

2018 Feasibility Study

An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options



Howard County Public School System

Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Interim Superintendent

Michael J. Martirano, Ed.D.

Board of Education

Elected Officials

Cynthia L. Vaillancourt, Chairman
Mavis Ellis, Vice Chairman
Bess Altwerger, Ed.D.
Kirsten Coombs
Christina Delmont-Small
Sandra H. French
Ananta Hejeebu

Student Member

Anna Selbrede

Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Prepared By

Office of School Planning
10910 Clarksville Pike
Ellicott City, Maryland 21042
410-313-6600

Anissa Brown Dennis

Chief Operating Officer

Bruce Gist

Executive Director
Capital Planning and Operations

Renée Kamen, AICP

Manager of School Planning

Tim Rogers

Planning Analyst

Jennifer Bubenko

Planning Specialist

This is a publication of the Howard County Public School System.

Electronic copy of the 2018 Feasibility Study can be
found on the school system's website at www.hcpss.org/school-planning/



Cynthia L. Vaillancourt
Chairman

667-786-3839
cynthia_vaillancourt@hcpss.org
Term Expires 2018



Mavis Ellis
Vice Chairman

667.786.3901
mavis_ellis@hcpss.org
Term Expires 2020



Bess Altwerger, Ed.D.
Member

667-786-3876
bess_altwerger@hcpss.org
Term Expires 2018



Kirsten A. Coombs
Member

667.786.3867
kirsten_coombs@hcpss.org
Term Expires 2020



Christina Delmont-Small
Member

667.786.3895
christina_delmont-small@hcpss.org
Term Expires 2020



Sandra H. French
Member

410.531.2394
sandra_french@hcpss.org
Term Expires 2018



Ananta Hejeebu
Member

443-355-7161
ananta_hejeebu@hcpss.org
Term Expires 2018

Anna Selbrede
Student Member

student_member@hcpss.org
Term 2017–2018

Michael J. Martirano, Ed.D.
Interim Superintendent
Email: superintendent@hcpss.org

Karalee Turner-Little, Assistant Superintendent for Administrative Affairs

Rafiu Ighile, Chief Business and Technology Officer

Helen A. Nixon, Ed.D., Chief Human Resources and Leadership Development Officer

Frank Eastham, Chief School Management and Instructional Leadership Officer

Anissa Brown Dennis, Chief Operating Officer

Jahantab Siddiqui, Chief Communication, Community and Workforce Engagement Officer

William Barnes, Chief Academic Officer

Table of Contents

1	Executive Summary	1
2	Planning Considerations	3
	Introduction	4
	Enrollment Projections	5
	Relationship to Capital Budget	11
	Capacities	13
	Policy 6010	17
	Alignment with Strategic Call to Action	18
	Land Use	19
	HCPSS Facilities and Land Bank	21
3	Needs and Strategies	23
	Elementary Schools	
	Columbia East Region	24
	Columbia West Region	25
	Northeastern Region	26
	Northern Region	27
	Southeastern Region	28
	Western Region	29
	Middle Schools	
	Columbia East Region	30
	Columbia West Region	31
	Northeastern Region	32
	Northern Region	33
	Southeastern Region	34
	Western Region	35
	High Schools	
	Columbia East Region	36
	Columbia West Region	37
	Northeastern Region	38
	Northern Region	39
	Southeastern Region	40
	Western Region	41
4	Foreseeable Attendance Area Adjustments	43
5	Pre- and Post- Measure Charts	45
6	Appendices	53
	A Policy 6010	55
	B Most Recent Attendance Area Adjustments	66

Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Section 1

Executive Summary

Executive Summary

The Howard County Public School System (HCPSS) annual Feasibility Study provides a comprehensive look at the ten-year student enrollment projections. The intent of this document is to provide the most updated student enrollment projection to the Board of Education, staff members and public to inform capital and operating decisions. This document contains specific information about K-12 student enrollment and projected enrollment for each school and county-wide. K-12 projections are produced in the winter of each year, predicting number of students on September 30 of each year.

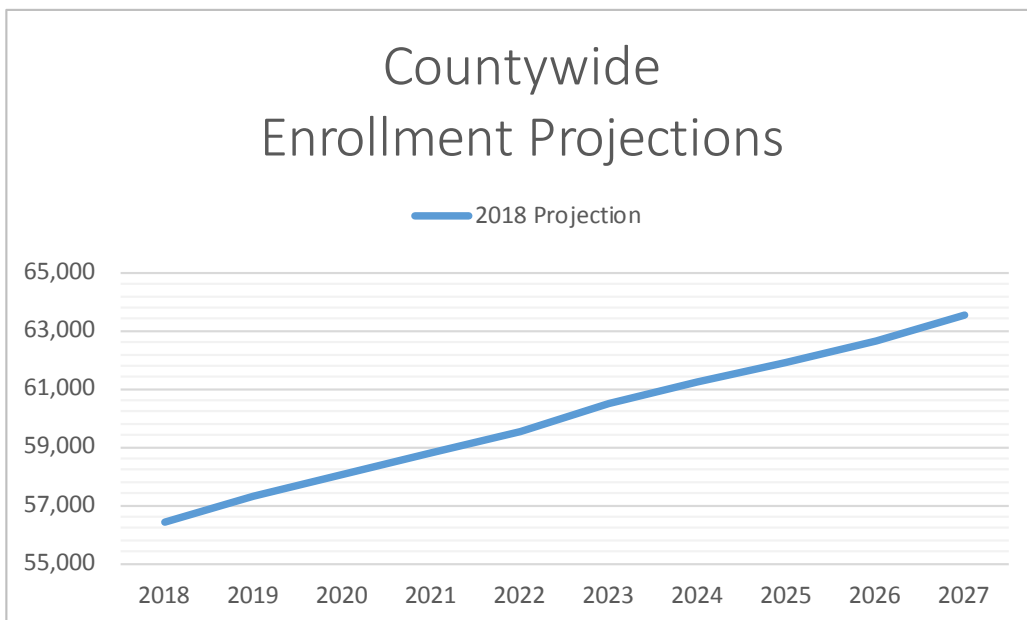
The projection is used to develop the Superintendent’s Proposed Operating and Capital Budgets for the next fiscal year and the annual Feasibility Study. The enrollment projections inform long-range facilities planning decisions, such as the need to relocate regional programs, implement school attendance area adjustments, assign relocatable classrooms, construct permanent classroom additions to existing schools, and replace or build new schools. The official K-12 enrollment on September 30, 2017 was 55,485 students. Continued enrollment growth is projected for school year 2018-19. Since the Fall of 2008 (48,790 students), HCPSS enrollment has increased by 6,601 students, which equates to a 13.5 percent growth over the past decade.

The projected enrollment for school year 2018-19 is 56,444 students, which is a gain of 959 students, and represents 1.7 percent growth over last year.

The Board of Education (Board) approved changes in the attendance areas for the school year 2018-19 on November 17, 2017. The newly developed student enrollment projections take into account the new boundaries and JumpStart participation. Figure 1.1 below shows the K-12 projected enrollment for school years 2018-19 through 2027-28.

The projection shows an increase in enrollment of over 7,000 students in the next ten years. Changes in delivery of capacity projects are recommended for the upcoming capital budget and long-range master plan request and are outlined on page 16 of this document. **This plan does not recommend school boundary adjustments for school year 2019-20.**

Figure 1.1 Countywide Enrollment Projections 2018-2027



Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Section 2

Planning Considerations

Planning assumptions and considerations regarding enrollment growth and other factors are addressed in this section. These factors are reviewed and updated on an annual basis. Implications of the factors discussed in this section include capital planning decisions. This section presents a discussion of the major components and adjustments included in this year's planning considerations.

Introduction

The Office of School Planning is pleased to present the 2018 Feasibility Study report for the Howard County Public School System (HCPSS). The report provides detailed information on the number of students projected for each school at HCPSS on September 30th of each school year for the period beginning in school year 2018-19 and ending in school year 2029-30. Projection accuracy is reported annually to the Board of Education (Board) each February. To project future enrollment, HCPSS uses multiple sets of data, which include the number of births for Howard County, the five-year history of cohort survival (i.e., ratio of students moving from one grade to the next in the same school), first-time sales of newly-constructed homes, resales of existing homes, apartment turnover, and enrollment at regional programs. Each data point is projected separately based on specific, appropriate methodologies for each category.

Enrollment projections are a valuable planning tool to help predict the need for new or expanded schools and determine how many teachers are needed each year in each school and grade. Enrollment projections are also used for facility planning purposes to estimate the expected number of students in each school.

Each year, the Board of the HCPSS reviews the capital planning options and boundary adjustment considerations through a feasibility study. The report has four goals:

- Inform the long-term planning process.
- Facilitate discussion of decisions that may lay ahead.
- Provide strategic information to the school system.
- Prepare for scheduled school boundary adjustments.

The Office of School Planning presents the student enrollment projection, projection trends, comprehensive strategies for the capital improvement program (i.e., additions) and attendance area adjustments anticipated within the ten-year CIP. Any plans examined in this document may only be implemented through the Board's approval of the capital budget and/or attendance area changes. Funding restraints may not allow capital projects recommended in this document to proceed as recommended.

New to the 2018 Feasibility Study are the latest Council requirements under the adequate public facilities ordinance. These items include State and Local Capacities, each school's most recent redistricting, factors contributing to growing enrollment, as well as funding and redistricting assumptions for schools that are projected to be open to new residential development in the testing year due to a capital project or attendance area adjustments associated with a capital project.

Experience has shown that by presenting this report annually, assumptions and trends can be evaluated on a regular basis and appropriate adjustments can be made to the capital budget or attendance area plans. Changes may need to be considered to react to and plan for anticipated population shifts or new residential development.

Annual enrollment projections are also used in short-term decision-making, such as determining staffing, school supplies and allocating relocatables.

Enrollment Projections

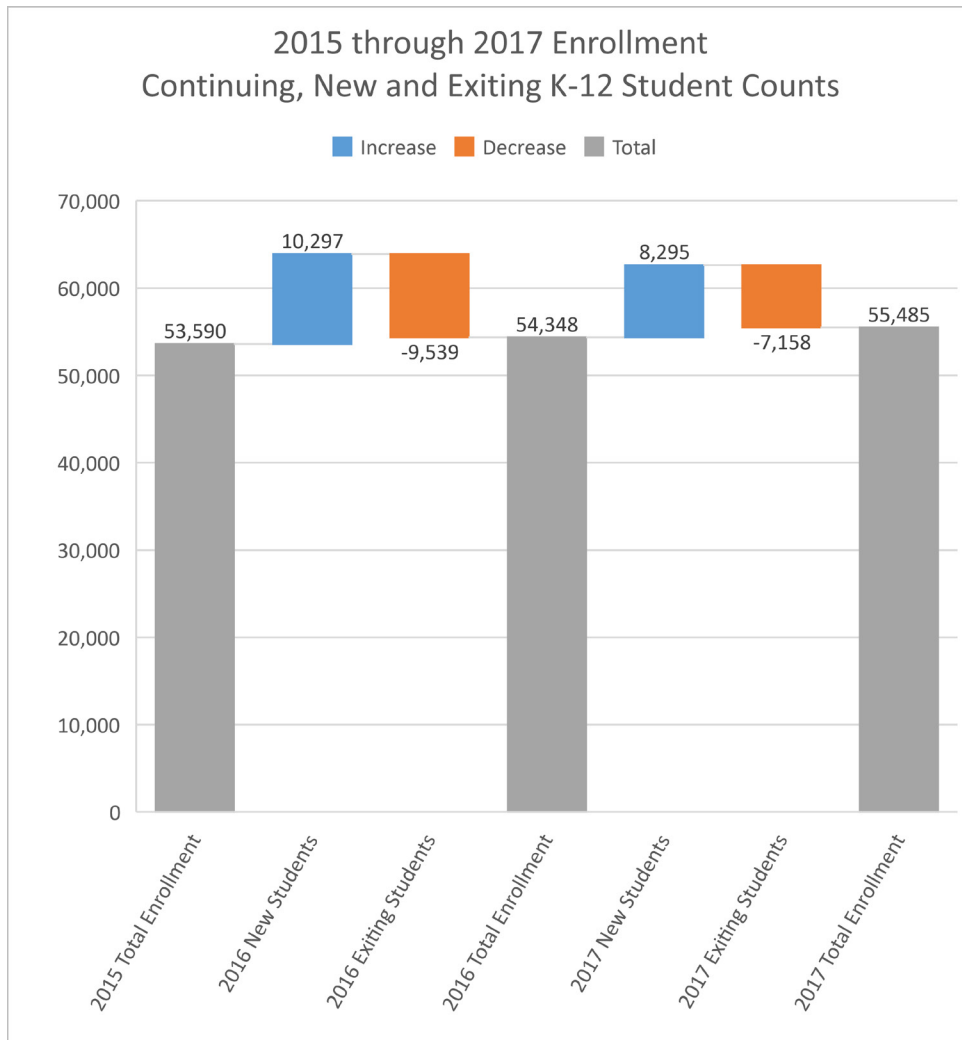
HCPSS Current Enrollment

On September 30, 2017, the total K-12 enrollment was 55,485 students. This total includes students from kindergarten to twelfth grade. Figure 2.1 below is a waterfall chart that illustrates the net change of student enrollment over the last three years.

Figure 2.1 2015 - 2017 Waterfall Chart

Figure 2.1 illustrates the total "ins and outs" (increase and decrease) over the last three years. New students arrive in HCPSS each year, and are mainly from new homes, resales, and kindergarten students enrolling in HCPSS for the first time. The exiting student group includes graduating twelfth graders and families moving out of Howard County.

Student Groups	Counts
2015 Total Enrollment	53,590
2016 New Students	10297
2016 Exiting Students	-9539
2016 Total Enrollment	54,348
2017 New Students	8295
2017 Exiting Students	-7158
2017 Total Enrollment	55,485



Enrollment Projections

Projection Methodology

HCPSS, as well as many other school districts, uses cohort survival ratio as a student enrollment projection methodology. For the purposes of the school system, a cohort is a group of students at a specific grade level.

The cohort survival ratios are calculated based on actual student data and are aggregated by school attendance area to maintain comparability regardless of any changes in school attendance area boundaries. Cohort-survival ratios project how many second graders will result from last year's first graders, how many third graders will result from last year's second graders, and continues until the number of twelfth graders from last year's eleventh graders is predicted, based on recent historical student data. This calculation is done for each grade level, at each school, using the most recent 3-5 years of historical data to predict future enrollment. The most recent past is viewed as the best predictor of the near future.

Figure 2.2 Cohort Survival Ratio

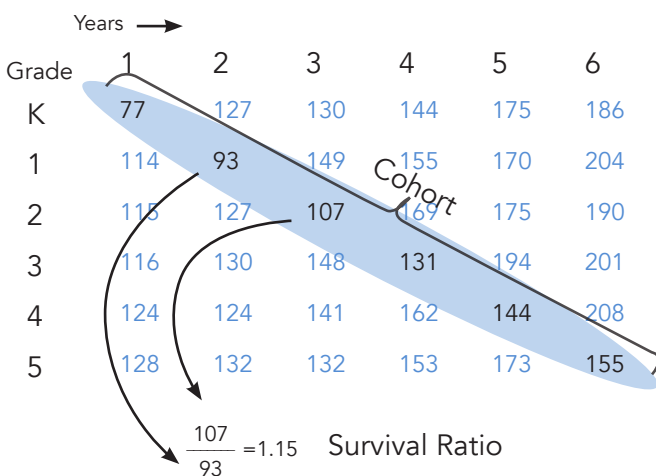


Figure 2.2 illustrates a cohort survival ratio. In the example, the rate of 1.15 can be used to predict how many second graders will result from the previous year's first graders. A cohort survival rate that is greater than one (1), indicates more students entered the grade than progressed from the previous grade. A cohort survival rate of less than one (1) indicates there are fewer students moving to the next grade at that school than the count of students from the previous grade in the previous year.

In addition to cohort survival ratios, HCPSS uses Howard County birth data, student yields from first-time sales of newly-constructed homes, resales of existing homes, and apartment turnover, as well as enrollment in regional programs. Table 2.1 below shows the total by-grade projected enrollment for the HCPSS for school year 2018-19.

Table 2.1 By Grade Enrollment Projection for September 30, 2018

2018 Projection by Grade					
Elementary	Projection	Middle	Projection	High	Projection
K	3,835	6th	4,598	9th	4,887
1st	4,030	7th	4,494	10th	4,459
2nd	4,246	8th	4,357	11th	4,249
3rd	4,221			12th	4,171
4th	4,346				
5th	4,551				

Enrollment Projections

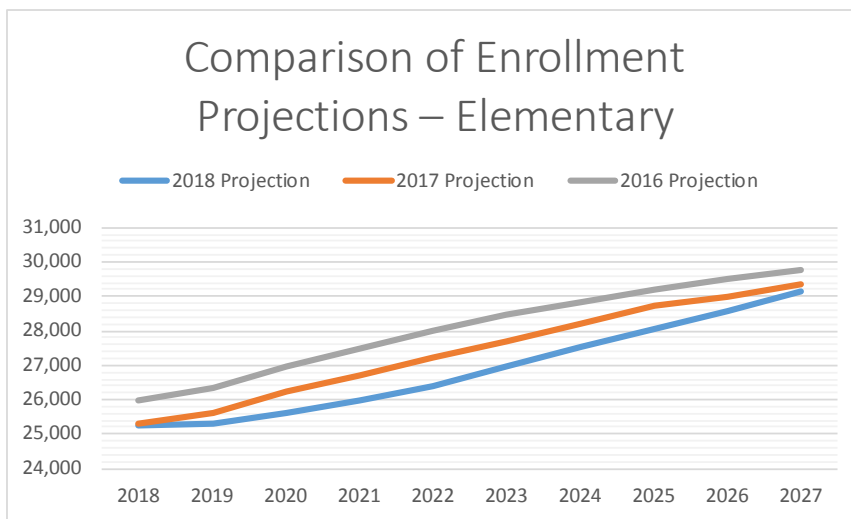
HCPSS Projected Enrollment

HCPSS ten-year K-12 projected enrollment for school year 2018-19 through 2027-28 continues to show enrollment growth at all levels.

The projection is presented to school year 2029-30 in Section 5 of this document. Certain decisions such as site acquisition are appropriately informed by the latter part of the projection. Planning issues may become apparent by comparing the current projection to those made in previous years. The following charts use a ten-year series and present three consecutive annual projections.

It is anticipated that for school year 2018-19, we will receive a net increase of 959 students. This increase comes from a variety of migration patterns and includes sales of existing homes and new construction. It is important to know that new construction is only new construction for one year in the HCPSS projection. After the first year, the new students generated by homes constructed in previous years are counted through cohort survival or resales.

Figure 2.3 Comparison of Three Enrollment Projections - Elementary

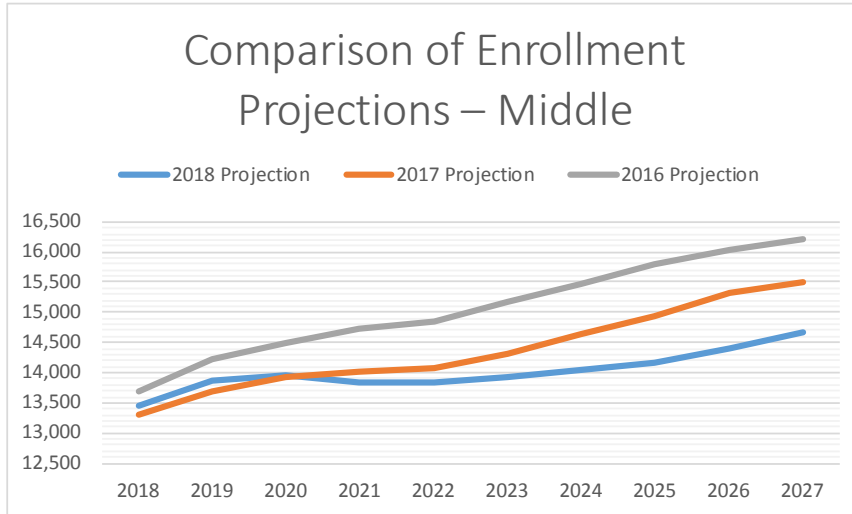


As shown in Figure 2.3, the 2018 elementary projection includes a similar rate of enrollment growth in the near-term, while trending towards a slightly lower enrollment in the long-term view. The trend in the 2018 projection is for elementary enrollment to increase by nearly 4,000 students by 2027.

As a result of this enrollment growth, the capacity utilization of all elementary schools combined will begin to exceed 110 percent by 2026 if new elementary schools are not built. Projects approved as part of the FY 2019 CIP can accommodate most of this growth.

