

HOWARD COUNTY PUBLIC SCHOOL SYSTEM

Capital Budget FY 2020



**Capital Improvement Program FY 2021–2025
Long-Range Master Plan FY 2020–2029**

Superintendent's Proposed Budget

Superintendent's Proposed FY 2020 Capital Budget
Capital Improvement Program FY 2021–2025
Long-Range Master Plan FY 2020–2029

Superintendent

Michael J. Martirano, Ed.D.

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Sandra H. French
Ananta Hejeebu

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Superintendent's Proposed FY 2020 Capital Budget
Capital Improvement Program FY 2021–2025
Long-Range Master Plan FY 2020–2029

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found on the school system's website at www.hcpss.org.

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Table of Contents

1 EXECUTIVE SUMMARY

Introduction	3
Message from the Superintendent	4
HCPSS Strategic Call to Action	6
Capital Budget Request	
FY 2020 Capital Budget	7
FY 2021–2025 Capital Improvement Program	8
FY 2020–2025 Long-Range Systemic Renovation Projects	9
FY 2020–2029 Long-Range Master Plan	10
Capital Planning	11
Capital Planning and Growth Management	12
Enrollment Projections and School Capacities	14
Types of Capital Projects	15
Land Bank as of July 1, 2018	18
Recent Capital Accomplishments	19
Capital Improvement Program (CIP) Development Process	20
FY 2020 Capital Budget Schedule	21

2 SYSTEM INFORMATION

HCPSS Facilities at a Glance	25
Systemwide Map of Schools	26

Table of Contents

3 PROJECT DETAIL

Talbott Springs Elementary School Replacement	28
New HS #13	30
Hammond High School Renovation/Addition	32
Dunloggin Middle School Renovation/Addition	34
Ellicott Mills Middle School Addition	36
Oakland Mills Middle School Renovation	38
MS/HS Career Development Center	40
Long-Range Plan Adjustments	42
Systemic Renovations	44
Roofing Projects	46
Playground Equipment	48
Relocatable Classrooms	50
Site Acquisition and Construction Reserve	52
Technology	54
School Parking Lot Expansions	56
Planning and Design	57
Barrier-Free Projects	58
Project Cost Details	60

4 SUPPORTING DATA

Pre- and Post-Measures Data	80
Public School Enrollment – Actual for 1973–2017 and Estimated for 2018–2030	86
Facility Use, Acreage, and Capital Projects	87
School and Region Tests for APFO: Elementary and Middle	89
Facilities Constructed with Assistance from MD School Construction Funds: 1980–2018	91
Addn./Reno. with Assistance from MD School Construction Funds: 1980–2018	92
Policy 6020 School Planning/School Construction Programs	93

Superintendent's Proposed FY 2020 Capital Budget
Capital Improvement Program FY 2021–2025
Long-Range Master Plan FY 2020–2029

Section 1

Executive Summary

September 2018



Introduction

This document contains the Howard County Public School System’s (HCPSS) Superintendent’s Proposed FY 2020 Capital Budget and the FY 2021–2025 Capital Improvement Program (CIP) schedules. Projects are presented for the next fiscal year and future years, documenting long-range plans for the system.

The capital budget process, detailed within the Executive Summary, links capital planning with attendance area planning and addresses long-range planning issues identified in the annual feasibility study. Presented to the Board of Education on June 7, 2018, the Feasibility Study provided new enrollment projections and proposed future redistricting. Several factors affect the total FY 2020 Capital Budget. This year’s capital improvement program provides for student capacity, renovations, and various other improvements that staff, parents, and community leaders have identified as needed. The formula used by the state to calculate school construction costs has increased to \$374 per square foot. Project budgets have increased to

reflect rising costs such as the requirement to pay prevailing wages on all projects after July 1, 2014, costs to comply with LEED, and inflation.

The Superintendent’s Proposed Capital Budget is the first step in this annual process which will ultimately end with the Board of Education’s Approved Capital Budget in May 2019. The capital budget is submitted much earlier than the operating budget to accommodate deadlines associated with submission of the State capital budget to the Interagency Commission on School Construction.

Executive Summary provides an introduction to the Superintendent’s Proposed FY 2020 Capital Budget, the Capital Improvement Program FY 2021–2025, and the Long-Range Master Plan FY 2020–2029. It presents a high level overview of the budget process and the FY 2020 Proposed Capital Budget. Included in the Executive Summary is the Superintendent’s Message, which provides an overview of the budget issues. Other information found in the Executive Summary is enrollment projections and student capacities, recent capital budget accomplishments, the capital budget schedule, and information on the capital budget process.

System Information presents information on the school system with a map of school locations throughout the county.

Project Detail presents detail on each project presented in the proposed FY 2020 Capital Budget as well as information on long range projects.

Supporting Data includes data from the feasibility study, detailed enrollment data, school and region tests for Adequate Public Facilities Ordinance (APFO), and facilities constructed and/or renovated with state funds.



Message from the Superintendent

September 6, 2018

Dear Howard County community,

I am pleased to present my Proposed FY 2020 Capital Budget, FY 2021-2025 Capital Improvement Program and the FY 2020-2029 Long-Range Master Plan for the Howard County Public School System.

In alignment with my Strategic Call to Action, the Capital Budget provides a framework for educational facilities that give all students and staff equitable opportunities to learn and achieve. It adds improvements and capacity where they are most urgently needed to relieve overcrowded schools and ensure the equitable allocation of instructional resources. The proposed budget facilitates the delivery of the high-quality instructional programming needed to enable every student to reach their full potential in the classroom and beyond.

The \$89.2 million Capital Budget, \$557 million Capital Improvement Program and \$938 million Long-Range Master Plan for FY 2020-2029 support our ultimate goal to build an inclusive, nurturing environment, close opportunity gaps, and address projected student capacity and existing facility needs. The Capital Improvement Program and Long-Range Master Plan address existing and projected facility needs to support our projected growth of 7,900 additional students between 2019 and 2029.

The Long-Range Master Plan reflects the collaborative deliberation by a committee of school system and county government staff to develop a realistic and affordable plan that equitably meets student needs and community priorities.

FY 2020 Capital Budget Highlights

- Talbott Springs Elementary School Replacement, scheduled for opening in August 2022.
- New High School #13, scheduled for opening in August 2023.
- Hammond High School Renovation/Addition, scheduled for opening in August 2023.
- Systemic renovations (ex. HVAC, boilers).

FY 2021-2025 Capital Improvement Program Highlights

- \$92 million in systemic renovations for modernizations and major programmatic renovations to existing school facilities.
- New elementary schools to address enrollment growth.
- Renovations to address deferred maintenance and additions to add needed seats at current middle school facilities.



Message from the Superintendent

FY 2020-2029 Long-Range Master Plan Highlights

- Includes funding for four future elementary schools and a future high school, which are necessary to meet projected enrollment growth and capacity needs.
- Replaces the Applications and Research Lab with a new Middle and High School Career Development Center in order to expand educational spaces to meet the growing curriculum.
- Provides for the addition of 4,300 additional seats.

The budget provides the facilities needed to give every student access to the high quality educational opportunities that lead to lifelong success. I want to acknowledge the stakeholder feedback that helped develop this budget. Thank you to our community, County Executive and Council, and Board of Education members for sharing your views and participating and collaborating with us during this process. Through our ongoing partnerships, we can continue to advance our vision of equity and support instructional growth with success.

Rising costs and continued increasing enrollment have led to school system capital needs that will require an increase to historical funding levels by the county and state. We know that resources are limited and there are many competing needs. I am committed to working collaboratively with our state and county partners to secure the funding that is necessary to move these projects forward.

Large public organizations demonstrate their priorities through their budgets. This recommended budget reflects our priorities as a school system for supporting our children and maintaining excellence in instruction by leading with equity.

The FY 2020 Capital Budget schedule is detailed at the end of the Executive Summary and includes the dates of Board public hearings and work sessions. I am dedicated to working with the Board of Education and our community stakeholders to advance these important capital projects forward.

Sincerely,



Michael J. Martirano, Ed.D.
Superintendent

HCPSS Strategic Call to Action

HCPSS Strategic Call to Action



Learning and Leading with Equity

The Fierce Urgency of Now

Vision

Every student and staff member embraces diversity and possesses the skills, knowledge and confidence to positively influence the larger community.



Mission

HCPSS ensures academic success and social-emotional well-being for each student in an inclusive and nurturing environment that closes opportunity gaps.

Four Overarching Commitments

VALUE

Every HCPSS stakeholder feels happy and rewarded in their roles and takes pride in cultivating the learning community.

ACHIEVE

An individualized focus supports every person in reaching milestones for success.

CONNECT

Students and staff thrive in a safe, nurturing and inclusive culture that embraces diversity.

EMPOWER

Schools, families and the community are mutually invested in student achievement and well-being.

Desired Outcomes

- **Equity** and **relationships** are at the foundation of all decisions and actions.
- Students' **social-emotional learning** is nurtured through life skills development and collaborative dialogue, such as **restorative practices** to solve problems.
- **Graduation rates** among all high schools and each demographic group are at exemplary levels.
- Students graduate with the skills, attributes and knowledge necessary to acquire **meaningful and rewarding employment** in a dynamic international workplace.
- All students have equitable opportunities to earn **college credit or industry certification**.
- Through collaboration with families and the greater community, all students enter kindergarten **ready to learn**.
- Each and every student receives a high-quality education through **individualized** instruction, challenges, supports and opportunities.
- High quality **special education** services are delivered in a consistent and collaborative manner.
- **Curriculum** is based on standards and best practices, implemented with fidelity, and aligned with meaningful **assessments** that provide actionable data for instructional planning.
- Students see **diversity and inclusion** reflected in the curriculum, and respect the contributions of all populations.
- Staff reflect the **diversity** of the student and community population.
- Parents, guardians and community members **trust** in the integrity of the school system and are active and valued **partners**.
- All staff feel **valued**, are effective in their roles, and have equitable access to additional opportunities through **professional learning** and leadership development.
- Organizational **culture and climate** are supportive and nurturing, and provide a **safe** and healthy environment for all.
- All operations and practices are **responsive**, accountable, efficient and **student-centered**.

FY 2020 Capital Budget

Superintendent's Proposed

September 6, 2018

(In Thousands)

Capacity	Project	County Project	Occupancy	Approved Appropriations	Local Bonds	Codes	Total FY20 Request	Requested Project Totals Through FY20
540	Talbott Springs ES Replacement	E1043	Sept 2022	\$ 8,050	\$ 9,500	(C)	\$ 9,500	\$ 17,550
1,615	New HS #13	E1035	Sept 2023	6,732	15,600	(C)	15,600	22,332
200	Hammond HS Renovation/Addition	E1024	Sept 2023	4,000	12,500	(C)	12,500	16,500
	Systemic Renovations/Modernizations	E1044		25,455	37,060	(P,C,E)	37,060	62,515
	Roofing Projects	E1046		12,500	5,000	(P,C,E)	5,000	17,500
	Playground Equipment	E0990		2,930	250	(E)	250	3,180
	Relocatable Classrooms	E1045		1,800	3,200	(P,C,E)	3,200	5,000
	Site Acquisition & Construction Reserve	E1047		-	-	(P,C)	-	-
	Technology	E1048		2,750	5,500	(C,E)	5,500	8,250
	School Parking Lot Expansions	E1012		4,200	-	(P,C,E)	-	4,200
	Planning and Design	E1038		700	400	(P)	400	1,100
	Barrier Free	E0989		5,603	200	(P,C,E)	200	5,803
	TOTALS			\$ 74,720	\$ 89,210		\$ 89,210	\$ 163,930

- (P) Planning
- (C) Construction
- (E) Equipment

FY 2021-2025 Capital Improvement Program

Superintendent's Proposed

September 6, 2018

(In Thousands)

Grades	Capacity	Project	County Project	Occupancy	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	5 Year CIP Total
K-5	540	Talbott Springs ES Replacement	E1043	Sept 2022	\$ 14,218	\$ 9,856	\$ -	\$ -	\$ -	\$ 24,074
9-12	1,615	New HS #13	E1035	Sept 2023	29,260	29,280	29,260	19,505	-	107,305
9-12	200	Hammond HS Renovation/Addition	E1024	Sept 2023	23,955	24,075	24,156	10,342	-	82,528
K-5	600	New ES #43	E1039	Sept 2024	4,000	15,500	14,500	12,439	4,588	51,027
6-8	97	Dunloggin MS Renovation/Addition	E1049	Sept 2024	2,000	8,694	11,671	11,534	5,000	38,899
6-8	156	Ellicott Mills MS Addition	E1037	Sept 2023	-	1,000	6,415	1,000	-	8,415
6-8	-	Oakland Mills MS Renovation	E1036	Sept 2026	-	-	-	7,500	15,500	23,000
K-5	600	New ES #44	E1040	Sept 2026	-	-	4,000	15,550	14,500	34,050
6-12	TBD	MS/HS Career Development Center	E1051	Sept 2028	-	-	-	8,232	25,566	33,798
		Systemic Renovations/Modernizations	E1044		22,724	21,481	18,515	18,430	10,405	91,555
		Roofing Projects	E1046		1,000	5,000	1,000	1,000	5,000	13,000
		Playground Equipment	E0990		250	250	250	250	500	1,500
		Relocatable Classrooms	E1045		1,500	1,500	1,500	1,500	1,500	7,500
		Site Acquisition & Construction Reserve	E1047		-	-	-	-	2,000	2,000
		Technology	E1048		5,500	7,500	7,500	7,500	7,500	35,500
		School Parking Lot Expansions	E1012		-	-	-	-	600	600
		Planning and Design	E1038		400	300	300	300	300	1,600
		Barrier Free	E0989		200	200	200	200	200	1,000
		TOTALS			\$ 105,007	\$ 124,636	\$ 119,267	\$ 115,282	\$ 93,159	\$ 557,351

FY 2020-2025 Long-Range Systemic Renovation Projects

Superintendent's Proposed

September 6, 2018

(In Thousands)

Project	FY 2020 Local Bonds	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Totals
Modification of FY 2019 HVAC Project Scopes	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000
Long Reach HS - Building Envelope	2,000	-	-	-	-	-	2,000
Applications and Research Lab Maintenance	2,500	1,500	1,500	1,500	-	-	7,000
Room Reconfigurations and Modernizations	1,000	-	-	-	-	-	1,000
Forest Ridge ES Office Reconfiguration	750	-	-	-	-	-	750
Guilford ES Exterior Windows/Doors	1,300	-	-	-	-	-	1,300
Ascend One Relocation/Renovations	3,000	-	-	-	-	-	3,000
West Friendship ES MBR/Well	3,000	3,000	-	-	-	-	6,000
Fulton ES HVAC Replacement	8,500	-	-	-	-	-	8,500
Cradlerock ES/Lake Elkhorn MS Boiler Replacement	550	-	-	-	-	-	550
Dump Trucks for Grounds Services (2)	360	-	-	-	-	-	360
Manor Woods ES HVAC Replacement	-	3,984	3,516	-	-	-	7,500
Elkridge Landing MS HVAC Replacement	-	5,185	4,515	-	-	-	9,700
Hammond MS Boiler Replacement	-	455	-	-	-	-	455
Forest Ridge ES Boiler Replacement	-	-	350	-	-	-	350
Bonnie Branch MS HVAC Replacement	-	-	-	5,065	4,435	-	9,500
Bonnie Branch MS Boiler Replacement	-	-	-	350	-	-	350
Hollifield Station ES HVAC Replacement	-	-	-	-	4,395	3,805	8,200
Administration Office	-	-	4,000	5,000	3,000	-	12,000
Kitchen Modernizations	300	300	300	300	300	300	1,800
Special Education/Regional Program Needs	300	300	300	300	300	300	1,800
Indoor Environmental Quality Repairs	3,500	3,000	2,000	1,000	1,000	1,000	11,500
School Security Measures	1,000	-	-	-	-	-	1,000
Emergency Reserve	5,000	5,000	5,000	5,000	5,000	5,000	30,000
TOTALS	\$ 37,060	\$ 22,724	\$ 21,481	\$ 18,515	\$ 18,430	\$ 10,405	\$ 128,615

FY 2020-2029 Long-Range Master Plan

Superintendent's Proposed

September 6, 2018

(In Thousands)

Capacity	Project	County Project	Occupancy	Approved Appropriations	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total Approp. plus FY20-FY29 Request
540	Talbot Springs ES Replacement	E1043	Sept 2022	\$ 8,050	\$ 9,500	\$ 14,218	\$ 9,856	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,624
1,615	New HS #13	E1035	Sept 2023	6,732	15,600	29,260	29,280	29,260	19,505	-	-	-	-	-	129,637
200	Hammond HS Renovation/Addition	E1024	Sept 2023	4,000	12,500	23,955	24,075	24,156	10,342	-	-	-	-	-	99,028
600	New ES #43	E1039	Sept 2024	-	-	4,000	15,500	14,500	12,439	4,588	-	-	-	-	51,027
97	Dunloggin MS Renovation/Addition	E1049	Sept 2024	-	-	2,000	8,694	11,671	11,534	5,000	-	-	-	-	38,899
156	Ellicott Mills MS Addition	E1037	Sept 2023	-	-	-	1,000	6,415	1,000	-	-	-	-	-	8,415
-	Oakland Mills MS Renovation	E1036	Sept 2026	-	-	-	-	-	7,500	15,500	12,500	2,810	-	-	38,310
600	New ES #44	E1040	Sept 2026	-	-	-	-	4,000	15,550	14,500	12,439	6,524	-	-	53,013
TBD	MS/HS Career Development Center	E1051	Sept 2028	-	-	-	-	-	8,232	25,566	30,850	31,686	22,566	-	118,900
480	New ES #45	E1041	Sept 2030	-	-	-	-	-	-	-	-	4,000	11,500	12,500	28,000
	Systemic Renovations/Modernizations	E1044		25,455	37,060	22,724	21,481	18,515	18,430	10,405	17,000	18,000	19,000	20,000	228,070
	Roofing Projects	E1046		12,500	5,000	1,000	5,000	1,000	1,000	5,000	5,000	5,000	5,000	5,000	50,500
	Playground Equipment	E0990		2,930	250	250	250	250	250	500	500	500	500	500	6,680
	Relocatable Classrooms	E1045		1,800	3,200	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	18,500
	Site Acquisition & Construction Reserve	E1047		-	-	-	-	-	-	2,000	2,000	2,000	2,000	2,000	10,000
	Technology	E1048		2,750	5,500	5,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	73,750
	School Parking Lot Expansions	E1012		4,200	-	-	-	-	-	600	600	600	600	600	7,200
	Planning and Design	E1038		700	400	400	300	300	300	300	300	300	300	300	3,900
	Barrier Free	E0989		5,603	200	200	200	200	200	200	200	200	200	200	7,603
	TOTALS			\$ 74,720	\$ 89,210	\$ 105,007	\$ 124,636	\$ 119,267	\$ 115,282	\$ 93,159	\$ 90,389	\$ 80,620	\$ 70,666	\$ 50,100	\$ 1,013,056

Ten-Year Long-Range Master Plan = \$938,336

Capital Planning



Capital planning is an ongoing process where the annual Capital Improvement Program (CIP) and Long-Range Master Plan are updated to reflect changes in enrollments, building capacities, and other conditions. The HCPSS provides other relevant publications, which should be taken as a whole with the capital budget. These include the Feasibility Study, Educational Facilities Master Plan, and the Comprehensive Maintenance Plan.

The formulation of the FY 2020 Capital Budget, FY 2021–2025 Capital Improvement Plan, and the FY 2020–2029 Long-Range Master Plan begins with the annual completion of enrollment projections first presented in the 2018 Feasibility Study. The results of this projection are also included in this document in pre- and post-measures charts. Capacities of schools dictate the calculation of capacity utilization percentage, a measure which allows the effect of school projections to be illustrated in a meaningful way. A school with capacity utilization over 110 percent is deemed to be over-utilized, while a school below 90 percent capacity utilization is deemed to be under-utilized. This range is set by Board of Education policy.



The redistricting of school attendance areas is an integral part of the CIP. The HCPSS is responsible for ensuring that school buildings in the county are run efficiently and effectively. This means keeping schools at or near capacity and ensuring that most available seats are used before new schools would be built. Redistricting is used to ensure that existing capacity and the scheduled capital projects efficiently accommodate projected student enrollments.



While redistricting plans are implied for new facilities proposed in this plan, formal approval of those plans will not occur until the year before they take effect. Changing circumstances may require different plans. For planning purposes, the school attendance areas are grouped into six planning regions. Redistricting plans may include more than one region. The schools and their regions are identified by level in the Supporting Data section.

Capital Planning and Growth Management

General Plan

The Capital Improvement Plan (CIP) must conform with an important County planning document, the Howard County General Plan. Known as *Plan Howard 2030*, it includes annual residential development targets through 2030. The HCPSS will work closely with the Howard County Government to identify future funding sources so that our capital plan best supports the growth management goals of the Howard County General Plan. The capital budget is presented to the Howard County Planning Board so they may make a finding of conformance with the General Plan to the County Council.

The General Plan policy most relevant to this capital budget is Policy 6.1h -- Schools, which directs HCPSS to make efficient use of existing school capacity avoiding unnecessary capital outlays. HCPSS has conducted four years of redistricting since the adoption of *Plan Howard 2030* to open new schools and make more efficient use of existing schools. Approximately 5,700 students were moved. Nearly three quarters of these students were relocated to existing schools.

The General Plan also guides land development in accordance with relevant state growth management laws like the 1997 Priority Funding Areas Act and Smart Green and Growing Act which direct state spending to existing communities and places where local governments want state

investment to support future growth, rather than farmland or undeveloped land. The HCPSS has invested heavily in priority funding areas with the construction of Ducketts Lane Elementary School, Thomas Viaduct Middle School and Hanover Hills Elementary School. Projects proposed outside of the priority funding area are systemic renovations necessary to maintain systems in existing schools, like boiler or HVAC upgrades.

