colleges were assessed in all three subject areas.

Four-Year Colleges. For the four-year colleges the data showed greater variation in whether or not students were assessed. Of those students *not* assessed, a sizeable percentage had SAT scores of 550 (or applicable SAT cut score) or higher in the relevant content area, with the highest levels at Towson, where all non-assessed students had SAT scores above 500 (the level required for exemption from the Accuplacer at Towson).

St. Mary's followed Towson in terms of likely SAT-related exclusions from assessment, with math and reading at 18.2% and 45.5%, respectively. At Coppin 29.8% of students not assessed in math had SAT scores above its 470 cut off, and 22.6% of those not assessed in reading and writing scored above 470. One-half to three-quarters of students in four-year colleges who were not assessed in math had achieved a B or better on a course beyond Algebra II and geometry.

Among the remaining cases, it is unclear what might have qualified them for credit-bearing courses, suggesting that how colleges determine who needs to be assessed before selecting courses in their freshman year needs to be made more transparent. See Appendix E for more detailed data on the non-assessed students.

Table 15
 Percent of Students with No Assessment Data by High School Indicators
 of College Readiness by Content and College (Abridged, see Appendix E for complete table)

Math		N	Math SAT 550+	GPA 3.0 +	Math Beyond Alg II w/B	Passed AP/IB Course	3+ on Math AP Exam
Two-Year College							
CCBC	417	6	0.0	0.0	16.7	0.0	0.0
BCCC	354	12	16.7	25.0	41.7	25.0	0.0
Four-Year College							
Coppin	118	58	29.8 [†]	8.6	50.0	25.9	3.5
Towson	37	15	100.0 [†]	53.3	73.3	66.7	13.3
Stevenson	22	22	20.0 [†]	13.6	59.1	31.8	0.0
Reading		N	Crit. Read. SAT 550+	GPA 3.0 +	Passed AP/IB English Course	3+ on English AP Exam	
Two-Year College							
CCBC	417	3	0.0	0.0	0.0	0.0	0.0
BCCC	354	12	16.7	25.0	33.3	33.3	8.3
Four-Year College							
Coppin State	118	118	22.6 [†]	7.6	29.7	29.7	0.9
Towson	37	12	100.0 [†]	58.3	58.3	58.3	33.3
Bowie State	36	22	0.0	0.0	63.6	63.6	0.0
Stevenson	22	20	10.5 [†]	15.0	45.0	45.0	0.0
UMCP	15	15	40.0	33.3	60.0	60.0	20.0
Capitol College	11	11	18.2	18.2	36.4	36.4	0.0
Writing							
Two-Year College							
CCBC	417	3	0.0	0.0	0.0	0.0	0.0
BCCC	354	13	15.4	23.1	38.5	38.5	7.7
Four-Year College							
Coppin State	118	118	22.6 [†]	7.6	29.7	29.7	0.9
Towson	37	13	100.0 [†]	53.9	61.5	61.5	30.8
Stevenson	22	21	10.0 [†]	14.3	42.9	42.9	0.0
UMCP	15	15	33.3	33.3	60.0	60.0	20.0

[†] Coppin, uses a 470 SAT cut score, Towson uses 500, Stevenson uses 500 for math and 520 for reading and writing. These tables reflect those SAT scores.

Enrolled in Developmental Courses with No Assessment Data

A small subset of students with no assessment data enrolled in developmental courses. The greatest number was in math. Most of these students were at UMES and Stevenson University (see Table 16).

It is unclear why some students enrolled in developmental courses with no assessed need. As a percent of students enrolled, UMES had a high proportion enrolling in developmental math. Stevenson enrolled almost one-half of Baltimore City graduates in developmental courses without an assessment indicator.

Table 16
 Number of Class of 2011 Enrolled in a Maryland College Fall 2011
 Who Were Not Assessed but Who Enrolled in Developmental Courses by Content and College

	Enrolled	Enrolled in Developmental and No Assessed Need		
		Math	Writing	Reading
Two-Year Colleges				
CCBC	417	-	1	1
BCCC	354	7	6	2
Four-Year Colleges				
UMES	45	36	-	-
Bowie	36	4	-	-
Stevenson	22	11	14	13

Note: - no data

Discussion and Recommendations

This report examines high school indicators of college readiness and compares them with assessed readiness results reported by colleges in Maryland. Local colleges use different cut-scores for college readiness, making it impossible to make comparisons across the district or even by high school as students enroll in different colleges. For this reason, the discussion is focused on the most commonly enrolled colleges, CCBC, BCCC, Morgan and Coppin.

Class of 2011 Who Enrolled in a Maryland College. The graduates of the Class of 2011 who later enrolled in Maryland colleges entered high school not proficient on the state assessments in math (60%) and English (39%), and many missed more than 20 days in 8th grade (18%). They started their freshman year with low attendance, 17% missed more than 20 days, and poor academic performance, with 27% failing at least one academic course, and 53% failing at least one academic course by graduation.

As they applied to college, their average GPA was 2.09 with 36% having received a B or better in math beyond Algebra II/Geometry and 32% earning a B or better on two credits in foreign language. The majority took college admissions tests with 87% having taken the PSAT and SAT at least once. The average combined math and reading SAT score was 802.

College Determinations. One surprising finding is the pattern, or lack of, for placement test administration. CCBC and BCCC have a policy that students with SAT scores of 550 and higher do not need to be assessed for developmental course need. Yet, some students with these scores did take the placement test. Moreover at Coppin, students needed a lower score, 470 on the SAT to be excused from the placement test, yet some students with a 470 took the test and other students without a 470 did not.

In addition, cut scores for placement into credit bearing courses varied by college. So, being placed in developmental courses ultimately depends on the college one attends.

Of those assessed, most were identified as needing developmental coursework in math. This was not surprising for students enrolled in Coppin and Towson with the highest cut-score. One college, Morgan State did not report math as the content area with the highest need, likely due to their policy that cut scores are dependent on a student's major. As a result, more students needed developmental courses in reading (67%), followed by math (49%) and writing (24%).

A discouraging finding was the number of students identified as needing multiple developmental courses. At the community colleges, most students needed developmental courses in all three areas. Fewer students were identified at four-year colleges with 24% of the students at Morgan assessed as needing developmental course in all three content areas.

High School Performance by Type. Patterns for developmental need varied by high school type. The majority of Entrance Criteria high school graduates who enrolled in the community colleges were assessed to need developmental courses in math (75 to 80%); of those who enrolled in Coppin, a third were assessed in math with all of them needing developmental math. [Reminder:

Coppin had the highest reported cut-score for math.] All students enrolled at Morgan were assessed and a third needed developmental math, half in reading and about 10% in writing.

All CTE high school graduates who enrolled in the community colleges were assessed in all three content areas and virtually all needed developmental math. More than half (75% at CCBC and 64% at BCCC) needed developmental reading, with approximately three-quarters needed developmental writing (73% at CCBC and 78% at BCCC). About two-thirds were assessed in math when they enrolled at Coppin, and again *all* were assigned to developmental math. All Morgan enrollees were assessed in all three areas with 30% indicating a need for developmental math, 47% in writing, and 88% in reading.

Nearly all graduates of the Traditional high schools were assessed, and a majority of those attending CCBC and BCCC were determined to need developmental math. At CCBC, four out of five needed both developmental reading and writing, and at BCCC, 67% in reading and 88% in writing. About half of enrollees at Coppin in were assessed in math, and among those assessed, *all* needed a developmental course. At Morgan all students were assessed in all three areas and 88% were assessed as needing developmental math or reading, and 63% writing.

High School Indicators. Knowing the college remediation need, we examined high school data to try to identify reasons why a student was or was not assessed and indicators that would explain the high levels of developmental need, particularly in math; none could be determined. SAT scores above 550 or earning a 3 or higher on an AP exam suggested a level of readiness that was reflected in the college determinations of developmental course need. However, these are very high standards for students enrolling in a community college. Non-helpful indicators were earning a B or better on a math course beyond Algebra II/geometry, passing an AP course in that content area. One other factor, taking math in the senior year, did not explain the high levels of math developmental need.

GPA continues to be a conundrum. With an average GPA of 2.09 for college enrollees, it is hard to imagine that grades are inflated. Yet we saw a handful of students with a GPA of 3.0 or better identified for developmental courses. This may suggest that cut scores at the college are too high. This warrants a conversation between the colleges and Baltimore City Schools to establish a better alignment between City Schools academic programs and the expectations of colleges.

Very few students opt to take developmental courses without any assessment data. No patterns could be ascertained.