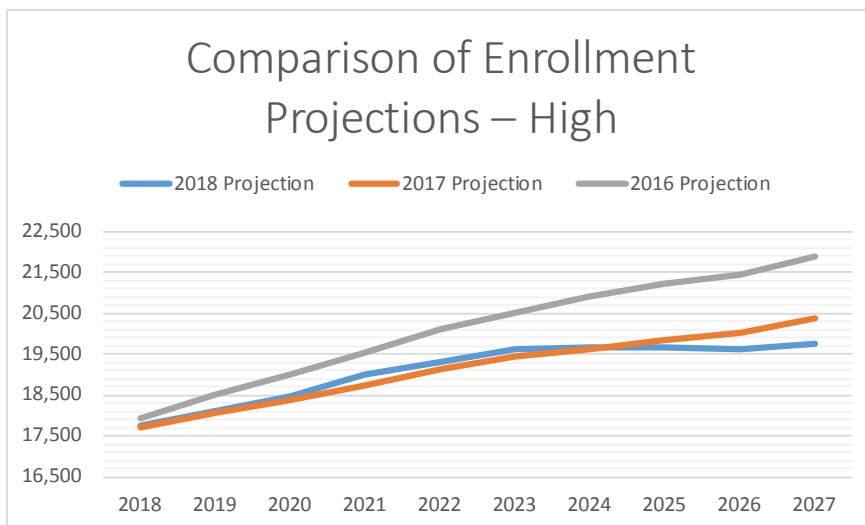
Enrollment Projections

Figure 2.4 Comparison of Three Enrollment Projections - Middle



As shown in Figure 2.4, the middle school projected enrollment is expected to increase by 1,200 student by 2027. The 2018 middle school enrollment growth trend rate is lower than the 2016 and 2017 in long-term growth. As a result of this enrollment growth, the combined capacity utilization of all middle schools will begin to exceed 110 percent beyond 2029. Most of the projected growth is in the East and North, and based on the long-term growth trends, strategic capacity projects should be considered for the middle school needs.

Figure 2.5 Comparison of Three Enrollment Projections - High



High school enrollment is projected to increase by nearly 2,000 student by 2027, as shown in Figure 2.5. As a result of this growth, the combined capacity utilization of all high schools will begin to exceed 110 percent beyond 2021. Similar to the middle school growth, high school growth is in the Eastern portions of the county. Based on the long-term growth trends, continued planning and finalization of the Mission Road site acquisition should continue.

Enrollment Projections

Projection Growth Factors

The new Adequate Public Facilities Ordinance adopted by the County Council in 2018 requires that HCPSS report factors that contribute to growing enrollment. This chart compares the official enrollment from school year 2017-18 with the updated projection for school year 2018-19, identifying schools with enrollment increase projected. Some schools show higher enrollment for school year 2018-19, but were involved in the redistricting approved in November 2017. This makes it difficult to estimate how much of the projected increase would have occurred without redistricting. The section of the chart labeled "Projected 2018 Student Yield" shows the estimated breakdown of the contribution of each housing factor on the number of students added to each school for school year 2018-19. Counted here are students projected to arrive at each school due to turnover of multi-family housing, resale of existing homes, and new construction. "Other factors" is the sum of all other contributing factors to change in enrollment between years for each school and includes projected change due to cohort size rising to next level, changes to cohort survival rates, changes in birth counts from 5 years ago, change to birth to kindergarten survival rates, adjustments to out of district counts, students who moved into an attendance area between birth and five years old, and adjustments based on previous projection accuracy. Tables 2.2, 2.3 and 2.4 below identify which portion of the projected enrollment growth is expected to come from new housing, resales, and other factors used to project student enrollment.

Table 2.2 Elementary School Student Yield Data

	Official 2017 Enrollment	Projected 2018 Enrollment	Projected Enrollment Change	RED 2017	Projected 2018 Student Yield			
					Apt Turnover	Resale	New Construction	Other Factors
Atholton ES	459	456	-3		8.0	12.7	0.0	-23.7
Bellows Spring ES	749	671	-78	Y	3.1	2.0	16.1	-99.2
Bollman Bridge ES	631	646	15		38.3	5.0	12.3	-40.7
Bryant Woods ES	397	390	-7		17.1	7.6	0.0	-31.7
Bushy Park ES	602	584	-18		0.0	35.8	10.6	-64.4
Centennial Lane ES	765	755	-10		14.6	34.9	1.5	-61.0
Clarksville ES	432	419	-13		5.0	15.2	5.6	-38.8
Clemens Crossing ES	550	470	-80	Y	0.0	11.5	6.0	-97.5
Cradlerock ES	468	464	-4		2.8	20.0	0.0	-26.8
Dayton Oaks ES	619	604	-15		0.0	36.2	6.1	-57.3
Deep Run ES	760	677	-83	Y	14.9	6.0	0.4	-104.3
Ducketts Lane ES	891	673	-218	Y	21.9	2.0	0.0	-241.9
Elkridge ES	849	857	8		17.3	27.0	17.8	-54.1
Forest Ridge ES	693	685	-8		3.5	13.0	0.6	-25.2
Fulton ES	878	949	71		0.0	27.4	41.2	2.5
Gorman Crossing ES	776	794	18		2.7	21.8	18.4	-24.8
Guilford ES	411	399	-12		9.4	13.1	1.5	-36.0
Hammond ES	651	642	-9		10.8	17.5	0.4	-37.6
Hollfield Station ES	811	826	15		38.0	19.8	15.4	-58.2
Ilchester ES	615	578	-37		0.0	14.1	7.1	-58.1
Jeffers Hill ES	428	428	0		12.7	10.0	0.0	-22.7
Laurel Woods ES	574	588	14		23.3	8.0	0.7	-18.1
Lisbon ES	455	449	-6		0.0	20.3	4.9	-31.2
Longfellow ES	408	402	-6		16.0	8.0	0.7	-30.8
New ES #42(HHES)	0	649	649	Y	7.3	8.2	24.1	609.3
Manor Woods ES	794	635	-159	Y	7.9	32.7	8.8	-208.4
Northfield ES	748	727	-21		8.1	29.1	1.1	-59.3
Phelps Luck ES	548	528	-20		24.7	10.7	0.0	-55.3
Pointers Run ES	721	834	113	Y	0.0	42.7	14.1	56.2
Rockburn ES	647	553	-94	Y	0.0	11.3	14.4	-119.8
Running Brook ES	459	499	40		33.5	2.0	17.9	-13.3
St Johns Lane ES	703	694	-9		8.7	28.3	0.4	-46.4
Stevens Forest ES	390	388	-2		20.7	5.4	0.0	-28.1
Swansfield ES	605	606	1		30.4	9.0	1.2	-39.6
Talbott Springs ES	459	458	-1		10.0	4.2	0.0	-15.2
Thunder Hill ES	544	535	-9		16.3	10.0	0.0	-35.3
Triadelphia Ridge ES	553	570	17	Y	0.0	25.2	27.9	-36.2
Veterans ES	861	885	24		28.0	20.1	4.6	-28.7
Waterloo ES	581	582	1		20.3	7.0	1.1	-27.4
Waverly ES	695	802	107	Y	0.8	37.8	8.3	60.2
West Friendship ES	327	394	67	Y	0.0	24.3	0.9	41.9
Worthington ES	515	484	-31		1.2	11.6	3.2	-47.0

Projected enrollment increase w/out redistricting

Enrollment Projections

Table 2.3 Middle School Student Yield Data

	2017 Enrollment	Projected 2018 Enrollment	Projected Enrollment Change	RED 2017	Projected 2018 Student Yield			
					Apt Yield	Resale Yield	NC Yield	Other Factors
Bonnie Branch MS	716	777	61	Y	-5.0	12.1	2.4	51.5
Burleigh Manor MS	807	804	-3		-10.4	18.0	4.9	-15.4
Clarksville MS	552	668	116	Y	0.0	10.6	3.3	102.2
Elkridge Landing MS	693	715	22		0.7	5.8	6.7	8.9
Ellicott Mills MS	853	883	30		-1.0	11.0	1.6	18.4
Folly Quarter MS	663	647	-16		0.0	10.6	4.5	-31.1
Glenwood MS	495	480	-15		0.0	8.9	5.7	-29.6
Hammond MS	554	563	9		-7.2	7.8	1.1	7.3
Harpers Choice MS	596	546	-50	Y	-8.5	11.5	0.7	-53.7
Lake Elkhorn MS	548	557	9		-1.4	-0.7	0.0	11.1
Dunloggin MS	630	639	9		-12.0	2.3	0.9	17.8
Lime Kiln MS	734	626	-108	Y	0.0	16.3	12.1	-136.4
Mayfield Woods MS	712	780	68	Y	-8.8	-0.6	3.7	73.7
Mount View MS	819	834	15		-0.4	24.2	5.6	-14.4
Murray Hill MS	700	697	-3		-0.7	9.5	6.6	-18.5
Oakland Mills MS	472	507	35		-3.7	0.2	0.1	38.3
Patapsco MS	706	739	33		-8.0	5.4	5.4	30.2
Patuxent Valley MS	618	652	34		-3.1	0.0	5.0	32.1
Thomas Viaduct MS	687	707	20		-8.5	7.6	13.3	7.5
Wilde Lake MS	610	628	18	Y	-12.2	3.8	13.9	12.4
Totals	13165	13449	284		-90.1	164.3	97.4	

Projected enrollment increase w/out redistricting

Table 2.4 High School Student Yield Data

	Official 2017 Enrollment	Projected 2018 Enrollment	Projected Enrollment Change	JumpStart	Projected 2018 Student Yield			
					Apt Turnover	Resale	New Construction	Other Factors
Atholton HS	1479	1516	37		-6.5	10.1	4.5	28.9
Centennial HS	1614	1664	50	Y	-5.8	16.1	1.5	38.3
Glenelg HS	1173	1197	24		0.0	15.6	3.8	4.6
Hammond HS	1301	1356	55		-11.1	1.5	5.1	59.5
Howard HS	1914	1908	-6	Y	-1.7	15.3	9.9	-29.5
Long Reach HS	1636	1586	-50	Y	-13.6	6.3	10.0	-52.8
Marriotts Ridge HS	1332	1376	44		-6.8	12.5	4.0	34.3
Mt Hebron HS	1567	1590	23		-13.0	4.4	3.2	28.4
Oakland Mills HS	1161	1217	56	Y	-8.7	8.7	0.1	55.9
Reservoir HS	1527	1595	68		-1.6	4.5	14.0	51.1
River Hill HS	1157	1411	254	Y	-0.6	12.0	8.3	234.4
Wilde Lake HS	1276	1350	74		-17.6	2.0	2.8	86.8

Projected enrollment increase w/out redistricting

Relationship to Capital Budget

Figure 2.6 Capital Budget and Attendance Area Adjustments Flow Chart

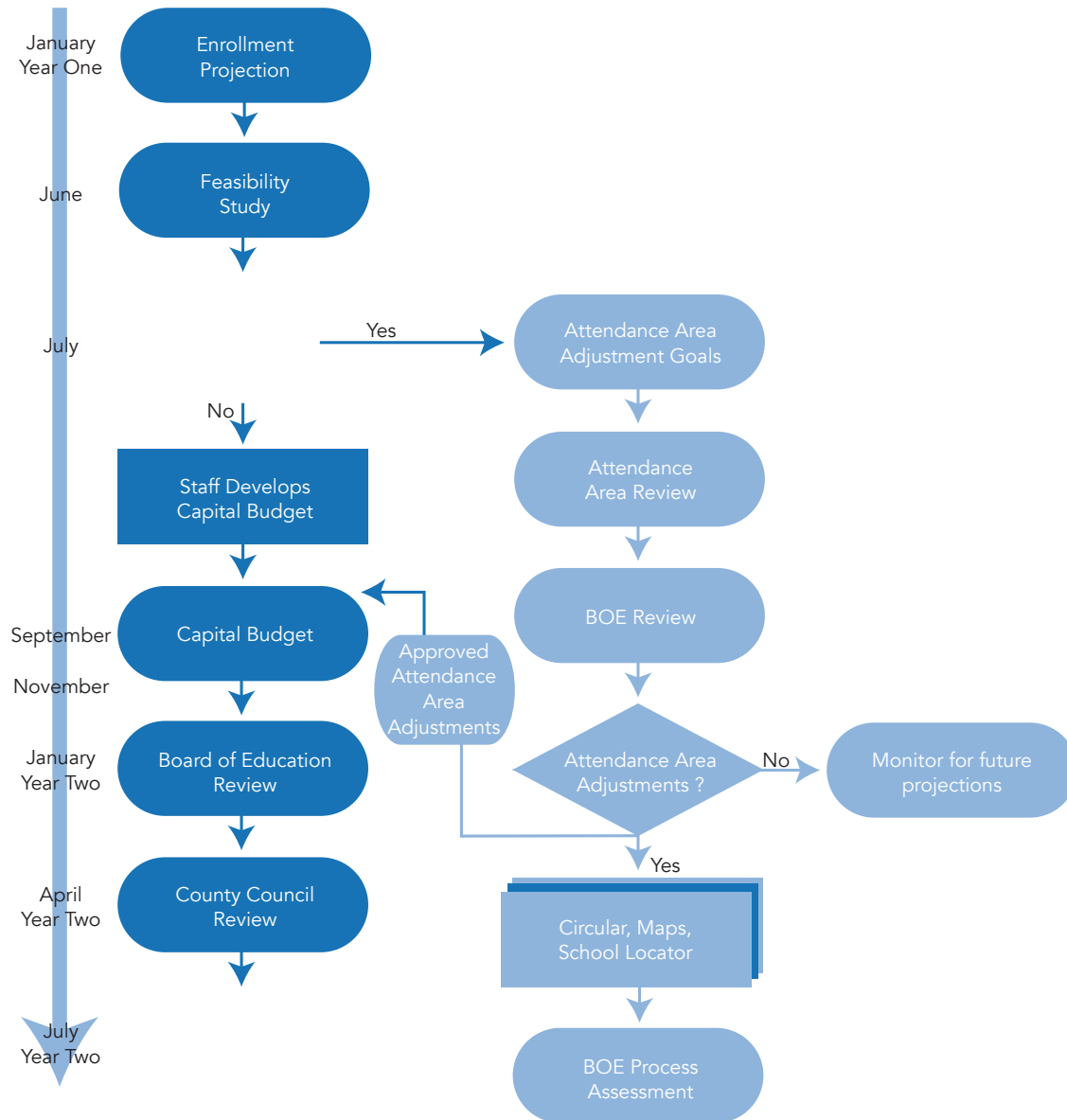


Figure 2.6 shows the school boundary adjustment process in the context of the capital budget. The feasibility study is presented as the capital budget is being prepared. The graphic shows that while school boundary adjustments may not take place annually, they are given consideration annually in the feasibility study. There are a number of ways to address enrollment growth. In some cases, new capacity or a capital project is the best solution. In other cases, a school boundary adjustment consistent with policy may allow better use of existing capacity. Sometimes a change to regional program location can open capacity. Relocatable buildings can also be used to relieve overcrowding. The process is ongoing but may be tracked through this document and the capital budget process.

Relationship to Capital Budget

The annual capital budget contains a Capital Improvement Plan (5-year plan) and Long-Range Master Plan (10-year plan). Table 2.5 is a copy of the FY 2019–2028 Long-Range Master Plan from FY 2019 Board Requested Capital Budget. Capital projects are shown with anticipated funding phased out over future fiscal years. The Feasibility Study evaluates enrollment trends and discusses adjustments and changes that may be reflected in the CIP and Long-Range Master Plan.

The new Adequate Public Facilities Ordinance adopted by the County Council in 2018 requires that HCPSS reports funding and attendance area adjustment assumptions for projects that are open due to a capital project or attendance area adjustments associated with a capital project. The Board Requested FY 2019 – 2027 Long Range Master Plan as approved by the Board on March 5, 2018, is below. The final adoption of the FY 2019 Capital Budget is scheduled for May 31, 2018.

Table 2.5 FY 2019-2028 Board of Education Requested Long Range Master Plan

FY 2019-2028 Long-Range Master Plan															
Board of Education's Requested														March 5, 2018	
(In Thousands)															
Capacity	Project	County Project	Occupancy	Approved Appropriations	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total Approp. plus FY19-FY28 Request
100	Waverly ES Phase I & II Renovation/Addition*	E0973	Aug 2018	\$ 36,769	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,769
832	New ES #42	E1028	Aug 2018	35,741	8,132	-	-	-	-	-	-	-	-	-	43,873
640	Talbot Springs ES Replacement School	E1043	Aug 2021	1,000	8,156	18,250	12,218	2,000	-	-	-	-	-	-	41,624
1,615	New HS #13	E1035	Aug 2023	-	6,732	25,315	25,415	25,515	25,115	15,972	-	-	-	-	124,064
200	Hammond HS Renovation/Addition	E1024	Aug 2023	-	6,000	18,695	18,795	18,895	19,995	15,147	-	-	-	-	97,527
788	New ES #43	E1039	Aug 2023	-	-	6,000	11,500	15,215	17,927	8,000	-	-	-	-	58,642
97	Dunloggin MS Renovation/Addition	TBD	Aug 2024	-	-	-	2,000	10,694	12,671	9,534	4,000	-	-	-	38,899
156	Ellicott Mills MS Addition	E1037	Aug 2024	-	-	-	-	-	1,000	6,415	1,000	-	-	-	8,415
-	Oakland Mills MS Renovation*	E1036	Aug 2026	-	-	-	-	-	-	9,003	14,404	10,603	2,000	-	36,010
150	Clarksville ES Addition	TBD	Aug 2026	-	-	-	-	-	-	2,000	7,000	1,000	-	-	10,000
788	New ES #44	E1040	Aug 2027	-	-	-	-	-	-	5,705	15,881	21,175	15,881	-	58,642
TBD	MS/HS Career Development Center	TBD	Aug 2028	-	-	-	-	-	-	11,232	22,566	30,850	31,686	22,566	118,900
788	New ES #45	E1041	Aug 2029	-	-	-	-	-	-	-	-	5,705	15,881	21,175	42,761
	Systemic Renovations/Modernizations	TBD		-	28,655	15,650	17,644	18,007	18,841	18,298	17,598	17,000	18,000	20,000	189,693
	Roofing Projects	TBD		-	12,500	5,000	1,000	5,000	1,000	1,000	5,000	5,000	5,000	5,000	45,500
	Playground Equipment	E0990		2,930	-	250	250	250	250	250	500	500	500	500	6,180
	Relocatable Classrooms	TBD		-	2,500	2,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	17,000
	Site Acquisition & Construction Reserve	TBD		-	-	-	-	-	-	-	2,000	2,000	2,000	2,000	8,000
	Technology	TBD		-	2,750	5,500	5,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	66,250
	School Parking Lot Expansions	E1012		4,200	-	-	-	-	-	-	600	600	600	600	6,600
	Planning and Design	E1038		600	300	300	300	300	300	300	300	300	300	300	3,600
	Barrier Free	E0989		5,603	-	200	200	200	200	200	200	200	200	200	7,403
	TOTALS			\$ 86,843	\$ 79,725	\$ 97,660	\$ 96,322	\$ 105,076	\$ 106,299	\$ 112,056	\$ 100,049	\$ 103,933	\$ 101,048	\$ 81,341	\$ 1,070,352

* Partial planning funds received in Systemic Renovation Project

Ten-Year Long-Range Master Plan = \$983,509

Capacities

Equitable evaluation of the impact of projected enrollment growth requires calculation of school capacities. Capacities are not necessarily fixed to the capacity designed when a building first opened. Change in space usage, program location, and building or program specifications can change capacity. Capacity methodologies have been reviewed at all three levels. The results from the capacity studies are integrated into any recalculation of capacities due to relocation of regional programs, additions or renovations. The feasibility study expresses the projected enrollment by level and by school as a function of capacity utilization. Utilization is the comparison of a facility's program capacity and its enrollment or projected future enrollment. In the Pre- and Post-Measure Tables (Section 5), the effects of potential capacity projects, or regional program moves on utilization are depicted.

The example below from the 2015 Feasibility Study, illustrates how capacity is shown in these tables. Table 2.6 shows the effect of the larger capacity of the Wilde Lake MS replacement school. The capacity columns show the number of seats, which changes from 467 to 760 in 2017 when the replacement school opened. The corresponding calculation of the percentage utilization also changes, dropping from 128.3 percent to 85.3 percent in 2017.

Table 2.6 Capacity Chart Example

Post-Measures										
Aggregate Plan										
Chart reflects May 2015 Projections, Board of Education's FY 2017 Requested capacities and estimate										
	Capacity				2016-17		2017-18			
	2016	2017	2018	2019	Proj	% Util.	Proj	% Util.		
Columbia - East										
Lake Elkhorn MS	643	643	643	643	503	78.2	548	85.2		
Oakland Mills MS	506	506	506	506	434	85.8	438	86.6		
Region MS Totals	1149	1149	1149	1149	937	81.5	986	85.8		
Columbia - West										
Harpers Choice MS	506	506	506	506	574	113.4	595	117.6	C	
Wilde Lake MS	R 467	760	760	760	599	128.3	C 648	85.3		
Region MS Totals	973	1266	1266	1266	1173	120.6	C 1243	98.2		

High school program capacities are a product of either 80 or 85 percent of the total number of teaching stations multiplied by 25 students. The minimum square footage for a teaching space is 660 square feet at all levels. This calculation excludes special education classrooms and special use rooms. Not all teaching stations can be scheduled for every period of the school day, which is the purpose of the 80 percent or 85 percent multiplier. Many of these rooms are designed for a specific class and cannot be adapted for other uses, leaving them unused for a portion of the day.

Middle school program capacities are a product of 95 percent of the total number of teaching stations multiplied by 20.5 students, exclusive of special education classrooms. Like high schools, not all teaching stations can be scheduled for use every period of the school day.

