The background of the cover is a photograph of a modern brick school building. The building is constructed of red brick with large, multi-paned windows. The name 'THOMAS VIADUCT MIDDLE SCHOOL' is visible on the brickwork. The sky is blue with light clouds. The text is overlaid on the top half of the image.

HOWARD COUNTY PUBLIC SCHOOL SYSTEM
Capital Budget FY 2017

Capital Improvement Program FY 2018–2022
Long-Range Master Plan FY 2017–2026

Superintendent's Proposed Budget

Superintendent's Proposed FY 2017 Capital Budget
Capital Improvement Program FY 2018–2022
Long-Range Master Plan FY 2017–2026

Superintendent

Renee A. Foose, Ed.D.

Board of Education

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Ann De Lacy, Vice Chairman
Bess Altwerger, Ed.D.
Sandra H. French
Ellen Flynn Giles
Christine E. O'Connor
Cynthia L. Vaillancourt

Student Member

Rachel S. Lin

September 2015

Superintendent's Proposed FY 2017 Capital Budget
Capital Improvement Program FY 2018–2022
Long-Range Master Plan FY 2017–2026

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

Electronic copy of the Capital Budget can be
found on the school system's website at www.hcpss.org.

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Superintendent's Proposed FY 2017 Capital Budget
Capital Improvement Program FY 2018–2022
Long-Range Master Plan FY 2017–2026

Section 1

Executive Summary

September 2015



Introduction

This document contains the Howard County Public School System’s (HCPSS) Superintendent’s Proposed FY 2017 Capital Budget and the FY 2018–2022 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 11, 2015, the Feasibility Study provided new enrollment projections and proposed future redistricting. Several factors affect the total FY 2017 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 \$335.58 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 requirements, and general inflationary increases.

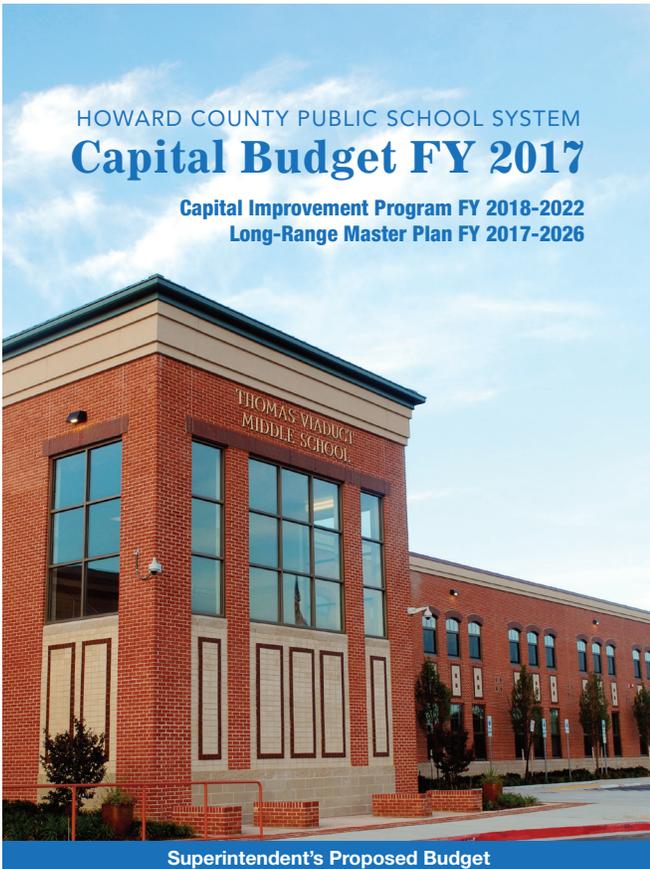
The Superintendent’s Proposed Capital Budget is the first step in this annual process which will ultimately end with the Board of Education’s Approved Capital Budget in May 2016. The capital budget is submitted much earlier than the operating budget to accommodate deadlines associated with submission of the capital budget to the Maryland State Department of Education.

Executive Summary provides an introduction to the Superintendent’s Proposed FY 2017 Capital Budget, the Capital Improvement Program FY 2018–2022, and the Long-Range Master Plan FY 2017–2026. It presents a high level overview of the budget process and the FY 2017 Superintendent’s Proposed Capital Budget. Included in the Executive Summary is the Superintendent’s Message which provides an overview of the budget issues. Among other information found in the Executive Summary is a discussion of the capital budget alignment with the school system’s strategic plan, *Vision 2018: Fulfilling the Promise of Preparation*, 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 county and the school system, with maps of school locations throughout the county displayed by school level.

Project Detail presents detail on each project presented in the proposed FY 2017 Capital Budget as well as information on longer range project plans.

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



Message from the Superintendent

September 3, 2015

Howard County Residents:

I am pleased to present the Howard County Public School System (HCPSS) Superintendent's Proposed FY 2017 Capital Budget and the Capital Improvement Program FY 2018–2022, and the Long-Range Master Plan FY 2017–2026. It provides the framework and plans for educational facilities that support a positive learning environment. The plans are integral to achieving *Vision 2018, Fulfilling the Promise of Preparation*, the school system's five-year strategic plan. The capital improvement program and Long-Range Master Plan address projected student capacity needs by implementing capital projects and facility renovations when and where they are most needed. The \$105 million FY 2017 proposed capital budget was developed from these plans.



Highlights of the FY 2017 Capital Budget and Long-Range Master Plan are noted below:

- The FY 2017 Capital Budget is \$105 million.
- The cumulative total of the ten-year Long-Range Master Plan for FY 2017–2026 is \$1.1 billion and includes funding for a replacement middle school, four future elementary schools, a future high school, and a new middle school which are necessary to meet projected enrollment growth and capacity needs. It includes approximately \$358.5 million in systemic renovations, modernizations, major programmatic renovations, and additions to existing school facilities.
- The HCPSS is projected to enroll approximately 11,000 additional students between 2016 and 2026. Over 5,000 (Grades K-12) additional seats are provided in the FY 2017–2026 Long-Range Master Plan. Coupled with the 55,000 seats of existing capacity in 2015 and the use of relocatable classrooms where required, the proposed capital program is sufficient to meet near-term student enrollment needs.

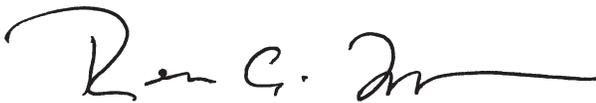
The Long-Range Master Plan includes capacity projects needed to meet projected future enrollment growth at all levels. The completion of Ducketts Lane Elementary School and Thomas Viaduct Middle School as well as the construction of the Wilde Lake Middle School Replacement School and the New ES #42 addresses capacity needs at the elementary and middle school levels. New HS #13 is being proposed to address the capacity needs at the high school level. The Long-Range Master Plan also includes much needed renovations of aging schools and systems.

Message from the Superintendent

The Capital Budget Long-Range Master Planning Committee, comprised of representatives from the HCPSS and the county government, assist in the development of the Long-Range Master Plan. The committee evaluates and prioritizes the many potential projects, basing recommendations on updated annual feasibility study data, support for Vision 2018, stakeholder input, and financial considerations. The Long-Range Master Plan reflects the collaborative work of this committee to develop a more realistic and affordable plan. Even with these efforts, however, rising costs and growing capacity needs result in future capital needs of the school system that will require an increase to the historical funding levels by the county and state. Funding of the capital budget currently depends predominantly upon the issuance of bonds by the county and state. We look forward to continuing our ongoing discussions with County Council and other stakeholders regarding both dedicated and alternative financing sources for education.

The FY 2017 Capital Budget Schedule is detailed at the end of the Executive Summary and includes the dates of Board public hearings and work sessions. I look forward to working with the Board of Education, parents, community members, and business leaders to secure the necessary funding and support for the improvements to Howard County public school facilities.

Sincerely,

A handwritten signature in black ink, appearing to read "Renee A. Foose". The signature is fluid and cursive, with a long horizontal stroke at the end.

Renee A. Foose, Ed.D.
Superintendent

FY 2017 Capital Budget

Superintendent's Proposed September 3, 2015

(In Thousands)

Capacity	Project	Occupancy	Approved Appropriations	Codes	Total FY17 Request	Requested Project Totals Through FY17
760	Wilde Lake MS Replacement School	Aug 2017	\$ 29,092	(C,E)	\$ 16,285	\$ 45,377
-	Patuxent Valley MS Renovation	Aug 2017	18,145	(C,E)	10,890	29,035
100	Swansfield ES Renovation/Addition	Aug 2018	11,773	(C,E)	12,722	24,495
100	Waverly ES Renovation/Phase II Addition*	Aug 2018	3,770	(C,E)	9,589	13,359
788	New ES #42	Aug 2018	2,807	(C)	16,526	19,333
-	Oakland Mills MS Renovation*	Aug 2019	-	(C)	9,131	9,131
1,800	New HS #13	Aug 2023	-	(P)	3,300	3,300
	Systemic Renovations/Modernizations		228,750	(P,C,E)	19,268	248,018
	Roofing Projects		45,537	(P,C,E)	-	45,537
	Playground Equipment		2,380	(E)	300	2,680
	Relocatable Classrooms		17,410	(P,C,E)	1,500	18,910
	Site Acquisition & Construction Reserve		20,836	(P,C)	-	20,836
	Technology		34,486	(C,E)	5,000	39,486
	School Parking Lot Expansions		4,200	(P,C,E)	-	4,200
	Planning and Design		300	(P)	300	600
	Barrier Free		5,428	(P,C,E)	200	5,628
	TOTALS		\$ 424,914		\$ 105,011	\$ 529,925

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

* Planning funds received in Systemic Renovation Project

FY 2018-2022 Capital Improvement Program

Superintendent's Proposed

September 3, 2015

(In Thousands)

Grades	Capacity	Project	Occupancy	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	5 Year CIP Total
K-5	100	Swansfield ES Renovation/Addition	Aug 2018	\$ 1,407	\$ -	\$ -	\$ -	\$ -	\$ 1,407
K-5	100	Waverly ES Renovation/Phase II Addition*	Aug 2018	18,396	-	-	-	-	18,396
K-5	788	New ES #42	Aug 2018	20,658	4,132	-	-	-	24,790
6-8	-	Oakland Mills MS Renovation*	Aug 2019	11,131	7,566	-	-	-	18,697
9-12	1,800	New HS #13	Aug 2023	9,950	23,250	27,500	36,500	27,525	124,725
9-12	-	Hammond HS Renovation	Aug 2023	2,800	9,748	15,099	20,099	20,099	67,845
K-5	788	New ES #43	Aug 2023	-	-	5,380	20,166	15,125	40,671
6-8	156	Ellicott Mills MS Addition	Aug 2024	-	-	-	-	544	544
9-12	-	Oakland Mills HS Renovation	Aug 2026	-	-	-	-	7,738	7,738
		Systemic Renovations/Modernizations		31,604	45,245	45,594	24,473	26,350	173,266
		Roofing Projects		-	-	5,000	5,000	5,000	15,000
		Playground Equipment		300	300	300	300	300	1,500
		Relocatable Classrooms		1,500	1,500	1,500	1,500	1,500	7,500
		Site Acquisition & Construction Reserve		2,000	2,000	2,000	2,000	2,000	10,000
		Technology		5,000	5,000	5,000	5,000	5,000	25,000
		School Parking Lot Expansions		600	600	600	600	600	3,000
		Planning and Design		300	300	300	300	300	1,500
		Barrier Free		200	200	200	200	200	1,000
		TOTALS		\$ 105,846	\$ 99,841	\$ 108,473	\$ 116,138	\$ 112,281	\$ 542,579