These findings provide a glimpse into some of the challenges faced by the district in thinking about how to measure and improve college readiness for Baltimore City Schools graduates. The findings also motivate some recommendations regarding how City Schools and local colleges could better align their academic programs and expectations to improve student trajectories.

Recommendations

There is a need for much clearer communication on college readiness across Baltimore and Maryland. Conversations need to include the district, local colleges, families, students, community stakeholders, and college access advocates, clarifying expectations for readiness for high school students and what colleges expect from entering freshmen. For example, MHEC should develop a web page that provides the readiness standards for all Maryland colleges for use by students, families, and counselors as an important tool for selecting and applying to colleges. Opportunities for clear communication to all graduates throughout the state will provide better clarity for high schools and colleges.

Moreover, SAT cut scores that place students in credit-bearing courses should be well known and a transparent policy at all colleges. Coppin (with a 470 and selective admissions requirements) and CCBC and BCCC (with 550 and an open door policy) might consider better aligning their expectations for entering freshmen.

City Schools should ease students' transition into high school to improve outcomes for ninth graders. For example, City Schools could offer summer bridge or transition programs to orient students at the start of ninth grade to the importance of attendance and maintaining a high GPA so that passing classes becomes a priority. After the start of the school year schools should monitor student performance throughout that first year and intervene if students struggle. These interventions could focus on attendance, academic performance, or behavior challenges students experience.

The district should develop a career/college readiness strategic plan that recognizes that career and college-going begins long before high school. Students who enter high school struggling academically and with low attendance are not poised to be successful in high school. Also not discussed in this report is an important component of a student's trajectory -- the high school choice process. The high school a student attends has implications for their level of readiness for either career or college. Applications use 7th grade attendance and performance, something not all our students and their families know at the start of seventh grade. City Schools might adopt a framework like the *College Readiness Indicator Systems Framework* (CRIS) which identifies three dimensions of college readiness: Academic Preparedness, Academic Tenacity, and College Knowledge, measured at the individual student-level, school-level and system-level. Students' personal progress toward college readiness on each dimension could be monitored. Individual-level indicators of Academic Preparedness include GPA, no failures in core subjects, maintaining achievement levels during transition years (i.e. middle school to high school) and participation in college-level coursework (AP, IB); attendance and disciplinary infractions are indicators of Academic Tenacity; College Knowledge includes participation in PSAT and SAT testing, development of independent study skills, and knowledge of college admissions criteria and financial aid requirements, such as FASFA. Successful implementation of CRIS would require school and district level efforts to put in place policies and infrastructure to support student college readiness (e.g. funding for guidance counselors). Work on this has already begun.

Course failure has implications for many students and might suggest the district should review its current grading policy. The low GPAs reported by graduates and those who enroll in college

limit their ability to apply to a four-year college or to qualify for scholarships. Failing one or more courses during freshman year results in a low GPA that requires a lot of effort to improve. First, schools could monitor course performance more carefully in an attempt to improve student performance and passing. Second, grading policy could be amended to allow students to retake courses and replace a former F with a passing grade. Also, students need to be aware of the importance of GPA, and that low GPAs can limit the colleges to which they can apply and their eligibility for scholarships.

Schools need to ensure all students take advantage of the district sponsored PSAT and SAT.

Schools should communicate the importance of taking the exams through teachers, administrators, and families. Also, students should be aware that students who took the PSAT had statistically significantly higher SAT scores. Moreover, students need to know what score to aim for. Local community colleges use SAT scores of 550 as an indicator of college readiness and scoring at that level exempts them from taking a placement test at several local colleges.

Community colleges need to evaluate how students are identified for developmental courses.

Colleges should adopt common standards when setting their cut-scores to reduce confusion for students and families as well as counselors and high schools. The low degree completion and transfer rates previously reported for Baltimore City graduates suggests further review of student performance in college should continue. For example, community colleges should examine pass rates in developmental courses and if necessary re-design them to increase student success. Establishing an MOU between BEREC, City Schools, CCBC and BCCC could increase the opportunities to specifically identify where students are not successful.

Colleges need to align math requirements with student need. Taking and passing developmental math has become for many students a major barrier to staying in school and attaining a degree. Colleges should recognize that students with different career interests may need different levels of math proficiency. For example, Morgan differentiates its Accuplacer cut-scores according to a student's major, and more should consider doing so.

Colleges should move away from relying solely on results from a single placement test and use multiple measures to assess students and determine need for remediation. Research has shown that many students placed in developmental courses could otherwise have satisfactorily taken the gateway college-level courses (Scott-Clayton and Rodriguez, 2012). Examining the student's total high school transcript would enable colleges to find *better predictors of success* such as the new PARCC assessment.

Readiness Indicators over Time

To provide more context and timely data, Table 17 contains several possible indicators of readiness for the graduating classes of 2011 through 2013.

There are some reasons for guarded optimism, at least for the Class of 2013. For most of these benchmarks the percent of students meeting them has increased over time, especially when comparing the Class of 2013 to the Class of 2011. More students are entering ninth grade

proficient in math and reading and are not chronically absent in the eighth grade. Also, the percent of students accruing enough credits during ninth grade to be a tenth-grader has increased over time.

Table 17
Percent of Baltimore City Graduates by College Readiness Indicators, Classes of 2011 thru 2013

	Class		
	2011 N=4596	2012 N=4633	2013 N=4471
<i>4-Year Cohort Graduation Rate</i>	65.8	66.5	68.5
Entering High School Ready			
MSA Proficiency, Grade 8			
Math	30.4	33.5	45.9
Reading	51.3	53.7	67.7
Not Chronically Absent, Grade 8	75.0	78.3	85.3
Successful First Year of High School			
Accrued 4 Credits in First Year (promoted)	88.4	91.1	93.3
Failed Any Academic Course, Grade 9	35.8	37.0	39.2
Not Chronically Absent, Grade 9	74.9	75.7	75.4
College Readiness Behaviors			
Passed Algebra I, Grade 9	87.0	86.6	83.5
Took PSAT	79.7	82.7	86.4
Took SAT	68.3	70.1	68.5
Not Chronically Absent, Grade 12	63.5	67.9	70.1
Meets USM Admissions Requirements			
Math Beyond Algebra II & Geometry w B or better	28.7	12.9	18.4
Two Years of For. Lang. B or better	24.0	24.5	27.1
College Readiness Performance			
<i>Course Performance</i>			
Mean wGPA	1.83	1.89	1.95
wGPA \geq 3.0	7.1	8.1	9.7
wGPA \geq 2.5	18.6	20.2	23.0
<i>SAT Scores</i>			
Math			
Of Takers, 550 or Higher	6.7	6.5	7.7
Of Takers, 500 or Higher	12.8	12.8	14.4
Critical Reading			
Of Takers, 550 or Higher	7.9	7.3	8.6
Of Takers, 500 or Higher	14.2	13.6	16.5
Writing			
Of Takers, 550 or Higher	6.8	6.4	6.2
Of Takers, 500 or Higher	12.6	11.8	12.3
Any AP Exam, 3 or Higher	3.9	4.3	5.0
Took Any AP Exam	22.1	22.3	24.0
3 or Higher on Exam (of Takers)	17.6	19.5	20.8

Academic performance has also increased. Weighted GPAs have increased to an average of 1.95 for the Class of 2013 and almost 10% had weighted GPAs over 3.0, the indicator of college readiness proposed by MSDE. Failing an academic course as a ninth grader has unfortunately increased.

The percent of students scoring 500 or 550 or higher on the SAT has also increased as the percent of graduates taking the SAT has hovered around 70%. Also, an increasing proportion of graduates leave city schools with a score of 3 or higher on one AP exam.

Areas for Further Study

As Baltimore City moves to improve outcomes for students, we suggest conducting a more detailed examination of math trajectories. As seen in this report, math achievement is a challenge for graduates who enroll in college. Math learning is heuristic, meaning that increasingly advanced courses require mastery of more fundamental skills, which are most thoroughly addressed in the later elementary and middle grade years. A forthcoming analysis will attempt to identify important opportunities for earlier intervention, so that students will be better situated for success in both high school and college math courses.

The trajectories of ELL students need to become a focus for analysis. While still a small percentage of the district, their success will become increasingly important to the district. While none from the Class of 2011 were reported to be attending a Maryland College, we do not know if they are working or involved in other postsecondary options.

An additional piece of work is to examine student trajectories into and through college. Understanding the pathway to and through developmental courses will shed much light on what high schools and colleges need to do to support student success. To accomplish this BERC would like to develop an MOU with City Schools, CCBC and BCCC to examine course trajectories from high school into college to provide a picture of persistence and performance of students in the community colleges.