Capacities

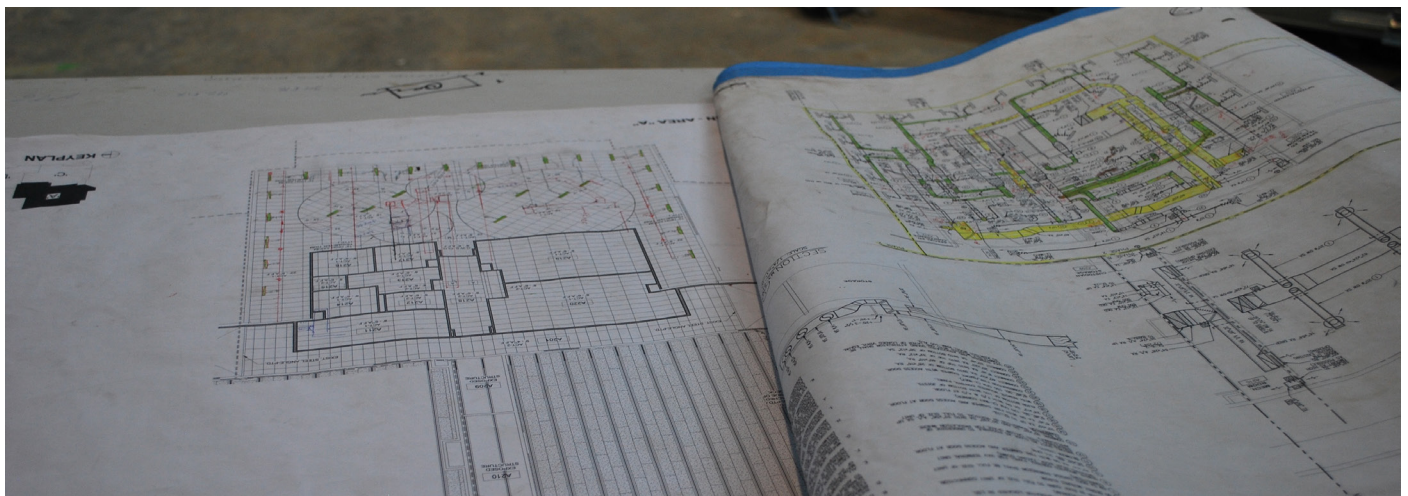
Elementary school program capacities are based on 22 students for each Kindergarten classroom, 19 students for each classroom in Grades 1 and 2, and 25 students for each classroom in Grades 3–5. Not included in the capacities for elementary schools are resource/instructional spaces that are utilized on a schoolwide basis where no one group of students is assigned exclusively. Some examples of spaces not included in the capacity are gymnasiums, cafeteriums, art rooms, music rooms, media centers, gifted and talented rooms, rooms dedicated to Special Education, or regional programs such as Regional Early Childhood Centers or Pre-K.

As mentioned previously, capacities can change with the placement of regional programs, renovations and additions. In many instances local capacities differ from the state rated capacity. Local K-12 program capacity calculations do not include rooms used for prekindergarten programs.

For school year 2018-19, several regional special education and prekindergarten programs were expanded or added, and completion of key capacity projects occurred. As such, rooms were either added or subtracted out of the capacity. Specifically, capacity changed at the following schools:

Table 2.7 School Capacity Changes due to Regional Programs for School Year 2018-19

School	Change	Reasons
Bushy Park ES	-44	Added Academic Life Skills
Dayton Oaks ES	-94	Added Prekindergarten, Primary Learner and Upper Learner
Ducketts Lane ES	-76	Added Prekindergarten
Hanover Hills ES	0	Added Prekindergarten, Regional Emotional Disabilities, reclaimed Community Use Room
Hollifield Station ES	38	Removed Prekindergarten
Ilchester ES	-69	Added Prekindergarten and Primary Learner
Phelps Luck ES	-19	Added Prekindergarten
Rockburn ES	-44	Added Academic Life Skills
Swansfield ES	173	Renovation/addition, including Prekindergarten
Thunder Hill ES	0	Removed Academic Life Skills, added Regional Emotional Disabilities
Waverly ES	172	Renovation/addition
Worthington ES	-75	Added Prekindergarten



Capacities

The new Adequate Public Facilities Ordinance adopted by the County Council in 2018 requires that HCPSS report State and Local Capacities. State rated capacities are calculated based on a minimum square footage of 550 square feet per elementary teaching station and 500 square feet per middle or high school teaching station. Relocatable classrooms are excluded from the calculation. The formula to calculate state rated capacity is based on the number of the rooms used for a specific purpose (PreKindergarten, Kindergarten, Grade 1-5, Special Education, Grade 6-12 [General], Career and Technology, Alternative Education) multiplied by the number of seats, and then summed:

$$ES = (\# \text{ Pre-K} \times 20) + (\# \text{ Kindergarten} \times 22) + (\# \text{ Grade 1-5} \times 23) + (\# \text{ Special Education} \times 10)$$

$$MS = 85\% \times (\# \text{ General} \times 25) + (\# \text{ Career} \times 20) + (\# \text{ Special Education} \times 10) + (\# \text{ Alternative} \times 15)$$

$$HS = 85\% \times (\# \text{ General} \times 25) + (\# \text{ Career} \times 20) + (\# \text{ Special Education} \times 10) + (\# \text{ Alternative} \times 15)$$

Table 2.8 Local Capacity and State Rated Capacity as of June 2018.

Name	State	Local
Atholton ES	419	424
Bellows Spring ES	720	751
Bollman Bridge ES	694	666
Bryant Woods ES	362	361
Bushy Park ES	910	744
Centennial Lane ES	544	647
Clarksville ES	581	543
Clemens Crossing ES	544	521
Cradlerock ES	556	398
Dayton Oaks ES	910	675
Deep Run ES	740	750
Ducketts Lane ES	785	694
Elkridge ES	819	760
Forest Ridge ES	660	713
Fulton ES	564	826
Gorman Crossing ES	618	735
Guilford ES	522	465
Hammond ES	525	653
Hanover Hills ES	TBD	810
Hollifield Station ES	564	732
Ilchester ES	564	584
Jeffers Hill ES	435	421
Laurel Woods ES	544	640
Lisbon ES	504	527
Longfellow ES	468	512
Manor Woods ES	564	681
Northfield ES	544	700
Phelps Luck ES	578	597
Pointers Run ES	564	744
Rockburn ES	847	609
Running Brook ES	471	515
St Johns Lane ES	619	612
Stevens Forest ES	320	399
Swansfield ES	601	694
Talbott Springs ES	500	377
Thunder Hill ES	386	509
Triadelphia Ridge ES	564	581
Veterans ES	922	799
Waterloo ES	726	663
Waverly ES	678	788
West Friendship ES	394	414
Worthington ES	589	515

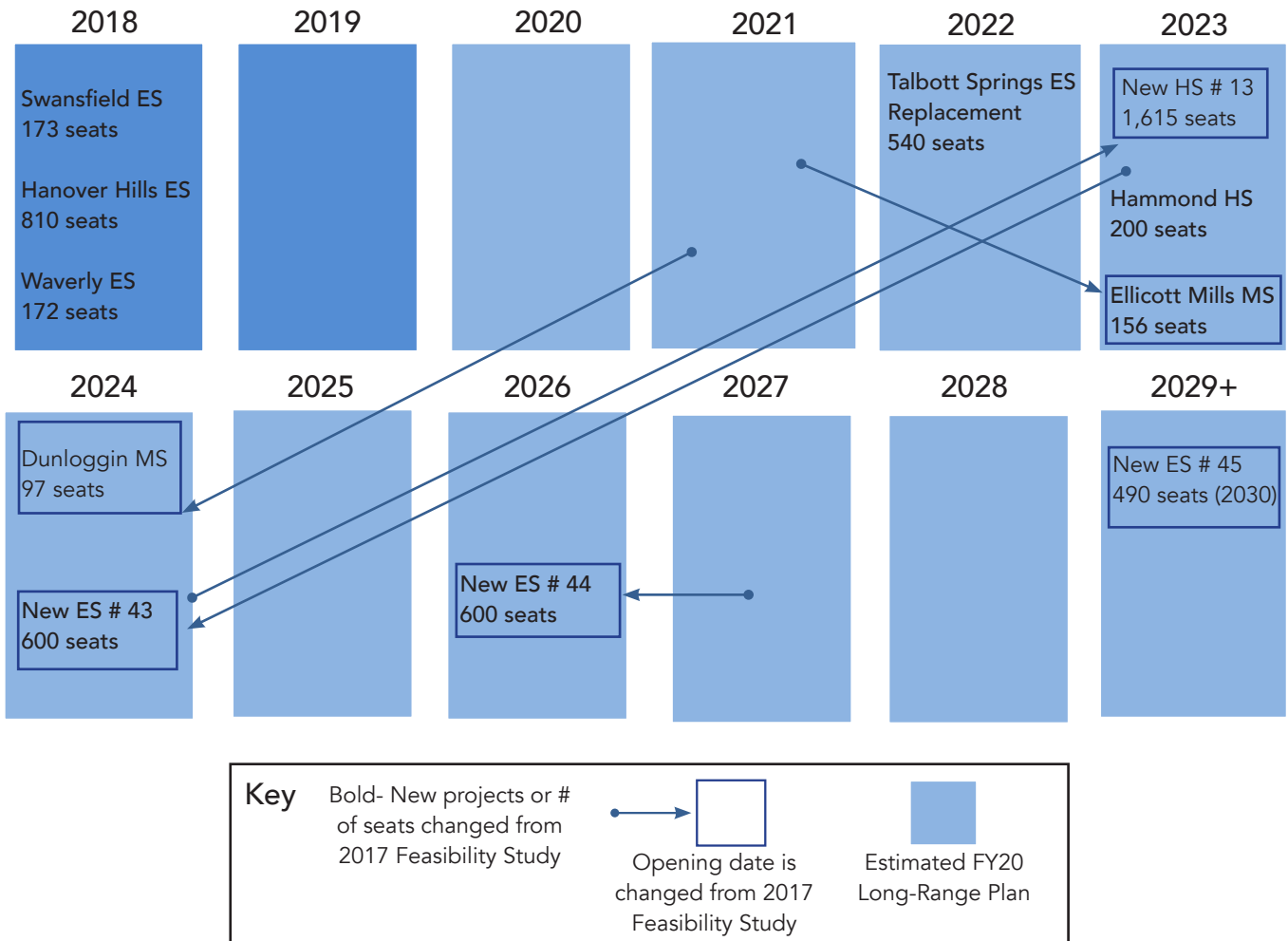
Name	State	Local
Bonnie Branch MS	732	701
Burleigh Manor MS	795	779
Clarksville MS	619	643
Dunloggin MS	619	565
Elkridge Landing MS	760	779
Ellicott Mills MS	816	701
Folly Quarter MS	732	662
Glenwood MS	640	545
Hammond MS	679	604
Harpers Choice MS	619	506
Lake Elkhorn MS	765	643
Lime Kiln MS	732	701
Mayfield Woods MS	773	798
Mount View MS	760	798
Murray Hill MS	685	662
Oakland Mills MS	598	506
Patapsco MS	598	643
Patuxent Valley MS	770	760
Thomas Viaduct	754	701
Wilde Lake MS	590	760

Name	State	Local
Atholton HS	1543	1460
Centennial HS	1091	1360
Glenelg HS	944	1420
Hammond HS	1434	1220
Howard HS	1051	1420
Long Reach HS	1434	1488
Marriotts Ridge HS	1434	1615
Mt Hebron HS	1408	1400
Oakland Mills HS	1135	1400
Reservoir HS	1339	1551
River Hill HS	1483	1488
Wilde Lake HS	1434	1424

Capacities

The FY 2020 Capital Budget will include updates to the long-range plan. Figure 2.7 below shows changes in capacity projects from the 2017 Feasibility Study to the 2018 Feasibility Study. The year shown represents the school year in which occupancy is proposed. For example, the project at Swansfield ES is scheduled to open in September 2018.

Figure 2.7 Capacity Projects



Policy Guidance

This document is guided by Board Policy 6010. Projects in the Capital Improvement Program that increase student capacity can be tested in a feasibility study with an attendance area adjustment plan consistent with stated policy goals. Plans will be linked within and across organizational levels to form a short- and long-range attendance area adjustment plan. The Board will review the plan and set direction, as appropriate, during the attendance area adjustment and/or capital budget presentations each year. Policy 6010 discusses consideration of redistricting under certain conditions such as the opening of a school or adjusting to some other change. When school capacity utilization projections fall outside the target capacity utilization range of 90 – 110 percent over a period of time, attendance area adjustments may be considered. Attendance area adjustments are not planned for school year 2019-2020. When boundary line changes are planned, staff will refine the goal-directed short- and long-range plan in the Feasibility Study based on the most current set of projections that conform to Policy 6010 Implementation Procedures. The Superintendent will appoint an Attendance Area Committee to test alternate scenarios consistent with the direction set by the Board and the standards and factors in Policy 6010. Plans may be presented in regional meetings, and various methods will be used to collect additional input from the public. A Superintendent's plan that takes into account previous staff, committee, and community input is presented to the Board.

The Board evaluates the Superintendent's plan according to the standards of Policy 6010, which are found in Standards Section B in Appendix A. In the Board's deliberations, new scenarios using these considerations may be reviewed, assessed, and considered. It is unlikely that one plan can fully satisfy all considerations.

On January 11, 2018, the Board of Education passed a charter to study the attendance area adjustments process. From March 2018 – June 2018, three members of the Board met with School Planning staff to discuss potential process improvements, including consideration of changes to Policy 6010. The charter set the following objectives for the Board members:

1. Review current redistricting process defined under Policy 6010 School Attendance Areas.
2. Review polygon creation process.
3. Identify implementation timelines of committee recommendations.
4. Review recommendations with legal counsel prior to Board presentation.

The Board's Redistricting Committee may be making recommendations to the full Board over the next few weeks and any recommendations and direction given to the Superintendent will be addressed as necessary.



Alignment with Strategic Call to Action

The Strategic Call to Action, a vision built on equity, is fueled by the belief that every student possesses the skills, knowledge and confidence to lead a successful life and positively influence the larger community. The anticipation of growth trends and planning for adequate permanent or temporary space is needed to serve student needs. When attendance area changes are necessary, a student-centered transition process is provided to welcome the students to their new school. These efforts are made to ensure every student achieves academic excellence in an inspiring, engaging, and supportive environment.



Tour of construction at Waverly ES.

Crucial decisions about budget and attendance areas must be the result of an open process that includes many stakeholders. Board decisions need to be informed by both the technical guidance of staff, and the concerns and desires of families and the community. For this reason, the Office of School Planning maintains an extensive web presence and supports many meetings of committees, parent-teacher-associations (PTAs), and other community groups. It is also necessary that the School Planning serves as a liaison to various county and state agencies to communicate agency direction. These efforts ensure that families and the community are engaged and supported as partners in education.

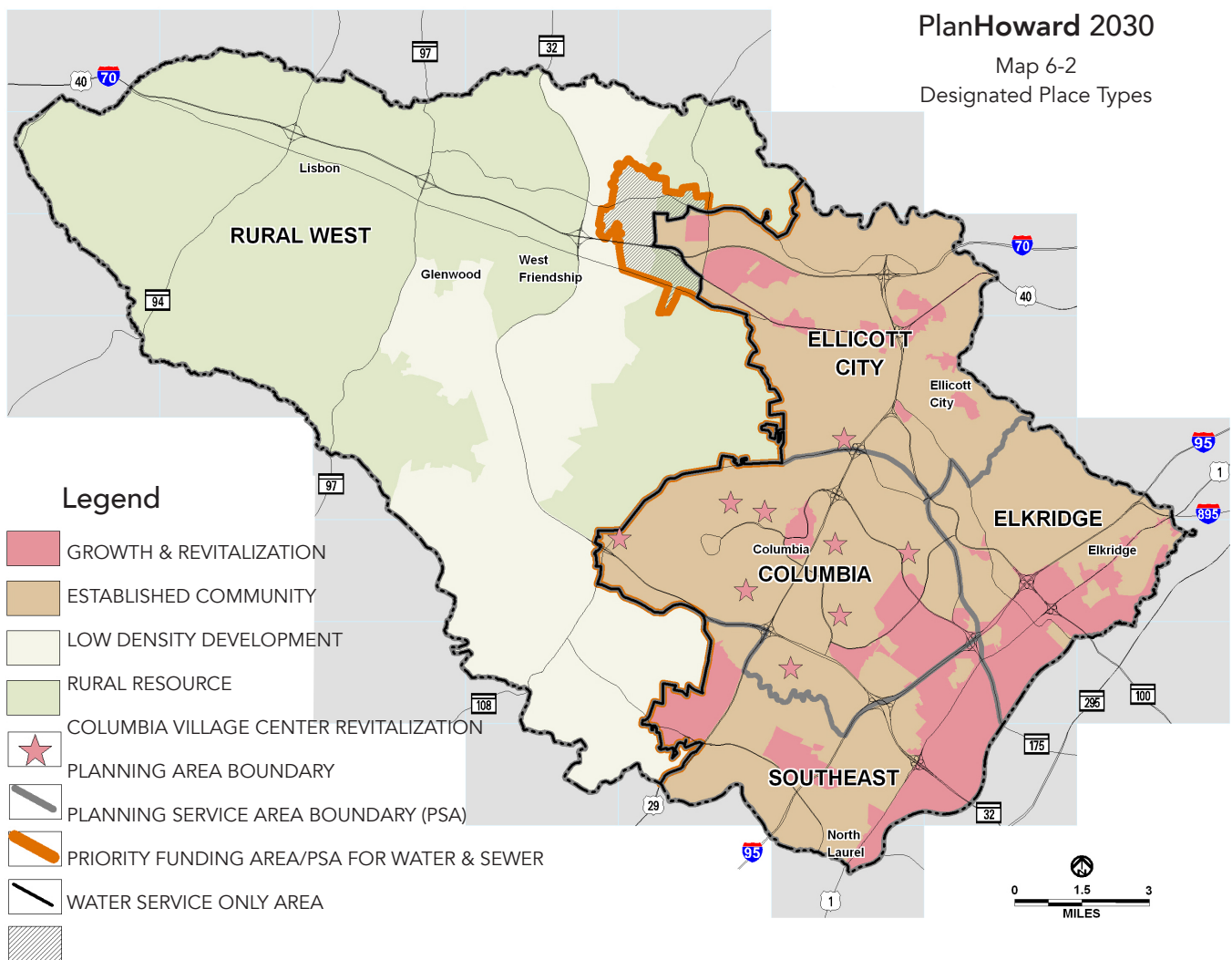


Land Use

The Howard County General Plan, PlanHoward2030 guides development. This Plan sets forth priorities for growth and redevelopment for the County. It was adopted by the County Council in July 2012, and took effect in October 2013. The General Plan is further implemented by zoning. Zoning tells property owners two things 1) what is permissible to build; and 2) the rules to place buildings on the property.

The General Plan included the adoption of a designated places map. Figure 2.8 depicts the Plan Howard Designated Places map. Most future development, and anticipated school needs, are planned where the map shows "Growth and Revitalization" areas in pink. Generally these are in the eastern part of the county and Columbia's Village Centers. Projected enrollment growth provided in this Feasibility Study is associated with the future development.

Figure 2.8 Plan Howard 2030 Designated Places Map



Land Use

The Department of Planning and Zoning provides the Office of School Planning with the number of existing and projected housing units in the county. Future housing is calculated using a software tool that simulates the residential build-out of the County's remaining undeveloped, residentially-zoned properties under real-world conditions. Constraints imposed by current zoning of properties, the logistics of residential construction, and the growth limits of the County's General Plan are included in the housing projection. The output from this simulation informs the enrollment projection.

The FY 2019-2028 Long-Range Master Plan includes funding requested for new construction of four elementary schools, one high school, the renovation/addition to a high school, and strategically placed middle school additions. The timing of residential development depends upon actual land development applications, which can change. Projections are adjusted yearly to account for phasing of the new residential development.

Figure 2.9 Residential Development



Oxford Square construction.

Verde apartments at Howard Square.



Maple Lawn section shown in 2013 (left) and 2015 (right).

HCPSS Facilities and Land Bank

The HCPSS maintains well over seven million square feet of school facilities and other buildings in service of delivering the educational program and for use by the community. This document examines utilization of the 74 elementary, middle, and high schools, and anticipates future schools.

HCPSS School Facilities	
77 schools	
42 elementary schools	
20 middle schools	
12 high schools	
3 education centers	

The HCPSS maintains sites for future school construction, commonly known as the "Land Bank." Some properties are held by other parties and designated on the final development plan as "school open space" for the future use by the Board for school construction. When determined that they are needed, the Board may request to purchase these properties. Most planned school sites result from agreements made during Columbia's planning and development. Howard County has aided the school system in the past through exchanges of county land where needed. Opportunities for additions to the land bank in eastern Howard County are under consideration. The HCPSS is working with Howard County Government to acquire land. Sites in Turf Valley and Mission Road will be added to the HCPSS Land Bank, once purchase is finalized, through the County's process. Figure 2.9 shows the inventory of school sites as presented in the annual capital budget:

Table 2.9 Land Bank

Owned Sites	Acreage	Location	Date Acquired	Cost
Sunny Spring Drive	10	Sunny Spring Drive	1974	\$1.00
Future MS Site	41	2865 Marriottsville Road	2007	\$1,700,000
Faulkner Ridge Center	9.01	Marble Faun Lane	1968	\$1.00

Table 2.10 Land Designated as School Open Space Property

Land Designated as School Open Space Property	Acreage	Location
Clary's Forest	10	Little Patuxent near Bright Passage
Dickinson	20	Sweet Hours Way east of Eden Brook Drive
Huntington	11	Vollmerhausen Road east of Murray Hill Road

Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Section 3

Needs and Strategies

Prior to examining future school boundary adjustments, it is necessary to review the implications of the new projection and identify needs and potential strategies. When school capacity utilization is outside of the acceptable target utilization range per Board Policy (90–110 percent), school boundary adjustments may be considered.