* Planning funds received in Systemic Renovation Project

FY 2017-2022 Long-Range Systemic Renovation Projects

September 3, 2015

Superintendent's Proposed

(In Thousands)

Project	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Totals
Glenwood MS Boiler/Water Heater	\$ 3,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,000
Bonnie Branch MS HVAC	2,274	-	-	-	-	-	2,274
Manor Woods ES RTUs	2,297	-	-	-	-	-	2,297
Talbott Springs ES Renovation	2,057	11,697	7,798	-	-	-	21,552
Administration Office	2,440	2,750	3,750	2,160	-	-	11,100
Burleigh Manor MS RTUs	-	2,023	-	-	-	-	2,023
Elkridge Landing MS RTUs	-	1,877	-	-	-	-	1,877
Dunloggin MS Renovation + Addition	-	3,557	19,703	13,136	-	-	36,396
Fulton ES RTUs	-	1,500	-	-	-	-	1,500
Hollifield Station ES RTUs	-	1,500	-	-	-	-	1,500
West Friendship ES MBR	-	-	2,000	2,000	-	-	4,000
Jeffers Hill ES Renovation	-	-	2,015	11,475	7,650	-	21,140
Hammond MS Renovation	-	-	3,279	10,123	10,123	10,122	33,647
Harpers Choice MS Renovation	-	-	-	-	-	2,671	2,671
Patapsco MS Renovation	-	-	-	-	-	3,737	3,737
Forest Ridge ES Renovation	-	-	-	-	-	3,120	3,120
Energy Projects	500	-	-	-	-	-	500
Other Systemic	6,700	6,700	6,700	6,700	6,700	6,700	40,200
TOTALS	\$ 19,268	\$ 31,604	\$ 45,245	\$ 45,594	\$ 24,473	\$ 26,350	\$ 192,534

FY 2017-2026 Long-Range Master Plan

Superintendent's Proposed September 3, 2015

(In Thousands)

Project	Approved Appropriations	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total Approp. plus FY17-FY26 Request
Wilde Lake MS Replacement School	\$ 29,092	\$ 16,285	-	-	-	-	-	-	-	-	-	\$ 45,377
Patuxent Valley MS Renovation	18,145	10,890	-	-	-	-	-	-	-	-	-	29,035
Swansfield ES Renovation/Addition	11,773	12,722	1,407	-	-	-	-	-	-	-	-	25,902
Waverly ES Renovation/Phase II Addition*	3,770	9,589	18,396	-	-	-	-	-	-	-	-	31,795
New ES #42	2,807	16,526	20,658	4,132	-	-	-	-	-	-	-	44,123
Oakland Mills MS Renovation*	-	9,131	11,131	7,566	-	-	-	-	-	-	-	27,828
New HS #13	-	3,300	9,950	23,250	27,500	36,500	27,525	10,500	-	-	-	138,525
Hammond HS Renovation	-	-	2,800	9,748	15,099	20,099	20,099	20,100	-	-	-	87,945
New ES #43	-	-	-	-	5,380	20,166	15,125	15,124	-	-	-	55,795
Ellicott Mills MS Addition	-	-	-	-	-	-	544	3,242	2,162	-	-	5,948
Oakland Mills HS Renovation	-	-	-	-	-	-	7,738	20,591	20,591	20,591	20,592	90,103
Centennial HS Renovation	-	-	-	-	-	-	-	7,652	24,443	24,443	16,295	72,833
New ES #44	-	-	-	-	-	-	-	-	5,380	20,166	15,125	40,671
New ES #45	-	-	-	-	-	-	-	-	-	5,380	20,166	25,546
New MS #21	-	-	-	-	-	-	-	-	-	-	4,446	4,446
Systemic Renovations/Modernizations	228,750	19,268	31,604	45,245	45,594	24,473	26,350	38,507	40,432	42,454	44,576	587,253
Roofing Projects	45,537	-	-	-	5,000	5,000	5,000	5,000	5,000	5,000	5,000	80,537
Playground Equipment	2,380	300	300	300	300	300	300	300	300	300	300	5,380
Relocatable Classrooms	17,410	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	32,410
Site Acquisition & Construction Reserve	20,836	-	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	38,836
Technology	34,486	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	84,486
School Parking Lot Expansions	4,200	-	600	600	600	600	600	600	600	600	600	9,600
Planning and Design	300	300	300	300	300	300	300	300	300	300	300	3,300
Barrier Free	5,428	200	200	200	200	200	200	200	200	200	200	7,428
TOTALS \$	424,914	\$ 105,011	\$ 105,846	\$ 99,841	\$ 108,473	\$ 116,138	\$ 112,281	\$ 130,616	\$ 107,908	\$ 127,934	\$ 136,100	\$ 1,575,062

* Planning funds received in Systemic Renovation Project

Ten-Year Long-Range Master Plan = \$1,150,148

Ten-Year State Average = \$ 21,788
 Potential County Obligation = \$ 83,223



Vision

Every student is **inspired** to learn and **empowered** to excel.

Mission

We cultivate a **vibrant** learning community that prepares students to thrive in a **dynamic** world.

GOAL 1

Students

Every student achieves academic excellence in an inspiring, engaging, and supportive environment.

GOAL 2

Staff

Every staff member is engaged, supported, and successful.

GOAL 3

Families and the Community

Families and the community are engaged and supported as partners in education.

GOAL 4

Organization

Schools are supported by world-class organizational practices.

Guiding Principles

We believe in...

- Achieving excellence in all we do
- Developing each student's unique gifts
- Engaging students in relevant, experiential, and personalized learning
- Cultivating creative problem solving, critical thinking, and innovation
- Promoting integrity, civility, and global citizenship
- Enriching learning by honoring our diversity
- Fostering a culture of collaboration, trust, and shared responsibility
- Removing barriers to success

THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

Capital Budget Support of Vision 2018



Alignment with Strategic Plan

Vision 2018: Fulfilling the Promise of Preparation is the school system's strategic plan to build an educational program that is among the best in the world. While much of this plan is implemented in the operating budget, the Capital Improvement Program (CIP) supports achievement of each goal in Vision 2018.

The CIP supports Goal 1 Strategy 1.4.6: Configure physical spaces to facilitate learning by providing spaces configured to facilitate learning in accordance with Board approved educational specifications. The CIP also supports Strategy 1.8.2: Provide opportunities for students to explore a wide variety of experiences and to build competencies in academics, athletics, and the arts. Classrooms are specified to contain students according to approved class size ratios. Beyond the regular classrooms, facilities have specialized spaces which are equipped to deliver approved programs.

The CIP provides facilities with program areas for physical education and play areas for unstructured activity; thus promoting physical activity as a part of every child's daily routine. Walking and biking are facilitated with pathways and bicycle racks. Facilities include a cafetorium or cafeteria outfitted with the necessary equipment to deliver approved menu items.

Facilities also provide opportunities for students to learn how to balance their choices in activity modalities, including independent activity, face-to-face interaction, athletics, creative endeavors, and screen time. Facilities are designed to physically and socially activate students, staff, and the community. Stimulating indoor and outdoor spaces utilize light and appealing designs to create spaces for impromptu use.

Goal 2 seeks to have every staff member engaged, supported, and successful. Facility planning includes cross-functional representatives of the school system at all levels of the construction and renovation process from acquisition of land to engagement during construction. Planning, construction, and maintenance information is provided online through BoardDocs as well as separate web pages. Staff is engaged with satisfaction surveys and presentations at training sessions.

Capital Budget Support of Vision 2018

Goal 3 seeks to have families and the community engaged and supported as partners in education. Facilities are designed with secure access points to ensure visitors' needs are addressed while protecting students and staff from intrusion. Classrooms and staff work areas are designed to be comfortable and well lit. Projects include outreach to the community through meetings and presentations to ensure notification and collection of valuable stakeholder input. Staff coordinate with local officials, safety inspectors, and environmental regulators in support of student well-being.

Goal 4 seeks to ensure that schools are supported by world-class organizational practices. Facilities and equipment are constructed according to required codes and best practices. Regular safety and maintenance inspections are conducted according to local, state, and national standards. Industry best practices are implemented and benchmarks are identified and used. Examples include LEED standards and Green School Certification. Facilities are designed to incorporate technology selected to support overall organized goals.



Capital Planning

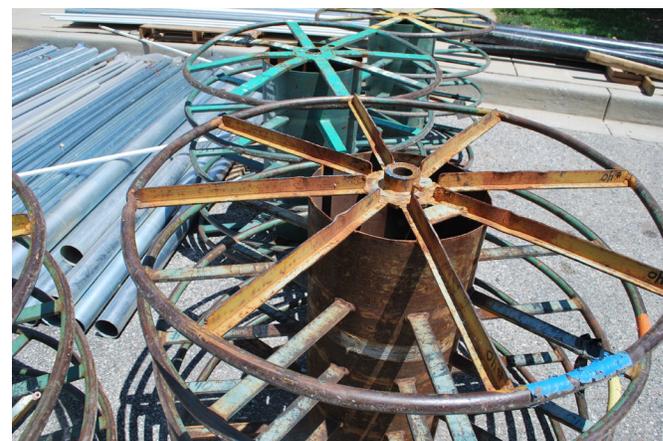


Capital planning is an ongoing process where the annual Capital Improvement Program (CIP) and Long-Range Master Plan are updated to reflect changes in enrollments, building capacities, and other conditions. The HCPSS provides other relevant publications which should be taken as a whole with the capital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

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.

The formulation of the FY 2017 Capital Budget, FY 2018–2022 Capital Improvement Plan, and the FY 2017–2026 Long-Range Master Plan begins with the annual completion of enrollment projections first presented in the 2015 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 percentage capacity utilization, 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.

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 on the elementary, middle, and high school level pages found in the Supporting Data section.



Capital Planning and Growth Management



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 three years of redistricting since the adoption of *PlanHoward 2030* to make more efficient use of existing schools. A total of 4,326 students were moved. More than three quarters of these students were relocated to existing schools. In 2011, prior to these redistricting efforts, 51 percent of students were in schools which met BOE target of 90–110 percent utilization. At the end of this redistricting cycle in 2014, 64 percent were in schools that meet this target. This was accomplished with only a four percent increase in capacity.

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 of late with the construction of Ducketts Lane Elementary School and Thomas Viaduct Middle School. The only projects proposed outside of the priority funding area today are the systemic renovations necessary to maintain systems in existing schools, like boiler or HVAC upgrades.

General Plan

The Capital Improvement Plan (CIP) is developed in alignment with the Board's strategic plan. However it must conform with another important planning document, the Howard County General Plan. Known as *PlanHoward 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 plan conformance to the County Council.