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Appendix A: Methodology

Table A.1
 SAT Cut-Scores Used for Exemption from Placement Exams
 for Colleges Attended by the Class of 2011

School	Mathematics	2010 Percentile	Critical Reading	2010 Percentile	Writing	2010 Percentile
<i>Two-Year Colleges</i>						
AACC	550	61	510	53	-	-
BCCC	550	61	550	66	550	69
CCBC	550	61	550	66	550	69
Allegany	550	61	550	66	550	69
<i>Four-Year Colleges</i>						
Coppin	470	35	470	39	-	-
Morgan	-	-	-	-	-	-
Towson	500	45	500	50	500	53
Bowie	-	-	-	-	-	-
Frostburg	-	-	-	-	-	-
UMCP	-	-	-	-	-	-
UMES	-	-	-	-	-	-
St Mary's	-	-	-	-	600	81
Stevenson	500	45	520	51	520	59
McDaniel	-	-	-	-	-	-
Notre Dame	-	-	-	-	-	-
Capitol College	-	-	-	-	-	-

Note: A dash indicated that SAT score not used for placement purposes. See College Board, 2011, "SAT Percentile Ranks" for complete list of SAT percentiles.

Table A.2
Demographic Profile of Class of 2011 Attending Maryland College in Fall 2011
By MHEC Data Availability and State ID

	MHEC Data Not Available			MHEC Data Available N=1344
	No State ID Available N=327	ID Available, No Match N=238	Total N=565	
Percent				
Male	34.0	38.0	36.0	37.0
African American	85.9	93.3	89.0	93.2
White	10.7	5.9	8.7	5.5
Other/Multi-Race	3.4	0.8	2.3	1.3
Overage	14.4	26.5	19.5	17.0
<i>Service Receipt</i>				
FARMS	58.4	75.1	65.3	70.3
Special Education	4.3	6.7	5.3	6.2

Table A.3
High School Performance of Class of 2011 Attending Maryland College in Fall
By MHEC Data Availability and State ID

	MHEC Data Not Available			MHEC Data Available N=1344
	No ID Available N=327	ID Available, No Match N=238	Total N=565	
% Entrance Criteria H. S.	50.5	20.2	37.7	31.6
GPA	2.2	1.9	2.1	2.1
% Missing SAT	10.4	22.2	15.4	13.0
Mean SAT Composite	1263	1133	1213	1180
Took AP/IB Courses	46.8	36.6	42.5	39.3
Attended four-year College	50.5	26.5	40.4	38.0

Table A.4
Measures of College Readiness for Class of 2011 Attending College in Fall

	Maryland College		Non-Maryland College	
	Two-Year College N=1104	Four-Year College N=708	Two-Year College N=35	Four-Year College N=305
Entering High School Ready				
MSA Proficiency, Grade 8				
Math	21.5	66.5	9.5	59.4
Reading	45.5	88.0	28.6	75.7
Not Chronically Absent, Grade 8	78.0	89.8	71.4	85.8
Successful First Year of High School				
Accrue 4 Credits in First Year (promoted)	88.9	98.6	96.7	96.5
Failed Any Academic Course, Grade 9	37.0	10.9	27.3	11.2
Not Chronically Absent, Grade 9	76.7	92.5	70.4	93.4
College Readiness Behaviors				
Passed Algebra I, Grade 9	86.6	97.6	97.1	94.4
Took PSAT	81.3	93.9	74.3	94.4
Took SAT	79.2	98.5	71.4	91.2
Not Chronically Absent, Grade 12	69.4	84.6	60.0	85.9
Meets USM Admissions Requirements				
Math Beyond Algebra II w B or better	24.6	53.8	11.4	53.8
Two Years of For. Lang. B or better	21.5	47.3	5.7	42.3
College Readiness Performance				
<i>Course Performance</i>				
Mean wGPA	1.78	2.55	1.55	2.44
wGPA \geq 3.0	2.6	22.6	0.0	20.0
wGPA \geq 2.5	13.0	51.3	5.7	44.3
<i>SAT Scores (Among Those Who Took SAT)</i>				
Math				
Of Takers, 550 or Higher	0.8	14.4	0.0	26.3
Of Takers, 500 or Higher	3.3	26.7	0.0	38.9
Critical Reading				
Of Takers, 550 or Higher	2.4	16.2	4.0	25.9
Of Takers, 500 or Higher	5.0	29.6	4.0	38.1
Writing				
Of Takers, 550 or Higher	1.3	14.5	4.0	26.3
Of Takers, 500 or Higher	3.6	28.4	8.0	39.6
<i>Any AP Exam, 3 or Higher</i>	0.4	12.9	2.9	18.0
Took Any AP Exam	16.7	55.4	5.7	46.2
3 or Higher on Exam (of Takers)	2.2	23.2	50.0	39.0

Table A.5
Missing Cases – Number of Cases (Ns) for Class of 2011 and Enrolled in MD College Fall 2011

	Class of 2011	Enrolled in MD College
<i>Demographic and Service Receipt</i>		
Gender, Race, Hispanic, Age	4596	1344
FARMS	4445	1325
Special Education, ELL	4596	1344
<i>Middle School Measures</i>		
Attendance, Grade 7	3626	1124
Attendance, Grade 8	3747	1155
MSA Math Proficiency Score, Final Gr 7	3500	1106
MSA Reading Proficiency Score, Final Gr 7	3508	1106
MSA Math Proficiency Score, Final Gr 8	3584	1119
MSA Reading Proficiency Score, Final Gr 8	3592	1121
<i>Beginning Ninth Grade</i>		
Age On Sept 1 of Year Began Grade 9	4544	1337
Attendance, Grade 9	4114	1243
Suspended Grade 9	4114	1243
Total Days Suspended Grade 9	4114	1243
<i>Senior Year Measures</i>		
Age Sept 1 of Senior Year	4596	1344
Attendance, Senior Year	4585	1343
Suspended Senior Year	4585	1343
Total Days Suspended, Senior Year	4585	1343
<i>High School Attended, Retention</i>		
Number of High Schools Attended	4552	1339
Completed High School in 4 Years or Less	4596	1344
<i>Transcript, HSSC File</i>		
Weighted GPA	4590	1343
Math Course Beyond Algebra II with B	4596	1344
At Least 2 Foreign Language Courses with B	4596	1344
<i>Course History</i>		
Academic Course Failures, Grade 9	4504	1329
Any Academic Course Failures	4591	1343
Took Math as a Senior	4591	1343
AP/IB Coursework	4591	1343
<i>College Admissions Testing</i>		
Ever Took PSAT	4596	1344
PSAT Performance	3664	1167
Ever Took SAT	4596	1344
Took SAT by End Junior Year	3137	1169
SAT Performance	3137	1169
<i>AP Exams</i>		
Took AP Exams	4596	1344
AP Exam Performance	1017	413

Appendix B: High School Indicators by High School Type

There are several types of public high schools in Baltimore City:

- *Entrance Criteria schools* customarily serve students from the entire city and generally feature a comprehensive curriculum. However, to be accepted, students must reach certain thresholds on the grade 7 Maryland State Assessment (MSA), have a high attendance rate in grade 8, and have competitive middle school grade averages in English, math and science.
- *Career-Tech schools* have a curriculum focused around technology; they seek to prepare students for further education and/or careers in technological fields. These schools also have some academic entrance requirements.
- *Traditional schools* are high schools with no special entrance criteria, featuring a standard comprehensive curriculum. Historically, these schools served the local neighborhoods, but City Schools currently allows most students to choose where they enroll in high school.
- *Charter schools* are externally operated public schools of choice, without entrance criteria. Each school has a specific contract with the district that details its curriculum, goals, and assessment methods.
- *Innovation schools* are small, independent schools operated by a non-profit governing board that oversees the school's performance.
- *Transformation schools* serve grades 6 through 12 (instead of the traditional 9 through 12), are externally operated, and feature a specific theme of study. Their curricula are focused around college, career, or alternative programming.
- *Alternative/Special Education schools* serve students with special needs, with students assigned by the Office of Student Placement.