Elementary Schools Columbia East Region

Need:

The region is projected to remain within target utilization, however, Cradlerock ES and Talbott Springs ES exceed target utilization in school year 2018-19. Cradlerock ES is projected to exceed target utilization by between 2% and 7% over the next five years.

Strategy:

With little to no housing growth in this region, capacity utilization is projected to stay within target utilization. Capital projects at Phelps Luck ES, Thunder Hill ES, and Stevens Forest ES have increased capacity. Projections indicate Talbott Springs ES will continue to exceed target utilization. A capital project yielding an increased capacity is planned for this school, potentially opening in 2022. This project should not be delayed. Depending on the capacity increase at Talbott Springs ES and regional program locations, attendance area adjustments should be explored in conjunction with completion of this project. Relocatable classrooms already on site will provide needed capacity in the interim.

Figure 3.1
Elementary schools of the Columbia East Region

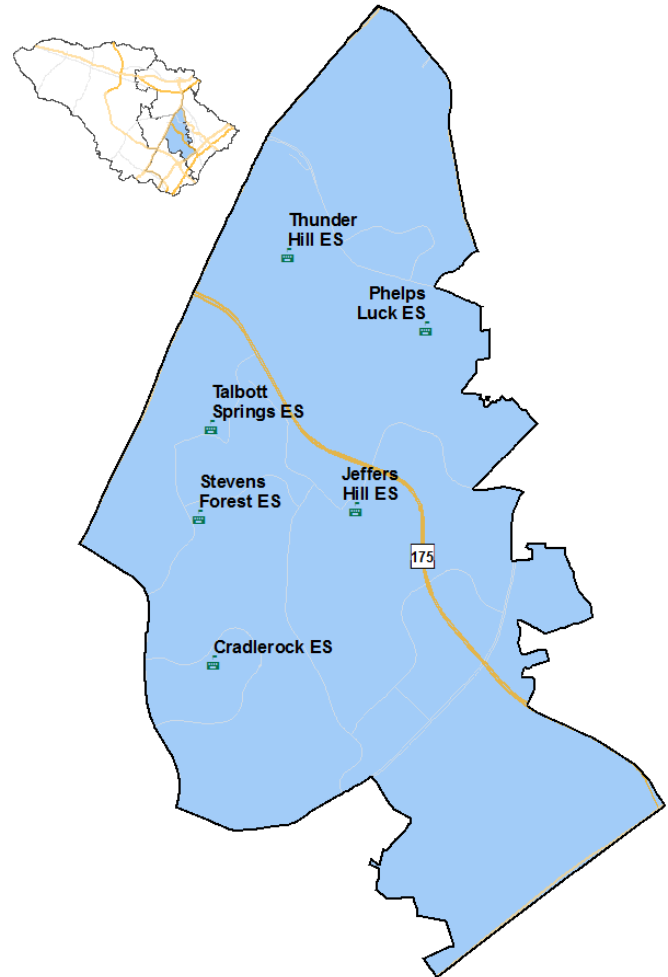


Table 3.1 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Columbia East	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Cradlerock ES	464	398	116.6	444	398	111.6
Jeffers Hill ES	428	421	101.7	400	421	95.0
Phelps Luck ES	528	597	88.4	578	597	96.8
Stevens Forest ES	388	399	97.2	405	399	101.5
Talbott Springs ES	458	377	121.5	464	540	85.9
Thunder Hill ES	535	509	105.1	476	509	93.5
(Region ES Totals)	2,801	2,701	103.7	2,767	2,864	96.6

Elementary Schools Columbia West Region

Need:

With the housing growth that is expected in Downtown Columbia, enrollment is expected to increase, with three schools exceeding target utilization by 2023. Bryant Woods ES is projected to exceed target utilization by 2020.

Strategy:

With recent investment in capacity within the Columbia West Region, at Running Brook ES, Longfellow ES and Swansfield ES, all schools are projected to be within target utilization in school year 2018-19.

Enrollment at Running Brook ES is projected to grow as Columbia Town Center continues to develop. Several site options exist in this region and are being considered for future ES #45. Updated projections show that the completion of a new elementary school in this area could be deferred from 2026-27 to 2030-31. Placement of relocatable classrooms, attendance area adjustments, regional program placement or Prekindergarten and primary/intermediate grade configuration using multiple buildings should be considered as strategies moving forward. As required by the Downtown Columbia Plan, when 10 percent of the residential units are occupied, HCPSS will evaluate student yield. It is anticipated that criteria will be met by the summer of 2018; therefore an evaluation of student yield could occur and be included in the 2019 Feasibility Study.

Figure 3.2
Elementary schools of the Columbia West Region

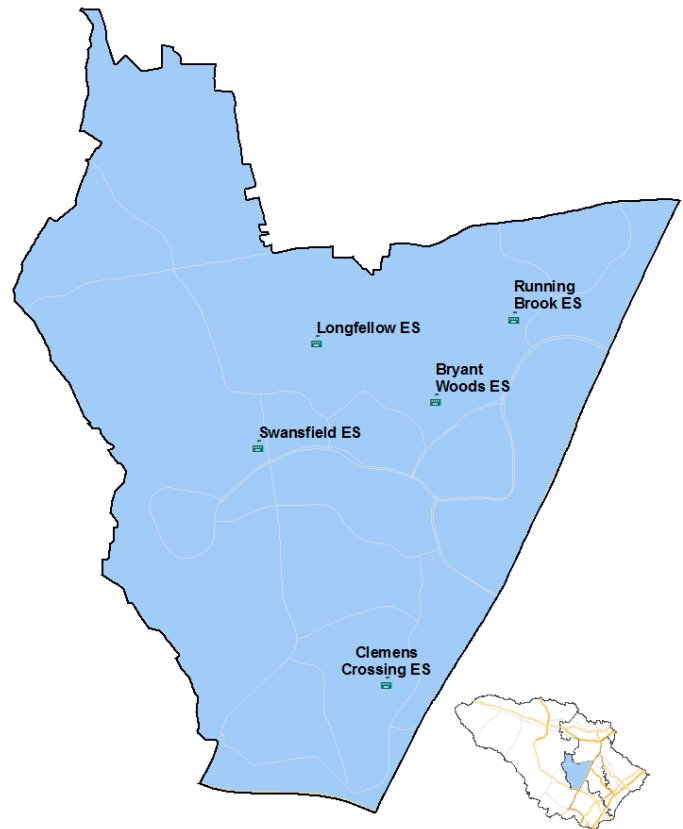


Table 3.2 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Columbia West	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Bryant Woods ES	390	361	108.0	430	361	119.1
Clemens Crossing ES	470	521	90.2	680	521	130.5
Longfellow ES	402	512	78.5	414	512	80.9
Running Brook ES	499	515	96.9	673	515	130.7
Swansfield ES	606	694	87.3	573	694	82.6
(Region ES Totals)	2,367	2,603	90.9	2,770	2,603	106.4

Elementary Schools Northeastern Region

Figure 3.3
Elementary schools of the Northeastern Region

Need:

The region is projected to have adequate capacity until 2023. Hanover Hills ES and Bellows Spring ES are projected to be above target utilization in 2022 and 2023, respectively.

Strategy:

Recent investments in this region that include Ducketts Lane ES, Hanover Hills ES, as well as additions at Deep Run ES and Bellows Spring ES, have been integral to closing the capacity gap in this rapidly growing region.

With the opening of Hanover Hills ES, all elementary schools are projected to be within target utilization until 2022.

Future relief is intended for Hanover Hills ES with the planned construction of New ES #43, which is recommended to open at the Mission Road site in school year 2024-25. Projections for Bellows Spring ES, Elkridge ES, Veterans ES and Deep Run ES will be closely monitored.

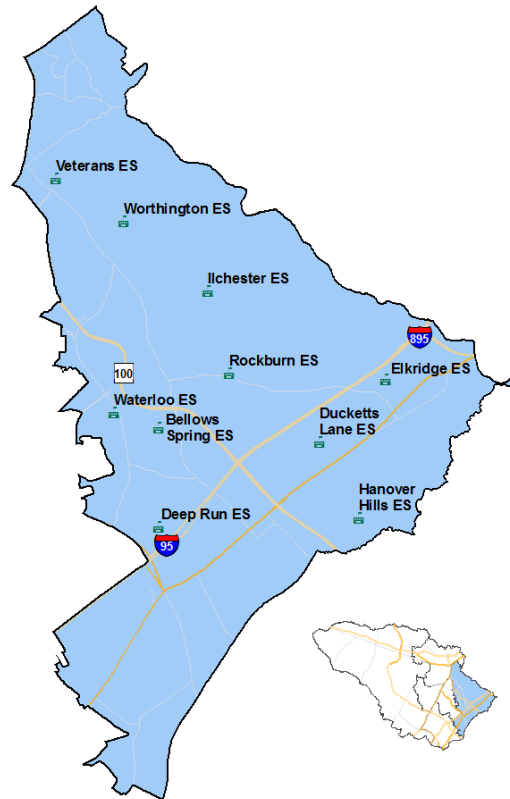


Table 3.3 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Northeastern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Bellows Spring ES	671	751	89.3	855	751	113.8
Deep Run ES	677	750	90.3	797	750	106.3
Ducketts Lane ES	673	694	97.0	639	694	92.1
Elkridge ES	857	760	112.8	794	760	104.5
Ilchester ES	578	584	99.0	559	584	95.7
Hanover Hills ES	649	810	80.1	1,071	810	132.2
Rockburn ES	553	609	90.8	610	609	100.2
Veterans ES	885	799	110.8	848	799	106.1
Waterloo ES	582	663	87.8	563	663	84.9
Worthington ES	484	515	94.0	469	515	91.1
(Region ES Totals)	6,609	6,935	95.3	7,205	6,935	103.9

Elementary Schools Northern Region

Need:

The region is projected to exceed 110 percent capacity utilization by 2023.

Strategy:

Approved attendance area adjustments for the school year 2018-19 will provide relief for Manor Woods ES by shifting some future growth to the Western Region and Waverly ES. Added capacity at Waverly ES provided additional relief to the region.

As other Northern region schools are considered for renovation, such as Hollifield Station ES or St. John's Lane ES, in future capital budgets and land is acquired, consideration should be given to additional capacity in the region.

Updated projections show that occupancy for New ES #44 should be advanced from 2029-30 to 2026-27. Acquisition of a site in Turf Valley for this school is anticipated.

Capacity is available in adjacent schools in the Western Region and schools in the Northern region could access that capacity. State funding eligibility for new capacity is based on adjacent schools, regardless of the region, and may be affected if available seats at nearby schools are not more fully utilized.

Figure 3.4

Elementary schools of the Northern Region

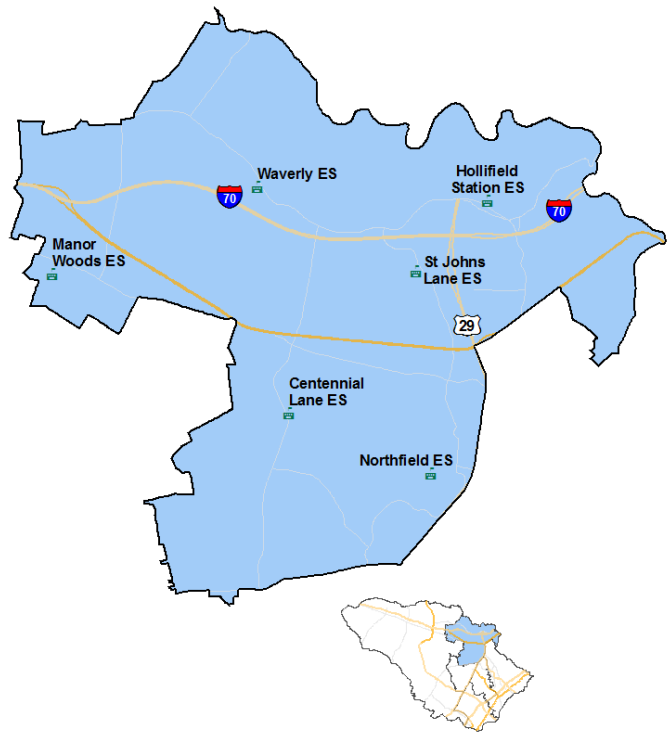


Table 3.4 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Northern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Centennial Lane ES	755	647	116.7	745	647	115.1
Hollifield Station ES	826	732	112.8	833	732	113.8
Manor Woods ES	635	681	93.2	748	681	109.8
Northfield ES	727	700	103.9	771	700	110.1
St Johns Lane ES	694	612	113.4	748	612	122.2
Waverly ES	802	788	101.8	904	788	114.7
(Region ES Totals)	4,439	4,160	106.7	4,749	4,160	114.2

Elementary Schools Southeastern Region

Need:
Future enrollment growth is projected.

Strategy:
While this region is projected to stay within target utilization through 2023, locating New ES #43 in this area could accommodate future enrollment growth in the Southeastern and Northeastern Regions, along the Route 1 Corridor, and at Fulton ES. Plan for New ES #43 in 2024-25. Attendance area adjustments to open New ES #43 can also be used to balance utilization in the region. Schools that are outside of target utilization in the Northeastern and Western regions will benefit from the location of New ES #43.

Recent capital investments at Laurel Woods ES, Bollman Bridge ES and Gorman Crossing ES, as well as reclaimed community rooms at Forest Ridge ES and Gorman Crossing ES, have provided needed seats to help keep the region within target utilization through 2023.

Monitor enrollment projections at Atholton ES, Forest Ridge ES, Gorman Crossing ES and Hammond ES.

Figure 3.5
Elementary schools of the Southeastern Region

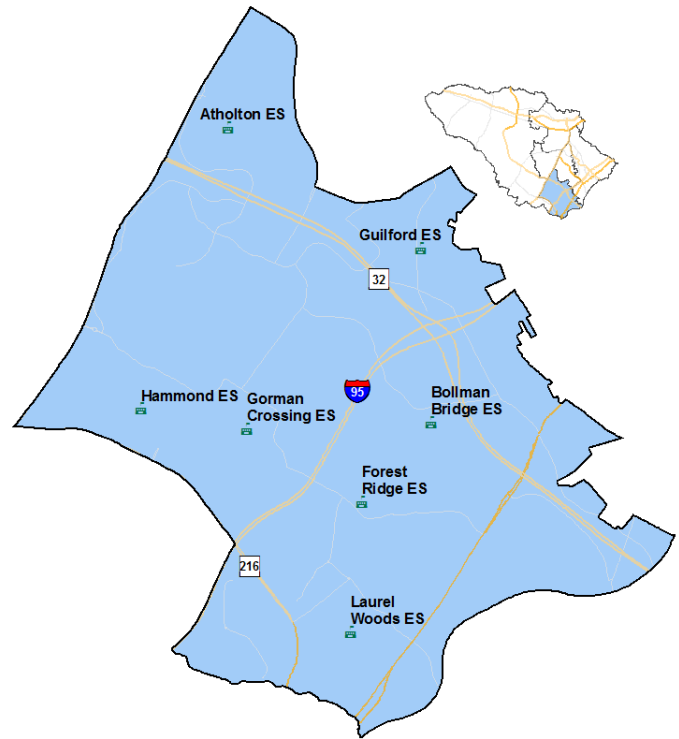


Table 3.5 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Southeastern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Atholton ES	456	424	107.5	479	424	113.0
Bollman Bridge ES	646	666	97.0	680	666	102.1
Forest Ridge ES	685	713	96.1	745	713	104.5
Gorman Crossing ES	794	735	108.0	786	735	106.9
Guilford ES	399	465	85.8	365	465	78.5
Hammond ES	642	653	98.3	698	653	106.9
Laurel Woods ES	588	640	91.9	544	640	85.0
(Region ES Totals)	4,210	4,296	98.0	4,297	4,296	100.0

Elementary Schools Western Region

Need:

Capacity is available, which could be used to relieve schools in this and other regions. Fulton ES and Pointers Run ES are over 110 percent capacity utilization and projections exhibit growth into the foreseeable future.

Strategy:

Approved attendance area adjustments for the school year 2018-19 reassigned students from overcrowded schools in the Northern region to some seats in the Western region. Boundary line adjustments to relieve Fulton ES using Western capacity were reviewed, but not approved. Construction of New ES #43 in the adjacent Southeastern Region may present an opportunity to utilize available capacity in that region to relieve Fulton ES.

Future boundary line adjustments to open New ES #44 in school year 2026-27 in the Northern Region may provide an opportunity to balance utilization, and may impact West Friendship ES, Triadelphia Ridge ES and Bushy Park ES.

Regional PreKindergarten and Special Education programs have been placed at Clarksville ES, Dayton Oaks ES, and Bushy Park ES, providing relief to crowded schools. Continue to evaluate ways to utilize available capacity at these schools. Schools projected to be over target utilization by 2023 will have relocatable classrooms in place to temporarily address the overcrowding.

Figure 3.6

Elementary schools of the Western Region

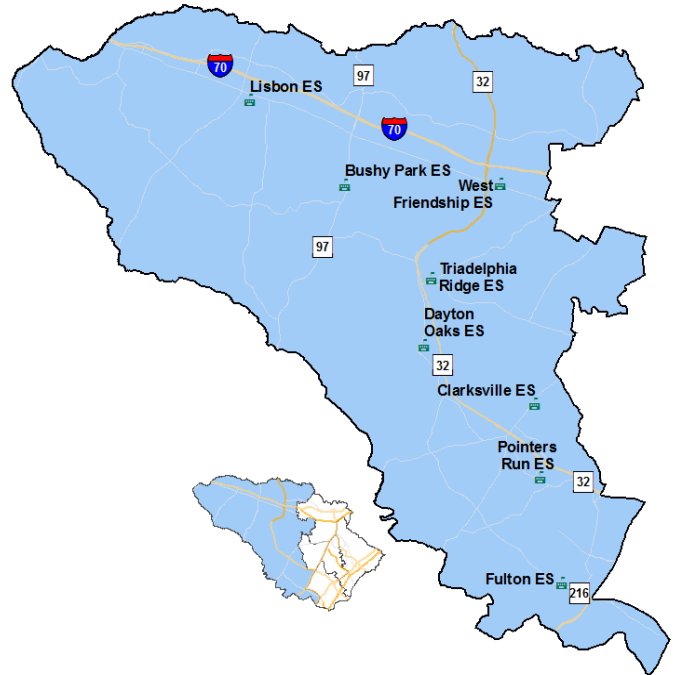


Table 3.6 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Western	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Bushy Park ES	584	744	78.5	528	744	71.0
Clarksville ES	419	543	77.2	380	543	70.0
Dayton Oaks ES	604	675	89.5	584	675	86.5
Fulton ES	949	826	114.9	1,132	826	137.0
Lisbon ES	449	527	85.2	532	527	100.9
Pointers Run ES	834	744	112.1	919	744	123.5
Triadelphia Ridge ES	570	581	98.1	636	581	109.5
West Friendship ES	394	414	95.2	466	414	112.6
(Region ES Totals)	4,803	5,054	95.0	5,177	5,054	102.4

Middle Schools Columbia East Region

Need:
Some capacity exists in this region.

Strategy:
Long range projections indicate stable enrollment. Monitor long-term needs.

Figure 3.7
Middle schools of the Columbia East Region

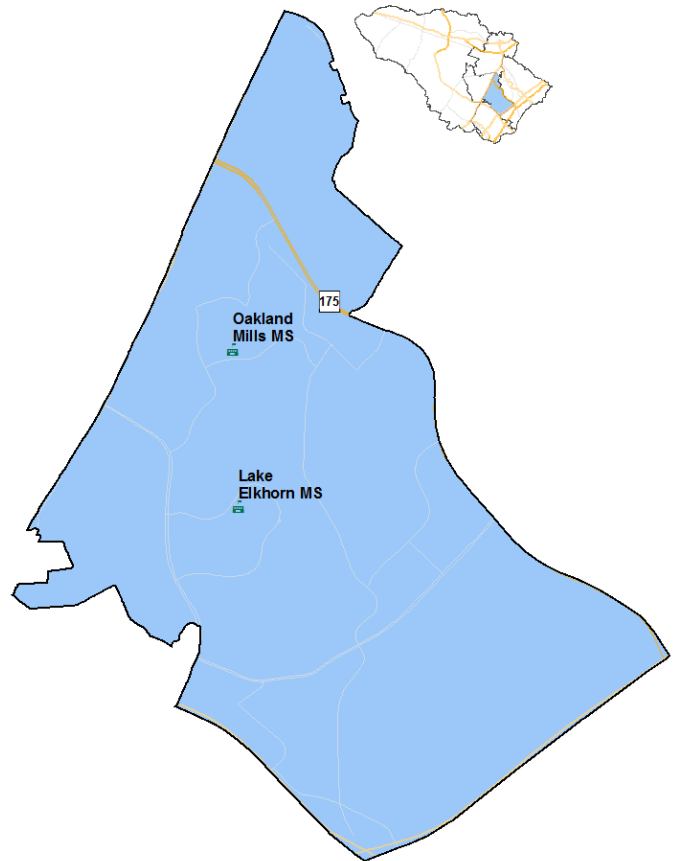


Table 3.7 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Columbia East	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Lake Elkhorn MS	557	643	86.6	564	643	87.7
Oakland Mills MS	507	506	100.2	515	506	101.8
(Region MS Totals)	1,064	1,149	92.6	1,079	1,149	93.9

Middle Schools Columbia West Region

Need:
Some capacity exists in the region.