Adequate Public Facilities Ordinance

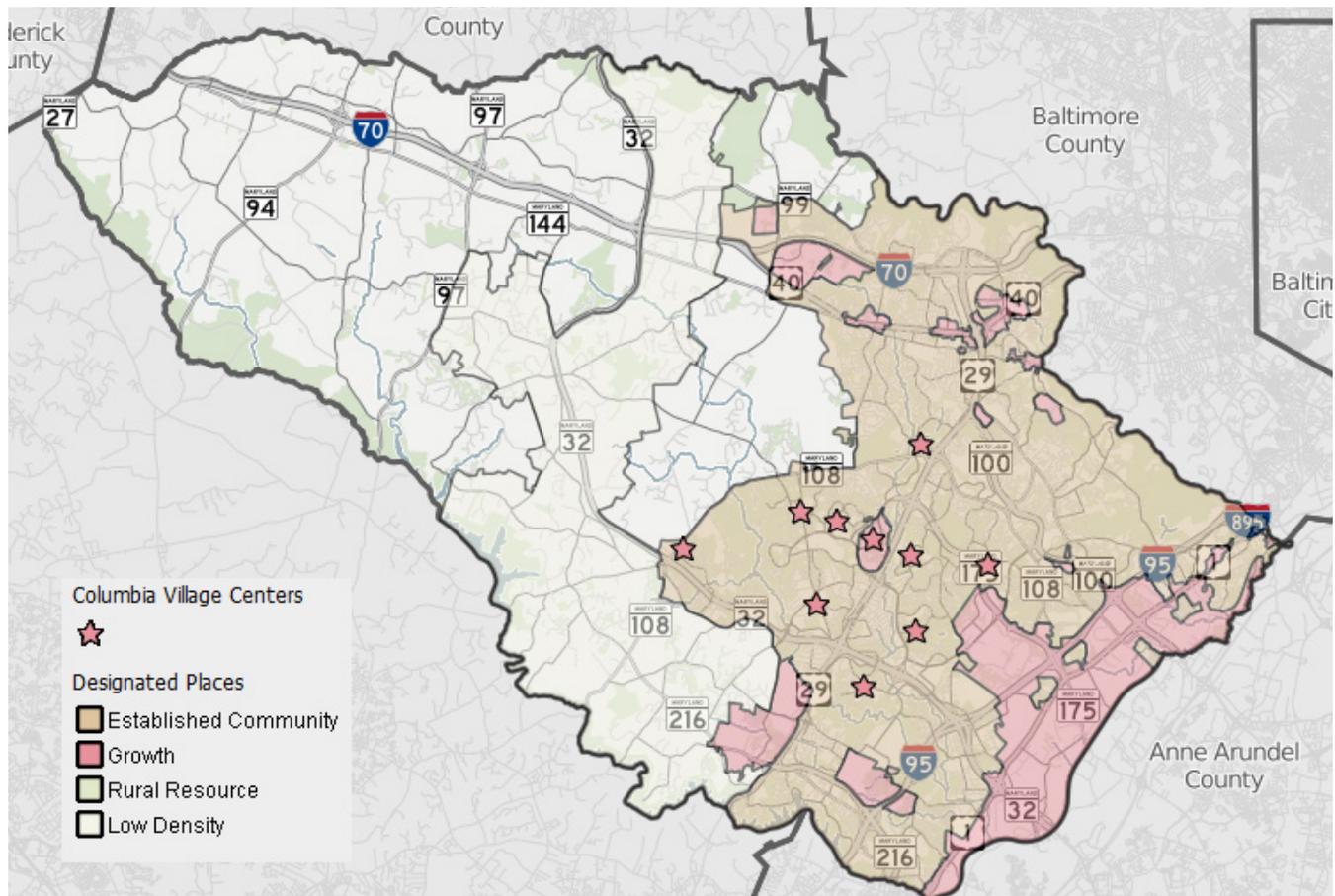
The Adequate Public Facilities Ordinance (APFO) ties future residential construction in Howard County to projected school enrollments and school capacities. Elementary and middle school attendance areas that show a projected enrollment over 115 percent of a school's program capacity are closed to future 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 residential building looks at the projected population of a school three years out from the current year. HCPSS is participating in an APFO task force but no changes to laws are expected before 2016.

Capital Planning and Growth Management

The APFO 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 7, 2015, and subsequently submitted to the County Council and begin with the year 2018. The APFO 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 APFO 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 adjusted FY 2016 Capital Budget projects and the new projections. The post-measures charts represent the recommended capital projects for the FY 2017 Capital Budget and redistricting results from the 2015 Feasibility Study 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 APFO charts as indicators at the elementary level, all regions are "open" in 2018 and five schools are "closed" in 2018. At the middle school level, four schools are "closed" in 2018.



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 2017 Capital Budget, FY 2018–2022 Capital Improvement Program, and the FY 2017–2026 Long-Range Master Plan begins with the annual completion of enrollment projections which are first published in the 2015 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. Elementary school special education classroom capacities are established by the mandated student/teacher ratios for the various programs. 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
- Housing 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 redistricting choices with capital investments. If the attending 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 redistricting. Redistricting is 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 Program published as a requirement of Maryland State Department of Education (MSDE). Each year staff evaluate comprehensive maintenance program plans to identify projects that exceed regular maintenance and add these project 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 surge space during renovations/additions, or provide space for a school’s program needs. Currently there are 237 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, Waverly 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. Similar plans are underway at Deep Run Elementary School and Patuxent Valley Middle School. The school system conducts annual 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. Uses of the fund in this way has been infrequent.



Land Bank as of July 1, 2015

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
ES #42 Site	8	Banbury Drive Parcel G	2013	\$ 4,200,000
Faulkner Ridge Center	9.01	Marble Faun Lane	1968	\$ 1

The following properties are held by other parties for future use by the Board of Education for school construction. Upon need for a school site, the Board may utilize these properties.

Reserved Sites	Acreage	Location
Clary's Forest	10	Little Patuxent Parkway near Bright Passage
Dickinson	11	Eden Brook Drive and Weather Worn Way
Dickinson	20	Sweet Hours Way east of Eden Brook Drive
Harper's Choice	5	Rivendell Lane and Cedar Lane
Hopewell	10	Rustling Leaf at Deepage Drive
Huntington	11	Vollmerhausen Road east of Murray Hill Road



Recent Capital Accomplishments

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

Facility Additions

Laurel Woods Elementary School

Renovation and construction has been completed at Laurel Woods Elementary School. The two-story classroom addition with two stair towers provides direct egress from the building. New security doors protect the existing entry doors to create a secure vestibule visible from the main office. Entry after normal opening hours is remotely controlled by office personnel. Emergency vehicle access has been extended around the building. The project made important modernizations to support our current program including a new health center, expansion of the cafetorium and a physical education activity room as well as improved space for prekindergarten, music, and art.



Renovated Facilities

Longfellow Elementary School

The Longfellow Elementary School project renovated an existing single-story facility originally constructed in 1970 and renovated in 1987. The primary focus was conversion of the open space teaching pods into individual classrooms. In addition, the administrative suite was relocated to the front entrance, and the health suite was developed to meet current standards. In providing this reconfiguration, a design direction was taken that improves the current use and flow of the building. Departing from the open pod concept, grade clusters are formed to maintain cohesion between the individual grade levels. To aid in the interior renovations of the school, several additions were built to relocate key programs within the building to free up interior space.



Recent Capital Accomplishments

Atholton High School

The Atholton High School renovation project was a complete modernization of the building and a complete update of the facility with over 52,000 square feet of new construction for the high school. New mechanical, electrical, and IT systems will extend the useful life of the building for decades into the future. The project was planned to achieve a Leadership in Energy and Environmental Design (LEED) Silver Certification.

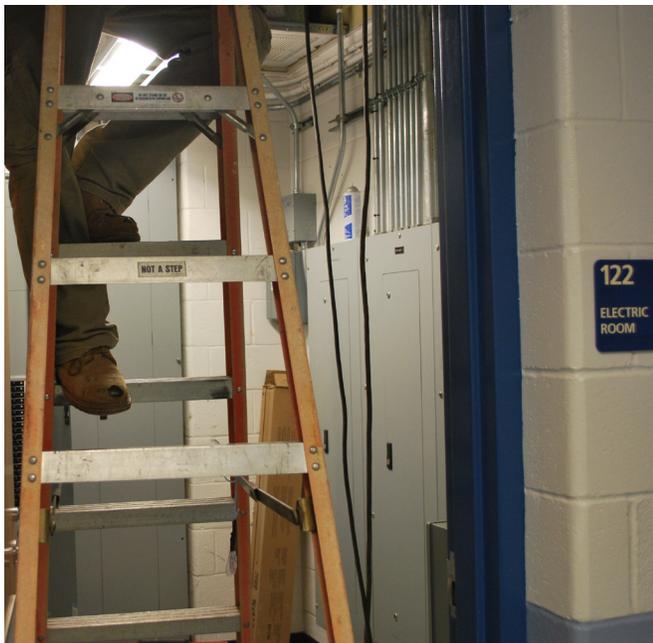
Highlights of the project include complete replacement of heating and cooling systems, as well as improvement of regional program areas for Academic Life Skills (ALS) and Junior Reserve Officer Training Corps (JROTC). The interior and exterior renovations provided a functional and modernized facility while maintaining the nostalgic architecture of the building.



Recent Capital Accomplishments

Security Features/Systemic

Renovations follow the recommendations of the 2013 Joint Task Force on school safety. Highlights include provision of controls to visitor access for all elementary and middle schools. Entrance points are secured with card access and camera monitored authorization at entrances. Systemic improvements continue to secure the interior of school buildings during lockdowns. All elementary and middle schools have been completed.