Baltimore City Schools Classification of High School Types for the Class of 2011:

Entrance Criteria

Baltimore Polytechnic (403); Western High (407); Paul Laurence Dunbar High (414); Baltimore School for the Arts (415); National Academy Foundation (421)**; Baltimore City College (480)

Career and Technology

Edmondson-Westside (400); Mergenthaler Vo-Tech (410); Carver Vo-Tech (454); Patterson High (405); Digital Harbor High (416); Vivian T. Thomas Medical Arts Academy High (429)

Traditional

Southside Academy of Environmental Science High (181); Northwestern High (401); Forest Park High (406); W.E.B. DuBois Environmental Science High (418); Reginald F. Lewis High (419); Heritage High (425); Doris M. Johnson High (426); Augusta Fells Savage Institute for Visual Arts (430); Maritime Industries Academy (431); Institute of Business and Entrepreneurship High (435); Frederick Douglass High (450)

Charter

ConeXions Community Leadership Academy (325); MD Academy of Technology & Health Sci Middle/High (331); Independence School Local 1 (333); Baltimore Freedom Academy Middle/High (423); Coppin Academy High (432)

Innovation

Baltimore Talent Development High (428); Renaissance Academy (433)

Transformation

REACH Partnership School (341); KASA (Knowledge & Success Acad Middle/High (342); Baltimore Liberation Diploma Plus High School (365); Baltimore Antioch Diploma Plus High School (366); Baltimore Community High School (367); New Era Academy (422); Academy for College and Career Exploration High (427)

Alternative/Special Ed

Francis M. Wood Alternative (178); New Hope Academy (345); Achievement Academy at Harbor City (413)

Table B.1
High School Indicators for the Class of 2011 and
Enrolled in Maryland Colleges Fall 2011 by High School Type

	High School Type		
	Entrance Criteria	CTE	Traditional
	<i>N</i> = 425	<i>N</i> = 382	<i>N</i> = 302
<i>High School Completion</i>			
Completed High School in 4 Years	99.3%	98.2%	91.4%
Completed High School in 5 or more Years	0.7%	1.8%	8.6%
<i>Behaviors Senior Year</i>			
Average Daily Attendance	93.7	89.8	90.9
Chronic Absence	12.7%	34.3%	27.8.3%
Suspension			
Students Suspended	2.4%	6.5%	9.3%
Days Missed from Suspension	13.8	9.7	6.4
<i>Academic Performance</i>			
Weighted GPA	2.4	2.0	1.8
Mean Math Grade	75.1	70.9	70.3
Mean English Grade	77.1	74.2	72.3
Mean Social Studies Grade	77.0	74.9	72.9
Mean Science Grade	76.0	73.4	71.4
<i>Course Taking</i>			
Took Math Senior Year	84.0%	42.9%	47.8%
Beyond Algebra II, Geometry with B or better	46.4%	27.0%	27.8%
Foreign Language, 2 credits B or better	39.5%	31.2%	28.5%
<i>Course Failures</i>			
Failed Any Academic Course	39.8%	54.2%	66.8%
Number of Academic Courses Failed	2.6	3.5	4.9
Failed Any Academic Course, Grade 9	12.0%	32.2%	37.9%
Number of Courses Failed, Grade 9	1.5	2.3	3.2
Ever Failed Math Course	19.8%	33.5%	39.9%
Ever Failed English Course	12.7%	30.9%	42.2%

Table B.2
College Admissions Testing and Performance for the
Class of 2011 Enrolled in Maryland Colleges Fall 2011 by High School Type

	High School Type		
	Entrance Criteria	CTE	Traditional
	<i>N</i> = 425	<i>N</i> = 382	<i>N</i> = 302
<i>PSAT</i>			
Took PSAT	99.3%	91.1%	73.5%
Number of Times Took	2.3	1.7	1.5
PSAT Performance (Range: 20-80)			
Highest Math	45.0	36.4	34.1
Highest Critical Reading	44.5	36.5	32.1
Highest Writing	44.7	35.9	32.3
Highest Combined (Range: 60-240)	131.8	106.4	97.2
<i>SAT</i>			
Took SAT	96.5%	92.4%	72.8%
Number of Times Took SAT	1.9	1.7	1.6
Took Prior to Senior Year	82.4%	67.0%	40.4%
SAT Performance (Range: 200-800)			
Highest Math	471.5	365.5	345.7
Highest Critical Reading	467.2	378.6	363.3
Highest Writing	461.1	366.7	345.5
Highest Combined (Range: 600-2400)	1380.2	1093.2	1040.5
<i>AP/IB Enrollment</i>			
Any AP/IB Course	64.5%	25.1%	29.5%
AP/IB Math	38.8%	4.7%	10.6%
AP/IB English	46.4%	14.9%	14.6%
<i>AP/IB Passed Course (≥60)</i>			
Any AP/IB	63.5%	24.9%	28.5%
AP/IB Math	38.6%	4.5%	9.3%
AP/IB English	46.4%	14.7%	13.3%
<i>AP Exams</i>			
Took Any AP Exam	48.5%	23.6%	21.5%
Took Math AP	17.2%	4.5%	7.3%
Took English AP	24.0%	14.7%	10.9%
Took Any Other AP	34.6%	12.8%	10.9%
<i>AP Exam Pass Rate (≥ 3)</i>			
Any AP Exam	29.6%	3.3%	1.5%
Math AP Exam	21.9%	11.8%	0.0%
English AP Exam	34.3%	7.1%	0.0%
Any Other AP Exam	32.7%	2.0%	6.1%

Table B.3
Class of 2011 Enrollment in Maryland Colleges Fall 2011 by High School Type

	High School Type					
	Entrance Criteria (N=425)		CTE (N =382)		Traditional (N = 302)	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<i>Two-Year Colleges</i>	134	31.5	274	71.7	249	82.5
CCBC	77		154		108	
BCCC	50		96		127	
<i>Four-Year Colleges</i>	291	68.5	108	28.3	53	17.5
Coppin	53		29		16	
Morgan	67		17		8	
University of MD Eastern Shore	31		10		3	
Frostburg State	28		4		1	
Towson University	18		9		4	
Bowie State	16		7		3	

Appendix C: PSAT Test-Taking by High School

PSAT Test-Taking for Fall 2012, by Grade level and School

	Grade			Avg. Daily Attendance 2012-13*
	9	10	11	
<i>District Total</i>				
Number of Test-takers	1,635	3,712	3,211	
% Oct 1 Enrollment	22.5	63.0	60.6	82.1
<i>Entrance Criteria High Schools</i>				
403 – Baltimore Polytechnic Institute				
Number of Test-takers	26	338	372	
% Oct 1 Enrollment	6.9	97.7	89.6	94.9
407 – Western High				
Number of Test-takers	296	267	232	
% Oct 1 Enrollment	94.6	94.7	92.8	92.9
414 – Paul Laurence Dunbar High				
Number of Test-takers	0	194	231	
% Oct 1 Enrollment	0.0	93.7	96.7	91.2
415 – Baltimore School for the Arts				
Number of Test-takers	114	103	79	
% Oct 1 Enrollment	97.4	99.0	97.5	>=95.0
421 – National Academy Foundation				
Number of Test-takers	4	118	83	
% Oct 1 Enrollment	2.3	92.2	77.6	93.7
480 – Baltimore City College High				
Number of Test-takers	316	288	262	
% Oct 1 Enrollment	88.0	88.3	81.9	>=95.0
<i>Career-Technology (CTE) High Schools</i>				
400 – Edmondson-Westside High				
Number of Test-takers	10	157	144	
% Oct 1 Enrollment	4.8	67.7	65.2	84.2
410 – Mergenthaler Vocational-Technical				
Number of Test-takers	56	361	242	
% Oct 1 Enrollment	11.7	75.4	70.4	85.8
454 – Carver Vocational-Technical High				
Number of Test-takers	5	169	139	
% Oct 1 Enrollment	2.1	66.0	56.3	84.8
405 – Patterson High				
Number of Test-takers	31	126	135	
% Oct 1 Enrollment	9.5	57.5	62.5	74.6

	Grade			Avg. Daily Attendance 2012-13*
	9	10	11	
416 – Digital Harbor High School				
Number of Test-takers	34	212	185	
% Oct 1 Enrollment	7.2	74.1	69.8	81.9
429 – Vivien T. Thomas Medical Arts Academy High				
Number of Test-takers	85	100	77	
% Oct 1 Enrollment	46.7	72.5	77.8	76.3
<i>Traditional High Schools</i>				
239 – Benjamin Franklin High				
Number of Test-takers	2	49	45	
% Oct 1 Enrollment	2.1	68.1	58.4	77.9
401 – Northwestern High				
Number of Test-takers	94	68	56	
% Oct 1 Enrollment	43.7	46.0	32.2	75.6
406 – Forest Park High				
Number of Test-takers	16	30	28	
% Oct 1 Enrollment	9.5	57.5	62.5	72.8
418 – W.E.B. DuBois High				
Number of Test-takers	11	37	41	
% Oct 1 Enrollment	10.2	50.0	38.0	75.9
419 – Reginald F. Lewis High School				
Number of Test-takers	39	45	15	
% Oct 1 Enrollment	39.0	39.8	22.1	88.3
425 – Heritage High School				
Number of Test-takers	97	57	54	
% Oct 1 Enrollment	55.4	47.1	45.8	64.6
430 – Augusta Fells Savage Institute of Visual Arts High				
Number of Test-takers	3	60	44	
% Oct 1 Enrollment	2.3	55.6	49.4	72.0
431 – Maritime Industries Academy High				
Number of Test-takers	78	43	40	
% Oct 1 Enrollment	49.7	53.1	41.7	76.5
450 – Frederick Douglass High				
Number of Test-takers	100	78	56	
% Oct 1 Enrollment	45.9	45.6	30.0	85.4
<i>Charter/Innovation/Transformation</i>				
325 – ConneXions High				
Number of Test-takers	1	29	23	
% Oct 1 Enrollment	1.5	50.9	56.1	>=95.0
331 – MD Acad. Of Tech and Health Sciences				
Number of Test-takers	2	46	46	