Strategy:
With the addition of 293 new seats in 2017, this region will remain within target utilization for the foreseeable future based on the current projection. Attendance area adjustments approved November 2017 for the school year 2018-19 utilized available capacity in the new Wilde Lake MS to provide relief for Harpers Choice MS. Both schools are projected to be within target utilization through 2023. Monitor projections for new development in the Columbia Town Center. As required by the Downtown Columbia Plan, when 10 percent of the residential units are occupied, HCPSS will evaluate student yield. It is anticipated that criteria will be met by the summer of 2018; therefore an evaluation of student yield could occur and be included in the 2019 Feasibility Study.

Figure 3.8
Middle schools of the Columbia West Region

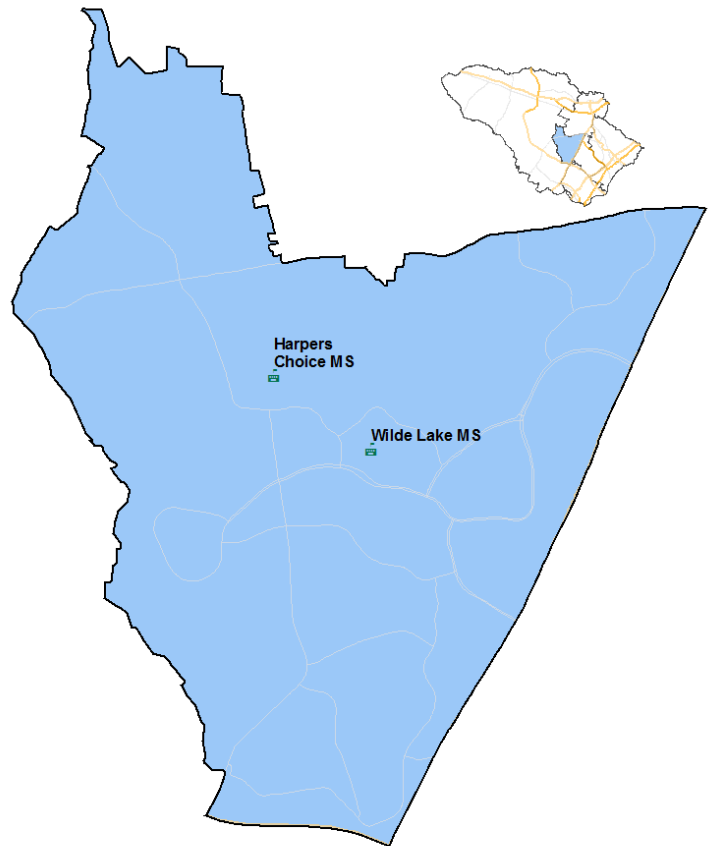


Table 3.8 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Columbia West	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Harpers Choice MS	546	506	107.9	522	506	103.2
Wilde Lake MS	628	760	82.6	749	760	98.6
(Region MS Totals)	1,174	1,266	92.7	1,271	1,266	100.4

Middle Schools

Northeastern Region

Figure 3.9
Middle schools of the Northeastern Region

Need:

Enrollment growth continues in the region. Ellicott Mills MS, Thomas Viaduct MS and Bonnie Branch MS are projected to be outside of target utilization by 2023.

Strategy:

Ellicott Mills MS is over 120 percent and is projected to remain over 120 percent through 2023. The FY 2019 Capital Improvement Plan shows a 156-seat addition for Ellicott Mills MS in 2024. Occupancy of this project should be advanced to school year 2023-24.

Thomas Viaduct MS is projected to exceed target utilization by 2019. Adequate relief from future growth was not attained by recent attendance area adjustments. Evaluate for placement of relocatable classrooms in the summer of 2019.

Monitor projections for Bonnie Branch MS and Mayfield Woods MS. Consider future placement of relocatable classrooms.

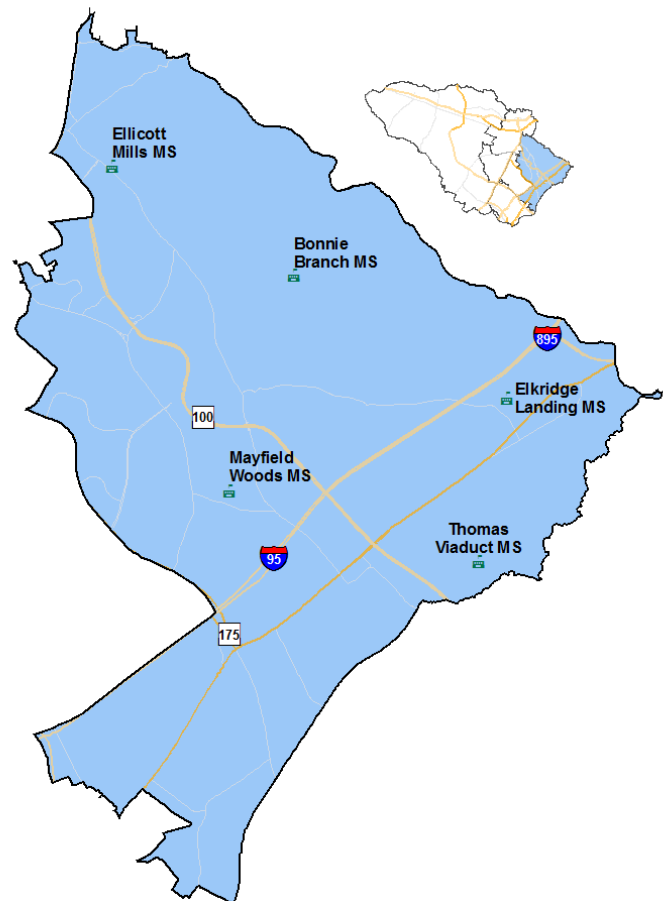


Table 3.9 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Northeastern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Bonnie Branch MS	777	701	110.8	805	701	114.8
Elkrigde Landing MS	715	779	91.8	733	779	94.1
Ellicott Mills MS	883	701	126.0	844	857	98.5
Mayfield Woods MS	780	798	97.7	821	798	102.9
Thomas Viaduct MS	707	701	100.9	863	701	123.1
(Region MS Totals)	3,862	3,680	104.9	4,066	3,680	110.5

Middle Schools Northern Region

Figure 3.10
Middle schools of the Northern Region

Need:

Projections show enrollment for the region nearing the top of target utilization.

Strategy:

Dunloggin MS continues to show projected enrollment growth above target utilization through 2023. A renovation/addition at Dunloggin MS is planned for 2024.

Continue to monitor projections for Patapsco MS. Near term projections show signs that the enrollment may decline. Consider relocatable placement if future enrollment projections support the need.

The land bank site on Marriottsville Road can be used for a future middle school when projections in this area show sufficient need.

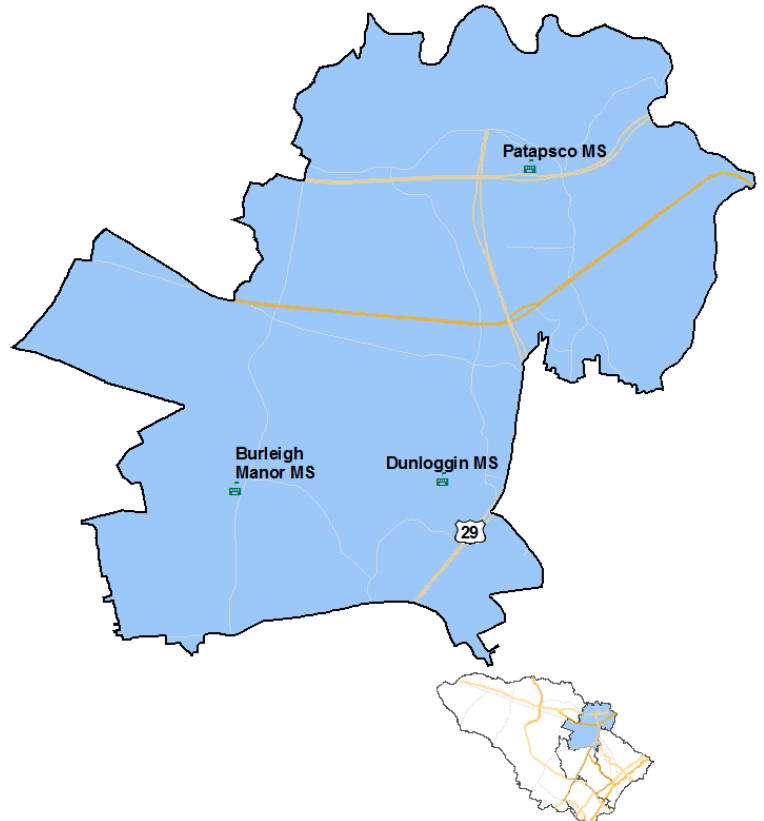


Table 3.10 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Northern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Burleigh Manor MS	804	779	103.2	757	779	97.2
Dunloggin MS	639	565	113.1	670	565	118.6
Patapsco MS	739	643	114.9	716	643	111.4
(Region MS Totals)	2,182	1,987	109.8	2,143	1,987	107.9

Middle Schools Southeastern Region

Figure 3.11
Middle schools of the Southeastern Region

Need:

Enrollment growth is projected at all three schools in this region. Murray Hill MS is projected to exceed target utilization by 2019.

Strategy:

A recent capital project at Patuxent Valley MS added capacity, keeping this region in target through school year 2023-24. Planned attendance area adjustments for the opening of New ES #43 in this region could provide an opportunity to relieve Murray Hill MS using available capacity at adjacent Patuxent Valley MS. Continue to monitor projections for Murray Hill MS and Hammond MS in light of projected residential development.

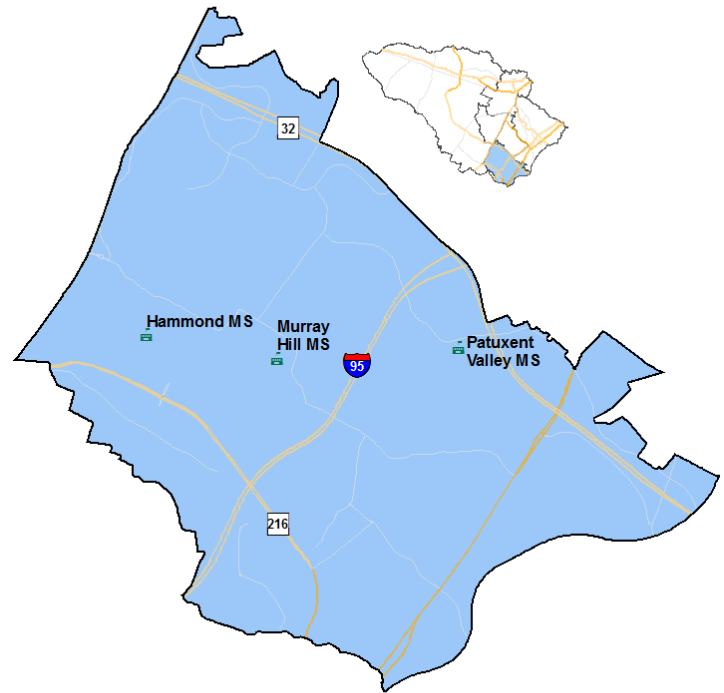


Table 3.11 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Southeastern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Hammond MS	563	604	93.2	633	604	104.8
Murray Hill MS	697	662	105.3	774	662	116.9
Patuxent Valley MS	652	760	85.8	656	760	86.3
(Region MS Totals)	1,912	2,026	94.4	2,063	2,026	101.8

Middle Schools Western Region

Need:

This region will remain in target utilization for the foreseeable future. Folly Quarter MS and Glenwood MS are showing stable projections within target utilization.

Strategy:

Projections for this region indicate stable enrollment, with some enrollment growth projected at Lime Kiln MS. Attendance area adjustments approved in November 2017 will provide relief for Lime Kiln MS to accommodate projected enrollment growth. The impact of recent attendance area adjustments and new construction on projections will be closely monitored.

Figure 3.12
Middle schools of the Western Region

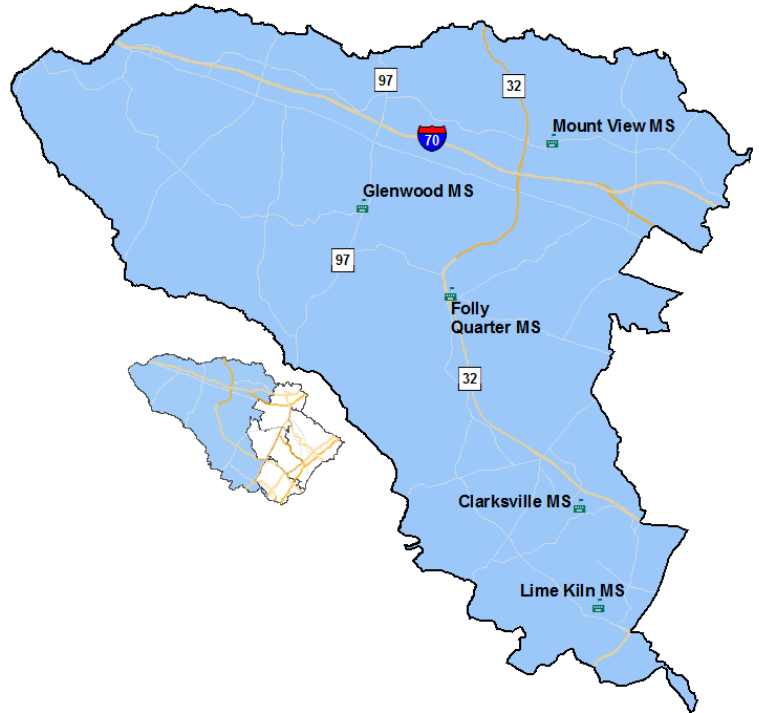


Table 3.12 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Western	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Clarksville MS	668	643	103.9	633	643	98.4
Folly Quarter MS	647	662	97.7	651	662	98.3
Glenwood MS	480	545	88.1	487	545	89.4
Lime Kiln MS	626	701	89.3	701	701	100.0
Mount View MS	834	798	104.5	821	798	102.9
(Region MS Totals)	3,255	3,349	97.2	3,293	3,349	98.3

High Schools Columbia East Region

Figure 3.13
High school of the Columbia East Region

Need:

This region is projected to be within target utilization.

Strategy:

Oakland Mills HS, with the recent addition of the JumpStart program, has a higher projection than in previous years. The impacts of this program will be monitored, and adjustments to program offerings recommended if needed. This region could be impacted by attendance area adjustments associated with New HS #13 in 2023.

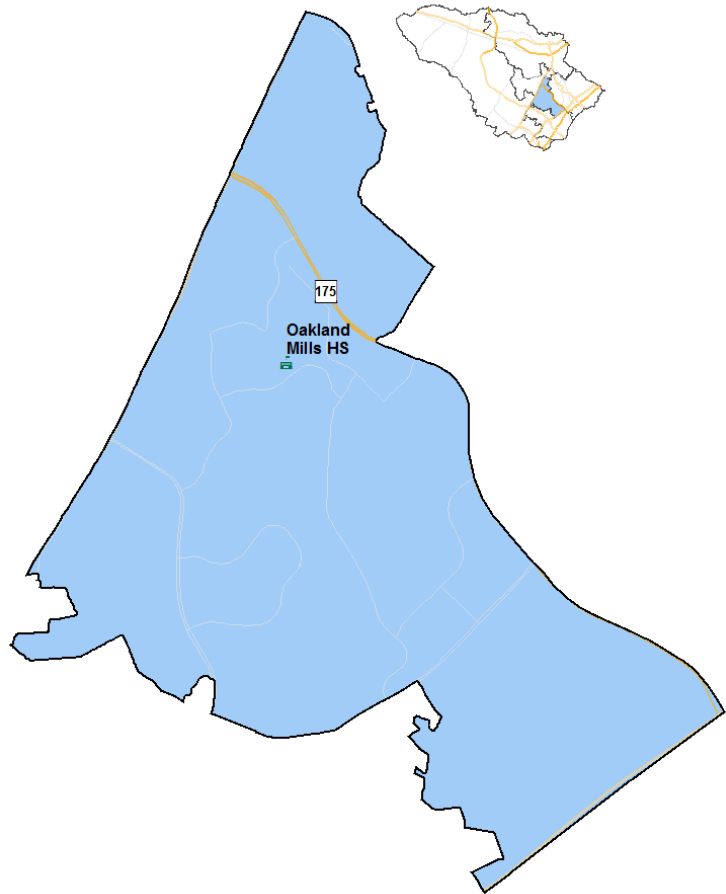


Table 3.13 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Columbia East	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Oakland Mills HS	1,217	1,400	86.9	1,379	1,400	98.5

High Schools Columbia West Region

Need:

This region is projected to be in target utilization. Wilde Lake HS is projected to be below 100 percent utilization through school year 2023-24.

Strategy:

New housing planned for Downtown Columbia will be monitored for projected student yield. This region may be impacted by attendance area adjustments associated with the opening of New HS #13 in school year 2023-24, depending on the scope of the boundary adjustment. As required by the Downtown Columbia Plan, when 10 percent of the residential units are occupied, HCPSS will evaluate student yield. It is anticipated that criteria will be met by the summer of 2018; therefore an evaluation of student yield could occur and be included in the 2019 Feasibility Study.

Figure 3.14

High school of the Columbia West Region

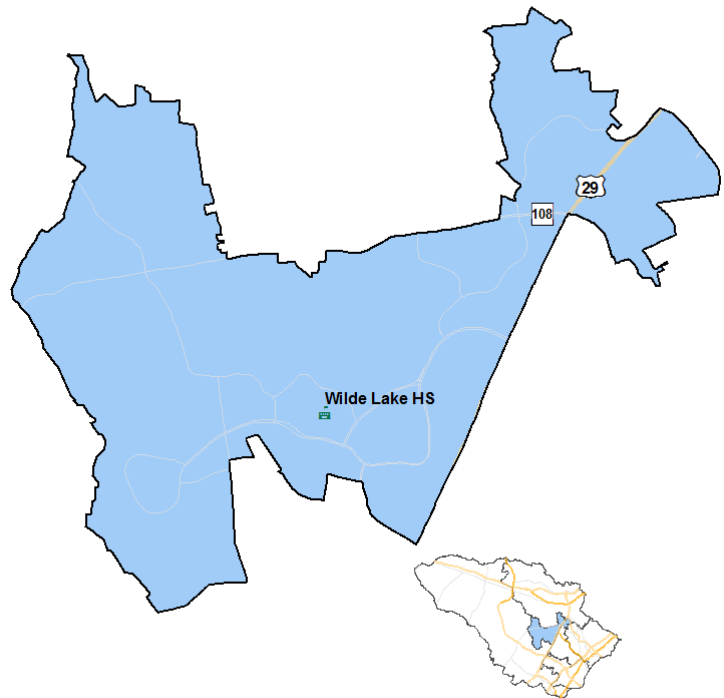


Table 3.14 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Columbia West	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Wilde Lake HS	1,350	1,424	94.8	1,399	1,424	98.2

High Schools Northeastern Region

Need:
 Significant enrollment growth is projected. Available capacity in this region is not sufficient to accommodate current and projected enrollment.

Strategy:
 For school year 2018-19, Howard HS is projected to continue to exceed target utilization. By school year 2019-20, Long Reach HS is projected exceed target utilization. Both schools are projected to experience some relief from the JumpStart early college program. Capacity at Howard HS has been supplemented with 15 relocatable classrooms. For school year 2019-20, Long Reach HS will have seven relocatable classrooms.

New HS #13 will provide relief to this region beginning in school year 2023-24. It is recommended that this project remain on schedule and not be delayed.

School Planning staff will continue to coordinate with the Department of Planning and Zoning regarding Route 1 Corridor Plan Development process.

Figure 3.15
 High schools of the Northeastern Region

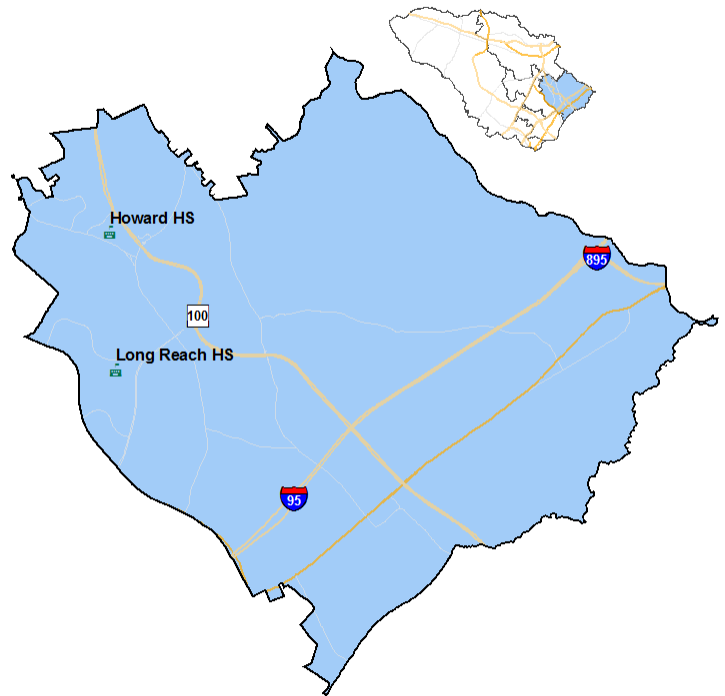


Table 3.15 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Northeastern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Howard HS	1,908	1,420	134.4	2,075	1,420	146.1
Long Reach HS	1,586	1,488	106.6	2,133	1,488	143.3
(Region HS Totals)	3,494	2,908	120.2	4,208	2,908	144.7

High Schools Northern Region

Need:
While capacity exists at Marriotts Ridge HS, the region is projected to exceed target utilization in school year 2020-21.