Energy Initiatives

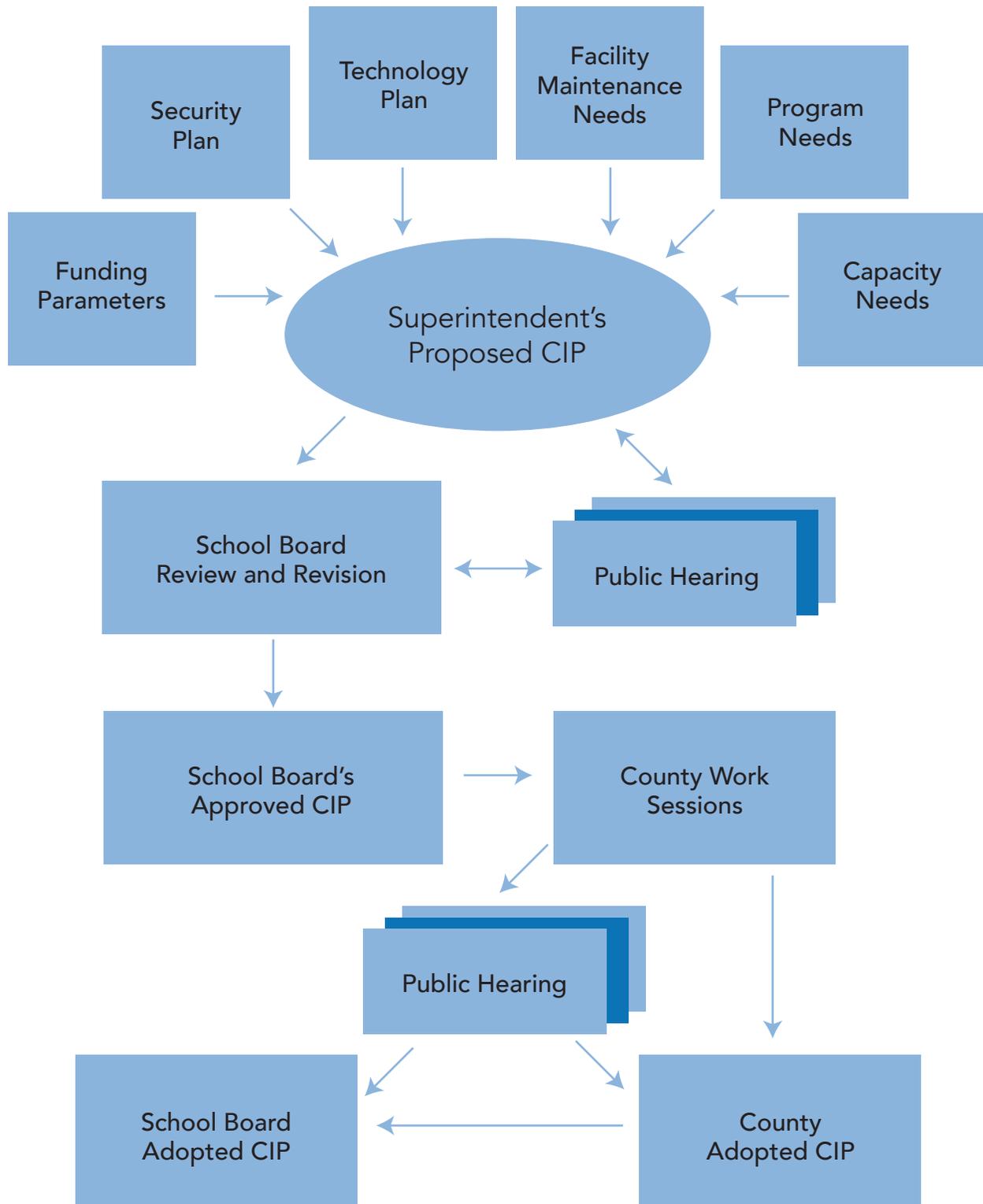
The HCPSS promotes a green school strategy which integrates educational and facility-related efforts in including construction to LEED standard.

Energy improvements are some of the most visible and noticeably effective improvements. Modernization of lighting fixtures and improved zone control of heating and cooling have saved money and qualified the HCPSS for utility rebates. Improvements have been made at:

- Bushy Park Elementary School
- Dayton Oaks Elementary School
- Ellicott Mills Middle School
- Folly Quarter Middle School
- Lime Kiln Middle School
- Veterans Elementary School



Capital Improvement Program (CIP) Development Process



Calendar for Development and Review/Approval

Superintendent's Proposed FY 2017 Capital Budget
 Capital Improvement Program FY 2018–2022
 Long-Range Master Plan FY 2017–2026

Thursday, June 11, 2015 7:30pm - Board Room	Staff presentation of Feasibility Study Report including 2015 enrollment projection.
Thursday, August 13, 2015 7:30pm - Forest Ridge ES*	Board of Education Public Hearing and Pre-Development Work Session.
Thursday, September 3, 2015 7:30pm - Banneker Room**	Staff presentation of the Superintendent's Proposed Capital Budget.
Thursday, September 17, 2015 7:30pm - Banneker 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.
Monday, October 5, 2015	Board of Education submission of Proposed Capital Budget to Maryland Public School Construction Program.
Thursday, October 15, 2015	Planning Board Public Hearing on Board of Education's Proposed Capital Budget.
Wednesday, November 2, 2015 7:30pm	County Council review of Board of Education's Proposed Capital Budget for letter of support to interagency Committee on School Construction.
Tuesday, February 23, 2016 9:00am - 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, May 12, 2016 7:30pm - Board Room	Board of Education Public Hearing.
TBD	County Council Public Hearing on the Education portion of the County Executive's Capital Budget.
TBD	County Council Adoption of the Capital Budget.
TBD	Staff pre-file of the Adequate Public Facilities Ordinance Open/Closed Chart to County Council.
Thursday, May 19, 2016 7:30pm - Board Room	Board of Education Work Session (If necessary).
Wednesday, May 26, 2016 7:30pm - 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: <http://www.co.ho.md.us/>

* Forest Ridge Elementary School: 9550 Gorman Rd., Laurel, MD

** Banneker Room: 3430 Court House Rd., Ellicott City, MD



Superintendent's Proposed FY 2017 Capital Budget
Capital Improvement Program FY 2018–2022
Long-Range Master Plan FY 2017–2026

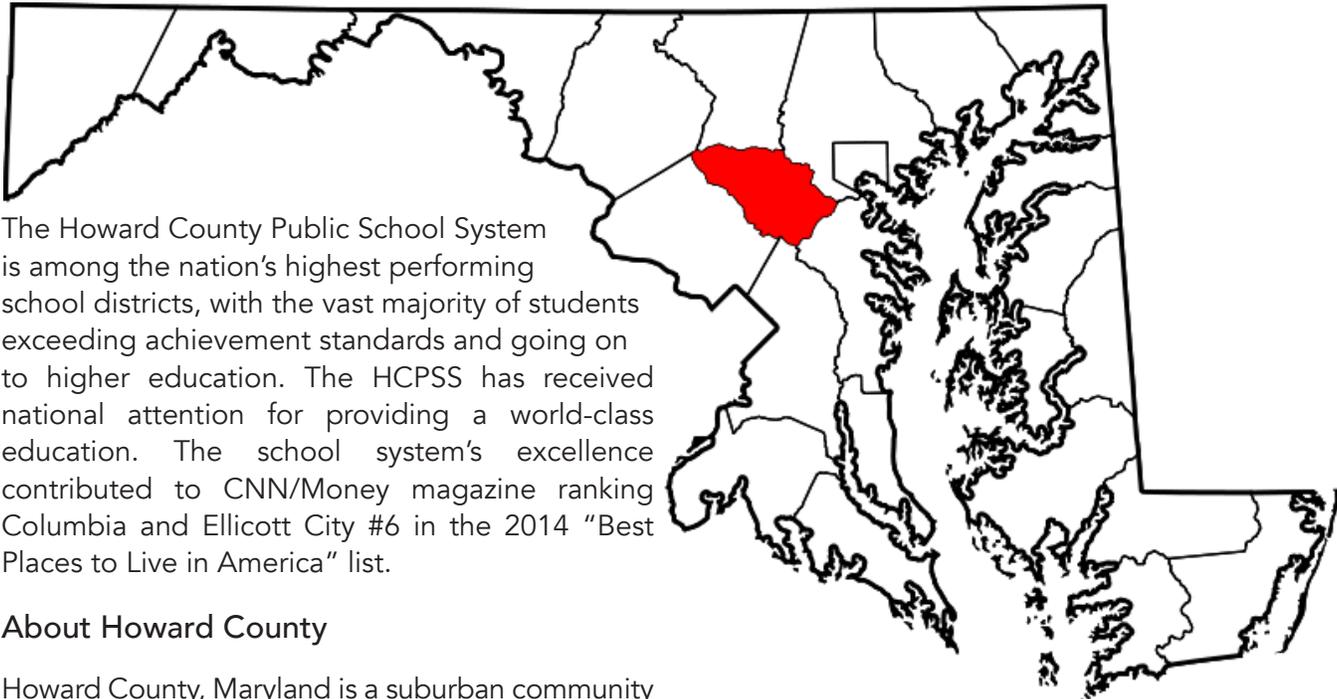
Section 2

System Information

September 2015



Howard County at a Glance



The Howard County Public School System is among the nation’s highest performing school districts, with the vast majority of students exceeding achievement standards and going on to higher education. The HCPSS has received national attention for providing a world-class education. The school system’s excellence contributed to CNN/Money magazine ranking Columbia and Ellicott City #6 in the 2014 “Best Places to Live in America” list.

About Howard County

Howard County, Maryland is a suburban community of over 300,000, situated midway along the Baltimore-Washington corridor. It is a county of contrast—a blend of old and new, urban and rural, historical and progressive. The county’s borders encompass Ellicott City, one of the country’s oldest towns, and Columbia, a planned community conceived and designed over 40 years ago by the Rouse Company.

Howard County boasts a number of historical landmarks, including the Bollman Truss Railroad Bridge, the Thomas Viaduct, and nine sites along the Maryland Civil War trails. The county’s 30 regional and community parks, 7 golf courses, 5 lakes, and extensive hiking and biking trails also contribute to the \$590.1 million in annual tourism revenue.

Howard County Race/Ethnicity

	Howard County	Maryland
American Indian/Alaskan	0.4%	0.6%
Asian	16.2%	6.0%
Black/African American	18.2%	14.0%
Hawaiian/Pacific Islander	0.1%	0.1%
Hispanic/Latino	6.3%	9.0%
White	61.4%	60.5%
Two or More Races	3.5%	2.6%

2013 US Census Bureau Data

Howard County Fast Facts

- 94.9% of the population over 25 has graduated high school. (MD State 88.7%)
- 60% hold a Bachelor’s degree or higher. (MD State 36.8%)
- \$108,844 is the median household income, 2nd highest in the country.
- 73.9% homeownership rate with median value of owner-occupied housing of \$428,100.
- 250.74 square miles land area and 1,144.9 persons per square mile. (MD State land area 9,707.24 square miles and 594.8 persons per square mile)
- Howard County is the smallest Maryland County by land area.
- 4% unemployment rate as of June 2014, lowest rate in Maryland. (MD State 6.2%)

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 1,827 acres of land. Approximately seven percent of HCPSS staff are devoted in some way to the maintenance of facilities.



HCPSS Facilities
76 Schools
41 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)
Harriet Tubman (Offices and Shops)
Ridge Road Center (Shops)
Old Bushy Park (Storage)
Old Cedar Lane (Offices)