	Grade			Avg. Daily Attendance 2012-13*	
	9	10	11		
333 – Independent School Local I High	% Oct 1 Enrollment	3.1	75.4	83.6	89.7
	Number of Test-takers	0	2	18	
338 – Friendship Acad. Of Science & Tech M/H	% Oct 1 Enrollment	0.0	5.4	75.0	89.7
	Number of Test-takers	9	98	47	
339 – Friendship Acad. Of Engineering & Tech M/H	% Oct 1 Enrollment	7.4	83.1	69.1	83.9
	Number of Test-takers	2	73	49	
341 – Reach! Partnership School	% Oct 1 Enrollment	1.9	65.8	62.8	81.6
	Number of Test-takers	4	51	48	
342 – KASA Academy M/H	% Oct 1 Enrollment	4.2	63.8	80.0	87.8
	Number of Test-takers	0	43	21	
343 – Civitas Middle/High	% Oct 1 Enrollment	0.0	66.2	56.8	83.9
	Number of Test-takers	1	24	15	
364 – Bluford Drew Jemison STEM Acad West	% Oct 1 Enrollment	1.9	54.6	55.6	80.5
	Number of Test-takers	0	65	53	
365 – Baltimore Liberation Diploma Plus High	% Oct 1 Enrollment	0.0	90.3	86.9	91.6
	Number of Test-takers	0	0	0	
366 – Antioch Diploma Plus High School	% Oct 1 Enrollment	0.0	0.0	0.0	54.5
	Number of Test-takers	0	0	1	
367 – Baltimore Community High School	% Oct 1 Enrollment	0.0	0.0	1.1	42.7
	Number of Test-takers	31	17	27	
376 – City Neighbors High	% Oct 1 Enrollment	26.1	22.7	44.3	63.1
	Number of Test-takers	0	1	0	
422 – New Era Academy High	% Oct 1 Enrollment	0.0	1.0	0.0	93.7
	Number of Test-takers	17	26	24	
423 – Baltimore Freedom Academy	% Oct 1 Enrollment	18.3	70.3	45.3	84.7
	Number of Test-takers	1	45	13	
427 – Academy for College and Career Exploration	% Oct 1 Enrollment	1.3	63.4	29.6	87.9
	Number of Test-takers	6	73	80	
	% Oct 1 Enrollment	3.8	64.6	69.6	83.4

	Grade			Avg. Daily Attendance 2012-13*
	9	10	11	
428 – Baltimore Talent Development High				
Number of Test-takers	27	65	47	
% Oct 1 Enrollment	13.2	57.5	56.0	86.8
432 – Coppin Academy High				
Number of Test-takers	66	68	74	
% Oct 1 Enrollment	78.6	85.0	72.6	85.7
433 – Renaissance Academy High				
Number of Test-takers	41	41	38	
% Oct 1 Enrollment	47.1	55.4	61.3	75.8
<i>Alternative/Special Education High Schools</i>				
178 – Excel Academy @ Francis M. Wood				
Number of Test-takers	0	4	1	
% Oct 1 Enrollment	0.0	4.9	1.8	41.6
413 –Harbor City High School				
Number of Test-takers	2	25	19	
% Oct 1 Enrollment	2.5	22.3	19.0	46.4
345 – New Hope Academy				
Number of Test-takers	0	0	0	
% Oct 1 Enrollment	0.0	0.0	0.0	67.7

*Attendance data is the high school attendance rate as reported on mdreportcard.org.

Appendix D: High School Indicators of College Readiness for Students Assessed As Needing Developmental Courses by College

Table D.1
Percent of Students by High School Indicators of College Readiness for Students Assessed as Needing Developmental Courses

Math	N	Math SAT 550+	GPA 3.0 +	Math Beyond Algebra II w/ B	Passed AP/IB Math Course	Passed Math AP Exam	Took Math Senior Year
Two-Year College							
CCBC	391	0.0	2.1	22.8	8.4	0.0	55.8
BCCC	340	0.0	1.8	23.2	3.8	0.0	47.9
AACC	19	0.0	0.0	31.6	5.3	0.0	47.4
Allegany College	17	0.0	0.0	29.4	5.9	0.0	58.8
Four-Year College							
Coppin	60	1.7 [†]	6.7	45.0	20.0	0.0	61.7
Morgan	50	2.0	12.0	30.0	26.0	0.0	68.0
Bowie	28	0.0	7.1	35.7	17.9	0.0	78.6
Towson	22	0.0 [†]	68.2	72.7	9.1	0.0	45.5
Frostburg	11	0.0	9.1	45.5	36.4	0.0	72.7
UMCP	4	0.0	50.0	100.0	50.0	0.0	75.0
Capitol College	7	0.0	14.3	71.4	14.3	0.0	71.4
Stevenson	-	-	-	-	-	-	-
Mc Daniel	-	-	-	-	-	-	-
Notre Dame	-	-	-	-	-	-	-
St Mary's	-	-	-	-	-	-	-
UMES	-	-	-	-	-	-	-

Reading		Critical Reading SAT 550+	GPA 3.0 +	Passed AP/IB English Course	Passed English AP Exam
Two-Year College					
CCBC	292	0.0	0.7	8.6	0.0
BCCC	212	0.0	0.9	6.1	0.0
AACC	9	0.0 [†]	0.0	0.0	0.0
Allegany College	16	0.0	0.0	12.5	0.0
Four-Year College					
Morgan State	69	1.5	11.6	37.7	1.5
Bowie State	14	7.7	14.3	57.1	0.0
Towson	14	0.0	78.6	42.9	0.0
Stevenson	2	0.0 [†]	0.0	50.0	0.0
Frostburg State	0				
Coppin State	-	-	-	-	-
UMCP	-	-	-	-	-
Capitol College	-	-	-	-	-
Mc Daniel	-	-	-	-	-
Notre Dame	-	-	-	-	-
St Mary's	-	-	-	-	-
UMES	-	-	-	-	-
Writing		Writing SAT 550+	GPA 3.0 +	Passed AP/IB English Course	Passed English AP Exam
Two-Year College					
CCBC	292	0.0	0.7	8.6	0.0
BCCC	284	0.0	1.8	7.7	0.0
AACC	5	0.0	0.0	0.0	0.0
Allegany College	16	0.0	0.0	12.5	0.0
Four-Year College					
Morgan State	25	0.0	8.0	44.0	0.0
Bowie State	12	0.0	8.3	58.3	0.0
Capitol College	5	0.0	20.0	40.0	0.0
Towson	0				
Frostburg State	0				
Stevenson	0				
Coppin State	-	-	-	-	-
UMCP	-	-	-	-	-
Mc Daniel	-	-	-	-	-
Notre Dame	-	-	-	-	-
St Mary's	-	-	-	-	-
UMES	-	-	-	-	-

[†] Coppin, uses a 470 SAT cut score, Towson uses 500, Stevenson uses 500 for math and 520 for reading and writing. AACC uses 550 in math, but 510 in reading. These tables reflect those SAT scores.