Strategy:
Centennial HS and Mt Hebron HS are projected to exceed target utilization in school year 2019-20 and both schools are projected to experience continued enrollment growth. Available capacity at Marriotts Ridge HS is not sufficient to relieve the other schools in this region. Four additional relocatables are being placed in this region during the summer of 2018 to provide additional temporary classroom space. Attendance area adjustments for New HS #13 in school year 2023-24 may include an opportunity to provide relief in this region.

Figure 3.16
High schools of the Northern Region

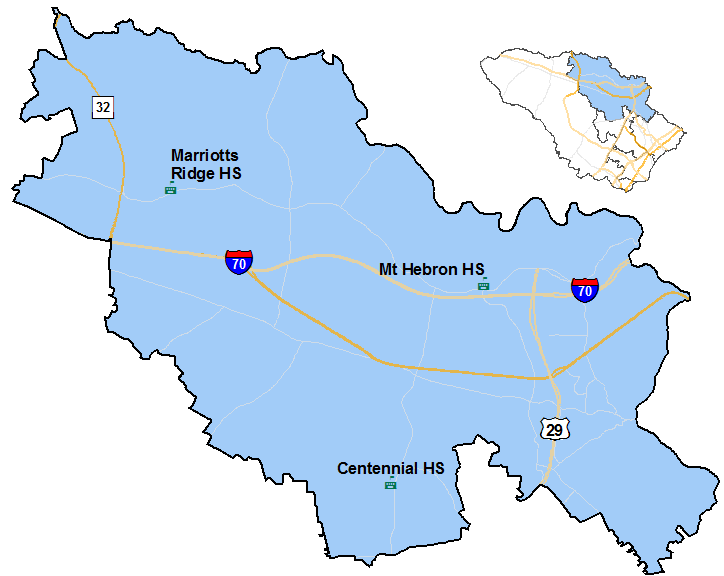


Table 3.16 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Northern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Centennial HS	1,664	1,360	122.4	1,772	1,360	130.3
Marriotts Ridge HS	1,376	1,615	85.2	1,499	1,516	98.9
Mt Hebron HS	1,590	1,400	113.6	1,679	1,400	119.9
(Region HS Totals)	4,630	4,354	106.3	4,950	4,354	113.7

High Schools Southeastern Region

Need:

The Southeastern region exceeds 110 percent capacity utilization in 2018 with enrollment growth projected.

Strategy:

Hammond HS is projected to exceed target utilization in school year 2018-19. An addition is proposed to open with the school's planned renovation in school year 2023-24. Due to the location of the New HS #13 on Mission Road, attendance area adjustments will affect this region in school year 2023-24.

As with the Northeastern region, School Planning staff will continue to coordinate with the Department of Planning and Zoning regarding Route 1 Corridor Plan Development Process.

Figure 3.17
High schools of the Southeastern Region

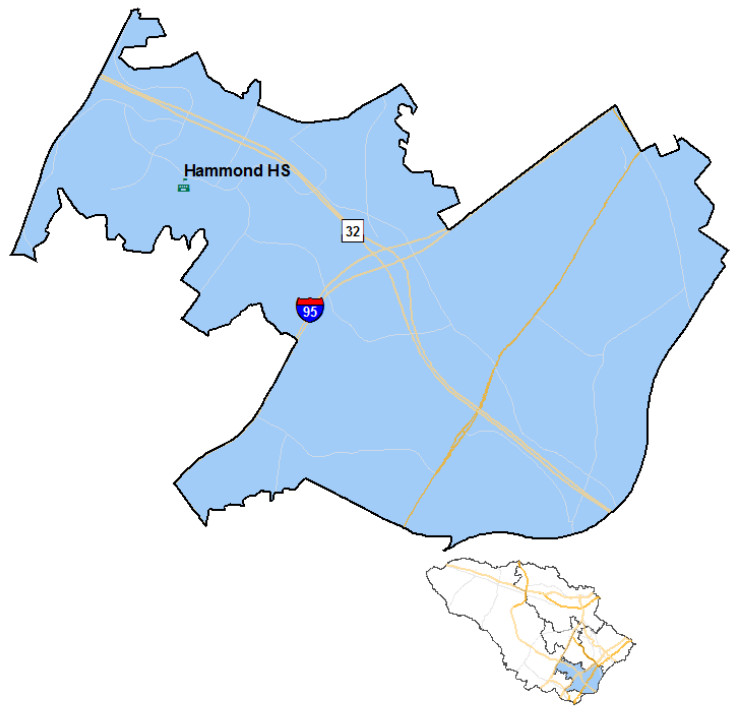


Table 3.17 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Southeastern	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Hammond HS	1,356	1,220	111.1	1,585	1,420	111.6

High Schools Western Region

Need:

While some capacity exists in this region, two of the four high schools are expected to reach target utilization by school year 2023-24.

Strategy:

In previous projections, River Hill HS had more available capacity, however with implementation of JumpStart early college program, the school is projected to be more fully utilized. Reservoir HS is projected to exceed target utilization by school year 2020-21 and will be monitored. A recent capital project at Atholton HS increased capacity, however projections will be monitored because the school is projected to exceed target utilization in school year 2023-24. Glenelg HS remains underutilized and could provide relief to other schools in the region through attendance area adjustments.

Figure 3.18
High schools of the Western Region

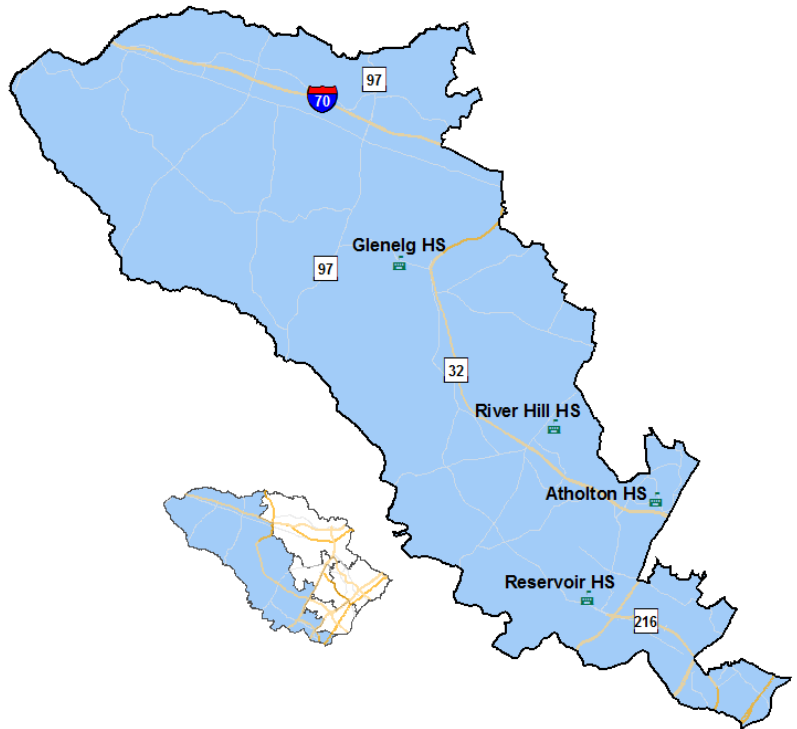


Table 3.18 Projected utilization (with proposed capacity projects, excluding boundary adjustments)

Western	2018			2023		
	Projected Pop.	Capacity	Projected Utilization	Projected Pop.	Capacity	Projected Utilization
Atholton HS	1,516	1,460	103.8	1,654	1,460	113.3
Glenelg HS	1,197	1,420	84.3	1,155	1,420	81.3
Reservoir HS	1,595	1,551	102.8	1,836	1,551	118.4
River Hill HS	1,411	1,488	94.8	1,454	1,466	99.2
(Region HS Totals)	5,719	5,919	96.6	6,099	5,919	103.0

Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Section 4

Foreseeable Attendance Area Adjustments

This report does not recommend any adjustments to attendance areas for the 2019-20 school year.

June 2018

Foreseeable Attendance Area Adjustments Summary

Adjustments School Attendance Areas

This report is not recommending initiation of an attendance area adjustment process in 2018-19 for the 2019-20 school year. The next boundary line adjustments are anticipated for 2023-24 with the opening of High School #13 and the addition of capacity to Hammond High School.

According to projections used in this document, 26 out of 74 schools will exceed 110% utilization by 2022. Each of these schools has been reviewed and a strategy recommended to address the over-utilization. In some cases where target utilization is exceeded farther in the future, projections are being monitored for consistency to ensure action is justified. In other cases, a capital project is planned to increase capacity of the over-utilized or a nearby school. Relocatable classrooms will be placed to add capacity until a solution can be planned and budgeted. Adjusting school attendance areas will be necessary with future capital projects to relieve some of the over-utilized regions.

Following the Board of Education's approval of the Mission Road site for High School #13, HCPSS is working in cooperation with Howard County government to acquire the site and plan for opening this school in 2023-24. Forming the attendance area for this school will have impacts to neighborhoods that currently are assigned to Long Reach HS, Howard HS, Hammond HS, and Oakland Mills HS. Depending on decisions made regarding this area, there may be opportunities to provide relief to over-utilized schools in the Northern region. More detail will be provided in future reports as planning continues. In the interim, additional relocatable classrooms are being placed at high schools in these areas. Additionally, some relief at Howard HS and Long Reach HS has been realized through the JumpStart early college program, utilizing available capacity at Oakland Mills HS and River Hill HS.

In some regions, new solutions to provide relief to over-utilized schools are being explored. In the Columbia West region, implementing a primary/intermediate school configuration may be an opportunity to utilize capacity in schools adjacent to those with projected over-utilization, without reassigning students outside of their neighborhood. Regional program locations will be reviewed annually to ensure placement where need matches available space. Educational programs such as JumpStart should also be monitored and evaluated for potential expansion to allow students to voluntarily attend a school with available capacity to participate in special programs.

In response to feedback received throughout the 2017 Attendance Area Adjustment process, many aspects of the School Planning and Attendance Area Adjustment procedures are being reviewed. The Board of Education formed a subcommittee to review and make recommendations to the full Board regarding attendance area adjustments and related processes. Any changes to policy or procedure resulting from this process should be implemented prior to the initiation of future Attendance Area Adjustments. School Planning staff is using feedback from the 2017 process to plan modifications to procedures and tools used for enrollment projection and scenario testing. Utilizing state of the art software and consultation from Davis Demographics, Office of School Planning is implementing new tools and workflows within these processes. Set-up and testing will continue through the summer and fall of 2018.

Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Section 5

Pre- and Post- Measure Charts

The effects of some scenarios tested for this report on capacity utilization are depicted in tabular form on the following pages. The tables are presented for each organizational level (elementary, middle, and high) using a pre-/post-measures format. The pre-measures format shows the effect of projected enrollment without any attendance area adjustments. The pre-measures format also shows FY 2019 capital projects as approved by the Board in March 2018.

The post-measures format shows the impact of projected enrollment with some capital plans discussed in this document. The post-measures format includes capital projects recommended in this document for the FY 2020 Capital Budget. If these projects are not approved, other plans must be developed.

Pre-Measures

ELEMENTARY SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Board of Education's Approved FY 2019 Capital Budget Projects - Not Test for APFO

Chart reflects May 2018 Projections, Board of Education's FY 2019 approved capacities, and no redistricting.

Table with columns for Capacity (2019-2022) and Utilization Rates (2019-2030) for Columbia - East schools. Includes schools like Bryant Woods ES, Clemens Crossing ES, and Region Totals.

Table with columns for Capacity (2019-2022) and Utilization Rates (2019-2030) for Columbia - West schools. Includes schools like Bryant Woods ES, Clemens Crossing ES, and Region Totals.

Table with columns for Capacity (2019-2022) and Utilization Rates (2019-2030) for Northeastern schools. Includes schools like Bellows Spring ES, Deep Run ES, and Region Totals.

Table with columns for Capacity (2019-2022) and Utilization Rates (2019-2030) for Northern schools. Includes schools like Centennial Lane ES, Hollifield Station ES, and Region Totals.

Table with columns for Capacity (2019-2022) and Utilization Rates (2019-2030) for Southeastern schools. Includes schools like Atholton ES, Bollman Bridge ES, and Region Totals.

Table with columns for Capacity (2019-2022) and Utilization Rates (2019-2030) for Western schools. Includes schools like Bushy Park ES, Clarksville ES, and Region Totals.

Summary table with columns for Capacity (2019-2022) and Utilization Rates (2019-2030) for Countywide Totals.

'A' includes additions as reflected in FY 2019 CIP for grades K-5
'NS' New School proposed in FY 2019 Capital Budget
'R' Replacement School proposed in FY 2019 Capital Budget
Color coding has been updated to align with the definition of target utilization (between 90-110% utilization) as outlined in Policy 6010.

Post-Measures
Aggregate Plan
ELEMENTARY SCHOOLS - Data for Demonstrative Purposes Only
 Capacity Utilization Rates with Proposed FY 2020 Capital Budget Projects - Not Test for APFO
 Chart reflects May 2018 Projections, potential FY 2020 requested capacities and no redistricting.

	Capacity				2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30	
	2019	2020	2021	2022	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East	2019	2020	2021	2022	2784	103.1	2785	103.1	2755	102.0	2733	95.4	2767	96.6	2760	96.4	2782	97.1	2806	98.0	2869	100.2	2903	101.4	2944	102.8
Columbia - East	398	398	398	398	458	115.1	449	112.8	445	111.8	435	109.3	444	111.6	450	113.1	448	112.6	455	114.3	464	116.6	471	118.3	478	120.1
Cradlerock ES	421	421	421	421	426	101.2	415	98.6	413	98.1	393	93.0	400	95.0	396	94.1	399	94.8	402	95.5	411	97.6	416	98.8	422	100.2
Jeffers Hill ES	597	597	597	597	528	88.4	536	89.8	551	92.3	555	93.0	578	96.8	577	96.6	596	99.8	602	100.8	609	102.0	615	103.0	623	104.4
Phelps Luck ES	399	399	399	399	395	99.0	406	101.8	400	100.3	403	101.0	405	101.5	410	102.8	407	102.0	414	103.8	420	105.3	424	106.3	428	107.3
Stevens Forest ES	377	377	377	377	459	121.8	472	125.2	460	122.0	463	122.8	464	122.8	453	119.9	458	121.8	461	122.8	475	126.0	481	129.1	488	131.6
Talbot Springs ES	509	509	509	509	518	101.8	507	99.6	486	95.5	484	95.1	476	93.5	474	93.1	474	93.1	472	92.7	490	96.3	496	97.4	505	99.2
Thunder Hill ES	2701	2701	2701	2664	2784	103.1	2785	103.1	2755	102.0	2733	95.4	2767	96.6	2760	96.4	2782	97.1	2806	98.0	2869	100.2	2903	101.4	2944	102.8
Region Totals	2701	2701	2701	2664	2784	103.1	2785	103.1	2755	102.0	2733	95.4	2767	96.6	2760	96.4	2782	97.1	2806	98.0	2869	100.2	2903	101.4	2944	102.8
Columbia - West	361	361	361	361	402	111.4	408	113.0	418	115.8	423	117.2	430	119.1	439	121.6	441	122.2	446	123.5	452	125.2	455	126.0	454	125.8
Bryant Woods ES	521	521	521	521	508	97.5	543	104.2	593	113.8	638	122.5	680	130.5	713	136.9	731	140.3	765	146.8	783	150.3	803	154.1	815	156.4
Clemens Crossing ES	512	512	512	512	400	78.1	401	78.3	403	78.7	417	81.4	414	80.9	425	83.0	431	84.2	437	85.4	445	86.9	448	87.5	453	88.5
Longfellow ES	0	0	0	0	515	102.5	515	102.5	600	116.5	646	125.4	673	130.7	708	137.5	742	144.1	785	152.4	841	163.3	890	172.8	937	181.9
New ES #45	694	694	694	694	591	85.2	590	85.0	576	83.0	579	83.4	573	82.6	574	82.7	580	83.6	584	84.1	595	85.7	601	86.6	607	87.5
Running Brook ES	515	515	515	515	528	102.5	559	108.5	600	116.5	646	125.4	673	130.7	708	137.5	742	144.1	785	152.4	841	163.3	890	172.8	937	181.9
Swansfield ES	2603	2603	2603	2603	2429	93.3	2501	96.1	2590	99.5	2703	103.8	2770	106.4	2859	109.8	2925	112.4	3017	115.9	3116	119.7	3197	122.8	3266	105.6
Region Totals	2603	2603	2603	2603	2429	93.3	2501	96.1	2590	99.5	2703	103.8	2770	106.4	2859	109.8	2925	112.4	3017	115.9	3116	119.7	3197	122.8	3266	105.6
Northeastern	751	751	751	751	678	90.3	737	98.1	784	104.4	825	109.9	855	113.8	879	117.0	896	119.3	887	118.1	864	115.0	844	112.4	817	108.8
Bellows Spring ES	750	750	750	750	686	91.5	706	94.1	746	99.5	772	102.9	797	106.3	816	108.8	837	111.6	842	112.3	860	114.7	872	116.3	886	118.1
Deep Run ES	694	694	694	694	678	97.7	664	95.7	662	95.4	651	93.8	639	92.1	643	92.7	634	91.4	658	94.8	677	97.6	684	98.6	684	98.6
Ducketts Lane ES	760	760	760	760	840	110.5	842	110.8	828	108.9	812	106.8	794	104.5	799	105.1	826	108.7	869	114.3	923	121.4	971	127.8	986	129.7
Elkridge ES	810	810	810	810	689	85.1	782	96.5	879	108.5	979	120.9	1071	132.2	1105	136.4	1149	141.9	1185	146.3	1219	150.5	1219	150.5	1245	153.7
Hanover Hills ES	584	584	584	584	555	95.0	536	91.8	523	89.6	514	88.0	559	95.7	610	104.5	635	108.7	652	111.6	689	118.0	694	118.8	678	116.1
Ilchester ES	609	609	609	609	542	89.0	560	92.0	570	93.6	584	95.9	610	100.2	657	107.9	706	115.9	714	117.2	730	119.9	733	120.4	735	120.7
Rockburn ES	799	799	799	799	870	108.9	853	106.8	851	106.5	840	105.1	848	106.1	834	104.4	861	107.8	903	113.0	914	114.4	915	114.5	916	114.6
Veterans ES	663	663	663	663	562	84.8	581	87.6	560	84.5	573	86.4	563	84.9	577	87.0	590	89.0	595	89.7	601	90.6	610	92.0	623	94.0
Waterloo ES	515	515	515	515	458	88.9	445	86.4	432	83.9	447	86.8	469	91.1	508	98.6	539	104.7	574	111.5	662	128.5	676	131.3	668	129.7
Worthington ES	6935	6935	6935	6935	6558	94.6	6706	96.7	6835	98.6	6997	100.9	7205	103.9	7428	107.1	7673	110.6	7879	113.6	8139	117.4	8218	118.5	8238	118.8
Region Totals	6935	6935	6935	6935	6558	94.6	6706	96.7	6835	98.6	6997	100.9	7205	103.9	7428	107.1	7673	110.6	7879	113.6	8139	117.4	8218	118.5	8238	118.8
Northern	647	647	647	647	752	116.2	746	115.3	749	115.8	751	116.1	745	115.1	750	115.9	760	117.5	760	117.5	768	118.7	774	119.6	776	119.9
Centennial Lane ES	732	732	732	732	821	112.2	835	114.1	849	116.0	839	114.6	833	113.8	851	116.3	847	115.7	857	117.1	860	117.5	868	118.6	881	120.4
Hollifield Station ES	681	681	681	681	653	95.9	665	97.7	693	101.8	699	102.6	748	109.8	760	111.6	760	111.6	776	114.0	765	112.3	763	112.0	757	111.2
Manor Woods ES	0	0	0	0	729	104.1	735	105.0	743	106.1	748	106.9	771	110.1	811	115.9	828	118.3	842	120.3	852	121.7	860	122.9	847	121.0
New ES #44	612	612	612	612	705	115.2	691	112.9	710	116.0	730	119.3	748	122.2	781	127.6	786	128.4	805	131.5	812	132.7	826	135.0	839	137.1
Northfield ES	788	788	788	788	823	104.4	846	107.4	866	109.9	870	110.4	904	114.7	949	120.4	985	125.0	1007	127.8	1010	128.2	1017	129.1	1023	129.8
St Johns Lane ES	4160	4160	4160	4160	4483	107.8	4518	108.6	4610	110.8	4637	111.5	4749	114.2	4902	117.8	4966	119.4	5047	121.3	5067	106.4	5108	107.3	5123	107.6
Waverly ES	4160	4160	4160	4160	4483	107.8	4518	108.6	4610	110.8	4637	111.5	4749	114.2	4902	117.8	4966	119.4	5047	121.3	5067	106.4	5108	107.3	5123	107.6
Region Totals	4160	4160	4160	4160	4483	107.8	4518	108.6	4610	110.8	4637	111.5	4749	114.2	4902	117.8	4966	119.4	5047	121.3	5067	106.4	5108	107.3	5123	107.6
Southeastern	424	424	424	424	466	109.9	478	112.7	480	113.2	477	112.5	479	113.0	476	112.3	477	112.5	474	111.8	478	112.7	480	113.2	485	114.4
Atholton ES	666	666	666	666	635	95.3	640	96.1	651	97.7	648	97.3	680	102.1	693	104.1	707	106.2	692	103.9	698	104.8	688	103.3	683	102.6
Bollman Bridge ES	713	713	713	713	684	95.9	681	95.5	689	96.6	711	99.7	745	104.5	764	107.2	811	113.7	865	121.3	903	126.6	927	130.0	938	131.6
Forest Ridge ES	735	735	735	735	820	111.6	799	108.7	830	112.9	812	110.5	786	106.9	777	105.7	746	101.5	777	105.7	766	104.2	770	104.8	758	103.1
Gorman Crossing ES	465	465	465	465	387	83.2	373	80.2	363	78.1	371	79														

Pre-Measures

MIDDLE SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Board of Education's Approved FY 2019 Capital Budget Projects - Not Test for APFO

Chart reflects May 2018 Projections, Board of Education's FY 2019 approved capacities, and no redistricting.