Average CEFPI Rating*		
Elementary	Middle	High
859	862	792

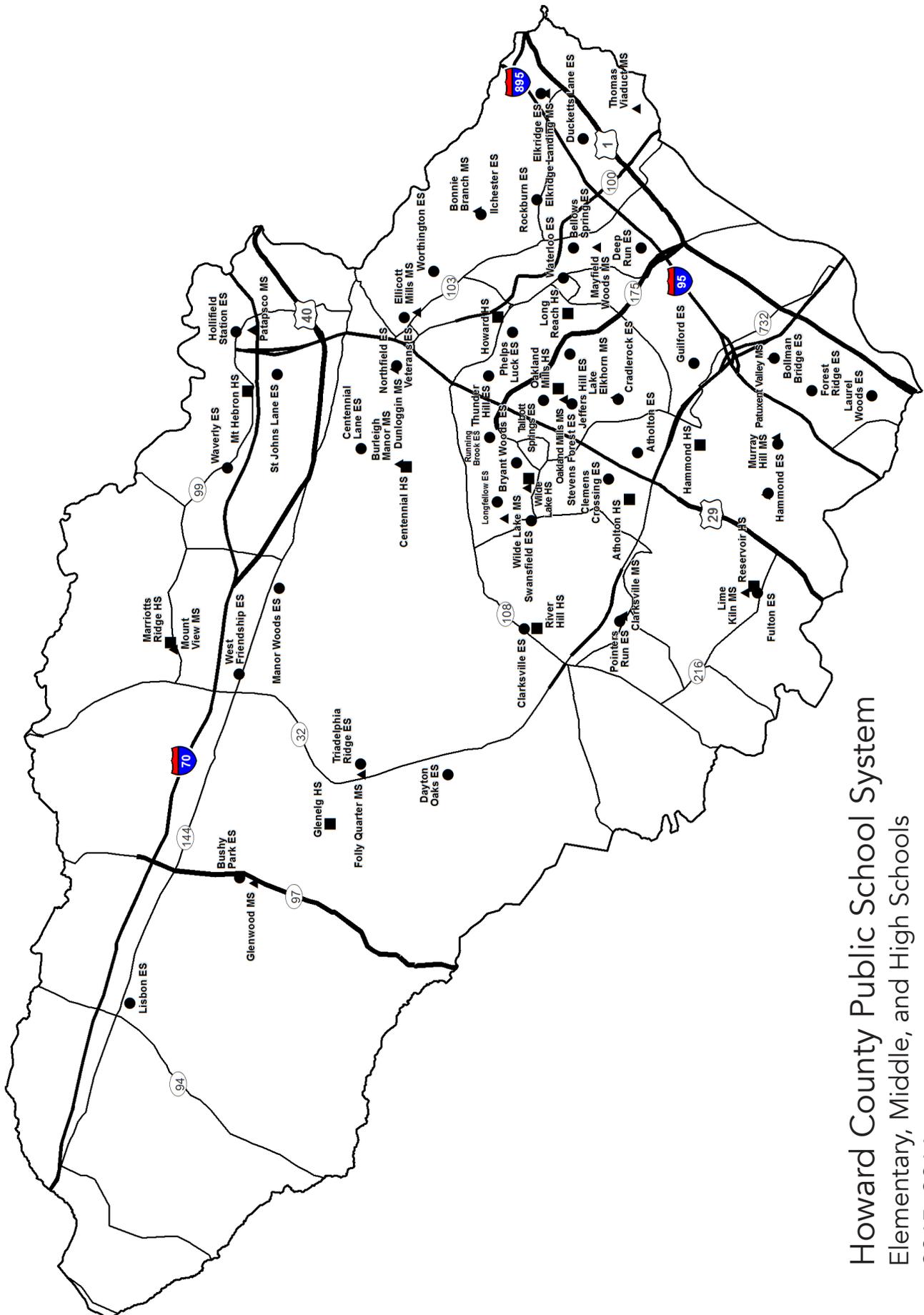
* Average score on 1,000 pt. scale based upon Council of Educational Facility Planners International Appraisal Guides.

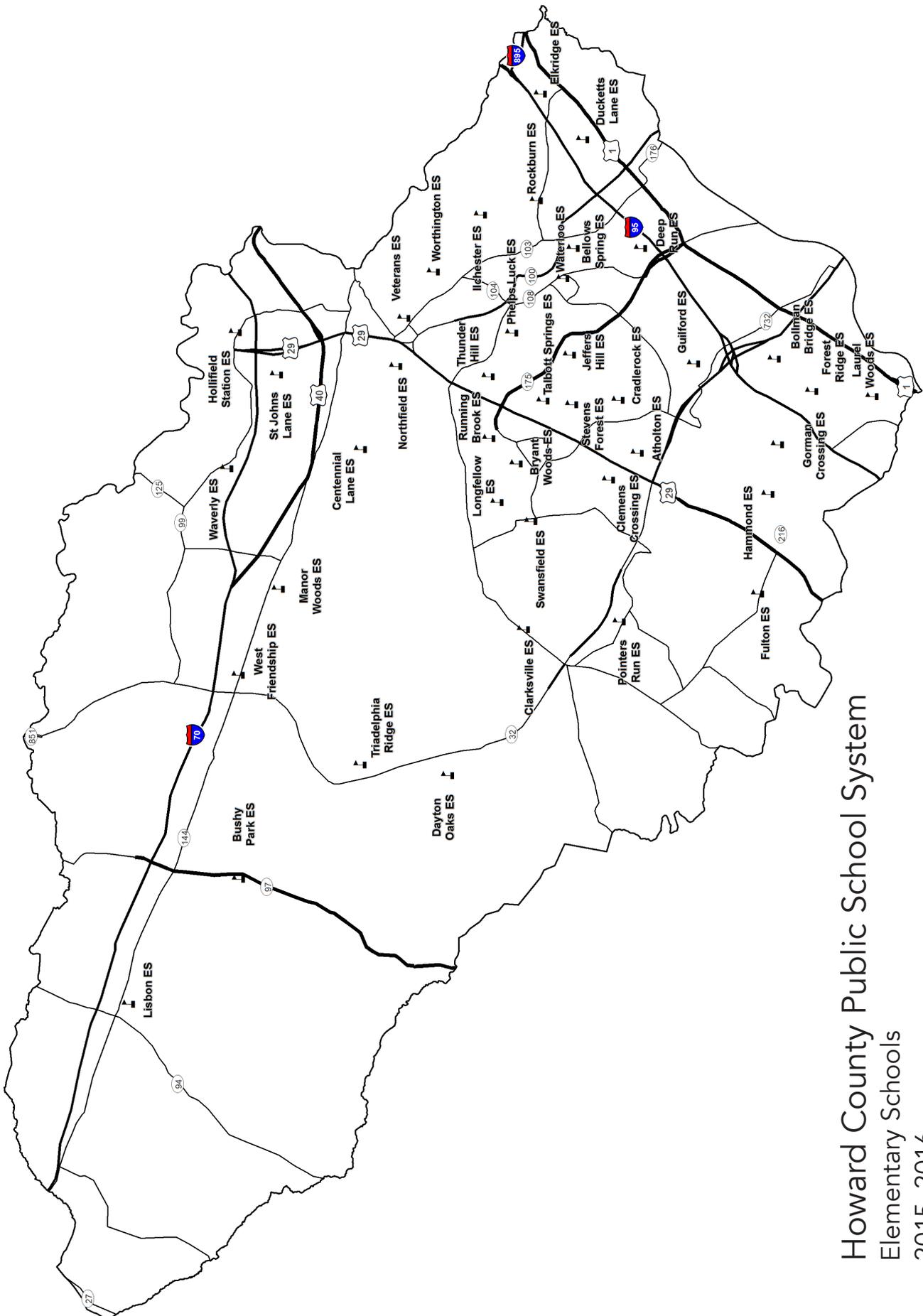
Average Age of Facilities*		
Elementary	Middle	High
14 years	19 years	18.75 years

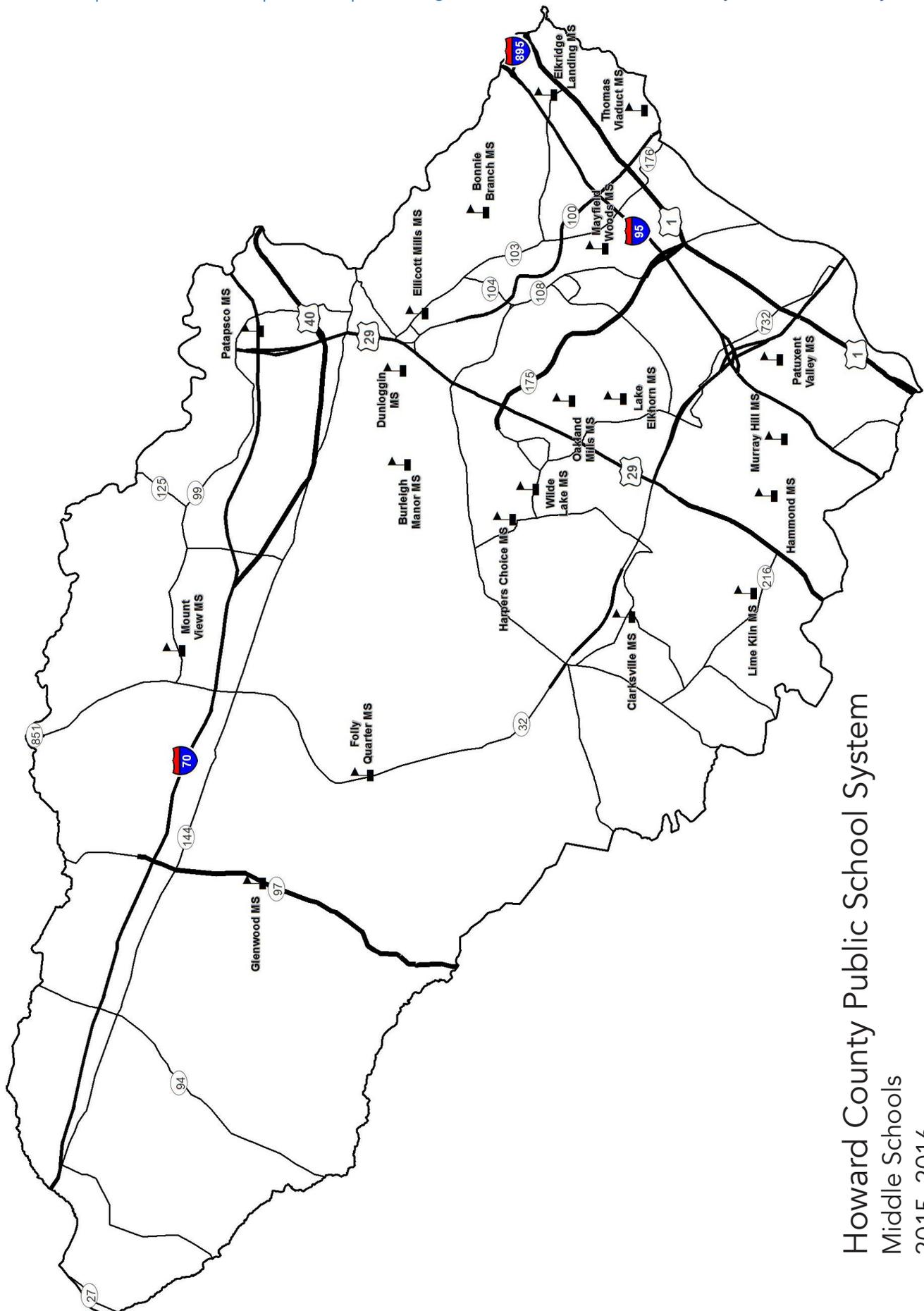
* Including completed renovations.