Note: - No data

Table D.2

High School Profile of Students Attending Two-Year Colleges by Assessed Need for Developmental Courses

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	No	Yes	No	Yes	No	Yes
Community College Baltimore County	(20)	(391)	(122)	(292)	(122)	(292)
% Overage, Senior Year	5.0%	18.7%	8.2	22.3	7.4	22.6
% Ave. Daily Attendance, Senior Yr	92.2	91.1	90.7	91.3	91.0	91.2
% Chronic Absence, Senior Year	10.0	27.9	32.8	24.7	27.1	27.1
Weighted GPA	2.4	1.8	2.0	1.8	2.1	1.8
Took Math Senior Year	85.0	55.8	63.1	54.8	67.2	53.1
Ever Failed Course: Math/English	15.0	40.7	27.1	33.2	27.9	32.9
Mean Grade: Math/English	76.6	69.4	73.9	72.1	74.5	71.8
Math beyond Algebra II (\geq B)	60.0%	22.8%	33.6	20.9	35.3	20.2
Passed Two Foreign Language (\geq B)						
Passed Any AP/IB Course (\geq 60)	40.0%	22.8%	39.3	16.8	36.1	18.2
Passed Math AP/IB Course (\geq 60)	25.0%	8.4%	23.0	3.4	19.7	4.8
Passed English AP/IB Course (\geq 60)	25.0	13.3	26.2	8.6	26.2	8.6
Passed Math AP Exam (\geq 3)	0.0	0.0	0.0	0.0	0.0	0.0
Passed English AP Exam (\geq 3)	0.0	0.0	0.0	0.0	0.0	0.0
Missing SAT	0.0	19.7	11.5	21.9	11.5	21.9
Took SAT Prior to Senior Year	75.0%	52.4%	63.9	49.3	65.6	48.6
Highest Math SAT	476.0	351.6	409.2	335.4	404.9	337.4
Highest Critical Reading SAT	448.5	367.8	437.7	341.6	432.8	343.9
Highest Writing SAT	449.5	355.5	419.4	333.6	420.8	332.9
Highest Combined SAT	1367.0	1058.1	1254.1	992.3	1244.4	996.8
SAT \geq 550 (Math/Reading/Write)	10.0	0.0	7.4	0.0	3.7	0.0

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Baltimore City Community College</i>	(1)	(342)	(129)	(213)	(56)	(285)
Overage for Grade		26.4%	21.7	29.1	7.1	30.2
% Ave. Daily Attendance, Senior Yr		89.3	90.2	88.8	90.4	89.2
% Chronic Absence, Senior Year		34.1	32.0	35.7	26.8	35.6
Weighted GPA		1.7	1.8	1.7	1.9	1.7
Math beyond Algebra II (\geq B)		23.2%	23.3	23.0	26.8	22.5
Passed Two Foreign Language (\geq B)			24.8	19.3	26.8	20.4
Took Math Senior Year		47.9	53.5	44.8	48.2	48.2
Ever Failed Course: Math/English		42.4	38.8	44.8	30.4	44.7
Mean Grade: Math/English		69.4	73.0	71.4	74.3	71.6
Passed Any AP/IB Course (\geq 60)		17.6%	24.8	13.6	30.4	15.1
Passed Math AP/IB Course (\geq 60)		3.8%	7.0	1.9	7.1	2.8
Passed English AP/IB Course (\geq 60)		8.8	13.2	6.1	12.5	7.7
Passed Math AP Exam (\geq 3)		0.0	0.0	0.0	0.0	0.0
Passed English AP Exam (\geq 3)		0.0	0.0	0.0	0.0	0.0
Missing SAT		22.6	19.4	24.4	7.1	25.6
Took SAT Prior to Senior Year		43.1%	54.3	37.1	64.3	39.3
Highest Math SAT		339.5	375.1	317.0	389.4	327.6
Highest Critical Reading SAT		349.5	392.5	322.0	409.4	334.8
Highest Writing SAT		339.6	371.1	319.7	404.0	324.0
Highest Combined SAT		1016.7	1127.5	946.8	1194.2	974.1
SAT \geq 550 (Math/Reading/Write)		0.0	1.0	0.0	0.0	0.0

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Anne Arundel Community College</i>	(2)	(19)	(12)	(9)	(16)	(5)
Overage for Grade		21.1	16.7	22.2	18.8	20.0
% ADA Senior Year		89.0	84.7	91.1	86.4	90.6
% Chronic Absence, Senior Year		31.6	41.7	22.2	37.5	20.0
Weighted GPA		2.0	2.3	1.8	2.2	1.8
Math beyond Algebra II (\geq B)		31.6	33.3	33.3	37.5	20.0
Passed Two Foreign Language (\geq B)			16.7	33.3	25.0	20.0
Took Math Senior Year		47.4	41.7	44.4	43.8	40.0
Ever Failed Course: Math/English		26.3	25.0	33.3	31.3	20.0
Mean Grade: Math/English		71.2	77.2	71.7	75.7	72.2
Passed Any AP/IB Course (\geq 60)		26.3	41.7	0.0	31.3	0.0
Passed Math AP/IB Course (\geq 60)		5.3	8.3	0.0	6.3	0.0
Passed English AP/IB Course (\geq 60)		21.1	33.3	0.0	25.0	0.0
Passed Math AP Exam (\geq 3)		0.0	0.0	0.0	0.0	0.0
Passed English AP Exam (\geq 3)		15.8	0.0	0.0	0.0	0.0
Missing SAT		10.5	8.3	11.1	6.3	20.0
Took SAT Prior to Senior Year		68.4	83.3	44.4	75.0	40.0
Highest Math SAT		351.2	388.2	310.0	374.0	285.0
Highest Critical Reading SAT		361.8	396.4	335.0	383.3	322.5
Highest Writing SAT		354.7	380.9	320.0	374.0	285.0
Highest Combined SAT		1048.2	1148.2	940.0	1109.3	877.5
SAT \geq 550 (Math/Reading/Write)		0.0	0.0	0.0	0.0	0.0

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Allegany College of Maryland</i>	(0)	(17)	(1)	(16)	(1)	(16)
Overage for Grade		35.3		31.3		31.3
% ADA Senior Year		95.8		95.8		95.8
% Chronic Absence, Senior Year		11.8		12.5		12.5
Weighted GPA		1.6		1.6		1.6
Math beyond Algebra II (\geq B)		29.4		25.0		25.0
Passed Two Foreign Language (\geq B)				0.0		0.0
Took Math Senior Year		58.8		56.3		56.3
Ever Failed Course: Math/English		41.2		50.0		50.0
Mean Grade: Math/English		69.2		68.3		68.3
Passed Any AP/IB Course (\geq 60)		29.4		25.0		25.0
Passed Math AP/IB Course (\geq 60)		5.8		6.3		6.3
Passed English AP/IB Course (\geq 60)		17.7		12.5		12.5
Passed Math AP Exam (\geq 3)		0.0		0.0		0.0
Passed English AP Exam (\geq 3)		0.0		0.0		0.0
Missing SAT		5.9		6.3		6.3
Took SAT Prior to Senior Year		82.4		81.3		81.3
Highest Math SAT		333.8		328.0		328.0
Highest Critical Reading SAT		334.4		325.3		325.3
Highest Writing SAT		323.1		314.7		314.7
Highest Combined SAT		974.4		950.0		950.0
SAT \geq 550 (Math/Reading/Write)		0.0		0.0		0.0

Table D.3
High School Profile of Students Enrolled in Four-Year Colleges by Their Assessment of
Need for Developmental Courses

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Morgan State University</i>	(53)	(50)	(34)	(69)	(78)	(25)
Overage for Grade	1.9	6.0%	2.9	4.4	3.9	4.0
% ADA Senior Year	96.3	94.5	94.6	95.8	95.6	94.9
% Chronic Absence, Senior Year	5.7	16.0	17.7	7.3	9.0	16.0
Weighted GPA	2.4	2.4	2.6	2.3	2.4	2.3
Math beyond Algebra II (\geq B)	54.7	30.0%	64.7	31.9	48.7	24.0
Passed Two Foreign Language (\geq B)	32.1	36.0	41.2	30.4	34.6	32.0
Took Math Senior Year	90.6	68.0	97.1	71.0	85.9	60.0
Ever Failed Course: Math/English	13.2	18.0	14.7	14.5	5.1	8.0
Mean Grade: Math/English	76.8	73.5	77.7	76.7	76.8	77.7
Passed Any AP/IB Course (\geq 60)	54.7	68.0%	79.4	52.2	62.8	56.0
Passed Math AP/IB Course (\geq 60)	39.6	26.0%	47.1	26.1	35.9	24.0
Passed English AP/IB Course (\geq 60)	32.1	50.0	47.1	37.7	39.7	44.0
Passed Math AP Exam (\geq 3)	9.3	0.0	16.7	0.0	7.1	0.0
Passed English AP Exam (\geq 3)	2.8	7.5	14.3	1.8	7.4	0.0
Missing SAT	0.0	2.0	0.0	1.5	0.0	4.0
Took SAT Prior to Senior Year	84.9	70.0%	88.2	72.5	83.0	60.0
Highest Math SAT	507.2	405.1	514.1	430.1	482.4	379.2
Highest Critical Reading SAT	474.7	438.6	495.6	438.2	471.2	412.5
Highest Writing SAT	454.0	428.8	482.9	421.3	453.3	404.6
Highest Combined SAT	1418.5	1251.8	1473.8	1270.7	1389.0	1174.2
SAT \geq 550 (Math/Reading/Write)	28.3	2.0	26.5	1.5	7.7	0.0