	Capacity				2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30	
	2019	2020	2021	2022	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East	643	643	643	643	596	92.7	599	93.2	586	91.1	596	92.7	564	87.7	567	88.2	543	84.4	557	86.6	552	85.8	557	86.6	564	87.7
Lake Elkhorn MS	643	643	643	643	596	92.7	599	93.2	586	91.1	596	92.7	564	87.7	567	88.2	543	84.4	557	86.6	552	85.8	557	86.6	564	87.7
Oakland Mills MS	506	506	506	506	510	100.8	498	98.4	493	97.4	497	98.2	515	101.8	514	101.6	518	102.4	524	103.6	502	99.2	503	99.4	500	98.8
Region MS Totals	1149	1149	1149	1149	1106	96.3	1097	95.5	1079	93.9	1093	95.1	1079	93.9	1081	94.1	1061	92.3	1081	94.1	1054	91.7	1060	92.3	1064	92.6

Columbia - West	506	506	506	506	552	109.1	539	106.5	533	105.3	509	100.6	522	103.2	506	100.0	512	101.2	500	98.8	505	99.8	514	101.6	515	101.8
Harpers Choice MS	760	760	760	760	643	84.6	644	84.7	653	85.9	695	91.4	749	98.6	815	107.2	867	114.1	882	116.1	919	120.9	948	124.7	1005	132.2
Region MS Totals	1266	1266	1266	1266	1195	94.4	1183	93.4	1186	93.7	1204	95.1	1271	100.4	1321	104.3	1379	108.9	1382	109.2	1424	112.5	1462	115.5	1520	120.1

Northeastern	701	701	701	701	816	116.4	814	116.1	795	113.4	787	112.3	805	114.8	796	113.6	774	110.4	775	110.6	793	113.1	821	117.1	836	119.3
Bonnie Branch MS	779	779	779	779	726	93.2	696	89.3	692	88.8	711	91.3	733	94.1	728	93.5	707	90.8	720	92.4	758	97.3	794	101.9	814	104.5
Elkridge Landing MS	A 701	701	701	701	913	130.2	900	128.4	884	126.1	846	120.7	844	120.4	810	94.5	811	94.6	811	94.6	805	93.9	816	95.2	847	98.8
Ellicott Mills MS	798	798	798	798	807	101.1	817	102.4	825	103.4	807	101.1	821	102.9	860	107.8	888	111.3	919	115.2	947	118.7	980	122.8	994	124.6
Mayfield Woods MS	NS 0	0	0	0																						
New MS #21																										
Thomas Viaduct MS	701	701	701	701	820	117.0	904	129.0	880	125.5	883	126.0	863	123.1	915	130.5	964	137.5	1040	148.4	1085	154.8	1118	159.5	1124	160.3
Region MS Totals	3680	3680	3680	3680	4082	110.9	4131	112.3	4076	110.8	4034	109.6	4066	110.5	4109	107.1	4144	108.0	4265	111.2	4388	114.4	4529	118.1	4615	120.3

Northern	779	779	779	779	771	99.0	778	99.9	762	97.8	770	98.8	757	97.2	769	98.7	777	99.7	786	100.9	780	100.1	776	99.6	784	100.6
Burleigh Manor MS	565	565	565	565	647	114.5	650	115.0	668	118.2	675	119.5	670	118.6	658	99.4	658	99.4	668	100.9	676	102.1	676	102.1	700	105.7
Dunloggin MS	643	643	643	643	724	112.6	718	111.7	712	110.7	714	111.0	716	111.4	705	109.6	712	110.7	721	112.1	741	115.2	745	115.9	757	117.7
Patapsco MS	1987	1987	1987	1987	2142	107.8	2146	108.0	2142	107.8	2159	108.7	2143	107.9	2132	102.3	2147	103.0	2175	104.4	2197	105.4	2197	105.4	2241	107.5
Region MS Totals																										

Southeastern	604	604	604	604	565	93.5	600	99.3	587	97.2	631	104.5	633	104.8	659	109.1	665	110.1	690	114.2	694	114.9	705	116.7	719	119.0
Hammond MS	662	662	662	662	748	113.0	783	118.3	777	117.4	748	113.0	774	116.9	800	120.8	822	124.2	775	117.1	758	114.5	724	109.4	741	111.9
Murray Hill MS	760	760	760	760	675	88.8	701	92.2	692	91.1	689	90.7	656	86.3	664	87.4	639	84.1	681	89.6	677	89.1	713	93.8	716	94.2
Patuxent Valley MS	2026	2026	2026	2026	1988	98.1	2084	102.9	2056	101.5	2068	102.1	2063	101.8	2123	104.8	2126	104.9	2146	105.9	2129	105.1	2142	105.7	2176	107.4
Region MS Totals																										

Western	643	643	643	643	695	108.1	686	106.7	665	103.4	630	98.0	633	98.4	644	100.2	642	99.8	620	96.4	631	98.1	664	103.3	684	106.4
Clarksville MS	662	662	662	662	674	101.8	653	98.6	658	99.4	651	98.3	651	98.3	645	97.4	654	98.8	655	98.9	660	99.7	668	100.9	683	103.2
Folly Quarter MS	545	545	545	545	507	93.0	517	94.9	512	93.9	485	89.0	487	89.4	469	86.1	479	87.9	499	91.6	526	96.5	546	100.2	560	102.8
Glenwood MS	701	701	701	701	641	91.4	651	92.9	638	91.0	680	97.0	701	100.0	731	104.3	729	104.0	739	105.4	752	107.3	763	108.8	767	109.4
Lime Kiln MS	798	798	798	798	834	104.5	803	100.6	813	101.9	828	103.8	821	102.9	796	99.7	793	99.4	838	105.0	898	112.5	919	115.2	938	117.5
Mount View MS	3349	3349	3349	3349	3351	100.1	3310	98.8	3286	98.1	3274	97.8	3293	98.3	3285	98.1	3297	98.4	3351	100.1	3467	103.5	3560	106.3	3632	108.5
Region MS Totals	13457	13457	13457	13457	13864	103.0	13951	103.7	13825	102.7	13832	102.8	13915	103.4	14051	102.5	14154	103.2	14400	105.0	14659	106.9	14950	109.0	15248	111.2
Countywide Totals																										

'A' includes additions as reflected in FY 2019 CIP for grades 6-8

'NS' New School proposed in FY 2019 Capital Budget

Color coding has been updated to align with the definition of target utilization (between 90-110% utilization) as outlined in Policy 6010. Blue is under target utilization, green is within target utilization and red is over target utilization.

Post-Measures
MIDDLE SCHOOLS - Data for Demonstrative Purposes Only
 Aggregate Plan Capacity Utilization Rates with Proposed FY 2020 Capital Budget Projects - Not Test for APFO
 Chart reflects May 2018 Projections, potential FY 2020 requested capacities and no redistricting.

	Capacity				2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30			
	2019	2020	2021	2022	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.		
Columbia - East																												
Lake Elkhorn MS	643	643	643	643	596	92.7	599	93.2	586	91.1	596	92.7	564	87.7	567	88.2	543	84.4	557	86.6	552	85.8	557	86.6	564	87.7	564	87.7
Oakland Mills MS	506	506	506	506	510	100.8	498	98.4	493	97.4	497	98.2	515	101.8	514	101.6	518	102.4	524	103.6	502	99.2	503	99.4	500	98.8	500	98.8
Region MS Totals	1149	1149	1149	1149	1106	96.3	1097	95.5	1079	93.9	1093	95.1	1079	93.9	1081	94.1	1061	92.3	1081	94.1	1054	91.7	1060	92.3	1064	92.6	1064	92.6
Columbia - West																												
Harpers Choice MS	506	506	506	506	552	109.1	539	106.5	533	105.3	509	100.6	522	103.2	506	100.0	512	101.2	500	98.8	505	99.8	514	101.6	515	101.8	515	101.8
Wilde Lake MS	760	760	760	760	643	84.6	644	84.7	653	85.9	695	91.4	749	98.6	815	107.2	867	114.1	882	116.1	919	120.9	948	124.7	1005	132.2	1005	132.2
Region MS Totals	1266	1266	1266	1266	1195	94.4	1183	93.4	1186	93.7	1204	95.1	1271	100.4	1321	104.3	1379	108.9	1382	109.2	1424	112.5	1462	115.5	1520	120.1	1520	120.1
Northeastern																												
Bonnie Branch MS	701	701	701	701	816	116.4	814	116.1	795	113.4	787	112.3	805	114.8	796	113.6	774	110.4	775	110.6	793	113.1	821	117.1	836	119.3	836	119.3
Elkridge Landing MS	779	779	779	779	726	93.2	696	89.3	692	88.8	711	91.3	733	94.1	728	93.5	707	90.8	720	92.4	758	97.3	794	101.9	814	104.5	814	104.5
Ellicott Mills MS	A 701	701	701	701	913	130.2	900	128.4	884	126.1	846	120.7	844	98.5	810	94.5	811	94.6	811	94.6	805	93.9	816	95.2	847	98.8	847	98.8
Mayfield Woods MS	798	798	798	798	807	101.1	817	102.4	825	103.4	807	101.1	821	102.9	860	107.8	888	111.3	919	115.2	947	118.7	980	122.8	994	124.6	994	124.6
New MS #21	NS 0	0	0	0																								
Thomas Viaduct MS	701	701	701	701	820	117.0	904	129.0	880	125.5	883	126.0	863	123.1	915	130.5	964	137.5	1040	148.4	1085	154.8	1118	159.5	1124	160.3	1124	160.3
Region MS Totals	3680	3680	3680	3680	4082	110.9	4131	112.3	4076	110.8	4034	109.6	4066	106.0	4109	107.1	4144	108.0	4265	111.2	4388	114.4	4529	118.1	4615	120.3	4615	120.3
Northern																												
Burleigh Manor MS	779	779	779	779	771	99.0	778	99.9	762	97.8	770	98.8	757	97.2	769	98.7	777	99.7	786	100.9	780	100.1	776	99.6	784	100.6	784	100.6
Dunloggin MS	A 565	565	565	565	647	114.5	650	115.0	668	118.2	675	119.5	670	118.6	658	99.4	658	99.4	668	100.9	676	102.1	676	102.1	700	105.7	700	105.7
Patapsco MS	643	643	643	643	724	112.6	718	111.7	712	110.7	714	111.0	716	111.4	705	109.6	712	110.7	721	112.1	741	115.2	745	115.9	757	117.7	757	117.7
Region MS Totals	1987	1987	1987	1987	2142	107.8	2146	108.0	2142	107.8	2159	108.7	2143	107.9	2132	102.3	2147	103.0	2175	104.4	2197	105.4	2197	105.4	2241	107.5	2241	107.5
Southeastern																												
Hammond MS	604	604	604	604	565	93.5	600	99.3	587	97.2	631	104.5	633	104.8	659	109.1	665	110.1	690	114.2	694	114.9	705	116.7	719	119.0	719	119.0
Murray Hill MS	662	662	662	662	748	113.0	783	118.3	777	117.4	748	113.0	774	116.9	800	120.8	822	124.2	775	117.1	758	114.5	724	109.4	741	111.9	741	111.9
Patuxent Valley MS	760	760	760	760	675	88.8	701	92.2	692	91.1	689	90.7	656	86.3	664	87.4	639	84.1	681	89.6	677	89.1	713	93.8	716	94.2	716	94.2
Region MS Totals	2026	2026	2026	2026	1988	98.1	2084	102.9	2056	101.5	2068	102.1	2063	101.8	2123	104.8	2126	104.9	2146	105.9	2129	105.1	2142	105.7	2176	107.4	2176	107.4
Western																												
Clarksville MS	643	643	643	643	695	108.1	686	106.7	665	103.4	630	98.0	633	98.4	644	100.2	642	99.8	620	96.4	631	98.1	664	103.3	684	106.4	684	106.4
Folly Quarter MS	662	662	662	662	674	101.8	653	98.6	658	99.4	651	98.3	651	98.3	645	97.4	654	98.8	655	98.9	660	99.7	668	100.9	683	103.2	683	103.2
Glenwood MS	545	545	545	545	507	93.0	517	94.9	512	93.9	485	89.0	487	89.4	469	86.1	479	87.9	499	91.6	526	96.5	546	100.2	560	102.8	560	102.8
Lime Kiln MS	701	701	701	701	641	91.4	651	92.9	638	91.0	680	97.0	701	100.0	731	104.3	729	104.0	739	105.4	752	107.3	763	108.8	767	109.4	767	109.4
Mount View MS	798	798	798	798	834	104.5	803	100.6	813	101.9	828	103.8	821	102.9	796	99.7	793	99.4	838	105.0	898	112.5	919	115.2	938	117.5	938	117.5
Region MS Totals	3349	3349	3349	3349	3351	100.1	3310	98.8	3286	98.1	3274	97.8	3293	98.3	3285	98.1	3297	98.4	3351	100.1	3467	103.5	3560	106.3	3632	108.5	3632	108.5
Countywide Totals	13457	13457	13457	13457	13864	103.0	13951	103.7	13825	102.7	13832	102.8	13915	102.2	14051	102.5	14154	103.2	14400	105.0	14659	106.9	14950	109.0	15248	111.2	15248	111.2

'A' includes additions as reflected in FY 2020 CIP for grades 6-8

Color coding has been updated to align with the definition of target utilization (between 90-110% utilization) as outlined in Policy 6010. Blue is under target utilization, green is within target utilization and red is over target utilization.

Pre-Measures

HIGH SCHOOLS - Data for Demonstrative Purposes Only

Capacity Utilization Rates with Board of Education's Approved FY 2019 Capital Budget Projects - Not Test for APFO

Chart reflects May 2018 Projections, Board of Education's FY 2019 approved capacities, and no redistricting.

	Capacity				2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30			
	2019	2020	2021	2022	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.		
Columbia - East	1400	1400	1400	1400	1248	89.1	1260	90.0	1319	94.2	1361	97.2	1379	98.5	1383	98.8	1382	98.7	1362	97.3	1377	98.4	1377	98.4	1363	97.4		
Oakland Mills HS																												
Columbia - West	1424	1424	1424	1424	1350	94.8	1380	96.9	1376	96.6	1381	97.0	1399	98.2	1382	97.1	1386	97.3	1429	100.4	1444	101.4	1482	104.1	1523	107.0		
Wild Lake HS																												
Northeastern	1420	1420	1420	1420	1972	138.9	1973	138.9	2017	142.0	2047	144.2	2075	146.1	2086	146.9	2090	147.2	2075	146.1	2084	146.8	2066	145.5	2062	145.2		
Howard HS																												
Long Reach HS	1488	1488	1488	1488	1673	112.4	1778	119.5	1919	129.0	2056	138.2	2133	143.3	2126	142.9	2147	144.3	2123	142.7	2166	145.6	2270	152.6	2364	158.9		
New HS #13	NS	0	0	0																								
Region HS Totals	2908	2908	2908	2908	3645	125.3	3751	129.0	3936	135.4	4103	141.1	4208	93.0	4212	93.1	4237	93.7	4198	92.8	4250	94.0	4336	95.9	4426	97.9		
Northern	1360	1360	1360	1360	1745	128.3	1765	129.8	1782	131.0	1782	131.0	1772	130.3	1775	130.5	1766	129.9	1755	129.0	1743	128.2	1742	128.1	1736	127.6		
Centennial HS																												
Marriotts Ridge HS	1615	1615	1615	1615	1425	88.2	1476	91.4	1499	92.8	1518	94.0	1499	92.8	1491	92.3	1503	93.1	1475	91.3	1462	90.5	1452	89.9	1453	90.0		
Mt Hebron HS	1400	1400	1400	1400	1605	114.6	1601	114.4	1687	120.5	1701	121.5	1679	119.9	1694	121.0	1674	119.6	1659	118.5	1659	118.5	1656	118.3	1649	117.8		
Region HS Totals	4375	4375	4375	4375	4775	109.1	4842	110.7	4968	113.6	5001	114.3	4950	113.1	4960	113.4	4943	113.0	4889	111.7	4864	111.2	4850	110.9	4838	110.6		
Southeastern	1220	1220	1220	1220	1376	112.8	1402	114.9	1471	120.6	1517	124.3	1585	111.6	1634	115.1	1654	116.5	1621	114.2	1648	116.1	1675	118.0	1689	118.9		
Hammond HS																												
Western	1460	1460	1460	1460	1526	104.5	1561	106.9	1572	107.7	1604	109.9	1654	113.3	1637	112.1	1647	112.8	1683	115.3	1705	116.8	1769	121.2	1804	123.6		
Atholton HS																												
Glenelg HS	1420	1420	1420	1420	1178	83.0	1140	80.3	1162	81.8	1147	80.8	1155	81.3	1161	81.8	1135	79.9	1122	79.0	1122	79.0	1135	79.9	1175	82.7		
Reservoir HS	1551	1551	1551	1551	1626	104.8	1715	110.6	1745	112.5	1786	115.2	1836	118.4	1850	119.3	1874	120.8	1914	123.4	1925	124.1	1973	127.2	1972	127.1		
River Hill HS	1466	1466	1466	1466	1397	95.3	1432	97.7	1455	99.2	1419	96.8	1454	99.2	1423	97.1	1407	96.0	1412	96.3	1411	96.2	1411	96.2	1424	97.1		
Region HS Totals	5897	5897	5897	5897	5727	97.1	5848	99.2	5934	100.6	5956	101.0	6099	103.4	6071	103.0	6063	102.8	6131	104.0	6163	104.5	6288	106.6	6375	108.1		
Countywide Totals	17224	17224	17224	17224	18121	105.2	18483	107.3	19004	110.3	19319	112.2	19620	103.1	19642	103.2	19665	103.3	19630	103.1	19746	103.7	20008	105.1	20214	106.2		

'NS' New School proposed in FY 2019 Capital Budget

Color coding has been updated to align with the definition of target utilization (between 90-110% utilization) as outlined in Policy 6010. Blue is under target utilization, green is within target utilization and red is over target utilization.

Post-Measures
Aggregate Plan

HIGH SCHOOLS - Data for Demonstrative Purposes Only
Capacity Utilization Rates with Proposed FY 2020 Capital Budget Projects - Not Test for APFO

Chart reflects May 2018 Projections, potential FY 2020 requested capacities and no redistricting.