Adequate Public Facilities Ordinance

The Adequate Public Facilities Ordinance (APFO) ties future residential construction in Howard County to projected school enrollments and school capacities. Elementary and middle school attendance areas that show a projected enrollment over 115 percent of a school's program capacity are closed to future residential development until an attendance area adjustment or a capital improvement can be completed. The APFO test for opening or closing a school attendance area to new residential building looks at the projected population of a school three years out from the current year. An update to the APFO was adopted by the County Council on February 5, 2018. While most of the ordinance is in effect now, changes to the meaning of "Open" for the School Capacity chart (elementary schools and elementary regions at 105%, middle schools at 110%, and high schools at 115%) will change with any chart adopted by the County Council after January 1, 2019.

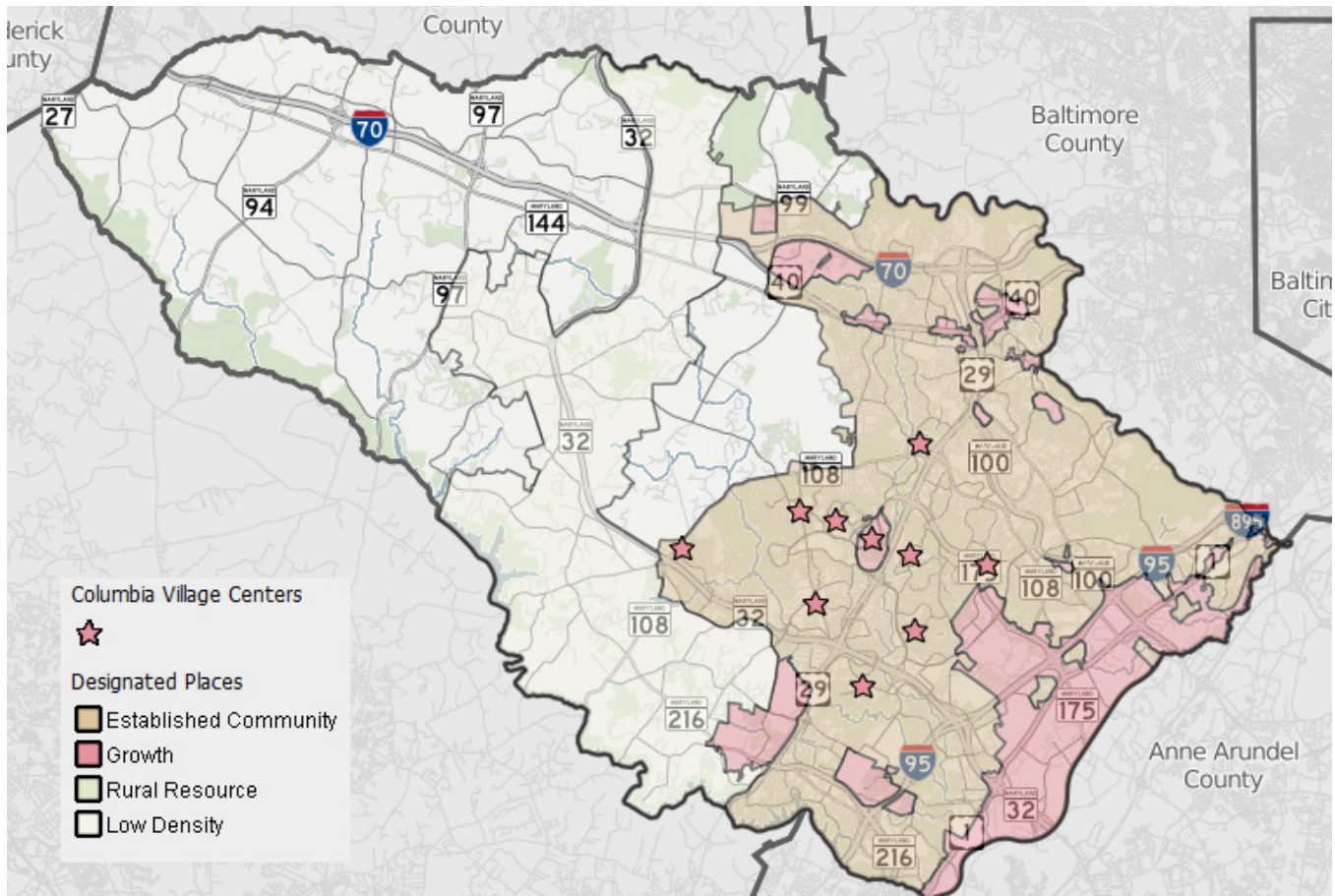


Capital Planning and Growth Management

The School Capacity charts that appear in the Supporting Data section are the charts that were approved for submission to the Howard County Council by the Board of Education on May 17, 2018, and subsequently submitted to the County Council and begin with the year 2021. The School Capacity charts do not include new schools or projects when their sites have not yet been acquired. As the school system secures deeds for the sites to these planned schools or projects, they will be reflected in that year's School Capacity chart.

With the pre-/post-measures approach, the APFO formatted charts found in the Supporting Data section are in the pre-measures format. These charts represent the FY 2019 Capital Budget projects and the new projections. The post-measures charts represent the recommended capital projects for the FY 2020 Capital Budget and no proposed boundary adjustments and are for demonstrative purposes only.

Along with the elementary and middle school tests, a regional test within planning regions at the elementary level is also included in the ordinance. Using the School Capacity charts as indicators at the elementary level, no region is "closed" in 2021 and eight schools are "closed" in 2021. At the middle school level, three schools are "closed" in 2021.



The General Plan process was followed by adoption of the growth tiers map. Future development and school needs are planned in growth areas or village centers.

Enrollment Projections and School Capacities

Methodologies

The formulation of the FY 2020 Capital Budget, FY 2021–2025 Capital Improvement Program, and the FY 2020–2029 Long-Range Master Plan begins with the annual completion of enrollment projections, which were first published in the 2018 Feasibility Study. The projections included in this document are the result of a collaborative effort between the HCPSS, Howard County Department of Planning and Zoning, Maryland Department of Health and Mental Hygiene, and other county and state agencies.

The calculation of the future enrollment projection is based upon a “cohort survival ratio” method of projecting student enrollments. This methodology looks at past population patterns within the county to construct “survival ratios” in predicting a particular grade’s migration through the school system. For example, cohort-survival ratios predict 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. A geographical cohort survival ratio is used rather than a school-based cohort survival ratio to maintain comparability regardless of any redistricting. Finally, the effects of new housing, the net effect of resale of existing housing, and programs housed at the school that impact enrollment are added to the cohort.



Capacities

Equitable evaluation of the impact of projected enrollment growth requires calculation of the capacities of schools. Capacities are not necessarily fixed to the capacity designed when a building first opened. Changes in use, programs, and standards can effectively change capacity.

High school capacities were evaluated and updated by the Board of Education in March 2009. High school program capacities are a product of either 80 or 85 percent of the total number of teaching stations multiplied by 25 students, exclusive of special education classrooms, and factored with consideration that not all teaching stations can be scheduled for use every period of the school day. Further, special-use teaching stations may not be adaptable for academic programs even if the space is available for a period of the school day.

Middle school capacities were evaluated and approved by the Board on September 26, 2013, after a full study and report by Gilbert Architects Inc. 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.

Elementary school capacities were evaluated and approved by the Board on October 23, 2014, after a full study and report by Gilbert Architects Inc. 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 or multipurpose rooms, cafeteriums, art rooms, music rooms, media centers, gifted and talented rooms, or rooms dedicated to regional programs such as prekindergarten.

Types of Capital Projects



The Capital Improvement Plan (CIP) provides for all facilities needs for the school system. Projects are identified by their purpose as described below.

Capacity Projects

New facilities or additions are proposed when projected enrollments cannot be accommodated reasonably within available capacity. The decision to construct a new facility or build an addition on an existing school involves consideration of fiscal implications as well as consideration of the following:

- Growth and location of the population to be served.
- Available capacity in surrounding schools.
- Accommodating needs of current and desired educational programs.

Each capacity project in the CIP has first been evaluated in the annual feasibility study, which balances school boundary adjustments with capital investments. If the attendance areas for existing schools can be adjusted, capital expenditures can be avoided or at least delayed. The Board of Education will review the CIP and set direction as appropriate during capital budget presentations each year. The opening of new schools requires changes in boundaries. Attendance area adjustments are not annual but potential options are evaluated annually in the feasibility study.

From the receipt of planning funds until completion of a project, it typically requires a maximum of three years to plan and construct an elementary or middle school and four years for a high school. Some parts of the construction process can be expedited at cost.

Non-Capacity Projects

Capital projects, which don’t produce capacity are “systemic” and serve the long-term plans of HCPSS and the state of Maryland by keeping and maintaining the systems that support 30–40 year infrastructure investments. Most maintenance investments are covered by the operating budget and documented in the annual Comprehensive Maintenance Plan published as a requirement of the Maryland State Department of Education (MSDE). Each year staff evaluates the comprehensive maintenance plan to identify projects that exceed regular maintenance and add these projects to the capital improvement program as appropriate.

Renovations of existing schools are proposed when repairs of the structure’s internal systems are no longer economically feasible. As the Comprehensive Facility Master Plan is updated using the results of ongoing facility assessments, specific projects are identified in the long-range master plan.

Types of Capital Projects

The decision to renovate an existing school involves the following considerations:

- Prioritization of needs based upon the current facility assessment.
- Optimal sequencing to ensure eligibility for state funding.
- Existing electrical, HVAC, roofing, and/or other major mechanical systems needs.
- Educational space needs.
- Health and safety needs.
- Americans with Disability Act (ADA) needs.
- Need to provide improved spaces for general teaching areas and/or supporting areas.

When renovating an older school, there are multiple considerations of how to best balance the existing footprint of the building against requirements defined in newer versions of the educational specifications. Renovation guidelines have been developed to provide a set of standards, guidelines, and procedures for use by HCPSS administrative staff and architectural/engineering firms engaged in the planning and design of renovation work for the school system.

Roofing Projects

A well-planned roofing program is critical to all other systems in a capital facility. When roofing systems wear, the damage from a failure can impact other systems and multiply costs. HCPSS regularly inspects roofing systems and provides reports to the state of Maryland. Planning and project execution must balance system warranties, state funding eligibility, and the risk of maintenance deferral.

Playground Equipment

Elementary school students are stimulated by interesting and engaging playground installations. The playground planning process considers the needs of a wide-range of ages and skills to develop strength, social skills, coordination, balance, and motor planning. Each year various playgrounds are replaced, repaired, or upgraded based upon need.



Types of Capital Projects

Relocatable Classrooms

Relocatable classrooms are pre-fabricated, stand-alone buildings which provide temporary capacity to a school to relieve overcapacity, provide temporary swing space during renovations/additions, or provide space for a school's program needs. Currently there are 229 modular/relocatable classrooms for Grades K–12 being used by the HCPSS, including several larger modular units of at least five classrooms.

In some cases modular units are integrated into a building's core facility, such as at St. John's Lane Elementary School and Clarksville Middle School. These units are included in building capacity as they are considered permanent additions.

In recent renovations, modular units have been replaced, like Bollman Bridge Elementary School, Deep Run Elementary School, Waverly Elementary School and Patuxent Valley Middle School. The school system conducts reviews of the physical condition and usage of all relocatable/modular units. When units are inspected, the cost of repairs is weighed against the option of retiring the units.

Site Acquisition and Construction Reserve

The selection and acquisition of appropriate school sites figures prominently in the development of a capital program. Each proposed school site is carefully evaluated prior to acquisition according to Board-approved selection criteria identified in Policy 6000 Site Selection and Acquisition. Delays in acquisition of suitable school sites may affect the timing of construction of needed schools, resulting in overcrowding situations.

The HCPSS continues to maintain a "land bank" to purchase potential sites or portions of land to augment sites. Larger sites identified in the subdivision review process may be reserved to be budgeted as line items in future capital budgets. This fund is also used as a reserve for unanticipated construction costs.



Land Bank as of July 1, 2018

The Board maintains ownership and/or the rights to purchase parcels of land for future school sites, commonly known as the "Land Bank." The following schedules detail the current land in the Land Bank.

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

The chart below shows land that was designated as school open space property.

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



Recent Capital Accomplishments

HCPSS completed impressive projects in the past year, which provided urgently needed capacity and necessary renovations.

New Facility and Renovation

Hanover Hills Elementary School

The Hanover Hills Elementary School (New ES #42) project was constructed to provide relief to the crowded elementary schools in the northeast region. The school is an adaptation of the original two-story prototype elementary school design, which was designed to accommodate a population of 788 kindergarten through fifth grade students. The environmental sustainability features of the building are anticipated to achieve LEED Gold certification. The building is located adjacent to Thomas Viaduct Middle School within the Oxford Square community which was built as a walkable community with access to public transportation.

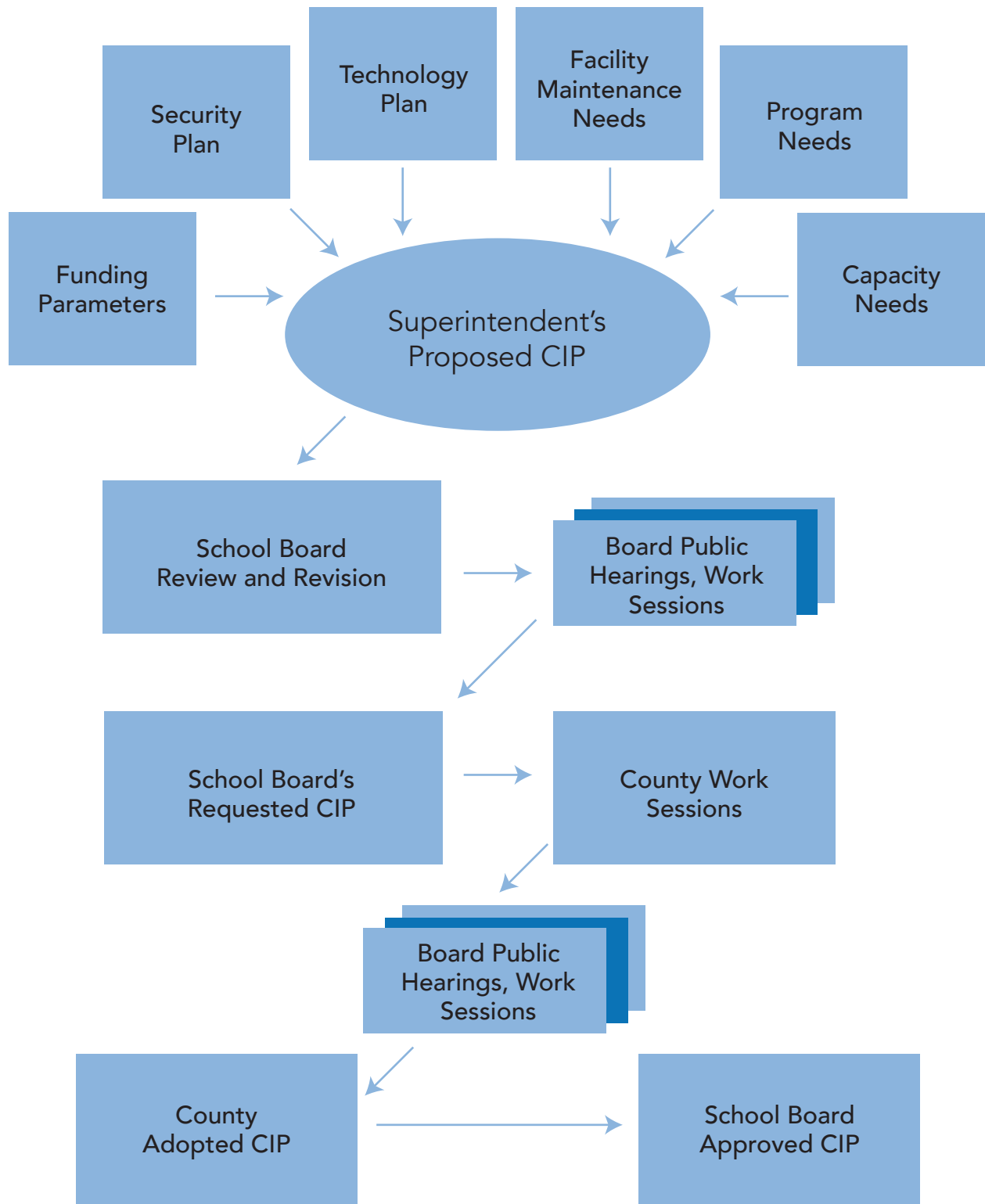


Waverly Elementary School

The Waverly Elementary School project renovated the original 1990 single story structure. The project included replacement of the modular classrooms with permanent construction, adding 100 seats of capacity, and conversion of the open space pods into individual classrooms. A larger administration suite was created by relocating the office space to the existing gymnasium adjacent to the front entrance. A new, larger gymnasium was constructed and the cafetorium and the music suite were expanded to increase the capacity of each space. Interior spaces were reconfigured to provide better circulation with improved accessibility and new finishes. The project is anticipated to achieve LEED certification.



Capital Improvement Program (CIP) Development Process



Calendar for Development and Review/Approval

Superintendent’s Proposed FY 2020 Capital Budget
 Capital Improvement Program FY 2021–2025
 Long-Range Master Plan FY 2020–2029

Thursday, June 7, 2018 7:30pm - Board Room	Staff presentation of Feasibility Study Report including 2018 enrollment projections.
Thursday, August 23, 2018 7:00pm - Board Room	Board of Education Public Hearing and Pre-Development Work Session.
Monday, September 6, 2018 7:00pm - Board Room	Staff presentation of the Superintendent’s Proposed Capital Budget.
Thursday, September 20, 2018 7:00pm - Board Room	Board of Education Public Hearing on Superintendent’s Proposed Capital Budget. Work Session and Approval of Superintendent’s Proposed Capital Budget following the Public Hearing.
Thursday, October 4, 2018	Board of Education submission of Proposed Capital Budget to Maryland Public School Construction Program.
Thursday, October 4, 2018 7:00pm	Planning Board Public Hearing on Board of Education’s Proposed Capital Budget.
Monday, October 29, 2018 7:00pm	County Council approval of Board of Education’s Proposed Capital Budget for letter of support to the Interagency Committee on School Construction.
Tuesday, February 12, 2019 4:00pm - Board Room	Board of Education Adoption of the Requested Capital Budget.
Mid-March	Board of Education submission of the Requested Capital Budget to the County Executive and Budget Administrator.
TBD	County Executive Public Hearing on Capital Budget.
TBD	County Executive presentation of the Capital Budget.
Thursday, April 25, 2019 7:00pm - Board Room	Board of Education Public Hearing.
TBD	County Council Public Hearing on the Education portion of the County Executive’s Capital Budget.
Tuesday, April 30, 2019 7:00pm - Board Room	Board of Education Work Session (if necessary).
TBD	Staff pre-file of the Adequate Public Facilities Ordinance Open/Closed Chart to County Council.
TBD	County Council Adoption of the Capital Budget.
Thursday, May 30, 2019 9:00am - Board Room	Board of Education Adoption of the Capital Budget
TBD	County Council Adoption of Adequate Public Facilities Ordinance Open/Closed Chart.

TBD (To Be Determined) - Please check Howard County’s website for the full schedule: <https://www.howardcountymd.gov/>



Superintendent's Proposed FY 2020 Capital Budget
Capital Improvement Program FY 2021–2025
Long-Range Master Plan FY 2020–2029

Section 2

System Information

September 2018



HCPSS Facilities at a Glance

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. The school system owns or controls approximately 1,820 acres of land. Approximately seven percent of HCPSS staff are devoted in some way to the maintenance of facilities.