Enrollment*	
Total Enrollment (Pre-K-12)	53,685
Elementary (Pre-K-5)	24,842
Middle (6-8)	12,276
High (9-12)	16,438
Special Schools	129

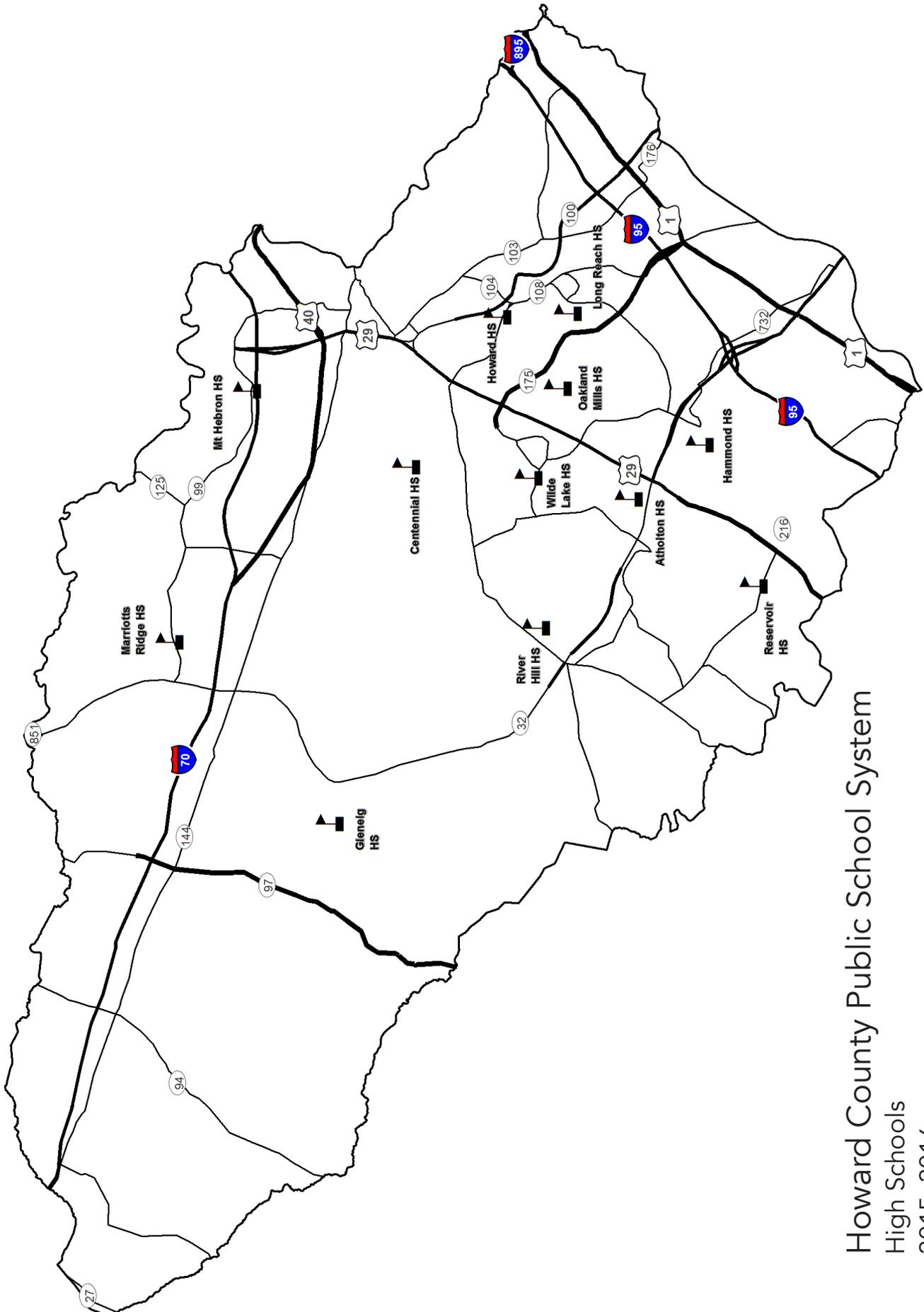
* Official September 30, 2014 Enrollment Report.







Howard County Public School System
Middle Schools
2015-2016



Howard County Public School System
High Schools
2015-2016

Superintendent's Proposed FY 2017 Capital Budget
Capital Improvement Program FY 2018–2022
Long-Range Master Plan FY 2017–2026

Section 3

Project Detail

September 2015

Wilde Lake Middle School Replacement School: Project 1031

10481 Cross Fox Lane, Columbia, MD 21044
<http://wlms.hcpss.org>

Anne Swartz, Principal
 410.313.6957



Building Data	
Year Built	1969
Age	46
Site Area (acres)	21
Last Renovation/Addition	1998
Current Relocatables	13
Current Capacity	467
9/2014 Enrollment	521
Projections/Capacity Utilization	
2015 Projection	573
Projected Utilization	123%
2020 Projection	692
Projected Utilization	148%
Post-renovation Cap.	760
Projected Utilization	91%

Project Purpose

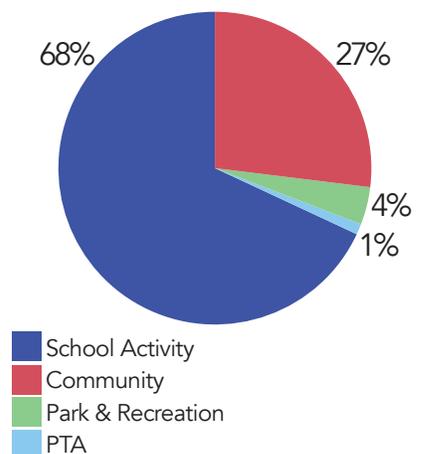
The Wilde Lake Middle School project will replace an aging middle school with a larger, modern facility in an area slated for growth. The replacement school will provide capacity for 760 students. A 2008 facility assessment concluded that the Wilde Lake Middle School building had a net program area deficiency of 13.6 percent, the largest deficiency of educational program area of the 19 middle schools operating at that time. A subsequent feasibility study determined that the cost of an ADA compliant renovation was comparable to a replacement.

Nearly twice as large as the current school but using less than half the energy, the new facility will be a showcase of energy efficiency. Solar power will allow the net draw from the power grid over the course of a year to be zero. This kind of capital investment can defray operating expenses. 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 Wilde Lake Middle School

Over 1,900 reservations brought citizens and students into Wilde Lake Middle School after school hours and on weekends for a variety of community and student programs, meetings, activities, and events. An attendance of 209,000 was estimated for these activities. Athletic events, after school activities, performance arts events, and camps accounted for the majority of the facility use. Other uses, which include training, elections, and other activities make up the balance of reservations.

Community Use in FY15



Project Details

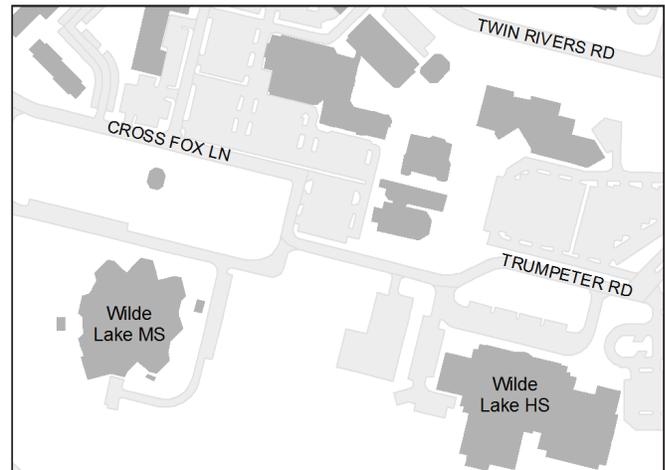
Wilde Lake Middle School, located in Columbia, was opened in 1969 as an open concept school and was expanded in 1974. In 1998, it was renovated with classrooms enclosed. During the summer of 2009, Wilde Lake Middle School went through minor renovations including some miscellaneous interior finishes and demountable partitions.

This building will be Net Zero and US Green Building Council (USGBC) LEED Certified. The building will be powered by solar voltaic cells on the roof. The architectural design is highly efficient considering building orientation, mass, and scale. Daylight is well used. The mechanical systems finely control electric lighting and HVAC and controls. Training will help school-based staff make the most of the energy efficient design. These considerations position the new Wilde Lake Middle School to be the most energy conscious and efficient school in the state.



This is the fourth year of funding for Wilde Lake Middle School. During FY 2017, the third year of construction will be implemented. Based upon the current plan, the Board will request a final appropriation for this program in FY 2017 of \$16.3 million to complete work and have the replacement school ready to open in August 2017.

School Location Map



Budget Summary (In Thousands)

Approved Appropriations		
FY 2014	Planning	\$ 2,658
FY 2015	Construction	\$ 8,200
FY 2016	Construction	\$ 18,234
Current & Future Requests		
FY 2017	Construction	\$ 16,285
Total Project Cost Estimate		
Total		\$ 45,377



Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Wilde Lake Middle School Replacement project is scheduled for completion in August of 2017.

Patuxent Valley Middle School Renovation: Project 1033

9151 Vollmerhausen Road, Jessup, MD 20794
<http://pvms.hcpss.org/>

Micah Humbert, Principal
 410.880.5840



Building Data

Year Built	1989
Age	26
Site Area (acres)	30
Last Renovation/Addition	N/A
Current Relocatables	6
Current Capacity	760
9/2014 Enrollment	648

Projections/Capacity Utilization

2015 Projection	676
Projected Utilization	89%
2020 Projection	757
Projected Utilization	100%

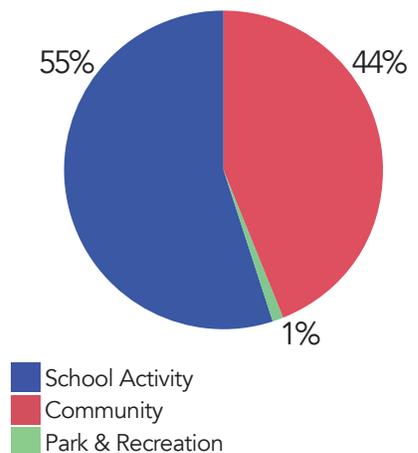
Project Purpose

The Patuxent Valley Middle School project will expand educational program spaces and renovate the existing facility to remedy deficiencies in the design, particularly to improve operation and security. Open teaching stations will be reconfigured into self-contained classrooms. Operable walls will be replaced with full-height drywall partitions. Modular classrooms will be replaced with permanent additions to the building that will accommodate the classroom spaces and necessary program areas.

The project will include a complete systemic renovation of the existing building including new electrical, mechanical, plumbing, sprinkler, technology, roofing, and life safety systems. Ceilings will be removed and replaced, toilet rooms will be renovated, and ADA accessibility will be addressed to bring the facility into compliance with the HCPSS Guidance Manual for Renovations and Modernizations of Existing Schools.

Patuxent Valley 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 in FY15



Community Use at Patuxent Valley Middle School

Over 852 community use reservations were registered for Patuxent Valley Middle School in FY 2015. An attendance of 40,310 was estimated for a variety of community and student programs, meetings, activities, and events. Athletic events accounted for the majority of facility use. Other uses, which include after school activities and educational activities, make up the remaining reservations.

Project Details

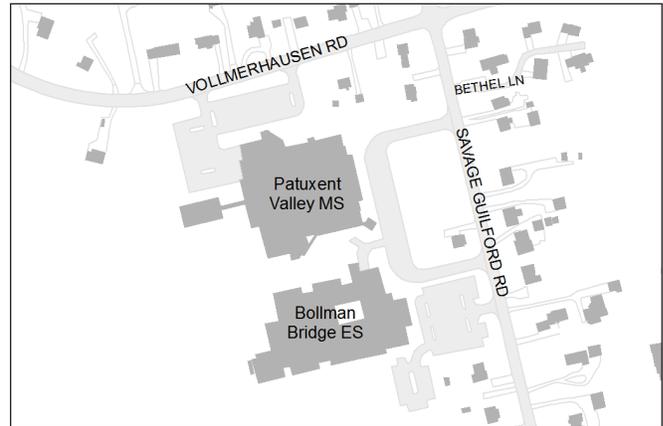
Patuxent Valley Middle School opened in 1989 and a group of six modular classrooms were connected to the building by a covered walkway sometime thereafter. No renovations to the 97,445 square foot school have occurred since the building was originally constructed.