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Coppin State University</i>	(0)	(60)				
Overage for Grade		18.3%				
% ADA Senior Year		92.3				
% Chronic Absence, Senior Year		21.7				
Weighted GPA		2.2				
Math beyond Algebra II (\geq B)		45.0				
Passed Two Foreign Language (\geq B)		31.7				
Took Math Senior Year		61.7				
Ever Failed Course: Math/English		16.7				
Mean Grade: Math/English		74.3				
Passed Any AP/IB Course (\geq 60)		53.3%				
Passed Math AP/IB Course (\geq 60)		20.0%				
Passed English AP/IB Course (\geq 60)		31.7				
Passed Math AP Exam (\geq 3)		0.0				
Passed English AP Exam (\geq 3)		0.0				
Missing SAT		3.3				
Took SAT Prior to Senior Year		68.3%				
Highest Math SAT		402.4				
Highest Critical Reading SAT		413.6				
Highest Writing SAT		402.4				
Highest Combined SAT		1201.4				
SAT \geq 550 (Math/Reading/Write)		0.0				

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Frostburg State University</i>	(23)	(11)	(34)	(0)	(34)	(0)
Overage for Grade	4.4	9.1	5.9		5.9	
% ADA Senior Year	96.1	94.5	95.6		95.6	
% Chronic Absence, Senior Year	0.0	9.1	2.9		2.9	
Weighted GPA	2.4	2.4	2.4		2.4	
Math beyond Algebra II (\geq B)	47.8	45.5	47.1		47.1	
Passed Two Foreign Language (\geq B)	34.8	36.4	35.3		35.3	
Took Math Senior Year	87.0	72.7	82.4		82.4	
Ever Failed Course: Math/English	21.7	18.2	11.8		11.8	
Mean Grade: Math/English	75.5	75.8	77.4		77.4	
Passed Any AP/IB Course (\geq 60)	56.5	81.8%	64.7		64.7	
Passed Math AP/IB Course (\geq 60)	34.8	36.4%	35.3		35.3	
Passed English AP/IB Course (\geq 60)	34.8	72.7	47.1		47.1	
Passed Math AP Exam (\geq 3)	6.3	0.0	4.6		4.6	
Passed English AP Exam (\geq 3)	6.3	0.0	3.9		3.9	
Missing SAT	0.0	0.0	0.0		0.0	
Took SAT Prior to Senior Year	100.0	81.8%	94.1		94.1	
Highest Math SAT	502.6	397.3	468.5		468.5	
Highest Critical Reading SAT	503.5	433.6	480.9		480.9	
Highest Writing SAT	495.2	438.2	476.8		476.8	
Highest Combined SAT	1482.2	1243.6	1405.0		1405.0	
SAT \geq 550 (Math/Reading/Write)	21.7	0.0	11.8		17.7	

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Bowie State University</i>	(4)	(28)	(0)	(14)	(20)	(12)
Overage for Grade		7.1		14.3	0.0	16.7
% ADA Senior Year		95.2		95.0	94.9	96.6
% Chronic Absence, Senior Year		3.6		7.1	5.0	0.0
Weighted GPA		2.4		2.5	2.3	2.6
Math beyond Algebra II (\geq B)		35.7		57.1	30.0	50.0
Passed Two Foreign Language (\geq B)		46.4		50.0	30.0	58.3
Took Math Senior Year		78.6		85.7	75.0	75.0
Ever Failed Course: Math/English		14.3		0.0	10.0	0.0
Mean Grade: Math/English		74.7		80.5	78.1	80.1
Passed Any AP/IB Course (\geq 60)		82.1%		78.6	80.0	66.7
Passed Math AP/IB Course (\geq 60)		17.9%		7.1	10.0	33.3
Passed English AP/IB Course (\geq 60)		60.7		57.1	55.0	58.3
Passed Math AP Exam (\geq 3)		0.0		0.0	0.0	0.0
Passed English AP Exam (\geq 3)		0.0		0.0	0.0	0.0
Missing SAT		3.6		7.1	0.0	8.3
Took SAT Prior to Senior Year		78.6%		57.1	80.0	75.0
Highest Math SAT		397.0		385.4	408.0	400.0
Highest Critical Reading SAT		461.1		441.5	461.5	456.4
Highest Writing SAT		430.4		413.8	445.5	406.4
Highest Combined SAT		1268.1		1225.4	1297.0	1242.7
SAT \geq 550 (Math/Reading/Write)		0.0		7.7	5.0	0.0

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
<i>Towson University</i>	(0)	(22)	(11)	(14)	(24)	(0)
Overage for Grade		4.6	0.0	14.3	4.2	
% ADA Senior Year		93.3	89.7	91.0	90.9	
% Chronic Absence, Senior Year		22.7	45.5	21.4	29.2	
Weighted GPA		3.1	3.0	3.2	3.2	
Math beyond Algebra II (\geq B)		72.7	63.6	85.7	75.0	
Passed Two Foreign Language (\geq B)		81.8	63.6	78.6	75.0	
Took Math Senior Year		45.5	63.6	42.9	54.2	
Ever Failed Course: Math/English		4.6	0.0	7.1	0.0	
Mean Grade: Math/English		83.2	85.1	85.8	85.4	
Passed Any AP/IB Course (\geq 60)		77.3	90.9	57.1	75.0	
Passed Math AP/IB Course (\geq 60)		9.1	18.2	35.7	20.8	
Passed English AP/IB Course (\geq 60)		59.1	72.7	42.9	54.2	
Passed Math AP Exam (\geq 3)		0.0	0.0	9.1	0.0	
Passed English AP Exam (\geq 3)		11.1	0.0	0.0	0.0	
Missing SAT		0.0	0.0	0.0	0.0	
Took SAT Prior to Senior Year		86.4%	72.7	78.6	79.2	
Highest Math SAT		421.4	443.6	461.5	442.9	
Highest Critical Reading SAT		462.3	445.5	443.1	450.4	
Highest Writing SAT		437.3	424.5	436.2	420.8	
Highest Combined SAT		1308.6	1294.5	1311.5	1398.8	
SAT \geq 550 (Math/Reading/Write)		0.0	0.0	0.0	0.0	

	Developmental Course Needed by Content Area					
	Math		Reading		Writing	
	No	Yes	No	Yes	No	Yes
<i>University of Maryland, College Park</i>	(11)	(4)				
Overage for Grade	18.2%	25.0%				
% ADA Senior Year	94.2	94.0				
% Chronic Absence, Senior Year	9.1%	25.0%				
Weighted GPA	2.64	3.30				
Math beyond Algebra II (\geq B)	63.6%	100.0%				
Passed Two Foreign Language (\geq B)	63.6%	75.0%				
Took Math Senior Year	90.9%	75.0%				
Ever Failed Course: Math/English	0.0%	0.0%				
Mean Grade: Math/English	78.6	82.2				
Passed Any AP/IB Course (\geq 60)	72.7%	100.0%				
Passed Math AP/IB Course (\geq 60)	36.4%	50.0%				
Passed English AP/IB Course (\geq 60)	54.6%	75.0%				
Passed Math AP Exam (\geq 3)	9.1%	0.0%				
Passed English AP Exam (\geq 3)	18.2%	25.0%				
Missing SAT	0.0%	0.0%				
Took SAT Prior to Senior Year	90.9%	100.0%				
Highest Math SAT	554.5	467.5				
Highest Critical Reading SAT	531.8	507.5				
Highest Writing SAT	529.1	490.0				
Highest Combined SAT	1594.5	1460.0				
SAT \geq 550 (Math/Reading/Write)	54.6%	0.0%				

Appendix E: High School Indicators of College Readiness for Non Assessed Students

Table E.1

Percent of Students with High School Indicators of College Readiness for Student's With No Assessment Data by Content