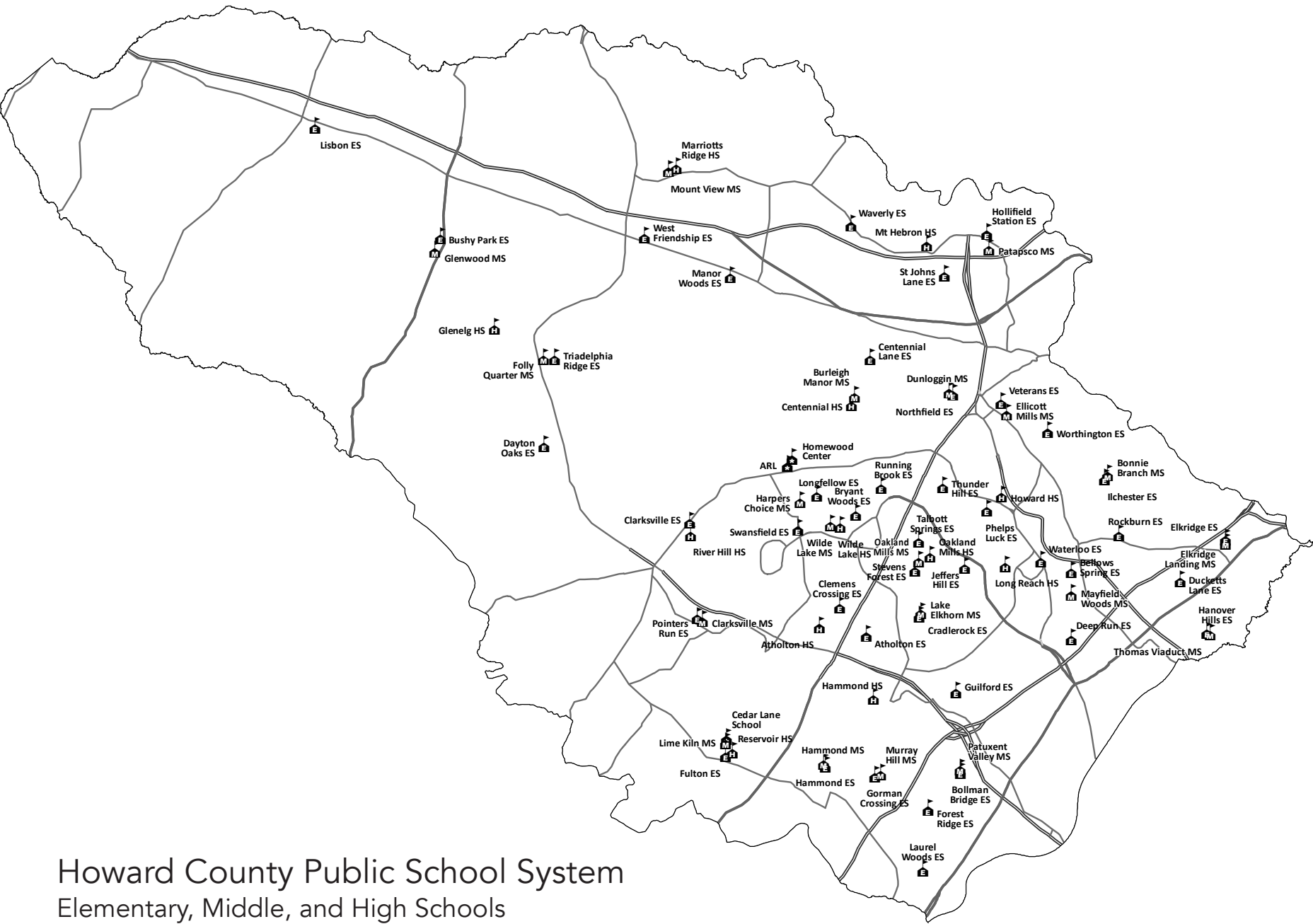


HCPSS Facilities
77 Schools
42 Elementary Schools
20 Middle Schools
12 High Schools
3 Special Schools
Ancillary Facilities
Ascend One
Central Office
Amberton Drive (Leased Storage)
Dorsey Building (Shared Space)
Faulkner Ridge (Vacant)
Mendenhall Court (Leased Offices and Shops)
Ridge Road Center (Shops)
Old Bushy Park (Storage)
Old Cedar Lane (Offices)

Average Age of Facilities		
Elementary	Middle	High
36 years	30 years	38 years

Enrollment*	
Total Enrollment (Pre-K–12)	56,799
Elementary (Pre-K–5)	26,326
Middle (6–8)	13,197
High (9–12)	17,276
Special Schools	99

* Official September 30, 2017 Enrollment Report.



Howard County Public School System
Elementary, Middle, and High Schools
2018–2019

Superintendent's Proposed FY 2020 Capital Budget
Capital Improvement Program FY 2021–2025
Long-Range Master Plan FY 2020–2029

Section 3

Project Detail

September 2018

Talbott Springs Elementary School Replacement: Project 1043

9550 Basket Ring Road, Columbia, MD 21045
<http://tses.hcpss.org/>

Nancy Thompson, Principal
 410.313.6915



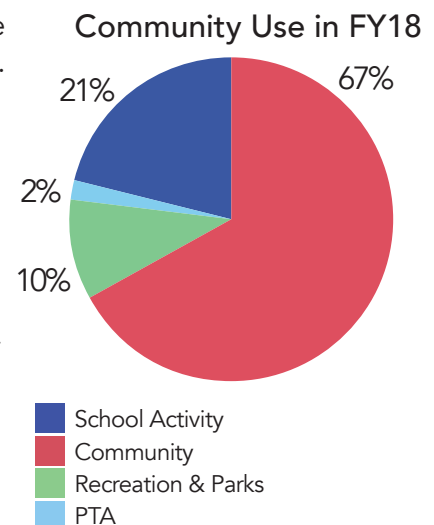
Building Data	
Year Built	1973
Age	45
Site Area (acres)	10
Last Renovation/Addition	2008
Current Relocatables	10
Current Capacity	377
9/2017 Enrollment	457
Projections/Capacity Utilization	
2018 Projection	458
Projected Utilization	122%
2022 Projection	463
Projected Utilization	123%
Post-Project Cap.	540
Projected Utilization	86%

Project Purpose

The Talbott Springs Elementary School project will replace an aging elementary school with a modern facility. Talbott Springs Elementary School opened in 1973 and was renovated in 2000. The art room and gymnasium were expanded in 2000 and all day kindergarten was added in 2008. In April 2009, HCPSS engaged Gilbert Architects Inc. to conduct a facility assessment of elementary schools. The report concluded that Talbott Springs Elementary School had 18.7 percent deficiency of educational program area of the 40 elementary schools operating at that time. In the FY 2020 Capital Budget, the total project cost estimated is \$41.6 million. Talbott Springs Elementary School is expected to achieve USGBC LEED Silver Certification. The complete scope of this project will be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Talbott Springs ES

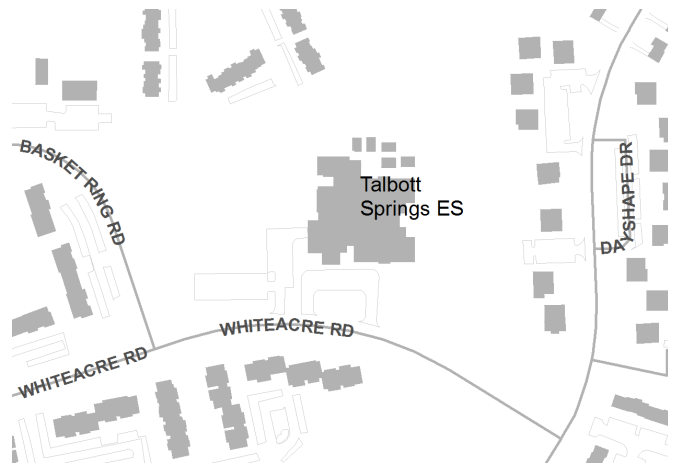
Talbott Springs Elementary School hosted an estimated 45,000 attendees for nearly 1,000 reservations after school hours and on weekends for a variety of events. The majority of the events were after school activities and community events and remaining reservations were athletic and PTA events.



Project Details

The planned scope of work includes a replacement facility to provide students with a new modern energy efficient building with programmatic and physical upgrades as well as new mechanical, electrical and technology systems in compliance with the HCPSS General Educational Specifications for New Elementary Schools. This project calls for an expansion of the educational program spaces, including additional programmatic space needed for Title I services.

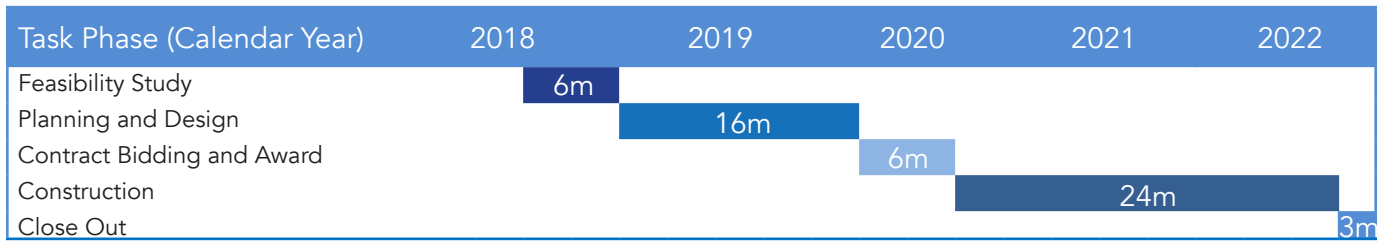
School Location Map



This project received \$8.1 million (including the TAO) in funds in FY 2018 and FY 2019. Construction funds are to be requested in FY 2020 through FY 2022 to complete work and have the school ready by September 2022.

Details of the budget request for this project can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Talbott Springs ES project is scheduled for completion in September of 2022.

New HS #13: Project 1035

Mission Road, Jessup MD



Architect rendering of Marriotts Ridge High School courtesy of TCA Architects.

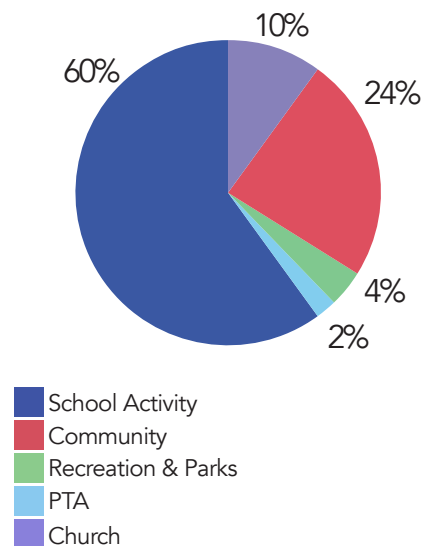
Project Purpose

New HS #13 will be a new facility. Based upon enrollment projections, at least one additional high school is needed to accommodate growth. Balanced capacity utilization in the northeast region alone would require 1,300 additional seats by 2023. This capital budget recommends completion of New HS #13 in 2023. Planning was initiated in FY 2019. The complete scope of this project would be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at New HS #13

Community use is anticipated in the planning for this new facility. As a comparison, Wilde Lake High School hosted an estimated 1,108,000 attendees for over 6,000 reservations after school hours and on weekends for a variety of events. The majority of the events were community and school related and athletic events, and the remaining reservations were Recreation and Parks, church events, and PTA meetings.

Community Use in FY18

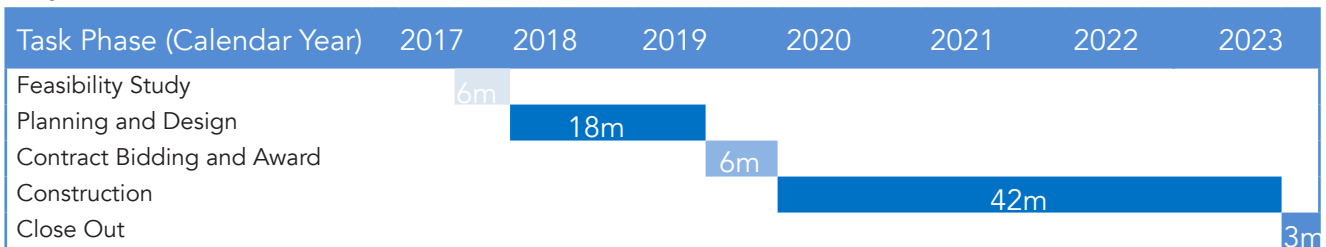




Planning for New HS #13 occurred during FY 2019. Based upon this timeline, the Board will request construction funding for this project in FY 2020 through FY 2024 to complete work and have the school ready for occupancy by September 2023.

Details of the budget request for this project can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The New HS #13 project is scheduled for completion in September of 2023.

Hammond High School Renovation/Addition: Project 1024

8800 Guilford Road, Columbia, MD 21046
<http://hahs.hcpss.org/>

John DiPaula, Principal
 410.313.7615



Building Data

Year Built	1976
Age	42
Site Area (acres)	33.14
Last Renovation/Addition	2011
Current Relocatables	4
Current Capacity	1,220
9/2017 Enrollment	1,311

Projections/Capacity Utilization

2018 Projection	1,356
Projected Utilization	111%
2023 Projection	1,585
Projected Utilization	130%
Post-Project Cap.	1,440
Projected Utilization	110%

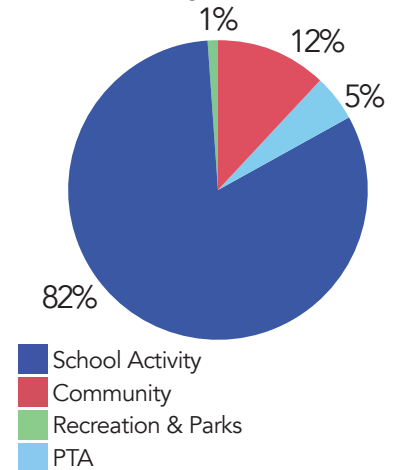
Project Purpose

The Hammond High School project will renovate and expand the existing school. Hammond High School is a one-story building that first opened in 1976 and underwent some renovation and addition work in 1997, followed by a dance studio addition in 2011. The present need is a complete renovation of the school with systemic upgrades to bring it into compliance with the Howard County Public School Systems Guidelines Manual for Renovations and Modernizations of Existing Schools. An addition of 200 seats of new capacity is planned for this project. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Hammond High School

An attendance of 348,000 was estimated for over 4,400 reservations at Hammond High School for events outside of school hours. Most after school activities at any high school are school-related including after school programming, athletic activities, educational activities and performing arts.

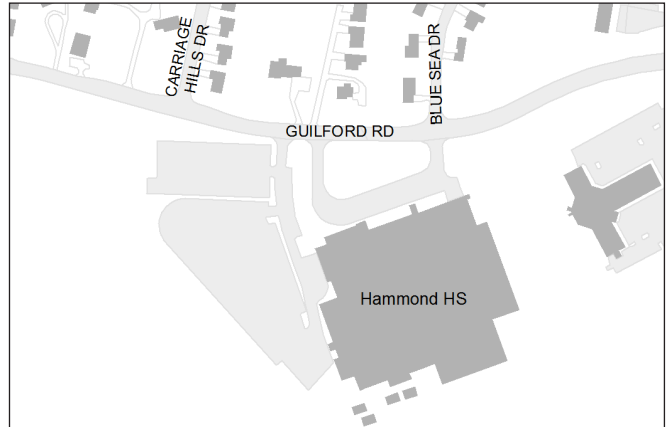
Community Use in FY18



Project Details

The project will consist of a complete systemic renovation and addition of the school that will replace the aging heating and cooling systems, upgrade the plumbing and electrical systems, supply new data technology and security systems, provide new interior finishes throughout the building, create ADA accessibility compliance throughout, repartition select areas of the school, and construct building additions as necessary to fulfill program deficiencies. It is also the intent to concentrate on energy efficient systems.

School Location Map

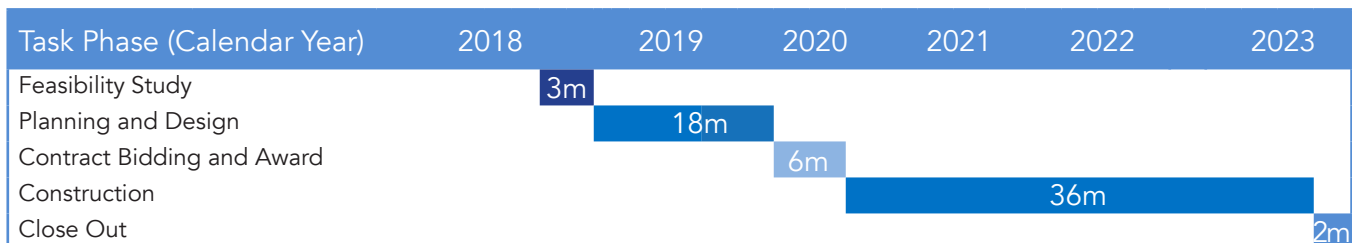


The first year of funding for Hammond High School was in FY 2019. Based upon the current plan, the Board will request construction funding for this program in FY 2020 through FY 2024 totaling \$99 million to complete work and have the school ready by September 2023.



Details of the budget request for this project can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Hammond High School Addition/Renovation project is scheduled for opening in September of 2023.

Dunloggin Middle School Renovation/Addition: Project 1049

9129 Northfield Road Ellicott City, MD 21042
<http://dms.hcpss.org/>

Antionette Roberson, Principal
 410.313.2839



Building Data

Year Built	1973
Age	45
Site Area (acres)	20
Last Renovation/Addition	1999
Current Relocatables	5
Current Capacity	565
9/2017 Enrollment	631

Projections/Capacity Utilization

2018 Projection	639
Projected Utilization	113%
2024 Projection	658
Projected Utilization	117%
Post-Project Cap.	662
Projected Utilization	99%

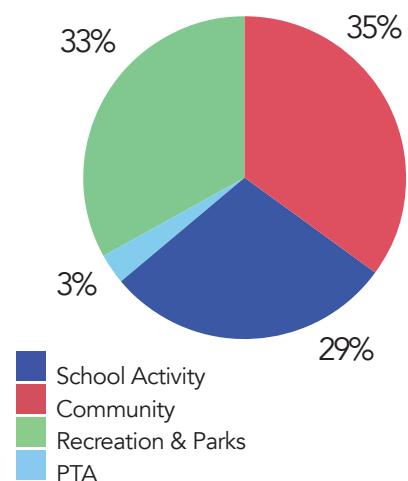
Project Purpose

The Dunloggin Middle School project will expand educational program spaces with 97 seats of new capacity and renovate the existing facility. Dunloggin Middle School opened in 1973 and was renovated in 1999. In August 2008, HCPSS engaged Gilbert Architects, Inc. to conduct a facility assessment of middle schools. The report concluded that Dunloggin Middle School has a 13.8 percent deficiency of educational program area of the 19 middle schools operating at that time. In the FY 2019 Capital Budget, the total project cost estimate is \$38.9 million. Dunloggin Middle School will be another USGBC LEED Certified school facility for Howard County. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Dunloggin Middle School

Over 1,900 reservations brought community members and students into Dunloggin Middle School after school hours and on weekends for a variety of community and student programs, meetings, activities, and events. An attendance of 104,000 was estimated for these activities. Community activities accounted for the largest portion of the facility use. Other uses, which include school activities, PTA events and Recreation and Parks programs, make up the remaining reservations.

Community Use in FY18



Project Details

This project calls for an expansion of the educational program spaces and renovation of the existing facility. The renovation will include a complete systemic renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing and life safety systems. The project will provide 97 seats of additional classroom space and core infrastructure space necessary to operate effectively at the larger capacity. Interior spaces will be reconfigured, new finishes provided, accessibility improve, and new spaces added as required bringing the facility into compliance with renovation specifications.

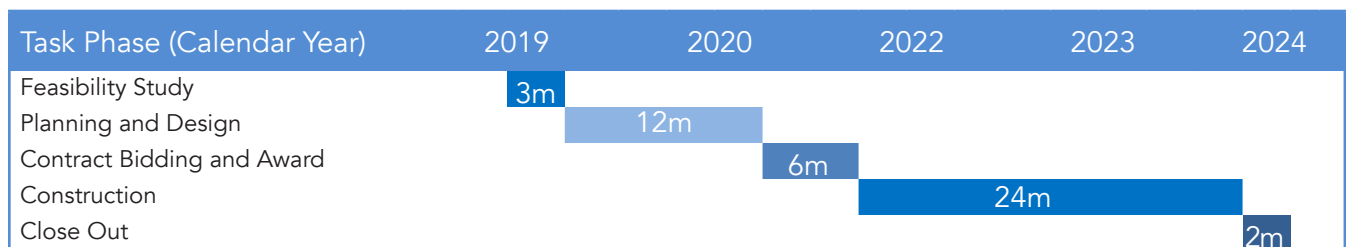
School Location Map



FY 2021 is the first year of funding for Dunloggin Middle School. In previous budgets it was listed as a systemic renovation. The requested funding in FY 2021 will allow planning and design to begin. Construction will start in FY 2022. Based upon the current plan, the Board will request a final \$5 million in FY 2025 to complete work for the school to open in September 2024.

Details of the budget request for this project can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Dunloggin Middle School Renovation/Addition project is scheduled for completion in September of 2024.

Ellicott Mills Middle School Addition: Project 1037

4445 Montgomery Road, Ellicott City, MD 21043
<http://emms.hcpss.org/>

Christopher Rattay, Principal
 410.313.2839



Building Data

Year Built	1939
Age	78
Site Area (acres)	16.22
Last Renovation/Addition	2001
Current Relocatables	7
Current Capacity	701
9/2017 Enrollment	853

Projections/Capacity Utilization

2018 Projection	883
Projected Utilization	126%
2023 Projection	844
Projected Utilization	120%
Post-Project Cap.	857
Projected Utilization	98%

Project Purpose

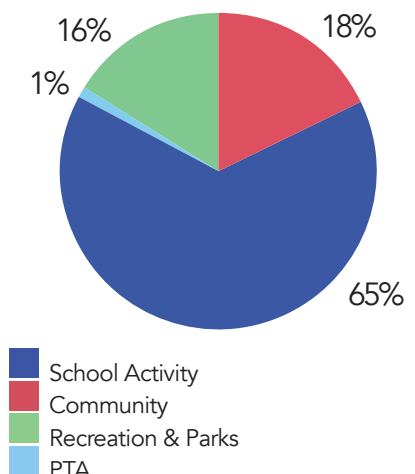
The Ellicott Mills Middle School project will add 156 seats of new capacity to the existing school. Ellicott Mills Middle School was originally built in 1939. The replacement school, which opened in 2001, was the third iteration of the current middle school prototype. Since 2015, the projections support the approved middle school capacity adjustments and the effort invested in redistricting. All middle schools in the northeast were relieved of overcrowding by the opening of Thomas Viaduct Middle School, except Ellicott Mills Middle School. Redistricting scenarios using western capacity failed to resolve crowding and created unacceptable travel distances and unusually elongated attending areas. With these findings, planned expansion of Ellicott Mills Middle School was contemplated as early as 2015. This project is a next logical step after study of middle school capacity and analysis of redistricting scenarios.

The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Ellicott Mills Middle School

Over 3,000 reservations brought community members and students into Ellicott Mills Middle School after school hours and on weekends for a variety of community and student programs, meetings, activities, and events. An attendance of 146,000 was estimated for these activities. Athletic events and school activities accounted for the largest portion of the facility use. Other uses, which include PTA events and performing arts, make up the remaining reservations.