The 2008 facility assessment of middle schools concluded that Patuxent Valley Middle School had a net 12.7 percent surplus of educational program area. While the net area meets specification, in 2013 Gilbert Architects found deficiencies in the design.

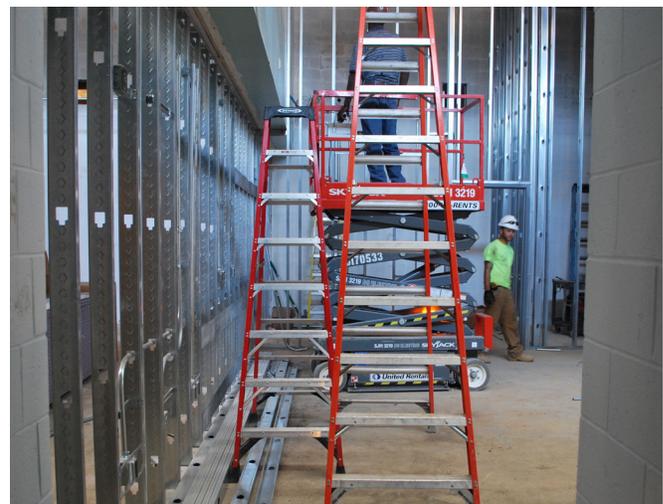
The systemic upgrades consist of a complete renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing, and life safety systems with an emphasis on energy efficiency. The physical upgrades include relocating the administration office to the main floor, re-purposing the oversized library space, reconfiguring the cafeteria access to playground and bathrooms, and providing daylighting throughout the building. ADA improvements will include elevator access to the second floor from the main entrance lobby/stair tower and an upgrade to the Health Suite to present standards.

This is the second year of funding for Patuxent Valley Middle School. During FY 2016, the first year of construction will be implemented. The requested sum of \$10 million in FY 2016 will allow construction to progress on schedule. Based upon the current plan, the Board will request a final appropriation for this program in FY 2017 of \$10.9 million to complete work by August 2017.

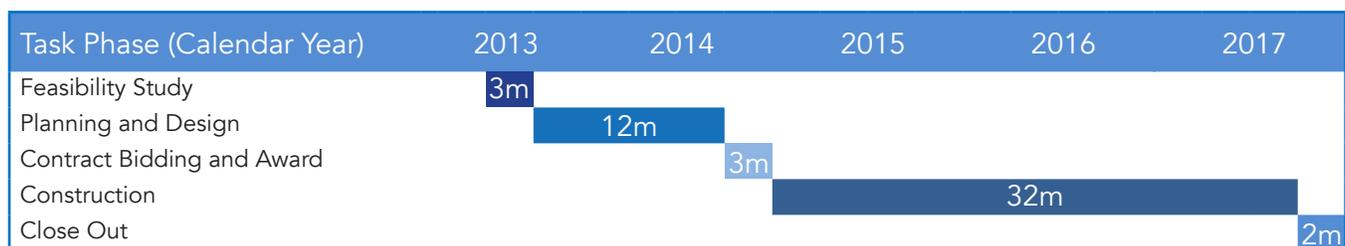
School Location Map



Budget Summary (In Thousands)		
Approved Appropriations		
FY 2014	Planning	\$ 8,145
FY 2016	Construction	\$ 10,000
Current & Future Requests		
FY 2017	Construction	\$ 10,890
Total Project Cost Estimate		
Total		\$ 29,035



Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Patuxent Valley Middle School Renovation project is scheduled for completion in August of 2017.

Swansfield Elementary School Renovation/Addition: Project 1034

5610 Cedar Lane, Columbia, MD 21044
<http://ses.hcpss.org/>

Maisha Strong, Principal
 410.313.6907



Building Data

Year Built	1972
Age	43
Site Area (acres)	10
Last Renovation/Addition	2008
Current Relocatables	12
Current Capacity	521
9/2014 Enrollment	548

Projections/Capacity Utilization

2015 Projection	555
Projected Utilization	107%
2020 Projection	519
Projected Utilization	100%
Post-Renovation Cap.	621
Projected Util. 2019	83%

Project Purpose

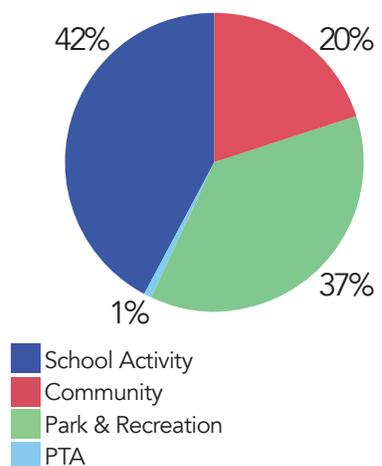
The Swansfield Elementary School project will expand educational program spaces with 100 seats of new capacity and renovate the existing facility. Swansfield Elementary School was opened in 1972 and renovated in 1998. The school was expanded in 1988 and 2008. In April 2009, HCPSS engaged Gilbert Architects Inc. to conduct a facility assessment of elementary schools. The report concluded that Swansfield Elementary School had 12.3 percent deficiency of educational program area of the 40 elementary schools operating at that time. The FY 2015 Capital Budget introduced this project to the Capital Improvement Program. In previous budgets, it was listed as a systemic renovation. In the FY 2015 Capital Budget, the total project cost was estimated at \$19.4 million. In the FY 2017 Capital Budget the total project cost estimate is \$25.9 million. The \$6.5 million increase is mainly attributed to the new plan including an addition.

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 Swansfield Elementary School

Over 2,900 reservations brought citizens and students into Swansfield Elementary School after school hours and on weekends for a variety of community and student programs, meetings, activities, and events. An attendance of 203,860 was estimated for these activities. After school activities and athletic events accounted for much of the facility use. Other uses, which include child care and camps, make up the remaining reservations.

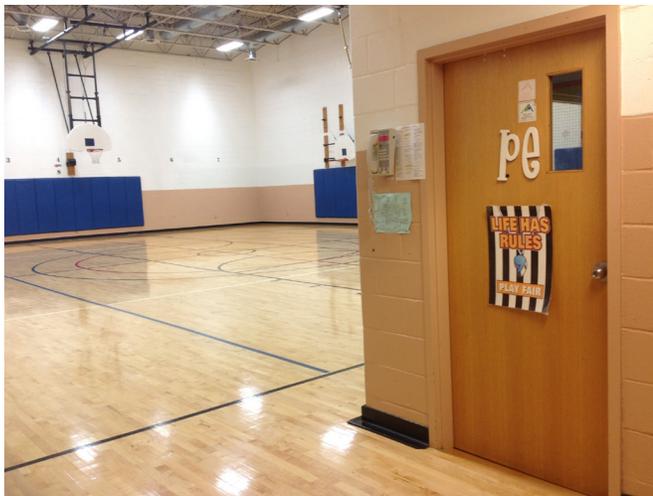
Community Use in FY15



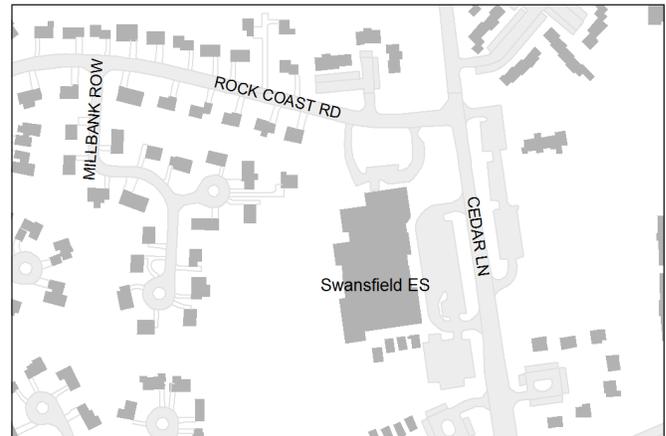
Project Details

The planned scope of work for the school includes programmatic, systemic, and physical upgrades as required to bring the facility into compliance with the HCPSS Guidance Manual for Renovations and Modernizations of Existing Schools. The programmatic changes include providing individual classrooms and corridors, creating a COMAR compliant health suite, and providing adjunct space to relocate existing portable classrooms inside of the building.

The systemic upgrades consist of a complete renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing, and life safety systems with an emphasis on energy efficiency. The physical upgrades include a refinished gymnasium floor, new doors and hardware, additional exterior windows, as well as new casework and finishes. This project will provide an additional capacity of 100 seats and core infrastructure space necessary to operate effectively at the larger capacity.



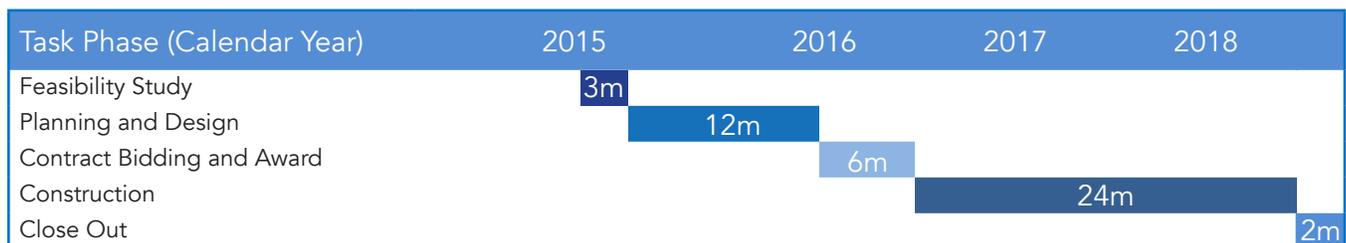
School Location Map



Budget Summary (In Thousands)		
Approved Appropriations		
FY 2015	Planning	\$ 1,898
FY 2016	Construction	\$ 9,875
Current & Future Requests		
FY 2017	Construction	\$ 12,722
FY 2018	Construction	\$ 1,407
Total Project Cost Estimate		
Total		\$ 25,902

This is the third year of funding for Swansfield Elementary School. During FY 2017, the second year of construction will be implemented. The requested sum of \$12.7 million in FY 2017 will allow construction to progress on schedule. Based upon the current plan, the Board will request a final \$1.4 million in FY 2018 to complete work and have the school ready by August 2018.

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Swansfield Elementary School Renovation/Addition project is scheduled for completion in August of 2018.