Math		Math SAT 550+	GPA 3.0 +	Math Beyond Algebra II w/ B	Passed AP/IB Math Course	Passed AP Exam
	N					
Two-Year College						
CCBC	6	0.0	0.0	16.7	0.0	0.0
BCCC	12	16.7	25.0	41.7	25.0	0.0
AACC	-					
Allegany College	-					
Four-Year College						
Coppin State	58	29.8 [†]	8.6	50.0	25.9	3.5
UMES	45	13.3	6.7	46.7	33.3	0.0
Stevenson	22	20.0 [†]	13.6	59.1	31.8	0.0
McDaniel College	17	11.8	76.5	82.4	35.3	0.0
Towson	15	100.0 [†]	53.3	73.3	66.7	13.3
Notre Dame	13	7.7	7.7	46.2	38.5	7.7
St. Mary's	11	18.2	63.6	63.6	27.3	0.0
Bowie	4	0.0	0.0	75.0	50.0	0.0
Morgan	-					
Frostburg	-					
UMCP	-					
Capitol	-					
Reading		Critical Reading SAT 550+	GPA 3.0 +	Passed AP/IB English Course	Passed AP Exam	
	N					
Two-Year College						
CCBC	3	0.0	0.0	0.0	0.0	0.0
BCCC	12	16.7	25.0	33.3	33.3	8.3
Four-Year College						
Coppin State	118	22.6 [†]	7.6	29.7	29.7	0.9
UMES	45	6.7	6.7	37.8	37.8	0.0
Bowie State	22	0.0	0.0	63.6	63.6	0.0
Stevenson	20	10.5 [†]	15.0	45.0	45.0	0.0
McDaniel College	17	29.4	76.5	64.7	64.7	29.4
UMCP	15	40.0	33.3	60.0	60.0	20.0
Notre Dame	13	23.1	7.7	46.2	46.2	15.4
Towson	12	100.0 [†]	58.3	58.3	58.3	33.3
St. Mary's College	11	45.5	63.6	81.8	81.8	27.3
Capitol College	11	18.2	18.2	36.4	36.4	0.0
Morgan	-					
Frostburg	-					

	N	Critical Reading SAT 550+	GPA 3.0 +	Passed AP/IB English Course	Passed AP Exam
Writing					
Two-Year College					
CCBC	3	0.0	0.0	0.0	0.0
BCCC	13	15.4	23.1	38.5	7.7
Four-Year College					
Coppin State	118	22.6 [†]	7.6	29.7	0.9
UMES	45	13.3	6.7	37.8	0.0
Stevenson	21	10.0 [†]	14.3	42.9	0.0
McDaniel College	17	23.5	76.5	64.7	29.4
UMCP	15	33.3	33.3	60.0	20.0
Towson	13	100.0 [†]	53.9	61.5	30.8
Notre Dame	13	23.1	7.7	46.2	15.4
St. Mary's College	11	9.1	63.6	81.8	27.3
Bowie State	4	0.0	0.0	100.0	0.0
Morgan	-				
Frostburg	-				
Capitol	-				

[†] Coppin, uses a 470 SAT cut score, Towson uses 500, Stevenson uses 500 for math and 520 for reading and writing. These tables reflect those SAT scores.

Note: - no data

Table E.2
 Class of 2011 Enrolled at Coppin State University
 By Whether or Not They Were Assessed for Remediation in Math

	Assessed in Math	Not Assessed in Math
	(60)	(58)
% Overage, Senior Year	18.3%	8.6%
% Ave. Daily Attendance, Senior Yr	92.3	92.1
% Chronic Absence, Senior Year	21.7%	20.7%
Weighted GPA	2.23	2.25
Math beyond Algebra II (\geq B)	45.0%	50.0%
Passed Two Foreign Language (\geq B)	31.7%	39.7%
Took Math Senior Year	61.7%	82.8%
Ever Failed Math Course	16.7	25.9
Ever Failed English Course	25.0	22.4
Mean Math Grade	74.3	73.9
Mean English Grade	76.6	76.2
Passed Any AP/IB Course (\geq 60)	53.3%	44.8%
Passed Math AP/IB Course (\geq 60)	20.0%	25.9%
Passed English AP/IB Course (\geq 60)	31.7%	27.6%
Passed Math AP Exam (\geq 3)	0.0%	3.5%
Passed English AP Exam (\geq 3)	0.0%	1.7%
Missing SAT	3.3%	1.7%
Took SAT Prior to Senior Year	68.3%	72.4%
Highest Math SAT	402.4	444.2
Highest Critical Reading SAT	413.6	441.1
Highest Writing SAT	402.4	435.3
Highest Combined SAT	1201.4	1300.5
Math SAT \geq 470	1.7	29.8%
Reading SAT \geq 470	15.5%	29.8%
Writing SAT \geq 470	6.9%	35.1%

Table E.3
Class of 2011 in Four-Year Colleges Who Were Not Assessed by College

High School Indicators	Non-Assessed Students in MD Four-year Colleges				
	UMES	Stevenson	McDaniel	Notre Dame	St Mary
	(45)	(20)	(17)	(13)	(11)
% Overage, Senior Year	2.2%	20.0%	17.7%	15.4%	18.2%
% Ave. Daily Attendance, Senior Yr	93.2	96.3	93.4	86.6	95.5
% Chronic Absence, Senior Year	17.8%	5.0%	23.5%	53.9%	18.2%
Weighted GPA	2.35	2.73	3.14	2.59	3.10
Math beyond Algebra II (\geq B)	46.7%	55.0%	82.4%	46.2%	63.6%
Passed Two Foreign Language (\geq B)	35.6%	65.0%	76.5%	53.9%	90.9%
Took Math Senior Year	77.8%	80.0%	64.7%	69.2%	63.6%
Ever Failed Math Course	13.3%	5.0%	5.9%	7.7%	0.0%
Ever Failed English Course	17.8%	0.0%	0.0%	15.4%	0.0%
Mean Math Grade	75.5%	78.3%	81.5%	78.1%	82.4%
Mean English Grade	77.2%	79.9%	84.7%	78.9%	87.0%
Passed Any AP/IB Course (\geq 60)	53.3%	85.0%	88.2%	69.2%	100.0%
Passed Math AP/IB Course (\geq 60)	33.3%	35.0%	35.3%	38.5%	27.3%
Passed English AP/IB Course (\geq 60)	37.8%	45.0%	64.7%	46.2%	81.8%
Passed Math AP Exam (\geq 3)	0.0%	0.0%	0.0%	7.7%	0.0%
Passed English AP Exam (\geq 3)	0.0%	0.0%	29.4%	15.4%	27.3%
Missing SAT	0.0%	5.0%	0.0%	0.0%	0.0%
Took SAT Prior to Senior Year	77.8%	80.0%	76.5%	92.3%	81.8%
Highest Math SAT	451.8	428.4	454.7	470.8	460.0
Highest Critical Reading SAT	443.6	455.3	482.4	494.6	515.5
Highest Writing SAT	431.6	425.3	462.9	484.6	464.5
Highest Combined SAT	1314.0	1275.8	1376.5	1430.8	1421.8
Math SAT \geq 550	13.3%	0.0%	11.8%	7.7%	18.2%
Reading SAT \geq 550	6.7%	5.3%	29.4%	23.1%	45.5%
Writing SAT \geq 550	13.3%	5.3%	23.5%	23.1%	9.1%

Table E.4
 Class of 2011 Enrolled at University Of Maryland, Eastern Shore,
 No Assessment and No Assessment, but Took Developmental Math

	No Assessment Took Develop Math	No Assessment Didn't Take
	(36)	(9)
% Overage, Senior Year	0.0	0.0
% Ave. Daily Attendance, Senior Yr	93.1	93.6
% Chronic Absence, Senior Year	19.4%	11.1%
Weighted GPA	2.35	2.35
Math beyond Algebra II (\geq B)	50.0%	33.3%
Passed Two Foreign Language (\geq B)	36.1%	33.3%
Took Math Senior Year	77.8%	77.8%
Ever Failed Math Course	13.9%	11.1%
Ever Failed English Course	13.9%	33.3%
Mean Math Grade	76.0%	73.3%
Mean English Grade	77.5%	76.3%
Passed Any AP/IB Course (\geq 60)	50.0%	66.7%
Passed Math AP/IB Course (\geq 60)	27.8%	55.6%
Passed English AP/IB Course (\geq 60)	36.1%	44.4%
Passed Math AP Exam (\geq 3)	0.0%	0.0%
Passed English AP Exam (\geq 3)	0.0%	0.0%
Missing SAT	0.0%	0.0%
Took SAT Prior to Senior Year	77.8%	77.8%
Highest Math SAT	446.9	471.1
Highest Critical Reading SAT	438.9	462.2
Highest Writing SAT	430.0	437.8
Highest Combined SAT	1301.4	1364.4
Math SAT \geq 550	11.1%	22.2%
Reading SAT \geq 550	5.6%	11.1%
Writing SAT \geq 550	11.1%	22.2%