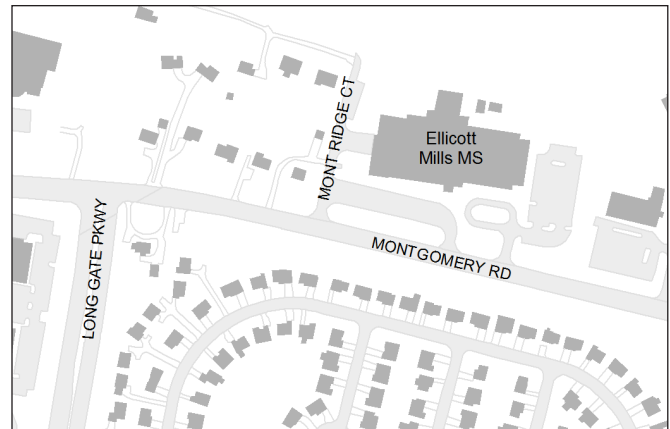
Community Use in FY18



Project Details

This project will include an addition and limited renovation to ensure seamless operation of the expanded facility. The majority of existing walls will remain; therefore, most existing classrooms will remain as classrooms. The addition will be designed to retain the use of natural daylight. The cafetorium will be enlarged to meet educational program requirements.

School Location Map



FY 2022 will be the first year of funding for Ellicott Mills Middle School. During FY 2022, the first year of planning will be implemented. Based upon the current plan, the Board will request construction funding for this program in FY 2023 to complete work and have the school ready by September 2023.

Details of the budget request for this project can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Ellicott Mills Middle School Addition project is scheduled for completion in September of 2023.

Oakland Mills Middle School Renovation: Project 1036

9540 Kilimanjaro Road, Columbia, MD 21045
<http://omms.hcpss.org/>

Megan Chrobak, Principal
 410.313.6937



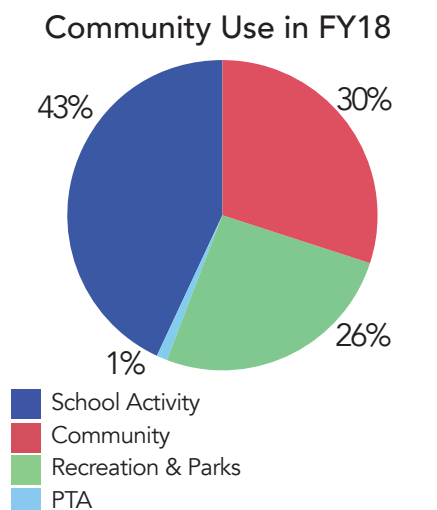
Building Data	
Year Built	1972
Age	46
Site Area (acres)	20
Last Renovation/Addition	1998
Current Relocatables	0
Current Capacity	506
9/2017 Enrollment	472
Projections/Capacity Utilization	
2018 Projection	507
Projected Utilization	100%
2026 Projection	524
Projected Utilization	104%

Project Purpose

The Oakland Mills Middle School project will renovate the existing facility. Oakland Mills Middle School opened in 1972 and was renovated in 1998. In August 2008, HCPSS engaged Gilbert Architects Inc. to conduct a facility assessment of middle schools. This project evaluated and scored each school according to the Council of Educational Facilities Planners, International (CEFPI) appraisal guidelines. The assessment included reviewing each school's plan layouts and measurements of spaces to compare to the educational specifications developed by HCPSS for middle schools. The report concluded that Oakland Mills Middle School had 8.8 percent deficiency of educational program area of the 19 middle schools operating at that time. In the FY 2016 Capital Budget the cost for the limited renovation was estimated at \$16.3 million. In the FY 2019 Capital Budget the complete renovation cost estimate is \$36 million. The complete scope of this project is defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Community Use at Oakland Mills Middle School

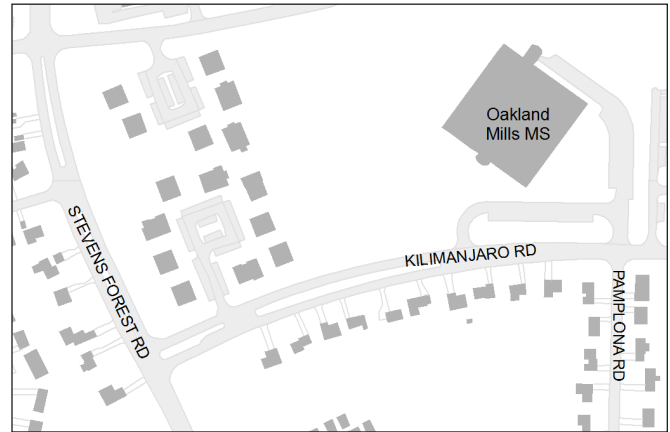
Community members and students spent over 6,500 hours at Oakland Mills Middle School after school hours and on weekends for a variety of community and student programs, meetings, activities, and events. An attendance of 78,000 was estimated for these activities. After school activities accounted for much of the facility use. Athletic activities and child care are included in the remaining reservations.



Project Details

The project calls for a renovation of the existing building in accordance with recommendations from the feasibility study. Renovation will include new electrical, mechanical, plumbing, technology, roofing, and life safety systems as applicable per the scope of work. Some Interior spaces will be reconfigured, new finishes provided, accessibility improved, and new spaces added as required, bringing the facility into compliance with the HCPSS Guidance Manual for Renovations and Modernizations of Existing Schools.

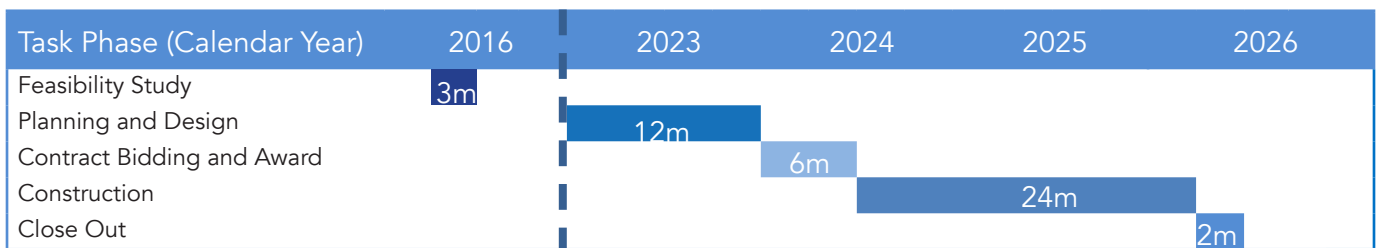
School Location Map



This project received planning funds through the systemic line in FY 2015. Construction funds will be requested in FY 2025 through FY 2027. This funding schedule will allow construction to progress on schedule and work to be completed by September 2026.

Details of the budget request for this project can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Oakland Mills Middle School Renovation project is scheduled for completion in September of 2026.

MS/HS Career Development Center: Project 1051

10920 Clarksville Pike (Route 108), Ellicott City, MD 21042
<http://arl.hcpss.org/>

Karl Schindler, Principal
 410.313.6998



Project Purpose

The MS/HS Career Development Center project will replace the aging Applications and Research Lab (ARL) school with a larger, more modern facility to facilitate the expansion of educational spaces to meet the growing curriculum. The current ARL campus includes multiple buildings constructed in various phases. The complete scope of this project would be defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

Building Data

Year Built	1968
Age	50
Site Area (shared acres)	45.48
Last Renovation/Addition	1998
Current Relocatables	0

Applications and Research Lab - Current Programs

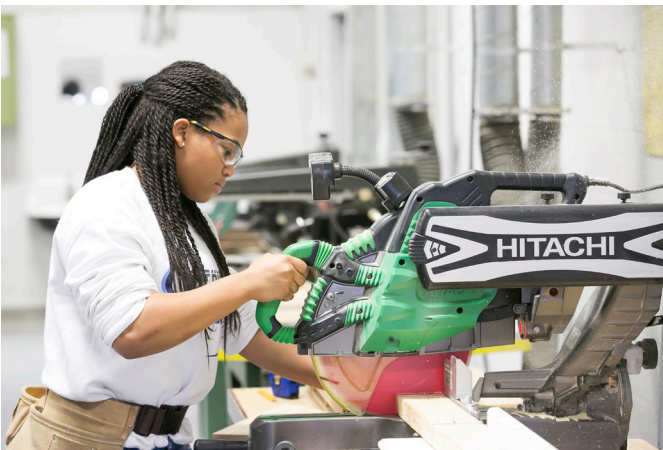
- Academy of Finance
- Academy of Health Professions
- Aerospace Engineering: Project Lead the Way Academy
- Agricultural Science GT
- Architectural Design Academy
- Automotive Technology Academy
- Biotechnology Academy
- Construction Technology
- CyberSecurity Networking Academy
- Early College Program-CyberSecurity
- Heating, Ventilation, and Air Conditioning
- Homeland Security and Emergency Management
- Hotel and Restaurant Management Academy
- Systems and Project Engineering Academy
- Visual Communications Academy



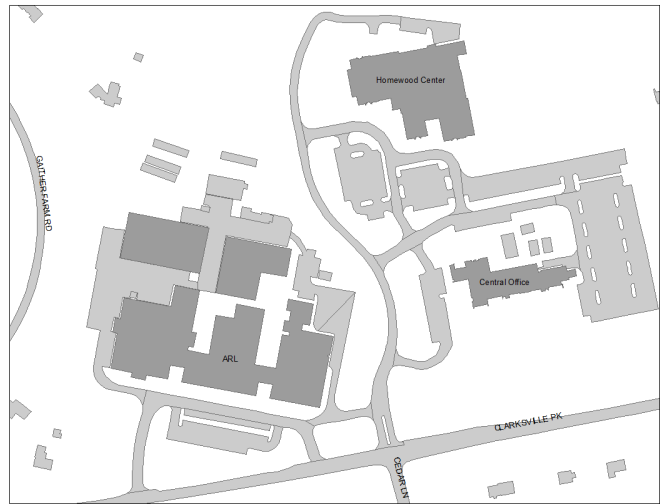
Project Details

The current Applications and Research Laboratory (ARL) is the Career and Technology High School. The program offers students an opportunity to meet and work with professionals from career fields while building an academic foundation and skill base to be college and career ready. Business partnerships and advisory boards are pivotal in the success of these programs. Students from all 12 high schools and Homewood are able to enroll in programs at the ARL. Students use industry standard software and technology through project-based instruction. Students have the opportunity to earn industry certifications and college credits while attending the ARL, preparing them for success in college and careers.

A feasibility study is planned to determine the curricular and facility needs of the replacement building. LEED certification will be studied.



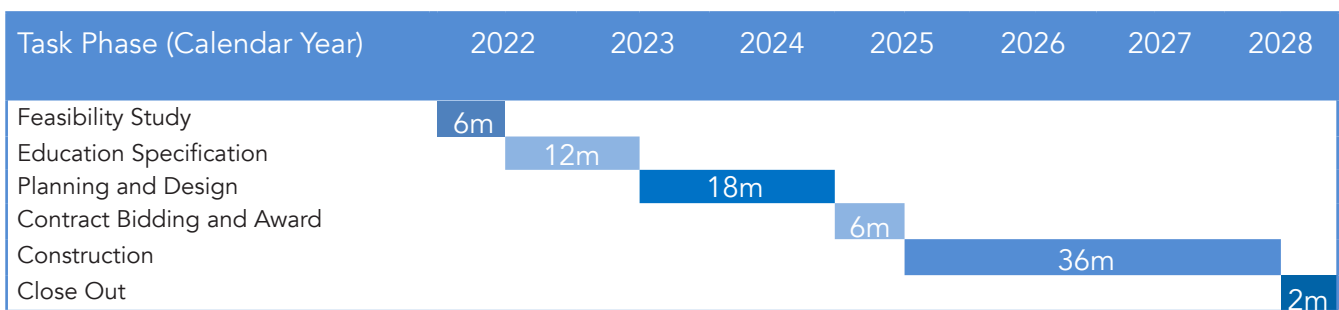
School Location Map



The first year of funding for the MS/HS Career Development Center project will be in FY 2024. The requested sum of \$8 million will allow planning and design to begin. During FY 2025, construction will be started and based upon the current plan the school will open in September 2028.

Details of the budget request for this project can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The MS/HS Career Development Center project is scheduled for completion in September of 2028.

Long-Range Plan Adjustments: New Schools (Grades K–12)

Sites to be determined.



Responding to the 2018 Feasibility Study

Planning and zoning changes require adjustments to the CIP. While the HCPSS is peripheral to land development discussions, land planning decisions impact school system capital improvement plans. Staff continues to work closely with the Departments of Planning and Zoning and Public Works to ensure that schools are central to new development. The annual feasibility study analyzes these trends and proposes adjustments to the CIP.

The projections indicate that the FY 2020–2029 long-range plan requires three new elementary schools. ES #43, ES #44 and ES #45 were introduced in previous capital budget requests.

Elementary School Needs

Elementary enrollment is projected to increase by 2,300 students by 2024 and the capacity utilization of all elementary schools combined will begin to exceed 110 percent by 2026. This suggests more elementary capacity is needed in the long-range capital improvement plan. The three areas which will experience the greatest growth over the next five to ten years will be the Route 1 Corridor, Columbia Town Center, and Turf Valley.

ES #43 – Southeastern ES – 1039

The continued growth along the Route 1 Corridor continues to support the need for additional seats between the Northeastern and Southeastern regions. The needs of the southeast region are evident in the projections of Bollman Bridge Elementary School, Gorman Crossing Elementary School, Forest Ridge Elementary School and Fulton Elementary School. The location of ES #43 is on Mission Road.



Artist rendering of the redevelopment of the Columbia Town Center. The Columbia Town Center report anticipated future needs as a result of this project.

ES #44 – Turf Valley ES – 1040

Projections continue to support the need for elementary redistricting to relieve overcrowding at Manor Woods Elementary School associated with Turf Valley growth. The addition at Waverly Elementary School will absorb some growth. Considering the limited potential for expanding schools outside of the sewer service area, a Turf Valley school is planned. The Howard County Executive’s Office is currently assisting HCPSS in securing land for the land bank.

ES #45 – Columbia West ES – 1041

Running Brook Elementary School is expected to exceed 110 percent utilization by 2021. A redistricting strategy alone, which uses nearby schools like Clarksville Elementary School, will not provide an adequate solution to accommodate the projected growth. Faulkner Ridge Center was closed on July 1, 2011. This site is a likely location for redevelopment as a future school.

Details of the budget requests for these projects can be found on the Capital Budget Request pages in Section 1 (Executive Summary) and the Project Cost Details pages in Section 3 (Project Detail).

Systemic Renovations: Project 1044



School Facilities is charged with maintaining the facilities of the Howard County Public School System (HCPSS) in as near original condition and effectiveness as possible. Actual costs incurred in the Systemic Renovations Project over the past five years is below.

Systemic Renovations Actual Expenses

Fiscal Year	Actual Expense
FY 2014	\$ 15,593,468
FY 2015	\$ 11,565,498
FY 2016	\$ 10,920,834
FY 2017	\$ 7,872,598
FY 2018	\$ 5,543,132

Project Purpose

The Systemic Renovations project includes projects that are needed to bring older facilities up to current standards in lighting, electrical, HVAC systems, reconfiguring space, handicap accessible improvements, and provide for upgrades to other building systems. For larger systemic renovation projects (see schools listed in project details section), the complete scope of projects are defined by the BOE approved construction documents (CD) brochure (see Policy 6020 in the Supporting Data Section for a complete description of the process) and any change orders approved subsequent to submittal of the CD brochure.

FY 2020 Request Analysis

Project Funding (July 1, 2018 - June 30, 2019)	\$	25,455,000
Project Cost-to-Date (through June 30, 2018)		-
FY 2019 Projected Costs		(25,455,000)
Available Project Funding (July 1, 2019)	\$	-
Requested Budget FY 2020	\$	37,060,000



Project Details

Systemic renovation projects include improvements and installation of systems at various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, and window replacement. The Facilities Department publishes an annual Comprehensive Maintenance Plan which reflects the objectives and methods utilized to provide a safe and secure learning environment for Howard County's school community as required by the Public School Construction Program's Administrative Procedures Guide. This document has been consulted in the development of this budget for potential systemic projects.



The FY 2020 Capital Budget request represents renovation work or planning for future construction at the following school system facilities:

- Modification of FY 2019 HVAC Project Scopes**
- Long Reach HS - Building Envelope
- Applications Research Lab Maintenance
- Room Reconfigurations and Modernizations
- Forest Ridge ES Office Reconfiguration
- Guilford ES Exterior Windows/Doors
- Ascend One Relocation/Renovations
- West Friendship ES MBR/Well
- Fulton ES HVAC Replacement
- Cradlerock ES/Lake Elkhorn MS Boiler Replacemnt.
- Dump Trucks for Grounds Services (2)

Kitchen Modernizations

Kitchen modernization projects will be implemented in schools system-wide, as ongoing critical infrastructure assessments are conducted and needs are identified. Existing infrastructure in many kitchens is obsolete and unreliable. The cost to mitigate these risks exceeds the asset life cycle replacement cost of the infrastructure.

Special Education/Regional Program Needs

The placement of new or the relocation of existing Special Education and regional programs is based on student needs and school capacity. Each program requires specific space configuration and education specifications.

Indoor Environmental Quality Project Repairs

Staff have implemented measures to reduce negative environmental impacts on schools over the last two years with this important funding source. Projects include maintenance of building envelopes, resolution of foundation issues, fixing settlement cracks, managing humidity related conditions and remediating flood damages.

School Security Measures

Additional physical security enhancement projects will be implemented in schools as ongoing critical infrastructure security assessments are conducted and needs are identified.

Emergency Reserve

The emergency reserve funding assists with projects that are not eligible for capital project consideration, those that have exceeded their operational life, premature failures and unexpected weather related damages.

Roofing Projects: Project 1046



School Facilities oversees the Roofing Projects and provides maintenance and repairs for all HCPSS facilities. Actual costs incurred in Roofing Projects over the past five years is below.

Roofing Projects Actual Expenses	
Fiscal Year	Actual Expense
FY 2014	\$ 5,468,035
FY 2015	\$ 3,400,190
FY 2016	\$ 2,220,940
FY 2017	\$ 4,830,760
FY 2018	\$ 1,800,046

Project Purpose

Roofing Projects will address aging roofs on various Howard County Public School System schools. A well-planned roofing program is critical to all other systems in a capital facility. When roofing systems wear, the damage can impact other systems and multiply costs. Roof planning is more than shingles and asphalt. Modern roofing systems are complex investments built to exact specifications and code requirements. The HCPSS inspects each facilities' roof twice a year and provides the reports to the State of Maryland. Planning and project execution must balance system warranties, state funding eligibility, and the risk of maintenance deferral.



FY 2020 Request Analysis

Project Funding (July 1, 2018 - June 30, 2019)	\$	12,500,000
Project Cost-to-Date (through June 30, 2018)		-
FY 2019 Projected Costs		(12,500,000)
Available Project Funding (July 1, 2019)	\$	-
Requested Budget FY 2020	\$	5,000,000



Project Details

The roof system is the largest area of the building that endures the most severe weather conditions. The roof protects the structural integrity of the building, equipment and its systems. Because of building age and environmental conditions, scheduled roof replacements must be completed to protect the investments that have been made in many facilities.

Roofing Projects include the design and construction of repairs to existing roof systems, the removal of old roof systems, and installation of new roof systems to include insulation membrane and flashings, sheet metal, drainage systems, and other associated components.

HCPSS is requesting funding for roof replacement projects in FY 2020. In continued collaboration with the Office of School Construction, roofing Projects will be considered in conjunction with systemic renovations, when feasible.

The Facilities Department is in the process of reviewing significant additional costs and impacts related to the roof replacement projects, such as high ceiling cleaning of debris and fireproofing, budgeting for the 2015 IBC/IECC code for R-30 insulation, exterior sealants may be considered to be included, etc. Facilities will conservatively budget for these items but will have to revisit the schools to determine the final scope for budgeting purposes. These newer items will require additional thought regarding roof budgeting and, more importantly, their impact on the project and schedule, which includes phasing.



Playground Equipment: Project 0990



Project Purpose

The Playground Equipment project will replace aging playgrounds at a variety of Howard County Public School System schools. This fund maintains a cycle of playground replacements. While playgrounds seem to be a standard installment at any elementary school, playgrounds can vary widely in design and are not specifically required by state or local codes or policies. Recess and unstructured play is a standard of Policy 9090 Health and Wellness. Research supports a link between learning and unstructured play. Elementary school students are stimulated by interesting and engaging playgrounds. The playground planning process considers the needs of a wide-range of ages and skills to develop strength, social skills, coordination, balance, and motor planning.

School Facilities oversees the Playground Equipment Project, managing safety requirements and a long-term replacement plan for all HCPSS playgrounds. Actual costs incurred in the Playground Equipment Project over the past five years is below.

FY 2020 Request Analysis

Project Funding (July 1, 2018 - June 30, 2019)	\$	2,930,000
Project Cost-to-Date (through June 30, 2018)		(2,481,688)
FY 2019 Projected Costs		(448,312)
Available Project Funding (July 1, 2019)	\$	-
Requested Budget FY 2020	\$	250,000

Playgrounds Actual Expenses

Fiscal Year	Actual Expense
FY 2014	\$ 8,506
FY 2015	\$ 503,412
FY 2016	\$ 85,058
FY 2017	\$ -
FY 2018	\$ 160,118



Long-Term Plan	
Playground Site	Fiscal Year
Worthington Elementary School	FY 2019
Northfield Elementary School	FY 2020
Bryant Woods Elementary School	FY 2020
Guilford Elementary School	FY 2020
Clarksville Elementary School	FY 2021
Triadelphia Ridge Elementary School	FY 2021
Bellows Spring Elementary School	FY 2022
Gorman Crossing Elementary School	FY 2023
Rockburn Elementary School	FY 2023
Thunder Hill Elementary School	FY 2023
Centennial Lane Elementary School	FY 2024
Lisbon Elementary School	FY 2024
St John's Lane Elementary School	FY 2024
Atholton Elementary School	FY 2025
Cedar Lane School at Lime Kiln	FY 2025
Dayton Oaks Elementary School	FY 2025
West Friendship Elementary School	FY 2025
Bollman Bridge Elementary School	FY 2026
Bushy Park Elementary School	FY 2026
Cradlerock Elementary School	FY 2026
Fulton Elementary School	FY 2026
Phelps Luck Elementary School	FY 2026
Ilchester Elementary School	FY 2027
Veterans Elementary School	FY 2027
Clemens Crossing Elementary School	FY 2028
Waterloo Elementary School	FY 2028
Ducketts Lane Elementary School	FY 2030
Stevens Forest Elementary School	FY 2030

Project Details

Playground replacement is planned every 15 years. In the interim, they are maintained and repaired using operating funds. This schedule delivers new designs and safety improvements in a reasonable period without requiring a much larger share of the capital budget. \$250,000 is adequate to replace both the kindergarten playground and grade 1-5 playground at an elementary school. In future years, more than two playground replacements are needed per year. Decisions about installing specific equipment are school based and require individual contracts. Better pricing may be possible through package bidding. Playground equipment at newly built schools is included in the funding request for the individual capital improvement project.