	Capacity				2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30	
	2019	2020	2021	2022	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East																										
Oakland Mills HS	1400	1400	1400	1400	1248	89.1	1260	90.0	1319	94.2	1361	97.2	1379	98.5	1383	98.8	1382	98.7	1362	97.3	1377	98.4	1377	98.4	1363	97.4
Columbia - West																										
Wilde Lake HS	1424	1424	1424	1424	1350	94.8	1380	96.9	1376	96.6	1381	97.0	1399	98.2	1382	97.1	1386	97.3	1429	100.4	1444	101.4	1482	104.1	1523	107.0
Northeastern																										
Howard HS	1420	1420	1420	1420	1972	138.9	1973	138.9	2017	142.0	2047	144.2	2075	146.1	2086	146.9	2090	147.2	2075	146.1	2084	146.8	2066	145.5	2062	145.2
Long Reach HS	1488	1488	1488	1488	1673	112.4	1778	119.5	1919	129.0	2056	138.2	2133	143.3	2126	142.9	2147	144.3	2123	142.7	2166	145.6	2270	152.6	2364	158.9
New HS #13	NS	0	0	0																						
Region HS Totals	2908	2908	2908	2908	3645	125.3	3751	129.0	3936	135.4	4103	141.1	4208	144.7	4212	93.1	4237	93.7	4198	92.8	4250	94.0	4336	95.9	4426	97.9
Northern																										
Centennial HS	1360	1360	1360	1360	1745	128.3	1765	129.8	1782	131.0	1782	131.0	1772	130.3	1775	130.5	1766	129.9	1755	129.0	1743	128.2	1742	128.1	1736	127.6
Marriotts Ridge HS	1615	1615	1615	1615	1425	88.2	1476	91.4	1499	92.8	1518	94.0	1499	92.8	1491	92.3	1503	93.1	1475	91.3	1462	90.5	1452	89.9	1453	90.0
Mt Hebron HS	1400	1400	1400	1400	1605	114.6	1601	114.4	1687	120.5	1701	121.5	1679	119.9	1694	121.0	1674	119.6	1659	118.5	1659	118.5	1656	118.3	1649	117.8
Region HS Totals	4375	4375	4375	4375	4775	109.1	4842	110.7	4968	113.6	5001	114.3	4950	113.1	4960	113.4	4943	113.0	4889	111.7	4864	111.2	4850	110.9	4838	110.6
Southeastern																										
Hammond HS	1220	1220	1220	1220	1376	112.8	1402	114.9	1471	120.6	1517	124.3	1585	129.9	1634	115.1	1654	116.5	1621	114.2	1648	116.1	1675	118.0	1689	118.9
Western																										
Atholton HS	1460	1460	1460	1460	1526	104.5	1561	106.9	1572	107.7	1604	109.9	1654	113.3	1637	112.1	1647	112.8	1683	115.3	1705	116.8	1769	121.2	1804	123.6
Glennelg HS	1420	1420	1420	1420	1178	83.0	1140	80.3	1162	81.8	1147	80.8	1155	81.3	1161	81.8	1135	79.9	1122	79.0	1122	79.0	1135	79.9	1175	82.7
Reservoir HS	1551	1551	1551	1551	1626	104.8	1715	110.6	1745	112.5	1786	115.2	1836	118.4	1850	119.3	1874	120.8	1914	123.4	1925	124.1	1973	127.2	1972	127.1
River Hill HS	1466	1466	1466	1466	1397	95.3	1432	97.7	1455	99.2	1419	96.8	1454	99.2	1423	97.1	1407	96.0	1412	96.3	1411	96.2	1411	96.2	1424	97.1
Region HS Totals	5897	5897	5897	5897	5727	97.1	5848	99.2	5934	100.6	5956	101.0	6099	103.4	6071	103.0	6063	102.8	6131	104.0	6163	104.5	6288	106.6	6375	108.1
Countywide Totals	17224	17224	17224	17224	18121	105.2	18483	107.3	19004	110.3	19319	112.2	19620	113.9	19642	103.2	19665	103.3	19630	103.1	19746	103.7	20008	105.1	20214	106.2

NS New School proposed in FY 2020 Capital Budget

Color coding has been updated to align with the definition of target utilization (between 90-110% utilization) as outlined in Policy 6010. Blue is under target utilization, green is within target utilization and red is over target utilization.

Feasibility Study:
An Annual Review of Long-Term Capital
Planning and Attendance Area Adjustment Options

Section 6

Appendices



BOARD OF EDUCATION

**POLICY 6010
SCHOOL ATTENDANCE AREAS**

Effective: January 26, 2017

I. Policy Statement

The Board of Education of Howard County, with the advice of the Superintendent, establishes school attendance areas to provide quality, equitable educational opportunities to all students and to balance the capacity utilization of all schools. The Board recognizes that school openings, closings, additions, program changes, population growth and other demographic changes may require that school attendance areas be adjusted. The Board also recognizes the value of diverse and inclusive school populations when establishing attendance areas. The Board believes that staff analyses and recommendations, as well as public advice and comment, are integral to its deliberations and decisions related to school attendance areas.

II. Purpose

The purpose of this policy is to define the conditions and process by which school attendance area adjustments will be developed and adopted.

III. Definitions

Within the context of this policy, the following definitions apply:

- A. Attendance Area Committee (AAC) – Committee comprised of community members appointed by the Superintendent and approved by the Board, to advise and comment on capacity needs and attendance area adjustment recommendations developed by staff.
- B. Continuity of Operations Plan (COOP) – Procedures to ensure that capability exists to continue essential functions during and after an extended emergency.
- C. Demographic Characteristics – Features in the composition of a school’s population that includes, but is not limited to the racial/ethnic composition of a school’s student population, as well as the percentage of students participating in Free and Reduced-Priced Meals (FARMS) and English for Speakers of Other Languages (ESOL) programs.
- D. Diversity – The sum of the ways that people are both alike and different. The dimensions of diversity include race, ethnicity, and socioeconomic condition.
- E. Extended Emergency – A severe or long-term situation that affects an individual school, multiple schools, or the entire school system. An extended emergency is normally one in which the Howard County Public School System (HCPSS) Continuity

POLICY 6010

of Operations Plan (COOP), the HCPSS Emergency Operations Plan (EOP) or the Howard County Emergency Operations Plan is activated.

- F. Equitable – Just or fair; different from equal in that equality connotes equal treatment, which may be insufficient for equitable access and outcomes.
- G. Feed – The flow of students from one school level to the next.
- H. Free and Reduced-Priced Meals (FARMS) – A federal program available to students whose households meet the federal income eligibility guidelines to receive free or reduced-priced meals.
- I. HCPSS Emergency Operations Plan (EOP) – A multi-hazard approach for HCPSS that addresses preparation, response, recovery, and mitigation to:
 - 1. An emergency, including a violent or traumatic event on school grounds, during school hours, or during a school-sponsored activity.
 - 2. Events in the community that affect normal school operations.
- J. Howard County Emergency Operations Plan – A countywide emergency management system incorporating all aspects of pre-emergency preparedness and post-emergency response, recovery, and mitigation.
- K. Inclusive – Securing the educational benefits of diversity for all students through active, intentional, and ongoing engagement.
- L. Long-Range Enrollment – Each school’s student population projections for the upcoming 10 years.
- M. Program Capacity – The number of students that can be reasonably accommodated in a school, based on the permanent facility (relocatables are excluded) and the educational program offered. Program capacity is calculated based at the below rates:
 - 1. Elementary schools: the product of the Board-approved student-to-teacher ratio and the number of teaching stations identified in the capital budget.
 - 2. Middle schools: 95% of the product of the Board-approved student-to-teacher ratio and the number of teaching stations identified in the capital budget.
 - 3. High schools: 80% or 85% of the product of the Board-approved student-to-teacher ratio and the number of teaching stations in the capital budget.
- N. Projections – Estimated student enrollment for future school years.

POLICY 6010

- O. Regional Program – A countywide educational program located at one or more, but not all schools that is designed to provide a particular type of educational leadership or intervention to students. Regional programs may include, but are not limited to Regional Academic Life Skills, Preschool Program, including Parent-Assisted Learning at Schools, Pre-Kindergarten, Elementary School Model Full-day Pre-Kindergarten, Early Beginnings, Regional Emotional Disabilities, Multiple Intensive Needs Classroom, Junior Reserve Officer Training Course (JROTC) and Elementary School Primary Learner Program.
- P. Planning Region – A geographic area of Howard County made up of one or more schools used by the HCPSS Office of School Planning for long-range planning purposes.
- Q. School Attendance Area – Geographic area from which a school’s students are drawn.
- R. Target Utilization – Enrollment between 90% and 110% utilization of the program capacity of a school facility.
- S. Utilization – The comparison of a facility’s program capacity and its enrollment or projected future enrollment.

IV. Standards

- A. The Board will consider school attendance area adjustments whenever one or more of the following conditions exist:
 - 1. A new school or addition is scheduled to open.
 - 2. An existing facility is significantly damaged, deemed unusable, or otherwise scheduled to close.
 - 3. School attendance area projections are outside the target utilization.
 - 4. The program capacity of a school building is altered.
 - 5. The road network(s) within one or more school attendance areas is altered.
 - 6. An unforeseen circumstance necessitates an adjustment to promote efficiency or provide for the welfare of students.
- B. The Board, Superintendent/Designee and the AAC will consider the impact of the following factors in the development of any school attendance area adjustment plan. While each of these factors will be considered, it may not be feasible to reconcile each and every school attendance area adjustment with each and every factor.

POLICY 6010

1. Facility Utilization. Where reasonable, school attendance area utilization should stay within the target utilization for as long a period of time as possible through the consideration of:
 - a. Efficient use of available space. For example, maintain a building's program capacity utilization between 90% and 100%.
 - b. Long-range enrollment, capital plans and capacity needs of school infrastructures (e.g., cafeterias, restrooms and other shared core facilities).
 - c. Fiscal responsibility by minimizing capital and operating costs.
 - d. The number of students that walk or receive bus service and the distance and time based students travel.
 - e. Location of regional programs, maintaining an equitable distribution of programs across the county.
2. Community Stability. Where reasonable, school attendance areas should promote a sense of community in both the geographic place (e.g., neighborhood or place in which a student lives) and the promotion of a student from each school level through the consideration of:
 - a. Feeds that encourage keeping students together from one school to the next. For example, avoiding feeds of less than 15% at the receiving school.
 - b. Areas that are made up of contiguous communities or neighborhoods.
 - c. Frequency with which any one student is reassigned, making every attempt to not move a student more than once at any school level or the same student more frequently than once every five years.
3. Demographic Characteristics of Student Population. Where reasonable, school attendance areas should promote the creation of a diverse and inclusive student body at both the sending and receiving schools through the consideration of:
 - a. The racial/ethnic composition of the student population.
 - b. The socioeconomic composition of the school population as measured by participation in the federal FARMS program.
 - c. Academic performance of students in both the sending and receiving schools as measured by current standardized testing results in English Language Arts/Literacy and Mathematics.

POLICY 6010

- d. The level of English learners as measured by enrollment in the English for Speakers of Other Languages (ESOL) program.
 - e. Number of students moved, taking into account the correlation between the number of students moved, the outcomes of other standards achieved in Section IV.B. and the length of time those results are expected to be maintained.
 - f. Other reliable demographic indicators, when applicable.
- C. Board of Education's Deliberations
1. The Superintendent/Designee will submit attendance area considerations to the Board for discussion and recommendation.
 2. If attendance area adjustments are considered under Section IV.A., the Board will notify the public of its decision for the Superintendent to proceed or not to proceed with the formation of the AAC and attendance area adjustment recommendations.
 3. The Superintendent/Designee will submit to the Board attendance area adjustment recommendations, which include data on each of the factors in Section IV.B. for which measurement can be obtained.
 4. The Board, in accordance with Policy 2040 Public Participation in Meetings of the Board, will hold a public hearing(s) regarding the school attendance area adjustment plan(s) submitted by the Superintendent. In addition, and as necessary, work session(s) will be scheduled to consider public hearing testimony. The Board may schedule additional hearings and/or work sessions at its discretion.
 5. The Board may direct the Superintendent to provide additional information and/or develop other alternative plans for its consideration at any time. The Board may also propose alternative plans at any time.
 6. The Board may consider exemptions for rising fifth, eighth, and eleventh grade students to continue attending schools in an area that is proposed for attendance area adjustments. Attendance area adjustments will not affect rising twelfth grade students.
 7. The Board will take final action on school attendance area adjustments at a public meeting. The Board reserves the right to adopt or to modify any alternatives and/or recommendations presented to it by the Superintendent/Designee or the citizens of Howard County proposed previously or during the Board's deliberations and vote.

POLICY 6010

8. The Board may alter these provisions, upon a majority vote of the Board, when an extended emergency as defined by Policy 3010 Emergency Preparedness and Response occurs or other extraordinary circumstances warrant such an alternation.

D. Community Input

1. The Superintendent will, when directed by the Board, form an AAC in accordance with the Implementation Procedures of this policy for the purpose of advising the Superintendent during the planning phase of the attendance area adjustment process. In the case of an extended emergency situation, the Superintendent/Designee will propose an attendance area adjustment.
2. The Board will provide opportunities for public input in accordance with Policy 2040 Public Participation in Meetings of the Board.
3. Members of the public may submit school attendance area adjustment plans to the Board, the Superintendent/Designee and/or the AAC.

V. Responsibilities

- A. The Superintendent/Designee will prepare and provide enrollment projections and attendance area considerations on an annual basis to the Board.
- B. The Superintendent/Designee will determine whether the conditions exist that require school attendance area adjustments and will recommend that the Board appoint the AAC. The Superintendent/Designee will assist the AAC in completing its review and comment process.
- C. All AAC meetings are subject to the Maryland Open Meetings Act. Staff will take summary notes of the AAC meeting and make these summary notes available to the public.
- D. The Superintendent/Designee will communicate the Board's action on attendance area adjustments to the principals, PTA presidents and SGA presidents of each affected school, the president of the PTA Council of Howard County and the chairman of the Community Advisory Council to the Board.
- E. Principals will communicate attendance area adjustments to the parents of students in areas affected by the Board's action.

VI. Delegation of Authority

The Superintendent is authorized to develop appropriate procedures for the implementation of this policy.

VII. References

- A. Legal
 - The Annotated Code of Maryland, Education Article, Section 4-109, Establishment of Public School
 - Maryland Open Meetings Act

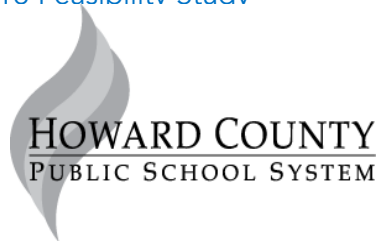
- B. Other Board Policies
 - Policy 2040 Public Participation in Meetings of the Board
 - Policy 2050 Advisory Committees to Staff and Schools
 - Policy 3010 Emergency Preparedness and Response
 - Policy 5200 Pupil Transportation
 - Policy 6000 Site Selection and Acquisition
 - Policy 6020 School Planning and Construction Programs
 - Policy 6070 Discontinuation of School Use
 - Policy 9000 Student Residency Eligibility Enrollment Assignment

- C. Relevant Data Sources

- D. Other

VIII. History

ADOPTED: April 15, 2004
REVIEWED: July 1, 2011
MODIFIED:
REVISED: April 28, 2005
April 16, 2009
January 26, 2017
EFFECTIVE: January 26, 2017



**POLICY 6010-IP
IMPLEMENTATION PROCEDURES**

SCHOOL ATTENDANCE AREAS

Effective: January 26, 2017

I. Definitions

Within the context of these implementation procedures, the following definitions apply:

- A. Integrated Modular Units – Modular classrooms or buildings that are permanently installed at a school and included in the program capacity of a school.
- B. Projection Methodology – Procedure to develop student enrollment projections that includes, but is not limited to historical cohort survival ratios, birth rates, new housing units, housing resales, apartment turnover and net migration.
- C. Relocatable(s) – Prefabricated, stand-alone buildings providing temporary capacity for a school and that are excluded from program capacity.

II. Development and Consideration of School Attendance Area Adjustment Plans

The long-range school facilities planning process is conducted on an annual basis according to the county's and state's capital budget process. The schedule is adjusted annually to account for holidays and other anomalies. The development and consideration of proposed school attendance area adjustment plans will take place in the following manner:

- A. Year 1 - January/February
The Office of School Planning will provide the Superintendent with enrollment projections by school annually and develop attendance area considerations per Policy 6010. The considerations will address capacity projects in the capital budget and will be the basis for short- and long-range attendance area plans.
- B. Year 1 - April
The Office of School Planning will solicit and interview candidates for the potential Attendance Area Committee (AAC) and nominate candidates for appointment by the Superintendent.
- C. Year 1 - June
The Superintendent/Designee presents projections, attendance area considerations and planning issues to the Board and interested citizens.

If the Board approves the appointment of an AAC, the Superintendent will charter such a committee to review proposed attendance area adjustment plans. The

POLICY 6010-IP
IMPLEMENTATION PROCEDURES

Board will notify the public of its decision for the Superintendent to proceed or not to proceed with the formation of the AAC and attendance area adjustment recommendations.

- D. Year 1 - June/July
If an AAC is created, the Office of School Planning staff will provide training to the AAC. Training will include, but is not limited the following:
1. Review of Policy 6010 and its standards used to establish an attendance area adjustment plan.
 2. Review the AAC's responsibilities in the attendance area adjustment plan process.
- E. Year 1 - July/August
With assistance from the Office of School Planning, the AAC will review attendance area adjustments, consider citizen feedback and make a committee recommendation to the Superintendent.
- F. Year 1 - July/August
The Office of School Planning will advise the Superintendent on capacity needs for the upcoming budget process during capital budget preparations.
- G. Year 1 - September
The Office of School Planning will facilitate regional meetings regarding proposed attendance area adjustments, including the plans refined by the AAC.
- H. Year 1 - October
After receipt of input from the AAC and the public, the Superintendent will propose attendance area adjustments and goals (e.g., to facilitate a balanced utilization, open a new school, etc.) to the Board.
- I. Year 1 - October/November
Board public hearing(s), work session(s) and adoption of attendance area adjustments.
- J. Year 1 - December
The Superintendent/Designee and Board will assess the attendance area adjustment process. Modifications to this process will be made, as needed, prior to the beginning of the next attendance area adjustment.
- K. Year 1 - December – Year 2 - January
After the Board has made any final decision(s) regarding attendance area adjustments, the approved attendance area maps are developed, the school locator is updated, and transportation routes are updated. The Superintendent will communicate the Board's action to the principals, PTA presidents and SGA presidents of each affected school, the president of the PTA Council of Howard

POLICY 6010-IP
IMPLEMENTATION PROCEDURES

County and the chairman of the Community Advisory Council to the Board. The Superintendent/Designee will assist school-based administrators and staff with articulating students affected by attendance area adjustments. Principals will communicate attendance area adjustments to the parents of students in areas affected by the Board's action.

- L. Year 2 - January
Capital Budget review by the Board.
- M. Year 2 - May
Capital Budget review and approval by County Council.
- N. Year 2 - August
Attendance Area Adjustment effective.

III. Attendance Area Committee Make-up and Responsibilities

- A. The AAC shall consist of 10 to 15 members. Consideration will be given to providing representation from each of the Howard County Public School System's (HCPSS) planning regions. Representation may include, but is not limited to the following:
 - 1. At least one member from the Howard County Association of Student Councils.
 - 2. At least one member from each of the HCPSS six planning regions.
 - 3. At least three, but no more than eight at-large citizen members, with consideration toward identifying members of the community based on the attendance area/planning region(s) affected by the proposed attendance area adjustment.
 - 4. Of those AAC members selected, no more than six members will have been members of a previous AAC.
 - 5. Members may not serve more than two consecutive AAC's.
- B. The AAC, after receiving training, will work in collaboration with the Office of School Planning staff and the Superintendent/Designee to refine the attendance area adjustment plan through a review and comments process. The basis for the review will be enrollment projections, the Policy 6010 Standards set forth in Section IV.B., and the attendance area adjustment goals set by the Superintendent.
- C. The AAC will take public input in the form of reviews and comments. The AAC will review public input and provide comments to the staff. Staff will modify the attendance area adjustment plans as appropriate based on the AAC comments.

POLICY 6010-IP
IMPLEMENTATION PROCEDURES

- D. Attendance areas plans refined by the AAC will be presented at one or more regional meetings for additional citizen comment. Further refinement to the AAC's plan may be necessary prior to forwarding it to the Superintendent for review.
- E. AAC members may be asked to participate during the meeting in which staff presents the attendance area adjustment recommendations as well as in one or more work sessions to assist the Board in its deliberations.

IV. History

ADOPTED: April 28, 2005

REVIEWED: July 1, 2011

MODIFIED:

REVISED: January 26, 2017

EFFECTIVE: January 26, 2017

Most Recent Attendance Area Adjustments

The new Adequate Public Facilities Ordinance adopted by the County Council in 2018 requires that HCPSS reports the most recent attendance area adjustments for each school.

Table 6.1 Most Recent Attendance Area Adjustments Chart

	In effect		In effect
Atholton ES	2012	Bonnie Branch MS	2014
Bellows Spring ES	2018	Burleigh Manor MS	2018
Bollman Bridge ES	2012	Clarksville MS	2018
Bryant Woods ES	2007	Dunloggin MS	2006
Bushy Park ES	2002	Elkridge Landing MS	2018
Centennial Lane ES	2007	Ellicott Mills MS	2014
Clarksville ES	2006	Folly Quarter MS	2006
Clemens Crossing ES	2018	Glenwood MS	2004
Cradlerock ES	2004	Hammond MS	2014
Dayton Oaks ES	2012	Harpers Choice MS	2018
Deep Run ES	2018	Lake Elkhorn MS	2014
Ducketts Lane ES	2018	Lime Kiln MS	2018
Elkridge ES	2013	Mayfield Woods MS	2018
Forest Ridge ES	2012	Mount View MS	2018
Fulton ES	2012	Murray Hill MS	2014
Gorman Crossing ES	2012	Oakland Mills MS	2003
Guilford ES	2012	Patapsco MS	2006
Hammond ES	2012	Patuxent Valley MS	2014
Hanover Hills ES	2018	Thomas Viaduct MS	2018
Hollifield Station ES	2013	Wilde Lake MS	2018
Ilchester ES	2013		
Jeffers Hill ES	2013		
Laurel Woods ES	2012		
Lisbon ES	1998		
Longfellow ES	2003		
Manor Woods ES	2018		
Northfield ES	2013		
Phelps Luck ES	2013	Atholton HS	2002
Pointers Run ES	2018	Centennial HS	2006
Rockburn ES	2018	Glenelg HS	2010
Running Brook ES	2007	Hammond HS	2005
St Johns Lane ES	2013	Howard HS	2005
Stevens Forest ES	2013	Long Reach HS	2005
Swansfield ES	1987	Marriotts Ridge HS	2010
Talbott Springs ES	2013	Mt Hebron HS	2006
Thunder Hill ES	2013	Oakland Mills HS	2005
Triadelphia Ridge ES	2018	Reservoir HS	2002
Veterans ES	2013	River Hill HS	2010
Waterloo ES	2013	Wilde Lake HS	2004
Waverly ES	2018		
West Friendship ES	2018		
Worthington ES	2007		