Projected Playground Replacement Cost per FY



The chart seen to the left shows the estimated funding requirements based upon the long-term plan listed above. Advancing or delaying some projects may help to smooth the funding profile but the graph shows that present funding levels will not be sufficient with future requirements. Risk management and purchasing staff are exploring different bidding methods with standard design options, which may save on design costs.

Relocatable Classrooms: Project 1045



Project Purpose

The Relocatable Classrooms project provides funds for the relocation and repairs of existing relocatable classrooms or purchase of new portable classrooms to be placed at schools in need of additional capacity. Relocation includes moving the structures as well as the installation of support services that make the portable structures functional classrooms. Additional classroom spaces are needed to help relieve overcapacity schools until permanent classroom spaces are available.

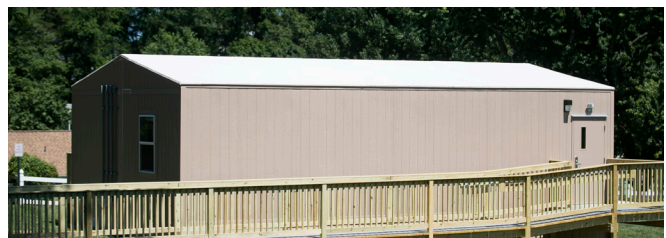
FY 2020 Request Analysis

Project Funding (July 1, 2018 - June 30, 2019)	\$	1,800,000
Project Cost-to-Date (through June 30, 2018)		-
FY 2019 Projected Costs		(1,800,000)
Available Project Funding (July 1, 2019)	\$	-
Requested Budget FY 2020	\$	3,200,000

Relocatable Classrooms Actual Expenses

Fiscal Year	Actual Expense
FY 2014	\$ 1,117,572
FY 2015	\$ 1,613,098
FY 2016	\$ 1,322,547
FY 2017	\$ 661,112
FY 2018	\$ 1,888,241

The School Planning Office evaluates relocatable classroom needs annually in a report to the Board of Education. After a decision is made, School Construction oversees the placing and connecting of all HCPSS relocatables. Actual costs incurred in the Relocatable Classrooms project over the past five years is shown above.



Project Details

In some cases modular units are integrated into a building's core facility. These units are in use at St. John's Lane Elementary School and Clarksville Middle School. These units are included in building capacity because they are considered permanent additions. In recent renovations at Bollman Bridge Elementary School, Deep Run Elementary School and Patuxent Valley Middle School, modular units were replaced.

The school system conducts regular reviews of the physical condition and usage of all relocatable/modular units. When units are inspected, the cost of repairs is weighed against the option of

retiring the units. Cycling out, and even reducing the inventory, can create operating economies. However, any dramatic reduction of inventory would require a considerable investment in brick and mortar construction.

In September 2018, there were 229 relocatable/modular classrooms in use (four are used for administrative purposes at the Central Office, all others are at school sites). The school system continues to conduct regular reviews of all relocatables which will include condition and usage. The potential to either remove relocatables out-of-service, transport them to other locations where needed, or place them in excess to dispose of in an appropriate manner will be decided annually.



Site Acquisition and Construction Reserve: Project 1047



Project Purpose

The Site Acquisition and Construction Reserve project is needed as a contingency reserve providing funds for use on an as-needed basis. Site funds are needed for future enrollment growth. This account is also a contingency fund for school construction at various school sites. The county government is currently negotiating the purchase of two future school sites that will be purchased directly by the county.

The School Construction Office oversees the Site Acquisition and Construction Reserve Project. Actual costs incurred in the Site Acquisition and Construction Reserve Project over the past five years is below.

Site Acquisition/Construction Reserve Actual Expenses

Fiscal Year	Actual Expense
FY 2014	\$ 4,258,073
FY 2015	\$ 22,850
FY 2016	\$ 3,704
FY 2017	\$ 607,123
FY 2018	\$ 1,103,937



Project Details

This fund is for site acquisition. The selection and acquisition of appropriate school sites is integral to the development of a capital program. Each proposed school site is carefully evaluated prior to acquisition according to Board-approved selection criteria identified in Policy 6000 Site Selection and Acquisition.

Delays in acquisition of suitable school sites may affect the timing of construction of needed schools. This can result in extended periods of overcrowding situations. In an effort to reduce such delays, the HCPSS continues to maintain a "land bank" that will be called upon to pursue the purchase of potential sites or portions of land to augment sites.

Larger sites identified in the subdivision review process may be reserved to be budgeted as line items in future capital budgets. The state of Maryland regulates but does not pay the costs for site acquisitions; therefore, funds for the purchase of school sites are provided locally by the Howard County Government.

This fund also serves as a construction reserve. Capital planning has been fairly accurate and overruns have been minimal so the actual use of the majority of this fund has been to acquire land. In the past, initial pre-planning expenses have been charged to this account, but the FY 2016 Capital Budget introduced pre-planning as a separate project request.



Technology: Project 1048



The Information Technology Department oversees the Technology project. The Howard County Board of Education, at its July 12, 2018 meeting, approved a fundamental shift in the way that technology is purchased and maintained across the district. The Strategic Technology Plan introduced the standard classroom infrastructure package for teachers and students that maximizes the use of technology in supporting instruction and digital literacy as well as optimizing and strengthening the district's enterprise infrastructure and improving our enterprise application function and service. Actual costs incurred in the Technology Project over the past five years is below.

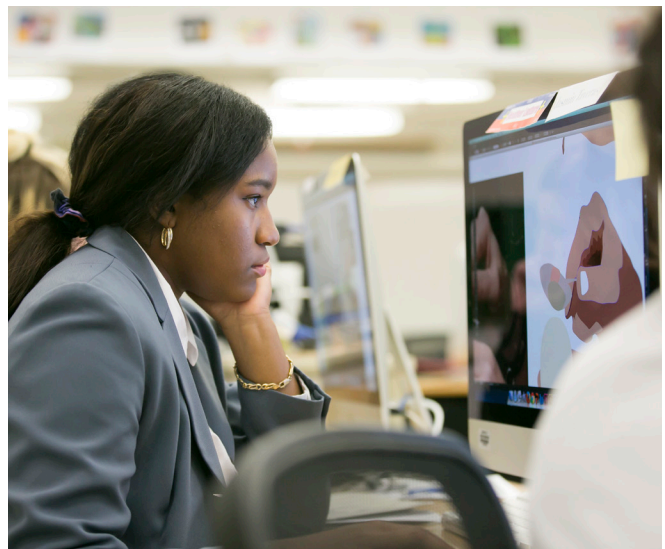
Technology Actual Expenses	
Fiscal Year	Actual Expense
FY 2014	\$ 3,606,457
FY 2015	\$ 5,226,710
FY 2016	\$ 5,559,784
FY 2017	\$ 458,965
FY 2018	\$ 6,109,668

Project Purpose

Students and staff need access to functional computers for instruction. Limited numbers of functional devices and extended login times on aging devices discourages the use of technology during class time. This situation also causes assessment windows to increase, and encroaches into time designated for teaching and learning.

FY 2020 Request Analysis

Project Funding (July 1, 2018 - June 30, 2019)	\$	2,750,000
Project Cost-to-Date (through June 30, 2018)		-
FY 2019 Projected Costs		(2,750,000)
Available Project Funding (July 1, 2019)	\$	-
Requested Budget FY 2020	\$	5,500,000



Project Details

This standard classroom infrastructure package is essential for providing equitable instructional opportunities that assists teachers as they provide students opportunities to master technology literacy standards and gain college and career ready skills and knowledge. The package includes the following:

- Student Device - Google Chromebook
- Staff Device- Windows platform
- AV Device- Short-throw wall mounted projector with TV tuner
- Document Camera



With standardized technology readily available, teachers will be able to facilitate engaging lessons using the same devices across all content areas.

Rollout of the Standard Infrastructure Package

Given the current state of technology in the Howard County Public School System (HCPSS), the implementation of this plan requires an incremental approach. The priorities for year two (FY 2020) include increasing equity and student access by continuing to purchase low cost student devices and AV devices.

FY 2020		
AV Devices	Student	Staff
14 Elementary Schools	9 Middle Schools, 20 Elementary Schools, 2 Education Centers	Under Life Cycle Management; No Action Required

Enterprise Infrastructure:

Enterprise Infrastructure refers to the entire collection of computers, audio visual equipment, networks, email, supporting software, Wi-Fi, data centers, switches and other related hardware equipment in schools and offices. These items, along with supporting services such as installation, monitoring, maintenance, and repairs provide the backbone for a high performing learning community. Infrastructure hardware is a significant portion of any technology budget and must be refreshed on a cyclical basis.

Enterprise Applications:

Enterprise Applications provide the system-wide information for the operation and benefit of our program directors, administrators, teachers, students, and parents. Enterprise Applications governs the operations of each of the major data systems: Student Information System (Synergy), Data Warehouse (Hoonuit), Learning Management System (Canvas), and our cloud-based Financial Management, Budgeting, and Human Capital Management System (Workday).

HCPSS Information Technology will:

- Continue the implementation of the new data warehouse.
- Implement full data integration between the student information system, data warehouse, and the learning management system.
- Enhance feature development in enterprise applications systems.
- Improve and optimize the Workday business processes in Human Resources, security, payroll, purchasing, and retirement benefits.

School Parking Lot Expansions: Project 1012



School Facilities oversees the School Parking Lot Expansions Project. Actual costs incurred in the School Parking Lot Expansions Project over the past five years is shown below.

Parking Lot Expansion Actual Expenses	
Fiscal Year	Actual Expense
FY 2014	\$ -
FY 2015	\$ -
FY 2016	\$ -
FY 2017	\$ -
FY 2018	\$ 92,000

Project Purpose

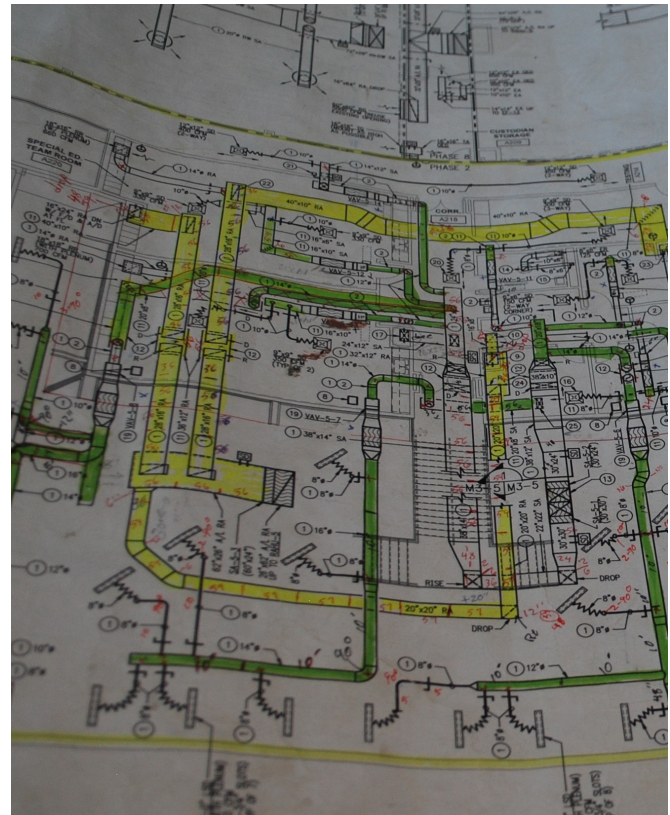
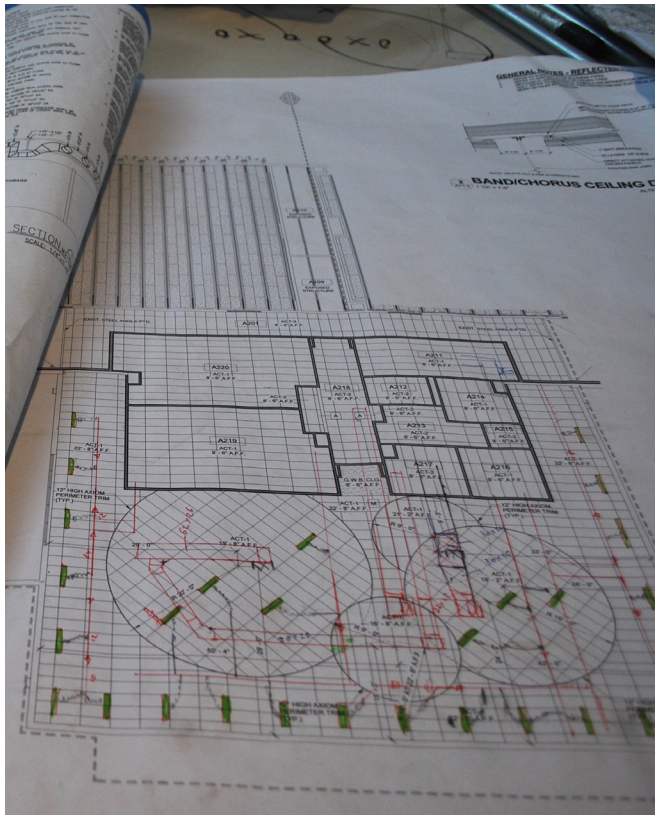
School Parking Lot Expansion projects provide for the construction of additional parking spaces and modification of parking lots to improve traffic flow patterns at existing school sites. These projects are necessary due to the insufficient supply of spaces to meet existing needs. Funds are used for parking improvements on sites that are not scheduled for other construction projects.

FY 2020 Request Analysis

Project Funding (July 1, 2018 - June 30, 2019)	\$	4,200,370
Project Cost-to-Date (through June 30, 2018)		(3,672,764)
FY 2019 Projected Costs		(350,000)
Available Project Funding (July 1, 2019)	\$	177,606
Requested Budget FY 2020	\$	-



Planning and Design: Project 1038



Project Purpose

The Planning and Design project has been established to provide funding for scope studies prior to the funding of individual projects. During the concept development stage, each project is summarized, supporting documentation is gathered, and necessary approvals are obtained before construction begins. A scope study provides the analysis to determine the scope and breadth of a project under consideration.

The value of these studies is having the flexibility to ask technical questions about projects before the formal design process. With these studies, projects can be "right sized." Pricing for these studies is favorable because design consultants want to obtain the full design project. These studies ensure the selection of the most effective scope for each project. This process will reduce the costs associated with significant changes in scope, which often occur in a compressed planning schedule. In the construction phase, the reduced number of change orders will lessen the impact on the construction schedule and decrease incremental costs. Future year studies may include out-year

construction projects and/or the considerations for the potential mandate of All-Day Pre-K.

The Office of School Construction oversees the planning and design for capital projects. Staff serve as the fiduciary agent for the administration of the Howard County Public School System/Board of Education construction contracts. The office recommends the selection of design consultants for capital projects to the Board of Education and supervises these consultants.

Barrier-Free Projects: Project 0989



An accessibility ramp to access the upper level play area at Bryant Woods Elementary School.

School Facilities oversees the Barrier-Free Projects. Actual costs incurred in the Barrier-Free Projects over the past five years is shown below.

Barrier Free Actual Expenses	
Fiscal Year	Actual Expense
FY 2014	\$ 119,445
FY 2015	\$ 23,580
FY 2016	\$ 54,747
FY 2017	\$ 234,811
FY 2018	\$ 316,622

Project Purpose

Barrier-Free Projects will include installation of ramps; alteration of restrooms, fixtures, and drinking fountains; and various modifications to make all remaining spaces (school buildings and school sites) accessible to the public, students, teachers, and staff. Federal, state, and local regulations require that school facilities be made accessible to the physically handicapped by removing barriers to access. Examples of projects include stadium bleacher ramps, play field access ramps, automatic door opening devices, reconfiguration of bathroom fixtures and partitions to allow wheelchair access, and other school-specific projects that remove barriers as described in project details.



Lift room for access to the stage.

FY 2020 Request Analysis

Project Funding (July 1, 2018 - June 30, 2019)	\$ 5,603,000
Project Cost-to-Date (through June 30, 2018)	(5,373,587)
FY 2019 Projected Costs	(229,413)
Available Project Funding (July 1, 2019)	\$ -
Requested Budget FY 2020	\$ 200,000

Project Details

The Americans with Disabilities Act (ADA) of 1990 is a comprehensive civil rights law that makes it unlawful for public and private employers to discriminate against individuals with disabilities. This law, as well as COMAR, and best risk management practices require that HCPSS be ready to adjust our physical plant for access. Funds support student needs and compliance with existing and new regulations as they relate to the ADA to ensure all students and staff have equal opportunities.

The barrier-free fund ensures our facilities provide full access to all students. When buildings are designed with accessibility in mind, issues are addressed in the schematic phase of a project. This practice generally produces buildings that are more accessible at the best cost.

With changing student enrollments, unique access issues may arise after the building is completed. This fund is used to make sensible, low-cost adjustments to improve overall access. This project funding is ongoing.



Elevator for transportation to the second-story level.

Talbott Springs ES (Grades K-5)

REPLACEMENT

Project: 1043

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 7,050	\$ 9,500	\$14,218	\$ 9,856	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 40,624
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	1,000	-	-	-	-	-	-	-	-	-	-	1,000
Total Funds	\$ 8,050	\$ 9,500	\$14,218	\$ 9,856	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,624

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000
Construction	7,050	9,500	14,218	8,856	-	-	-	-	-	-	-	39,624
Equip./Furnishings	-	-	-	1,000	-	-	-	-	-	-	-	1,000
Total Expenditures	\$ 8,050	\$ 9,500	\$14,218	\$ 9,856	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,624

Project Commencement FY 2019

Project: 1043

New HS #13 (Grades 9-12)

NEW SCHOOL

Project: 1035

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan					
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 6,732	\$15,600	\$29,260	\$29,280	\$29,260	\$19,505	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,637
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 6,732	\$15,600	\$29,260	\$29,280	\$29,260	\$19,505	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,637

Use of Funds		Five-Year Capital Program					Master Plan					
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ 6,732	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,732
Construction	-	15,600	29,260	29,280	29,260	14,505	-	-	-	-	-	117,905
Equip./Furnishings	-	-	-	-	-	5,000	-	-	-	-	-	5,000
Total Expenditures	\$ 6,732	\$15,600	\$29,260	\$29,280	\$29,260	\$19,505	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 129,637

Project Commencement FY 2018

Project: 1035

Hammond HS (Grades 9–12)

RENOVATION/ADDITION

Project: 1024

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 4,000	\$12,500	\$23,955	\$24,075	\$24,156	\$10,342	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99,028
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 4,000	\$12,500	\$23,955	\$24,075	\$24,156	\$10,342	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99,028

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ 7,342	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,342
Construction	-	12,500	23,955	24,075	24,156	-	-	-	-	-	-	84,686
Equip./Furnishings	-	-	-	-	-	3,000	-	-	-	-	-	3,000
Total Expenditures	\$ 4,000	\$12,500	\$23,955	\$24,075	\$24,156	\$10,342	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 99,028

Project Commencement FY 2019

Project: 1024

New ES #43 (Grades K-5)

NEW SCHOOL

Project: 1039

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ 4,000	\$15,500	\$14,500	\$12,439	\$ 4,588	\$ -	\$ -	\$ -	\$ -	\$ 51,027
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ 4,000	\$15,500	\$14,500	\$12,439	\$ 4,588	\$ -	\$ -	\$ -	\$ -	\$ 51,027

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	-	4,000	15,500	14,500	12,439	2,388	-	-	-	-	48,827
Equip./Furnishings	-	-	-	-	-	-	2,200	-	-	-	-	2,200
Total Expenditures	\$ -	\$ -	\$ 4,000	\$15,500	\$14,500	\$12,439	\$ 4,588	\$ -	\$ -	\$ -	\$ -	\$ 51,027

Project Commencement FY 2024

Project: 1039

Dunloggin MS(Grades 6–8)

RENOVATION/ADDITION

Project: 1049

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ 2,000	\$ 8,694	\$ 11,671	\$ 11,534	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ 38,899
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ 2,000	\$ 8,694	\$ 11,671	\$ 11,534	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ 38,899

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	-	2,000	8,694	11,671	11,534	4,500	-	-	-	-	38,399
Equip./Furnishings	-	-	-	-	-	-	500	-	-	-	-	500
Total Expenditures	\$ -	\$ -	\$ 2,000	\$ 8,694	\$ 11,671	\$ 11,534	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ 38,899

Project Commencement FY 2019

Project: 1049

Ellicott Mills MS(Grades 6–8)

ADDITION

Project: 1037

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan					
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ -	\$ 1,000	\$ 6,415	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,415
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ 1,000	\$ 6,415	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,415

Use of Funds		Five-Year Capital Program					Master Plan					
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,000
Construction	-	-	-	-	5,915	500	-	-	-	-	-	6,415
Equip./Furnishings	-	-	-	-	500	500	-	-	-	-	-	1,000
Total Expenditures	\$ -	\$ -	\$ -	\$ 1,000	\$ 6,415	\$ 1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,415

Project Commencement FY 2022

Project: 1037

Oakland Mills MS (Grades 6-8)

RENOVATION

Project: 1036

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500	\$ 15,500	\$ 12,500	\$ 2,810	\$ -	\$ -	\$ 38,310
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500	\$ 15,500	\$ 12,500	\$ 2,810	\$ -	\$ -	\$ 38,310

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	-	-	-	-	7,500	15,500	12,500	1,810	-	-	37,310
Equip./Furnishings	-	-	-	-	-	-	-	-	1,000	-	-	1,000
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,500	\$ 15,500	\$ 12,500	\$ 2,810	\$ -	\$ -	\$ 38,310

Project Commencement FY 2016

Project: 1036

New ES #44 (Grades K-5)

NEW SCHOOL

Project: 1040

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ 15,550	\$ 14,500	\$ 12,439	\$ 6,524	\$ -	\$ -	\$ 53,013
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ 15,550	\$ 14,500	\$ 12,439	\$ 6,524	\$ -	\$ -	\$ 53,013

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000
Construction	-	-	-	-	-	15,550	14,500	12,439	4,324	-	-	46,813
Equip./Furnishings	-	-	-	-	-	-	-	-	2,200	-	-	2,200
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ 15,550	\$ 14,500	\$ 12,439	\$ 6,524	\$ -	\$ -	\$ 53,013

Project Commencement FY 2025

Project: 1040

MS/HS Career Development Center (Grades 6-12)

NEW SCHOOL

Project: 1051

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,232	\$25,566	\$30,850	\$31,686	\$22,566	\$ -	\$ 118,900
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,232	\$25,566	\$30,850	\$31,686	\$22,566	\$ -	\$ 118,900

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,232	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,232
Construction	-	-	-	-	-	-	25,566	30,850	31,686	17,566	-	105,668
Equip./Furnishings	-	-	-	-	-	-	-	-	-	5,000	-	5,000
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,232	\$25,566	\$30,850	\$31,686	\$22,566	\$ -	\$ 118,900

Project Commencement FY 2019

Project: 1051

New ES #45 (Grades K-5)

NEW SCHOOL

Project: 1041

(In Thousands)

Source of Funds		Five-Year Capital Program							Master Plan			
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ 11,500	\$ 12,500	\$ 28,000
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ 11,500	\$ 12,500	\$ 28,000

Use of Funds		Five-Year Capital Program							Master Plan			
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ -	\$ -	\$ 4,000
Construction	-	-	-	-	-	-	-	-	-	11,500	12,500	24,000
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,000	\$ 11,500	\$ 12,500	\$ 28,000

Project Commencement FY 2026

Project: 1041

Systemic Renovations

Project: 1044

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 17,116	\$37,060	\$22,724	\$21,481	\$18,515	\$18,430	\$10,405	\$17,000	\$18,000	\$19,000	\$20,000	\$ 219,731
Paygo	1,400	-	-	-	-	-	-	-	-	-	-	1,400
State Aid	2,789	-	-	-	-	-	-	-	-	-	-	2,789
Transfer Tax	4,150	-	-	-	-	-	-	-	-	-	-	4,150
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 25,455	\$37,060	\$22,724	\$21,481	\$18,515	\$18,430	\$10,405	\$17,000	\$18,000	\$19,000	\$20,000	\$ 228,070

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	25,455	37,060	22,724	21,481	18,515	18,430	10,405	17,000	18,000	19,000	20,000	228,070
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 25,455	\$37,060	\$22,724	\$21,481	\$18,515	\$18,430	\$10,405	\$17,000	\$18,000	\$19,000	\$20,000	\$ 228,070

Project Commencement FY 2019

Project: 1044

Roofing Projects

Project: 1046

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 6,546	\$ 5,000	\$ 1,000	\$ 5,000	\$ 1,000	\$ 1,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 44,546
Paygo	5,954	-	-	-	-	-	-	-	-	-	-	5,954
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 12,500	\$ 5,000	\$ 1,000	\$ 5,000	\$ 1,000	\$ 1,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 50,500

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	12,500	5,000	1,000	5,000	1,000	1,000	5,000	5,000	5,000	5,000	5,000	50,500
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 12,500	\$ 5,000	\$ 1,000	\$ 5,000	\$ 1,000	\$ 1,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 50,500

Project Commencement FY 2019

Project: 1046

Playground Equipment

Project: 0990

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 2,350	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,100
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	580	-	-	-	-	-	-	-	-	-	-	580
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 2,930	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,680

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	2,930	250	250	250	250	250	500	500	500	500	500	6,680
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 2,930	\$ 250	\$ 250	\$ 250	\$ 250	\$ 250	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,680

Project Commencement FY 2002

Project: 0990

Relocatable Classrooms

Project: 1045

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 1,800	\$ 3,200	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,500
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 1,800	\$ 3,200	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,500

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	1,800	3,200	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	18,500
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 1,800	\$ 3,200	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 18,500

Project Commencement FY 2019

Project: 1045

Site Acquisition and Construction Reserve

Project: 1047

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 10,000
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 10,000

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	-	-	-	-	-	2,000	2,000	2,000	2,000	2,000	10,000
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 10,000

Project Commencement FY 2019

Project: 1047

Technology

Project: 1048

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	2,750	5,500	5,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	73,750
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 2,750	\$ 5,500	\$ 5,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 73,750

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings	2,750	5,500	5,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	73,750
Total Expenditures	\$ 2,750	\$ 5,500	\$ 5,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 73,750

Project Commencement FY 2019

Project: 1048

School Parking Lot Expansions

Project: 1012

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan					
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 2,779	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 5,779
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	1,421	-	-	-	-	-	-	-	-	-	-	1,421
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 4,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 7,200

Use of Funds		Five-Year Capital Program					Master Plan					
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ 240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 540
Construction	3,960	-	-	-	-	-	540	540	540	540	540	6,660
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 4,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 7,200

Project Commencement FY 2008

Project: 1012

Planning and Design

Project: 1038

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ -	\$ 400	\$ 400	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,200
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	700	-	-	-	-	-	-	-	-	-	-	700
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 700	\$ 400	\$ 400	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,900

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ 700	\$ 400	\$ 400	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,900
Construction	-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 700	\$ 400	\$ 400	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,900

Project Commencement FY 2016

Project: 1038

Barrier-Free

Project: 0989

(In Thousands)

Source of Funds		Five-Year Capital Program						Master Plan				
Type	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Bonds	\$ 3,850	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 5,850
Paygo	303	-	-	-	-	-	-	-	-	-	-	303
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	1,450	-	-	-	-	-	-	-	-	-	-	1,450
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 5,603	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 7,603

Use of Funds		Five-Year Capital Program						Master Plan				
Description	Approved Appropriation	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	5,603	200	200	200	200	200	200	200	200	200	200	7,603
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 5,603	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 7,603

Project Commencement FY 1989

Project: 0989

Superintendent's Proposed FY 2020 Capital Budget
Capital Improvement Program FY 2021–2025
Long-Range Master Plan FY 2020–2029

Section 4

Supporting Data

September 2018

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.

		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	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL	Proj	% UHL		
Pre-Measures																													
Columbia - East																													
	Bryant Woods ES	398	398	398	398	458	115.1 C	449	112.8	445	111.8	435	109.3	444	111.6	450	113.1	448	112.6	455	114.3	464	116.6 C	471	118.3 C	478	120.1 C		
	Cradlerock ES	421	421	421	421	426	101.2	415	98.6	413	98.1	393	93.3	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	540	540	459	121.8 C	472	125.2 C	460	85.2	463	85.7	464	85.9	453	83.9	458	84.8	461	85.4	475	88.0	481	89.1	488	90.4		
	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	2864	2864	2784	103.1	2785	103.1	2755	96.2	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	2864	2864	2784	103.1	2785	103.1	2755	96.2	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																													
	Bryant Woods ES	361	361	361	361	402	111.4	408	113.0	418	115.8 C	423	117.2 C	430	119.1 C	439	121.6 C	441	122.2 C	446	123.5 C	452	125.2 C	455	126.0 C	454	125.8 C		
	Clemens Crossing 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 C		
	Longfellow 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		
	New ES #44	0	0	0	0	528	102.5	559	108.5	600	116.5 C	646	125.4 C	673	130.7 C	708	137.5 C	742	144.1 C	785	152.4 C	841	163.3 C	890	172.8 C	937	181.9 C		
	Running Brook ES	515	515	515	515	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		
	Swansfield ES	694	694	694	694	655	94.6	670	96.7	683	98.6	697	100.9	720	103.9	742	107.1	763	110.6	787	113.6	813	117.4 C	828	118.5 C	828	118.8 C		
	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	91.9	3197	94.3	3266	96.3		
Northeastern																													
	Bellows Spring ES	751	751	751	751	678	90.3	737	98.1	784	104.4	825	109.9	855	113.8	879	117.0 C	896	119.3 C	887	118.1 C	864	115.0 C	844	112.4	817	108.8		
	Deep Run 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 C	886	118.1 C		
	Ducketts Lane 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		
	Elkridge 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 C	971	127.8 C	986	129.7 C		
	Hanover Hills ES	810	810	810	810	689	85.1	732	96.5	879	108.5	979	120.9	1071	132.2	1105	136.4	1149	141.9 C	1185	146.3 C	1219	150.5 C	1219	150.5 C	1245	153.7 C		
	Ilchester ES	584	584	584	584	555	95.0	586	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 C		
	Rockburn 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 C	714	117.2 C	730	119.9 C	733	120.4 C	735	120.7 C		
	Veterans 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		
	Waterloo 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		
	Worthington 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 C	676	131.3 C	668	129.7 C		
	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																													
	Centennial Lane ES	647	647	647	647	752	116.2 C	746	115.3 C	749	115.8 C	751	116.1 C	745	115.1 C	750	115.9 C	760	117.5 C	760	117.5 C	768	118.7 C	774	119.6 C	776	119.9 C		
	Hollifield Station 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 C		
	Manor Woods 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		
	New ES #45	0	0	0	0	729	104.1	735	105.0	743	106.1	748	106.9	771	110.1	811	115.9 C	828	118.3 C	842	120.3 C	852	121.7 C	860	122.9 C	847	121.0 C		
	Northfield ES	700	700	700	700	729	104.1	735	105.0	743	106.1	748	106.9	771	110.1	811	115.9 C	828	118.3 C	842	120.3 C	852	121.7 C	860	122.9 C	847	121.0 C		
	St. Johns Lane ES	612	612	612	612	705	115.2 C	691	112.9	710	116.0 C	730	119.3 C	748	122.2 C	781	127.6 C	786	128.4 C	805	131.5 C	812	132.7 C	826	135.0 C	839	137.1 C		
	Waverly 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 C	1007	127.8 C	1010	128.2 C	1017	129.1 C	1023	129.8 C		
	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	121.8	5108	122.8	5123	103.5		
Southeastern																													
	Atholton ES	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		
	Bollman Bridge 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		
	Forest Ridge 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 C	903	126.6 C	927	130.0 C	938	131.6 C		
	Gorman Crossing 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		
	Guilford ES	465	465	465	465	387	83.2	373	80.2	363	78.1	371	79.8	365	78.5	376	80.9	412	88.6	412	88.6	424	91.2	423	91.0	422	90.8		
	Hammond ES	653	653	653	653	654	100.2	648	99.2	639	97.9	662	101.4	698	106.9	720													

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.		
Pre-Measures																												
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		
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																												
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		
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	C	919	120.9	C	948	124.7	C	
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	C	1520	120.1	C
Northeastern																												
Bonnie Branch MS	701	701	701	701	816	116.4	C	814	116.1	C	795	113.4	787	112.3	805	114.8	796	113.6	774	110.4	775	110.6	793	113.1	821	117.1	C	
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		
Ellicott Mills MS	A	701	701	701	913	130.2	C	900	128.4	C	884	126.1	C	846	120.7	C	844	120.4	C	810	94.5	811	94.6	811	94.6	805	93.9	
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	C	947	118.7	C	980	122.8	C	
Thomas Viaduct MS	701	701	701	701	820	117.0	C	904	129.0	C	880	125.5	C	883	126.0	C	863	123.1	C	915	130.5	C	964	137.5	C	1040	148.4	C
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	C	4615	120.3	C
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		
Dunloggin MS	A	565	565	565	647	114.5	650	115.0	C	668	118.2	C	675	119.5	C	670	118.6	C	658	99.4	658	99.4	668	100.9	676	102.1		
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	C	745	115.9	C		
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		
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	C			
Murray Hill MS	662	662	662	662	748	113.0	783	118.3	C	777	117.4	C	748	113.0	774	116.9	C	800	120.8	C	822	124.2	C	775	117.1	C		
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		
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		
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		
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		
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		
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		
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	C			
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		
Countywide 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		

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

MIDDLE 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, Board of Education's 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
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																										
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
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
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																										
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
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
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
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
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	106.0	4109	107.1	4144	108.0	4265	111.2	4388	114.4	4529	118.1	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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

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																										
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	93.0	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	A	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
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
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

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, Board of Education's 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.		
Post-Measures																										
Aggregate Plan																										
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
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	113.9	19642	103.2	19665	103.3	19630	103.1	19746	103.7	20008	105.1	20214	106.2

**PUBLIC SCHOOL ENROLLMENT
ACTUAL FOR 1973-2017 AND ESTIMATED FOR 2018-2030**

Year	Elementary	K-5	Middle	6-8	High	9-12	Sp. Ed. School	Sp Ed.	K-12	
	Enrollment	Change	Enrollment	Change	Enrollment	Change	Enrollment	Change	Enrollment	Change
1973	10,481	-	5,289	-	6,177	-	30	-	21,977	-
1974	10,798	317	5,652	363	6,638	461	35	5	23,123	1,146
1975	10,891	93	6,025	373	7,032	394	44	9	23,992	869
1976	11,069	178	6,117	92	7,410	378	61	17	24,657	665
1977	11,246	177	6,175	58	7,957	547	62	1	25,440	783
1978	10,968	-278	6,080	-95	8,488	531	70	8	25,606	166
1979	10,627	-341	6,163	83	8,530	42	80	10	25,400	-206
1980	10,261	-366	6,337	174	8,547	17	83	3	25,228	-172
1981	9,856	-405	6,409	72	8,468	-79	112	29	24,845	-383
1982	9,486	-370	6,245	-164	8,387	-81	106	-6	24,224	-621
1983	9,414	-72	5,988	-257	8,458	71	103	-3	23,963	-261
1984	9,808	394	5,597	-391	8,723	265	124	21	24,252	289
1985	10,439	631	5,496	-101	8,900	177	143	19	24,978	726
1986	11,135	696	5,551	55	8,737	-163	173	30	25,596	618
1987	12,155	1,020	5,727	176	8,675	-62	191	18	26,748	1,152
1988	13,225	1,070	5,776	49	8,441	-234	147	-44	27,589	841
1989	14,160	935	6,235	459	8,305	-136	136	-11	28,836	1,247
1990	15,001	841	6,603	368	8,248	-57	150	14	30,002	1,166
1991	15,805	804	7,058	455	8,527	279	70	-80	31,460	1,458
1992	16,456	651	7,382	324	8,858	331	60	-10	32,756	1,296
1993	17,155	699	7,958	576	9,107	249	58	-2	34,278	1,522
1994	17,767	612	8,510	552	9,611	504	62	4	35,950	1,672
1995	18,226	459	8,843	333	10,181	570	73	11	37,323	1,373
1996	18,795	569	9,066	223	10,713	532	82	9	38,656	1,333
1997	19,241	446	9,293	227	11,387	674	89	7	40,010	1,354
1998	19,849	608	9,669	376	12,020	633	95	6	41,633	1,623
1999	20,395	546	10,177	508	12,481	461	103	8	43,156	1,523
2000	20,821	426	10,672	495	12,927	446	105	2	44,525	1,369
2001	21,000	179	11,138	466	13,479	552	115	10	45,732	1,207
2002	21,012	12	11,446	308	14,080	601	112	-3	46,650	918
2003	20,792	-220	11,689	243	14,629	549	101	-11	47,211	561
2004	20,498	-294	11,754	65	15,235	606	95	-6	47,582	371
2005	20,412	-86	11,716	-38	15,580	345	87	-8	47,795	213
2006	20,318	-94	11,889	173	15,858	278	90	3	48,155	360
2007	20,550	232	11,740	-149	16,094	236	96	6	48,480	325
2008	20,811	261	11,748	8	16,231	137	98	2	48,888	408
2009	21,292	481	11,649	-99	16,657	426	85	-13	49,683	795
2010	21,814	522	11,472	-177	16,614	-43	91	6	49,991	308
2011	22,246	432	11,523	51	16,627	13	93	2	50,489	498
2012	22,735	489	11,483	-40	16,660	33	91	-2	50,969	480
2013	23,327	592	11,890	407	16,378	-282	86	-5	51,681	712
2014	23,698	371	12,276	386	16,438	60	99	13	52,511	830
2015	24,245	547	12,715	439	16,574	136	100	1	53,634	1,123
2016	24,582	337	12,897	182	16,768	194	101	1	54,348	714
2017	24,978	733	13,180	465	17,233	659	99	-1	55,490	1,856
2018	25,229	251	13,449	269	17,766	533	106	7	56,550	1,060
2019	25,297	68	13,864	415	18,121	355	106	0	57,388	838
2020	25,598	301	13,951	87	18,483	362	106	0	58,138	750
2021	25,977	379	13,825	-126	19,004	521	106	0	58,912	774
2022	26,395	418	13,832	7	19,319	315	106	0	59,652	740
2023	26,965	570	13,915	83	19,620	301	106	0	60,606	954
2024	27,525	560	14,051	136	19,642	22	106	0	61,324	718
2025	28,071	546	14,154	103	19,665	23	106	0	61,996	672
2026	28,580	509	14,400	246	19,630	-35	106	0	62,716	720
2027	29,154	574	14,659	259	19,746	116	106	0	63,665	949
2028	29,470	316	14,950	291	20,008	262	106	0	64,534	869
2029	29,673	203	15,248	298	20,214	206	106	0	65,241	707
2030	29,818	348	15,581	631	20,453	445	106	0	65,958	1,424

ACTUAL ENROLLMENTS

PROJECTIONS

Notes: (1) All "actual" enrollments are head count as of September 30th.
 (2) "Change" column indicates change from prior year.
 (3) Preschool enrollments are not included in these figures.
 (4) Cedar Lane School's projected enrollment is based on Cedar Lane School's September 30, 2017 enrollment

Facility Use, Acreage, and Capital Projects

HCPSS Elementary Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Conversion (C), Projects
Atholton ES	12.31	3	\$ 447,569	1961	1980(A), 2001(R), 2002(R), 2006, 2007
Bellows Spring ES	40.00	5	\$ 15,105,663	2003	2009(A), 2011(A)
Bollman Bridge ES	16.95	2	\$ 6,274,000	1988	1994(A), 2008(C), 2013(R/A)
Bryant Woods ES	9.25	4	\$ 695,406	1968	1983, 1984(A), 2004(R), 2007
Bushy Park ES	19.20	0	\$ 24,000,000	2007	(Replacement) replaced Old Bushy Park with a new school
Centennial Lane ES	11.22	6	\$ 1,101,140	1973	1987(A), 2007(R), 2008(A)
Clarksville ES	10.69	1	\$ 435,986	1964	1980(A), 1986 HVAC, 2002(R), 2006
Clemens Crossing ES	10.80	3	\$ 1,853,590	1979	1988(A), 2009(R)
Cradlerock ES	33.16	3	\$ 4,249,000	1976	1998(A), 2001(R), 2003(R), 2007, 1996 Dasher Green Head Start
Dayton Oaks ES*	22.74	0	\$ 21,804,000	2006	New school 2006
Deep Run ES	11.67	1	\$ 6,403,575	1990	1998(A), 2009(A), 2016 (R)
Ducketts Lane ES	10.03	0	\$ 34,447,000	2013	New school 2013
Elkridge ES	48.581 shared	4	\$ 7,139,588	1992	1998, 2009(A)
Forest Ridge ES**	20.85	5	\$ 6,050,000	1992	2001/2 (R)/(A), 2009(A)
Fulton ES**	99.0 shared	10	\$ 6,156,161	1997	2003(A)/(R), 2006
Gorman Crossing ES**	15.00	2	\$ 5,766,716	1998	2007, 2013(A)
Guilford ES	11.00	5	\$ 216,278	1954	1959(R), 1982, 1986(A), 1989, 2006
Hammond ES	35.00 shared	1	\$ 2,381,673	1971	(includes Hammond MS & Hammond ES) 1987, 1988/9, 1996/7 (A), 2007, 2011(R/A)
Hanover Hills ES	8.02	0	\$ 43,873,000	2018	New School 2018
Hollifield Station ES	14.50	3	\$ 6,017,889	1997	2002(R)/(A), 2009(A)
Ilchester ES**	27.22 shared	3	\$ 6,430,404	1996	2000/1, 2008(A)
Jeffers Hill ES	10.00	2	\$ 1,747,200	1975	1998/1999(R)
Laurel Woods ES	27.00	2	\$ 1,658,399	1973	1987(A), 2004(R), 2005(ROOFING PROJECT), 2008(A)
Lisbon ES	22.55	1	\$ 2,056,000	1976	1988(A), 2006
Longfellow ES	9.50	0	\$ 775,481	1970	1986(R), 1994(A), 2008(A), 2015 (R)
Manor Woods ES	43.23	5	\$ 5,900,000	1994	2004(R)
Northfield ES	10.00	1	\$ 20,330,000	1968	1986(A), 2007, 2011(R/A)
Phelps Luck ES	10.00	2	\$ 1,036,792	1972	1989, 1999(A), 2007, 2013(R/A)
Pointers Run ES	13.69	9	\$ 6,645,000	1991	2000, 2001/2, 2006, 2008(A)
Rockburn ES	8.74	1	\$ 5,849,000	1993	2004(A), 2007
Running Brook ES	9.00	3	\$ 776,406	1970	1984(A)/(REMODELING), 2004 (ROOF REPLACEMENT), 2006, 2014(A)
St. John's Lane ES	10.00	7	\$ 235,985	1954	1988(A), 1959, 1966, 1975(MODERNIZ)1988, 1995, 2000(A)/(R), 2009(A)
Stevens Forest ES	10.00	5	\$ 764,941	1972	1995(A), 2013(R/A)
Swansfield ES	10.00	5	\$ 764,941	1972	1988(A), 1998(R), 2008(A)
Talbott Springs ES	10.00	10	\$ 1,224,800	1973	1999(SPRINKLERS), 2000(A) & (R), 2008(A)
Thunder Hill ES	14.93	3	\$ 14,515,430	1970	1987, 1988(A), 1988, 1989, 2007, 2012(R/A)
Triadelphia Ridge ES	78.3 shared	0	\$ 6,219,488	1998	2005(A), 2006
Veterans ES**	23.66	5	\$ 19,000,000	2007	New school 2007
Waterloo ES	10.00	4	\$ 435,221	1964	1987(A)/(MODERNIZATION), 1998(A), 2009(R)
Waverly ES	11.49	5	\$ 6,669,587	1990	2007, 2018 (R)
West Friendship ES	17.85	0	unknown	1925	(7 rm school (1925)) 1950, 1962, 1971(MODERNIZATION), 1978(A), 2004(R), 2005(ROOF)
Worthington ES	19.69	1	\$ 2,385,850	1976	1989, 1998, 2007, 2008(R)

*Dayton Oaks shares 12.66 acres with Recreation and Parks play fields.

** At least one of the current relocatables is used for Recreation and Parks programming: Forest Ridge (1), Fulton (1), Gorman Crossing (2), Ilchester (1), Veterans (1)

Facility Use, Acreage, and Capital Projects

HCPSS Middle Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Conversion (C), Projects
Bonnie Branch MS*	27.22 shared	2	\$ 7,819,520	1999	1999(A)
Burleigh Manor MS	27.00	1	\$ 8,107,000	1992	
Clarksville MS	20.43	5	\$ 5,662,361	1979	2004, 2006(A), 2008(R), 2010(Masonry)
Dunloggin MS	20.00	5	\$ 1,963,323	1973	1999(R)
Elkridge Landing MS	48.58	0	\$ 9,000,000	1995	
Ellicott Mills MS	16.22	7	\$ 9,430,537	1939	1957, 1962, 1973, 2001 (Replacement)
Folly Quarter MS	78.3 shared	0	\$ 11,077,000	2003	
Glenwood MS	30.00	6	\$ 1,179,168	1967	1999(R), 2000(R), 1986(Air Conditioning), 2016 (HVAC)
Hammond ES/MS	35.00 shared	3	\$ 22,650,672	1971	includes Hammond MS & Hammond ES, 2011
Harper's Choice MS	19.67	5	\$ 1,974,697	1973	1999(R), 2000
Lake Elkhorn MS	33.16 shared	1	\$ 4,244,500	1976	includes Dasher Green ES & Owen Brown MS
Lime Kiln MS	99.0 shared	0	\$ 8,420,400	1999	2005(A)
Mayfield Woods MS	27.00	2	\$ 8,501,354	1991	
Mount View MS	35.75	2	\$ 8,617,000	1993	
Murray Hill MS	25.00	6	\$ 7,858,000	1997	
Oakland Mills MS	20.00	0	\$ 1,803,876	1972	1998 (R)
Patapsco MS	21.13	2	\$ 1,391,791	1969	1974, 1996, 2003(R)/(A), 2004 (R)/(A)
Patuxent Valley MS	30.00	0	\$ 8,261,000	1989	2017 (R)
Thomas Viaduct MS	20.21	0	\$ 34,755,000	2014	
Wilde Lake MS	21.00	0	\$ 1,323,314	1969	1974, 1998(R), 2017 (Replacement)

HCPSS High Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Projects
Atholton HS	36.28	0	\$ 1,423,493	1966	1972, 1977, 1978, 1988, 1987(A), 1997(R), 2003(R)/(A),
Centennial HS	43.00	9	\$ 6,337,867	1977	1998(R), 2002(R)/(A), 2011(A)
Glenelg HS	40.94	0	\$ 56,345,257	1958	1963, 1967, 1969, 1971, 1972(R), 1986(A), 1988(A)/(R), 2003, 2008(A), 2009(Auditorium), 2011(HVA
Hammond HS	33.14	4	\$ 6,321,000	1976	1996(A), 1998®, 2011(A)
Howard HS	41.00	15	\$ 698,781	1951	1960, 1964,1971, 1975, 1977, 2001(A)/(R), 2002(R), 2004, 2006, 2009(Windows)
Long Reach HS	50.00	7	\$ 20,373,000	1996	
Marriotts Ridge HS	42.40	0	\$ 34,115,895	2005	
Mt. Hebron HS	40.05	5	\$ 55,560,000	1965	1968,1972,1976, 1977-1978,1983(MODERNIZATION), 1997-99(A), 2004(R), 2005(R), 2011
Oakland Mills HS	28.60	0	\$ 3,579,000	1973	1991-92(R), 1998(R), 2004(A)
Reservoir HS	99.0 shared	5	\$ 27,224,000	2002	
River Hill HS	64.2	0	\$ 21,473,000	1994	
Wilde Lake HS	31.25	0	\$ 21,202,391	1996	(Replacement)

HCPSS Countywide Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Projects
Applications & Research Lab	45.48 shared	0	\$ 1,502,581	1968	1970, 1974, 1986, 1997/1998(R),2002(NEW ROOF), 2006
Cedar Lane Special	99.0 shared	0	\$ 18,663,069	2005	2005(A)
Homewood	45.48 shared	1	\$ 8,620,912	2002	

HCPSS Other Facilities	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Projects
Admin. Building(Harriett Tubman)	3.58	0	\$ 256,664	1948	1953, 1956
Admin. Building(Central Office)	45.48 shared	4	\$ 3,657,660	1980	
Old Bushy Park	12.00 shared	0	\$ 2,931,991	1976	1988(A), school replaced 2007
Faulkner Ridge Resource Center	9.01	0	\$ 750,174	1969	
Old Cedar Lane	11	0	\$ 3,839,731	1981	

* One of the current relocatables is used for Recreation and Parks programming at Bonnie Branch.

ELEMENTARY SCHOOLS - JUNE 2018 APFO School Capacity Chart
Capacity Utilization Rates with Board of Education's Approved FY 2019 Capital Budget Projects
Chart reflects May 2017 Projections, Board of Education's Requested FY 2019 capacities, and effects of approved redistricting for the 2018-19 school year.

	Capacity				2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30		2030-31		
	2021	2022	2023	2024	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	
Columbia - East	398	398	398	398	374	94.0	351	88.2	363	91.2	363	91.2	368	92.5	374	94.0	377	94.7	383	96.2	388	97.5	394	99.0	
Cradlerock ES	398	398	398	398	374	94.0	351	88.2	363	91.2	363	91.2	368	92.5	374	94.0	377	94.7	383	96.2	388	97.5	394	99.0	
Jeffers Hill ES	421	421	421	421	437	103.8	432	102.6	434	103.1	434	103.1	441	104.8	450	106.9	455	108.1	460	109.3	468	111.2	474	112.6	
Phelps Luck ES	597	597	597	597	654	109.5	664	111.2	676	113.2	682	114.2	691	115.7	C 714	119.6	C 720	120.6	C 727	121.8	C 735	123.1	C 740	124.0	C
Stevens Forest ES	399	399	399	399	410	102.8	424	106.3	426	105.3	416	104.3	422	105.8	434	108.8	436	109.3	438	109.8	441	110.5	442	110.8	
Talbot Springs ES	A 377	540	540	540	449	119.1	C 436	80.7	439	81.3	447	82.8	444	82.2	449	83.1	454	84.1	461	85.4	466	86.3	479	88.7	
Thunder Hill ES	509	509	509	509	513	100.8	507	99.6	499	98.0	504	99.0	508	99.8	509	100.0	515	101.2	521	102.4	531	104.3	537	105.5	
Region Totals	2701	2864	2864	2864	2837	105.0	2814	98.3	2831	98.8	2846	99.4	2874	100.3	2930	102.3	2957	103.2	2990	104.4	3029	105.8	3066	107.1	
Columbia - West	361	361	361	361	416	115.2	C 404	111.9	406	112.5	404	111.9	410	113.6	414	114.7	418	115.8	C 418	115.8	C 421	116.6	C 427	118.3	C
Bryant Woods ES	361	361	361	361	416	115.2	C 404	111.9	406	112.5	404	111.9	410	113.6	414	114.7	418	115.8	C 418	115.8	C 421	116.6	C 427	118.3	C
Clemens Crossing ES	521	521	521	521	546	104.8	568	109.0	595	114.2	605	116.1	C 651	125.0	C 671	128.8	C 685	131.5	C 695	133.4	C 696	133.6	C 693	133.0	C
Longfellow ES	512	512	512	512	385	75.2	392	76.6	390	76.2	388	75.8	396	77.3	401	78.3	406	79.3	412	80.5	418	81.6	424	82.8	
Running Brook ES	515	515	515	515	701	136.1	C 771	149.7	C 833	161.7	C 882	171.3	C 927	180.0	C 981	190.5	C 1032	200.4	C 1071	208.0	C 1109	215.3	C 1134	220.2	C
Swansfield ES	694	694	694	694	644	92.8	658	94.8	663	95.5	665	95.8	673	97.0	682	98.3	688	99.1	700	100.9	708	102.0	718	103.5	
Region Totals	2603	2603	2603	2603	2692	103.4	2793	107.3	2887	110.9	2944	113.1	3057	117.4	3149	121.0	3229	124.0	3296	126.6	3352	128.8	3396	130.5	C
Northeastern	751	751	751	751	797	106.1	845	112.5	875	116.5	C 900	119.8	C 908	120.9	C 879	117.0	C 864	115.0	C 850	113.2	840	111.9	820	109.2	
Bellows Spring ES	751	751	751	751	797	106.1	845	112.5	875	116.5	C 900	119.8	C 908	120.9	C 879	117.0	C 864	115.0	C 850	113.2	840	111.9	820	109.2	
Deep Run ES	750	750	750	750	781	104.1	803	107.1	834	111.2	855	114.0	878	117.1	C 869	115.9	C 880	117.3	C 889	118.5	C 899	119.9	C 910	121.3	C
Ducketts Lane ES	694	694	694	694	777	112.0	839	120.9	C 854	123.1	C 866	124.8	C 870	125.4	C 851	122.6	C 840	121.0	C 814	117.3	C 807	116.3	C 803	115.7	C
Elkridge ES	760	760	760	760	770	101.3	739	97.2	719	94.6	738	97.1	780	102.6	807	106.2	852	112.1	868	114.2	878	115.5	C 887	116.7	C
Hanover Hills ES	NS 810	810	810	810	1009	124.6	C 1085	134.0	C 1121	138.4	C 1152	142.2	C 1178	145.4	C 1204	148.6	C 1240	153.1	C 1278	157.8	C 1315	162.3	C 1361	168.0	C
Ilchester ES	584	584	584	584	527	90.2	546	93.5	592	101.4	622	106.5	663	113.5	696	119.2	C 708	121.2	C 736	126.0	C 726	124.3	C 709	121.4	C
Rockburn ES	609	609	609	609	628	103.1	635	104.3	650	106.7	691	113.5	715	117.4	C 711	116.7	C 719	118.1	C 727	119.4	C 737	121.0	C 740	121.5	C
Veterans ES	799	799	799	799	900	112.6	886	110.9	874	109.4	882	110.4	869	108.8	867	108.5	923	115.5	C 944	118.1	C 940	117.6	C 949	118.8	C
Waterloo ES	663	663	663	663	539	81.3	552	83.3	551	83.1	547	82.5	556	83.9	562	84.8	568	85.7	584	88.1	590	89.0	597	90.0	
Worthington ES	515	515	515	515	402	78.1	408	79.2	423	82.1	442	85.8	471	91.5	481	93.4	492	95.5	547	106.2	548	106.4	541	105.0	
Region Totals	6935	6935	6935	6935	7130	102.8	7338	105.8	7493	108.0	7695	111.0	7888	113.7	7927	114.3	8086	116.6	8237	118.8	8280	119.4	8317	119.9	C
Northern	647	647	647	647	738	114.1	741	114.5	721	111.4	718	111.0	718	111.0	713	110.2	718	111.0	726	112.2	731	113.0	741	114.5	
Centennial Lane ES	647	647	647	647	738	114.1	741	114.5	721	111.4	718	111.0	718	111.0	713	110.2	718	111.0	726	112.2	731	113.0	741	114.5	
Hollifield Station ES	732	732	732	732	841	114.9	827	113.0	814	111.2	842	115.0	C 834	113.9	830	113.4	851	116.3	C 869	118.7	C 892	121.9	C 920	125.7	C
Manor Woods ES	681	681	681	681	766	112.5	800	117.5	C 833	122.3	C 856	125.7	C 890	130.7	C 903	132.6	C 898	131.9	C 844	123.9	C 809	118.8	C		
Northfield ES	700	700	700	700	753	107.6	750	107.1	737	105.3	736	105.1	748	106.9	753	107.6	778	111.1	779	111.3	782	111.7	790	112.9	
St Johns Lane ES	612	612	612	612	739	120.8	C 762	124.5	C 789	128.9	C 821	134.2	C 856	139.9	C 852	139.2	C 857	140.0	C 863	141.0	C 874	142.8	C 884	144.4	C
Waverly ES	A 788	788	788	788	831	105.5	844	107.1	876	111.2	892	113.2	909	115.4	C 910	115.5	C 913	115.9	C 913	115.9	C 916	116.2	C 914	116.0	C
Region Totals	4160	4160	4160	4160	4668	112.2	4724	113.6	4770	114.7	4865	116.9	4955	119.1	4961	119.3	5015	120.6	5025	120.8	5039	121.1	5058	121.6	C
Southeastern	424	424	424	424	447	105.4	418	98.6	416	98.1	414	97.6	414	97.6	412	97.2	415	97.9	418	98.6	420	99.1	423	99.8	
Atholton ES	424	424	424	424	447	105.4	418	98.6	416	98.1	414	97.6	414	97.6	412	97.2	415	97.9	418	98.6	420	99.1	423	99.8	
Bollman Bridge ES	666	666	666	666	757	113.7	761	114.3	772	115.9	C 784	117.7	C 776	116.5	C 768	115.3	C 767	115.2	C 768	115.3	C 781	117.3	C 783	117.6	C
Forest Ridge ES	713	713	713	713	776	108.8	813	114.0	852	119.5	C 894	125.4	C 918	128.8	C 952	133.5	C 953	133.7	C 945	132.5	C 928	130.2	C 918	128.8	C
Gorman Crossing ES	735	735	735	735	836	113.7	839	114.1	830	112.9	803	109.3	803	109.3	809	110.1	790	107.5	774	105.3	763	103.8	763	103.8	
Guilford ES	465	465	465	465	410	88.2	414	89.2	415	89.2	451	97.0	484	104.1	488	104.9	482	103.7	483	103.9	495	106.5	495	106.5	
Hammond ES	653	653	653	653	661	101.2	705	108.0	792	121.3	C 830	127.1	C 874	133.8	C 923	141.3	C 971	148.7	C 1038	159.0	C 1107	169.5	C 1155	176.9	C
Laurel Woods ES	640	640	640	640	482	75.3	469	73.3	462	72.2	459	71.7	449	70.2	467	73.0	473	73.9	479	74.8	486	75.9	491	76.7	
Region Totals	4296	4296	4296	4296	4369	101.7	4419	102.9	4539	105.7	4635	107.9	4718	109.8	4819	112.2	4851	112.9	4905	114.2	4980	115.9	5028	117.0	C
Western	744	744	744	744	507	68.1	499	67.1	483	64.9	478	64.2	490	65.9	494	66.4	514	69.1	551	74.1	561	75.4	559	75.1	
Bushy Park ES	744	744	744	744	507	68.1	499	67.1	483	64.9	478	64.2	490	65.9	494	66.4	514	69.1							

MIDDLE SCHOOLS - MAY 2018 APFO School Capacity Chart

Capacity Utilization Rates with Board of Education's Approved FY 2019 Capital Budget Projects

Chart reflects May 2017 Projections, Board of Education's Requested FY 2019 capacities, and effects of approved redistricting for the 2018-19 school year.

	Capacity				2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28		2028-29		2029-30		2030-31					
	2021	2022	2023	2024	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	585	91.0	591	91.9	557	86.6	553	86.0	532	82.7	546	84.9	553	86.0	557	86.6	559	86.9	565	87.9				
Oakland Mills MS	506	506	506	506	497	98.2	495	97.8	513	101.4	506	100.0	501	99.0	495	97.8	496	98.0	496	98.0	497	98.2	505	99.8				
Region MS Totals	1149	1149	1149	1149	1082	94.2	1086	94.5	1070	93.1	1059	92.2	1033	89.9	1041	90.6	1049	91.3	1053	91.6	1056	91.9	1070	93.1				
Columbia - West																												
Harpers Choice MS	506	506	506	506	534	105.5	511	101.0	517	102.2	520	102.8	534	105.5	540	106.7	534	105.5	539	106.5	546	107.9	555	109.7				
Wide Lake MS	760	760	760	760	724	95.3	756	99.5	785	103.3	845	111.2	903	118.8	C	947	124.6	C	967	127.2	C	994	130.8	C	1016	133.7		
Region MS Totals	1266	1266	1266	1266	1258	99.4	1267	100.1	1302	102.8	1365	107.8	1437	113.5	1487	117.5	1501	118.6	1533	121.1	1562	123.4	1597	126.1				
Northeastern																												
Bonnie Branch MS	701	701	701	701	670	95.6	681	97.1	697	99.4	703	100.3	702	100.1	719	102.6	732	104.4	761	108.6	781	111.4	803	114.6				
Elkridge Landing MS	779	779	779	779	760	97.6	773	99.2	787	101.0	774	99.4	761	97.7	788	101.2	817	104.9	841	108.0	824	105.8	838	107.6				
Ellicott Mills MS A	701	701	701	857	906	129.2	C	857	122.3	C	858	122.4	C	827	96.5	810	94.5	801	93.5	814	95.0	854	99.6	856	99.9	891	104.0	
Mayfield Woods MS	798	798	798	798	875	109.6	855	107.1	872	109.3	918	115.0	C	949	118.9	C	1022	128.1	C	1038	130.1	C	1074	134.6	C	1044	130.8	
Thomas Viaduct MS	701	701	701	701	788	112.4	826	117.8	C	919	131.1	C	1043	148.8	C	1182	168.6	C	1260	179.7	C	1311	187.0	C	1358	193.7		
Region MS Totals	3680	3680	3680	3836	3999	108.7	3992	108.5	4133	112.3	4265	111.2	4404	114.8	4590	119.7	4712	122.8	4888	127.4	4852	126.5	4937	128.7				
Northern																												
Burleigh Manor MS	779	779	779	779	857	110.0	864	110.9	885	113.6	923	118.5	C	963	123.6	C	969	124.4	C	973	124.9	C	968	124.3	C	971	124.6	
Dunloggin MS	A	565	565	662	694	122.8	C	711	125.8	C	730	129.2	C	720	108.8	704	106.3	698	105.4	712	107.6	717	108.3	714	107.9	727	109.8	
Patapsco MS	643	643	643	643	735	114.3	764	118.8	C	769	119.6	C	776	120.7	C	775	120.5	C	803	124.9	C	811	126.1	C	815	126.7		
Region MS Totals	1987	1987	1987	2084	2286	115.0	2339	117.7	2384	120.0	2419	116.1	2442	117.2	2470	118.5	2496	119.8	2500	120.0	2486	119.3	2515	120.7				
Southeastern																												
Hammond MS	604	604	604	604	612	101.3	661	109.4	693	114.7	706	116.9	C	705	116.7	C	722	119.5	C	732	121.2	C	743	123.0	C	773	128.0	
Murray Hill MS	662	662	662	662	769	116.2	C	754	113.9	737	111.3	781	118.0	C	778	117.5	C	774	116.9	C	751	113.4	746	112.7	747	112.8	736	111.2
Patuxent Valley MS	760	760	760	760	656	86.3	649	85.4	654	86.1	672	88.4	702	92.4	721	94.9	737	97.0	737	97.0	737	97.0	763	100.4	764	100.5		
Region MS Totals	2026	2026	2026	2026	2037	100.5	2064	101.9	2084	102.9	2159	106.6	2185	107.8	2217	109.4	2220	109.6	2226	109.9	2283	112.7	2341	115.5				
Western																												
Clarksville MS	643	643	643	643	657	102.2	636	98.9	635	98.8	638	99.2	672	104.5	664	103.3	675	105.0	668	103.9	677	105.3	677	105.3	677	105.3		
Folly Quarter MS	662	662	662	662	628	94.9	616	93.1	605	91.4	608	91.8	599	90.5	602	90.9	590	89.1	592	89.4	601	90.8	613	92.6				
Glenwood MS	545	545	545	545	534	98.0	502	92.1	492	90.3	477	87.5	484	88.8	506	92.8	517	94.9	539	98.9	524	96.1	529	97.1				
Lime Kiln MS	701	701	701	701	635	90.6	670	95.6	677	96.6	687	98.0	694	99.0	728	103.9	747	106.6	738	105.3	723	103.1	716	102.1				
Mount View MS	798	798	798	798	887	111.2	907	113.7	930	116.5	C	971	121.7	C	973	121.9	C	1009	126.4	C	1003	125.7	C	1020	127.8			
Region MS Totals	3349	3349	3349	3349	3341	99.8	3331	99.5	3339	99.7	3381	101.0	3422	102.2	3509	104.8	3532	105.5	3557	106.2	3544	105.8	3575	106.7				
Countywide Totals	13457	13457	13457	13710	14003	104.1	14079	104.6	14312	106.4	14648	106.8	14923	108.8	15314	111.7	15510	113.1	15757	114.9	15783	115.1	16035	117.0				

A: capacity includes additions as reflected in FY 2019 Capital Budget for Grades 6-8 between 2019 and 2026.

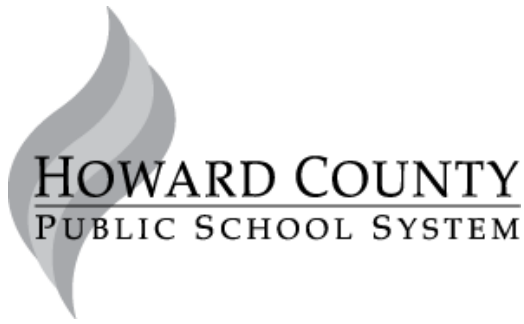
C: Constrained for future development

Facilities Constructed With Assistance From Maryland School Construction Funds (1980–2018)				
Completion (School year)	Elementary	Middle	High	Special
1980–1981				
1981–1982				Cedar Lane
1988–1989	Bollman Bridge			
1989–1990		Patuxent Valley		
1990–1991	Deep Run			
	Waverly			
1991–1992	Pointers Run	Mayfield Woods		
1992–1993	Elkridge	Burleigh Manor		
	Forest Ridge			
1993–1994	Rockburn	Mount View		
1994–1995	Manor Woods		River Hill	
1995–1996		Elkridge Landing		
1996–1997	Ilchester		Long Reach	
			Wilde Lake Replacement	
1997–1998	Fulton	Murray Hill		
	Hollifield Station			
1998–1999	Gorman Crossing			
	Triadelphia Ridge			
1999–2000		Bonnie Branch		
		Lime Kiln		
2001–2002		Ellicott Mills Replacement		
2002–2003			Reservoir	Homewood
2003–2004	Bellows Spring	Folly Quarter		
2005–2006			Marriotts Ridge	Cedar Lane
2006–2007	Dayton Oaks			
2007–2008	Veterans			
	Bushy Park Replacement			
2013–2014	Ducketts Lane			
2014–2015		Thomas Viaduct		
2016–2017		Wilde Lake*		
2017–2018	Hanover Hills			

* Replacement School

Additions/Renovations Constructed with Assistance From Maryland School Construction Funds (1980–2018)

Completion (School year)	Elementary	Middle	High	Special
1980–1981	Atholton			
1981–1982	Clarksville			
1983–1984	Guilford	Waterloo		
1985–1986			Mt. Hebron	
1986–1987	Guilford			School of Technology
1987–1988			Atholton	
1991–1992			Oakland Mills	
1994–1995	Northfield	Owen Brown		
	Centennial Lane			
	Dasher Green			
1995–1996		Wilde Lake		
		Oakland Mills		
1996–1997	Hammond		Hammond	
1998–1999	Swansfield	Dunloggin		
	Jeffers Hill			
2000–2001	Waterloo			
	Ilchester			
	Pointers Run			
	St. John's Lane			
2001–2002	Talbott Springs			
	Forest Ridge			
2002–2003	Pointers Run			
	Atholton		Centennial	
	Clarksville			
2003–2004	Hollifield Station			
2003–2004	Fulton	Patapsco	Atholton	
2004–2005	Manor Woods	Clarksville	Mt. Hebron	
	Rockburn		Oakland Mills	
2006–2007	Clarksville		Howard	
	Fulton			
	Pointers Run			
	Triadelphia Ridge			
2007–2008	All Day K			
	All Day K			
	Waverly			
2008–2009	Centennial Lane			
	Clarksville	Clarksville	Glenelg	
	All Day K			
2009–2010	Centennial Lane			
	Worthington			
	All Day K			
2009–2010	Clemens Crossing			
2010–2011	Waterloo			
2010–2011	Northfield			
2011–2012	Hammond	Hammond	Hammond	
	Bellows Spring		Centennial	
2012–2013	Thunder Hill			
2013–2014	Bollman Bridge			
	Gorman Crossing			
	Phelps Luck			
	Stevens Forest			
2014–2015	Running Brook			
2015–2016	Longfellow		Atholton	
2015–2016	Laurel Woods			
2016–2017	Deep Run	Patuxent Valley		
2016–2017	Swansfield			
2017–2018	Waverly			



I. Policy Statement

The Board of Education is responsible for providing safe, engaging and supportive educational and work environments for all students and staff. The Board recognizes the continuing need to plan, design, and construct new educational facilities and to renovate or make additions to existing schools that are in accordance with all applicable code, as well as Maryland and federal law. Fulfilling this responsibility requires a comprehensive program that monitors population trends, enrollment trends, educational program spatial requirements, cost/benefit considerations, technologies that support environmentally responsible construction, and an annual six-year capital improvement program.

II. Purpose

The purpose of the policy is to establish guidelines for the administration of the School Planning and the School Construction programs.

III. Definitions

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

- A. Architect/Engineering Firm (A/E) – A designation usually reserved by law for a person or organization professionally qualified and duly licensed to perform architectural and/or engineering services including, but not necessarily limited to, analysis of project requirements; creation and development of the project design; preparation of drawings, specifications, and bidding requirements; and general administration of the construction contract.
- B. Beneficial Occupancy – The use by the owner of a project or portion thereof before all the terms of the contract are complete.
- C. Bid – The price a contractor commits to for constructing a project.
- D. Bid Procedures – Criteria to determine the award of a contract pursuant to Policy 4050 Procurement of Capital Materials, Supplies, Equipment and Services.
- E. Bonds – General obligation documents issued by the county to borrow money to fund capital projects.

- F. Capital Improvement Program (CIP) – All capital improvements listed as part of the Board’s annual approved capital budget.
- G. Capital Improvement Project – Any physical betterment or improvement and any preliminary studies and surveys relative thereto, including but not limited to, any property of a permanent nature, and equipment needed in connection with such improvement when first erected or acquired.
- H. Change Order – A written document to the contractor signed by the owner and engineer or architect, issued after the execution of the contract, authorizing a change in the work or an adjustment in the contract sum.
- I. Construction Manager (CM) – A person or organization hired to coordinate and manage the construction phases of a project with the objective of minimizing project construction time and cost while maintaining the quality, function, and aesthetics of the building.
- J. Design Stages – The three phases of an architect’s basic services, which include:
 - 1. Schematic Design (SD) – the first phase of the architect's basic services. In this phase, the architect meets with the project planning team to ascertain the requirements of the project and prepares schematic design studies consisting of drawings and other documents illustrating the scale and relationship of the project components for approval by the Board. A statement of probable construction cost is also submitted at this time.
 - 2. Design Development (DD) – the second phase of the architect's basic services. In this phase the architect prepares, from the approved schematic design studies, the design development documents for approval by the Board. These design documents consist of drawings and other documents to fix and describe the size and character of the entire project as to structural, mechanical and electrical systems, materials and other essentials as may be appropriate. The architect also submits to the Board a further statement of probable construction costs.
 - 3. Construction Documents (CD) – the third phase of the architect's basic services. In this phase the architect prepares, from the approved design development documents, the working drawings, specifications, and necessary bidding information for approval by the Board. A final cost estimate is prepared before the project is bid.
- K. Facility Design – Plans, elevations, sections, and other drawings and specifications that may be necessary for a building or other structure.

- L. Facility Planning – Educational and architectural planning and analysis used to produce and design the concept for school projects.
- M. Final Occupancy – The point at which all or a designated portion of a building complies with the provisions of a contract and all applicable county and state statutes and regulations.
- N. Interagency Committee on School Construction (IAC) – The state agency responsible for the review/approval of construction documents and funding of schools or school construction projects.
- O. Office of Safety, Environment and Risk Management – The office that is responsible for reviewing and monitoring the design and construction phases related to environmental initiatives, such as Integrated Pest Management (IPM), Indoor Air Quality (IAQ), and Asbestos Abatement.
- P. Office of School Construction – The office that is responsible for all phases of planning, design and construction of new schools as well as additions to and comprehensive modernization of existing schools, from planning through occupancy.
- Q. Office of School Planning – The office that is responsible for projecting needs based on demographics for the purpose of assisting the Superintendent in the development of the Capital Improvement Program.
- R. Punch List – List made near the completion of work, indicating items to be furnished or work to be performed by the contractor or subcontractor in order to complete the work as specified in the contract documents.
- S. State of Maryland Public School Construction Program (PSCP) – Program that provides for the funding of public school construction.
- T. Sustainable Design – Design that seeks to reduce negative impacts on the environment and the health and comfort of building occupants, thereby improving building performance. The objectives of sustainability are to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive environments.
- U. Warranty/Guarantee Period – Period of time in which the quality of work and/or satisfactory performance is guaranteed.

IV. Standards

- A. This policy and associated implementation procedures apply to the capital improvement projects that are listed as part of the Board's annual approved capital budget requiring contracts and consultant agreements.
- B. The Howard County Public School System (HCPSS) employs sustainable design construction that supports educational program needs and creates a safe and nurturing environment for students and staff within allotted budgetary resources.
- C. The school planning/school construction program involves a sequential plan of action and is divided into ten general categories, each requiring professionally trained and experienced staff to plan and carry out the requirements of the program consistent with the Superintendent's Safety Guidelines for Renovation and Construction Projects and all applicable regulations.
 - 1. Long-Range Planning and Student Population Projection
 - a. This category involves the annual projection of pupil population and general population growth by the Office of School Planning. Short-range demographic studies to support the Capital Improvement Program, school attendance area studies, transportation planning, and other special needs are also included.
 - b. By state regulation the Board is also required to develop, maintain, and annually update a master plan for the school system for submission to the IAC. This plan has as its basis a variety of population studies which guide the decision making for school facilities on both a long and short-term basis.
 - 2. Capital Improvement Program
 - a. The Capital Improvement Program is a projection of the school facility needs for the next fiscal year (Capital Budget) and the following five-year period. The Capital Improvement Program is based on needs to support the educational program of the system with new schools, modernizations, and other construction projects.
 - b. The local Capital Improvement Program serves as the basis for state funding requests through the Interagency Committee for School Construction and the State of Maryland Public School Construction Program.

3. Site Selection

Procedures for site selection and summarization of site size criteria for elementary, middle and high schools are addressed in Policy 6000 Site Selection and Acquisition. As part of the selection process, the Office of School Construction produces studies including site layouts and environmental assessments.

4. Architect/Engineering Firm and Construction Manager Selection

Procedures for architectural/engineering and construction management services selection are addressed in Policy 6030 Procurement of Architectural/Engineering and Construction Management Services.

5. Facility Planning and Facility Design

The facility planning and design process allows for orderly and systematic design of school facilities. This process is conducted using either the Board-approved General Elementary Educational Specifications for New Schools, General Educational Specifications for New Howard County Middle Schools, General Educational Specifications High Schools, or the Board approved Guidelines Manual for Renovations and Modernizations of Existing Schools as the basic references for the facility in question. These documents describe the basic educational philosophy, instructional program, and spatial requirements needed to implement the planning and construction program.

6. Bid and Award

The bid and award procedures for school construction projects conform to those used for the procurement of other goods and services which are addressed in Policy 4050. In addition, these procedures comply with the requirements of the State of Maryland Public School Construction Program.

7. Contract and Construction Administration

The Office of School Construction is responsible for monitoring construction work and administering the schedule, budget, and change orders that affect the scope and/or cost of the work. A school construction progress report which includes these topics is submitted monthly to the Board.

In accordance with the provisions of Policy 6030, a construction manager may be hired to manage the construction process.

8. Official Acceptance of Capital Improvement Projects

Capital improvement projects may be designed to be accepted in stages or upon total completion of work, based on staff recommendation to and approval by the Board.

9. Post-Acceptance Evaluation

Use, occupancy, and evaluation by staff may occur only after the project has been officially accepted. The Board will receive a final report following the walk-through.

10. Temporary and Relocatable Facilities

Relocatable classroom units should be considered under the following conditions and within the context of Policy 6010 School Attendance Areas:

- a. Where school population growth occurs
- b. Where school capacity is near maximum
- c. When boundary lines are adjusted
- d. Where population is projected to remain high for at least one year
- e. Where school construction or renovation projects require the provision of swing space to accommodate the student population and minimize the impact on instruction.

Where excess population is projected to remain beyond four years, consideration should be given to an addition or new construction.

- D. To the extent possible, school facilities and sites should be available for after school use by the community. The possibility of joint use development of school and recreational facilities, including joint construction of school and recreational space, is encouraged on a case-by-case basis.

V. Compliance

- A. The Superintendent/Designee is responsible for the administration of the school planning and construction programs.
- B. The Office of School Planning and the Office of School Construction are responsible for collaboration in order to obtain the efficient implementation of this policy.
- C. For Capital Improvement Projects, the Principal is responsible for communicating project information to the parent community in a timely manner.

VI. Delegation of Authority

The Superintendent is authorized to develop appropriate procedures to implement this policy.

VII. References

A. Legal

The Annotated Code of Maryland, Education Article

§ 3-602.1 (requirements to design high performance buildings)

§ 4-115 (right to acquire land, school sites or buildings)

§ 4-116 (land use approval procedures)

§ 4-117 (construction and remodeling conformance to state and county building codes)

§ 5-301 (Board of Public Works role and procedures in school construction)

§ 5-302 (composition and role of the IAC in school construction)

§ 5-303 (procedure for determining the cost of renovating existing schools)

§ 5-312 (state funding support related to high performance buildings)

§ 7-108 (guidelines for community use of public school facilities)

§ 7-109 (use of public school facilities as day care centers)

COMAR 13A.01.02.03 (requirements for obtaining State Superintendent's approval for school construction projects)

COMAR 15.05.02 (regulations pertaining to integrated Pest Management and Notification of Pesticide Use in a Public School Building or on School Grounds)

Americans with Disabilities Act (ADA)

Occupational Safety and Health Act (OSHA)

Maryland Occupational Safety and Health Act (MOSHA)

B. Other Board Policies

Policy 4050 Procurement of Capital Materials, Supplies, Equipment, and Services

Policy 6000 Site Selection and Acquisition

Policy 6010 School Attendance Areas

Policy 6030 Procurement of Architectural/Engineering and Construction Management Services

C. Other

General Elementary Educational Specifications for New Schools

General Educational Specifications for New Howard County Middle Schools

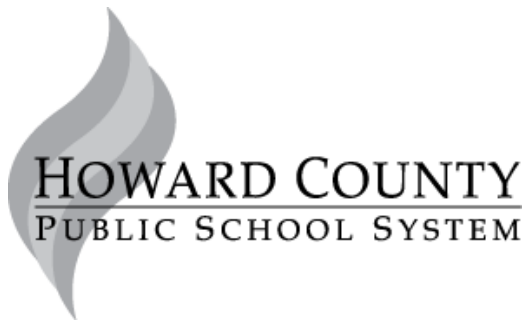
General Educational Specifications High Schools

Guidelines Manual for Renovations and Modernizations of Existing Schools

Safety Guidelines for Renovation and Construction Projects

VIII. History

ADOPTED: September 4, 1968
REVIEWED:
MODIFIED: August 14, 2014
REVISED: September 13, 1990
January 14, 2010
EFFECTIVE: August 14, 2014



POLICY 6020-PR
IMPLEMENTATION PROCEDURES
SCHOOL PLANNING/SCHOOL
CONSTRUCTION PROGRAMS

Effective: July 1, 2010

These procedures apply to the construction of new schools and the modernization/renovation of existing facilities that are included in the Board's Capital Improvement Program.

I. Long-range Planning and Student Population Projection

The Office of School Planning will:

- A. Gather enrollment, population, and housing data from appropriate sources
- B. Provide an annual projection using the cohort survival method or other established demographic methodology
- C. Provide an annual report of projection accuracy to the Board of Education.

II. Capital Improvement Program

The Office of School Planning and the Office of School Construction will:

- A. Develop the Capital Improvement Program based on population growth and anticipated needs of that population
- B. Present the Board's requested six-year Capital Improvement Program, which includes a request for the next fiscal year (capital budget) and the following five-year period
- C. Prepare the State of Maryland Public School Construction Program (PSCP) budget funding request
- D. Incorporate the state budget request with the Board six-year Capital Improvement Program to determine the annual county Capital Improvement Program request
- E. Select and analyze site(s).

III. Site Selection

Site selection and acquisition is recommended to the Board after being analyzed for appropriateness for a school. (See Policy 6000 Site Selection and Acquisition.)

IV. Architect/Engineering Firm and Construction Manager Selection

Procurement of architectural/engineering and construction management services are recommended to and approved by the Board in compliance with Policy 6030 Procurement of Architectural/Engineering and Construction Management Services.

V. Facility Planning and Facility Design

A facility planning team is convened, consisting of school and community members, personnel from the Office of School Construction, a designee from the Office of Safety, Environment and Risk Management, other central office personnel, the project architect, and others who may be named by the Superintendent/Designee. The planning team provides input to the architect in developing a series of three design studies that meets Board policy as well as the objectives of the applicable educational specifications or renovation guidelines.

The series of three design studies is as follows:

- A. Schematic Design Phase
 - 1. Planning team named by the Superintendent/Designee
 - 2. Description of conceptual design
 - 3. Initial cost analysis
 - 4. Presentation to and approval by the Board.

- B. Design Development Phase
 - 1. Description of the design
 - 2. Detailed layouts of subject areas
 - 3. Cost analysis
 - 4. Presentation to and approval by the Board.

- C. Construction Documents Phase
 - 1. Description of the final design
 - 2. Cost analysis and cost reduction
 - 3. Final review of drawings and specifications
 - 4. Presentation to and approval by the Board
 - 5. Preparation of bid documents.

The above steps may be combined. In each phase, the effect on the occupants, the building structure, and/or systems is considered. Each phase is submitted for review and approval by the Board and the Interagency Committee on School Construction (IAC). Copies of the Howard County Public School System (HCPSS) response to the design

submission review letters from the IAC approving agencies will also be submitted to the Board

VI. Bid and Award

Pursuant to Policy 4050 Procurement of Capital Materials, Supplies, Equipment, and Services, these procedures call for a publicly announced bid period during which interested bidders examine the bid documents and submit a sealed bid by the date and time required. The bid documents are opened in public and the price submitted for each bid item is read aloud. At a subsequent meeting of the Board, the results of the bid are presented and a recommendation to award to the lowest responsible and responsive bidder is made.

The final decision is made by the Board. Upon submission of all documents, bonds, and other matters required in the contract, a formal contract is signed.

VII. Contract and Construction Administration

A. Office of School Construction

The project architect serves as the Board's representative and administers the contract, answers technical questions, approves submittals, and initiates change orders and requests for proposals subject to the Board's approval. The Office of School Construction coordinates the completion schedule with the principal/designee and other school system personnel to ensure that furniture and equipment deliveries, technology services, and food services satisfy the requirements for their respective sections. Prior to the opening of school, the Office of School Construction monitors each project to resolve any last minute problems and continues this supervision during the warranty period.

The Office of School Construction supervises the construction, budget, schedule, and quality of work, administers change order requests, and administers the warranty period. When school projects are technically complex, have a very short construction time, or require staff attention beyond the time available, a construction manager may be hired to manage the construction process.

B. Office of Safety, Environment and Risk Management

The Office of Safety, Environment and Risk Management monitors the design and construction phases at regular intervals and in response to specific concerns. Consistent with all statutory requirements, monitoring includes Integrated Pest Management (IPM), Indoor Air Quality (IAQ), and abatement of potentially hazardous materials.

VIII. Official Acceptance of Capital Improvement Projects

New facilities and other Capital Improvement Projects may be accepted in several ways. If conditions permit, the school system will wait until all major and minor building system corrections are fully complete and all minor repairs, deficiencies and discrepancies (punch list items) have been corrected. The project architect will then certify that the building is complete and has been constructed according to the drawings and specifications. This marks the beginning of the warranty period for the building. School facilities are typically scheduled so that all construction will be complete and the building ready for acceptance in early summer. Final inspection and acceptance involves a review of the project at substantial completion of construction, which includes listing items to be adjusted, corrected, or completed by the contractor's "punch list." In most cases, the project is complete except for minor system work and completion of the punch list items by late summer.

The Office of School Construction is responsible for certifying, as applicable, beneficial occupancy, final occupancy, move-in, punch list, and warranty/guarantee.

IX. Post-Acceptance Evaluation

- A. After project acceptance, furnishings and movable equipment can be installed, supplies can be delivered and stored, and the staff can occupy the facility for operation. At this time, the construction project enters into a one year guarantee and a two year mechanical/electrical guarantee period during which time discrepancies in the workmanship, materials, and equipment supplied under the contract are noted and corrected. Some specifically identified warranties/guarantees may be longer than one to two years.
- B. Following the move-in, the Office of School Construction works closely with the school administration and maintenance personnel to correct any problems that arise during the warranty period.
- C. After the first instructional year following construction, a walk-through of the facility is conducted to evaluate the success of the facility as a teaching environment and the success of the educational concepts in the General Elementary Educational Specifications for New Schools, or General Educational Specifications for New Howard County Middle Schools, or General Educational Specifications High Schools or Guidelines Manual for Renovations and Modernizations of Existing Schools in effect at the time the project was designed. The facility is also evaluated as to use of materials, building systems, construction quality, and other aspects pertaining to the building.

- D. A walk-through of the building by a representative team of stakeholders may include a:
 - 1. Teacher representative
 - 2. Administration personnel
 - 3. Custodian
 - 4. PTA representative
 - 5. School facilities representative(s)
 - 6. Designee from Safety, Environment and Risk Management.

X. Temporary and Relocatable Facilities

Placement of temporary and relocatable portable facilities is determined by and implemented as follows:

- A. Presentation of current population projections
- B. Identification of where new units are needed
- C. Evaluation of site plans
- D. Evaluation of cost implications
- E. Presentation to and approval by the Board
- F. Reassignment or procurement of units
- G. Installation of units
- H. Post installation inspection by the Office of School Construction.

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