Waverly Elementary School Renovation/Addition: Project 0973

10220 Wetherburn Road, Ellicott City, MD 21043
<http://waves.hcpss.org/>

Kathy Jacobs, Principal
 410.313.2819



Building Data	
Year Built	1990
Age	25
Site Area (acres)	11.49
Last Renovation/Addition	2007
Current Relocatables	8
Current Capacity	638
9/2014 Enrollment	705
Projections/Capacity Utilization	
2015 Projection	688
Projected Utilization	108%
2020 Projection	572
Projected Utilization	90%
Post-Renovation Cap.	738
Projected Util. 2019	76%

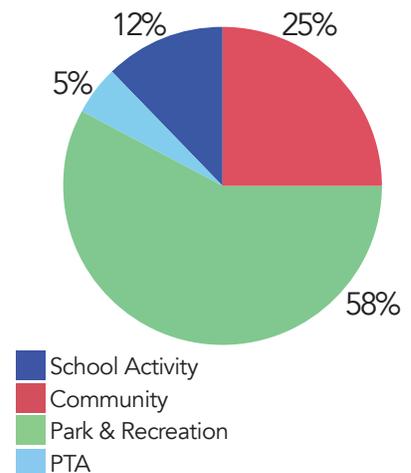
Project Purpose

The Waverly Elementary School project will expand educational program spaces with 100 seats of new capacity and renovate the existing facility. Waverly Elementary School opened in 1990 and was renovated in 2007 to accommodate full-day kindergarten. The 2009 facility assessment of elementary schools concluded that Waverly Elementary School had 14.6 percent deficiency of educational program area of the 40 elementary schools operating at that time. The FY 2016 Capital Budget introduced this project in the CIP. In previous budgets, it was listed as a systemic renovation. In the FY 2016 Capital Budget, the total project cost was estimated at \$29.5 million. In the FY 2017 Capital Budget, the total project cost estimate is \$34.2 million. The \$4.7 million increase is mainly attributed to the new plan including an addition. 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 Waverly Elementary School

Waverly Elementary School hosted over 1,620 after school and weekend activities for a variety of community and student programs, meetings, activities, and events. An attendance of 91,297 was estimated for these activities. Athletic events accounted for approximately half of the facility use. Other uses, which include child care and after school activities, make up the balance of reservations.

Community Use in FY15



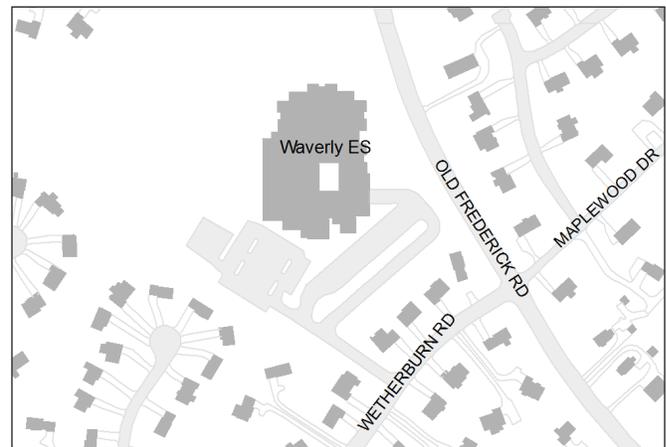
Project Details

This project calls for an expansion of the educational program spaces and renovation of the existing facility. This will consist of a complete systemic renovation of the existing building including new electrical, mechanical, plumbing, technology, roofing, and life safety systems as applicable per the recent feasibility assessment survey. The project will provide 100 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 improved, and new spaces added as required bringing the facility into compliance with renovation specifications.

The Waverly Elementary School Addition supports a long-term plan as described in the 2015 Feasibility Study. In 2015 and beyond, Manor Woods Elementary School is projected to be above the 110 percent capacity utilization standard and eventually trends above 200 percent. Manor Woods Elementary School is not on public sewer and for that reason expansion is unlikely. Constructing this addition in 2018 can help relieve overcrowding at Manor Woods Elementary School. Beyond that, a new elementary school in Turf Valley has been considered after 2020.



School Location Map



Budget Summary (In Thousands)		
Approved Appropriations		
FY 2015	Planning*	\$ 2,421
FY 2016	Construction	\$ 3,770
Current & Future Requests		
FY 2017	Construction	\$ 9,589
FY 2018	Construction	\$ 18,396
Total Project Cost Estimate		
Total		\$ 31,755

* Planning funds received in Systemic Renovation Project.

This is the third year of funding for Waverly Elementary School. Planning funds were received in the Systemic Renovation Line in FY 2014. During FY 2016, the first year of construction was implemented. In FY 2017 and FY 2018, an additional \$26.5 million is planned to complete work and have the school ready by August 2018.

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Waverly Elementary School Renovation/Addition project is scheduled for completion in August of 2018.

New ES #42: Project 1028

School Site located adjacent to Thomas Viaduct Middle School at 7000 Banbury Drive, Hanover, MD



Architect rendering of Ducketts Lane Elementary School courtesy of Grimm + Parker Architects. This is the newest HCPSS elementary school based on the current education specifications.

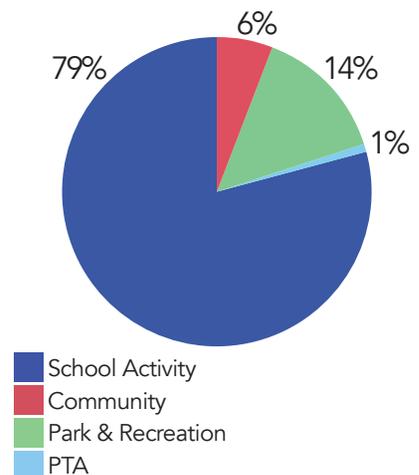
Project Purpose

The New ES #42 will be a new facility. Capacity utilization at Ducketts Lane Elementary School, which opened in August 2013, in the northern Route 1 corridor, will continue to grow. Even with additional capacity that may have been found in the Gilbert study, we now know that at least one additional elementary school is needed in the eastern part of the county. The region will exceed 115 percent utilization in 2021 and require approximately 950 additional seats. The recently completed comprehensive zoning increased the entire housing projection this year by 996 units, most was initiated in FY 2016. 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 New ES #42

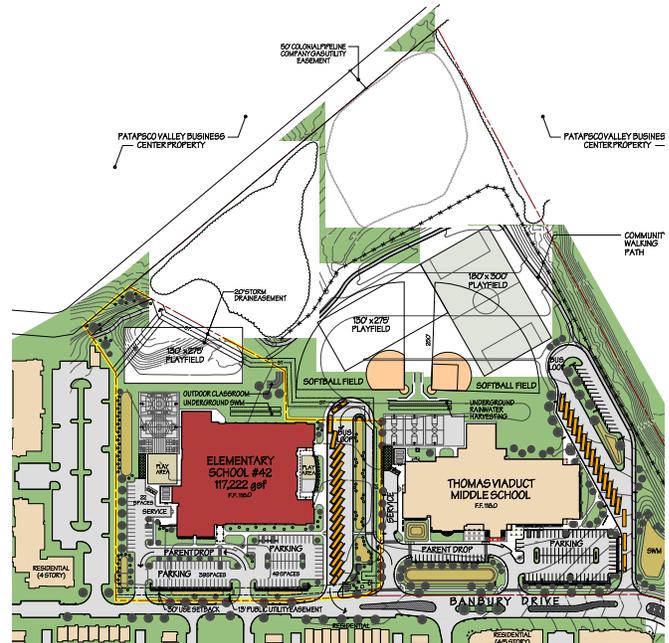
Community use is anticipated in the planning for this new facility. Ducketts Lane Elementary School serves as a comparison. Ducketts Lane Elementary School hosted an estimated 87,917 attendees for over 3,394 reservations after school hours and on weekends for a variety of events. The majority of the events were school related, and remaining reservations were Park and Recreation and other community events.

Community Use in FY15



Project Details

The New ES #42 will be designed in conformance with the General Educational Specifications for New Elementary Schools published in June 2003. The building design will provide the best possible learning environment for all elementary students in every aspect of educational programs by providing inclusive learning spaces, state-of-the-art technology, and sustainable building practices. The prototype is a two-story elementary school designed for a 788 student capacity. The new school will accommodate prekindergarten through fifth grade, as well as the Regional Early Childhood Center. The project will achieve USGBC LEED Gold certification in keeping with the sustainable goals of HCPSS to reduce negative impact on the environment and enhance health and comfort of the building occupants, thereby improving building performance.



A school site is located adjacent to Thomas Viaduct Middle School at 7000 Banbury Drive in Hanover, MD.

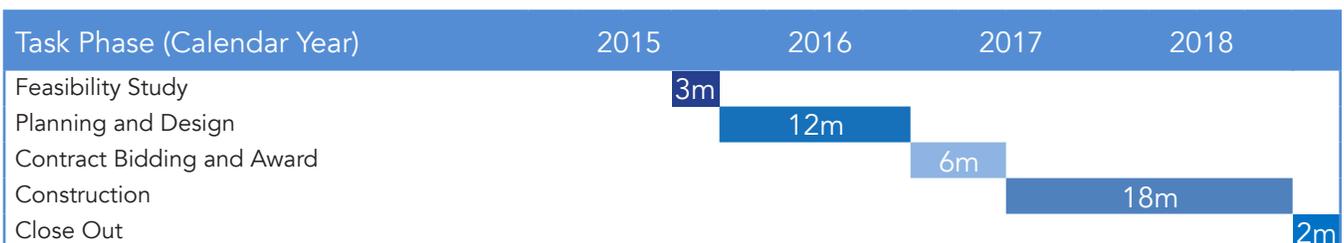


Transit-oriented developments (TOD) are densely arranged communities of homes, offices, and stores near a rail station or bus line. Oxford Square situated very close to the Dorsey MARC Station and will have a community shuttle until a pedestrian access can be constructed.

Budget Summary (In Thousands)		
Approved Appropriations		
FY 2016	Planning	\$ 2,807
Current & Future Requests		
FY 2017	Construction	\$ 16,526
FY 2018	Construction	\$ 20,658
FY 2019	Construction	\$ 4,132
Total Project Cost Estimate		
Total		\$ 44,123

This is the second year of funding for New ES #42. Planning funds were received in FY 2016. During FY 2017, the first year of construction will be implemented. In FY 2018 and FY 2019, an additional \$24.8 million is planned to complete work and have the school ready by August 2018.

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The New ES #42 project is scheduled for opening in August of 2018.

Oakland Mills Middle School Renovation: Project 1036

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

Kathy Orlando, Principal
 410.313.6937



Building Data	
Year Built	1972
Age	43
Site Area (acres)	20
Last Renovation/Addition	1998
Current Relocatables	0
Current Capacity	506
9/2014 Enrollment	423
Projections/Capacity Utilization	
2015 Projection	431
Projected Utilization	85%
2020 Projection	489
Projected Utilization	97%

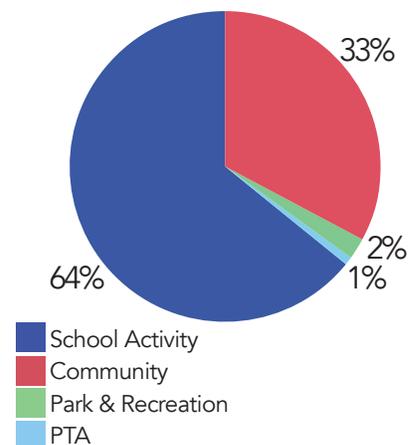
Project Purpose

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. The FY 2016 Capital Budget introduced this project to the Capital Improvement Plan. In previous budgets, it was listed as a systemic renovation. In the FY 2016 Capital Budget the cost for the limited renovation was estimated at \$16.3 million. In the FY 2017 Capital Budget the complete renovation cost estimate is \$30.1 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

Citizens and students spent nearly 4,000 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 48,472 was estimated for these activities. Athletic events accounted for approximately half of the facility use. After school activities and child care are included in the remaining reservations.

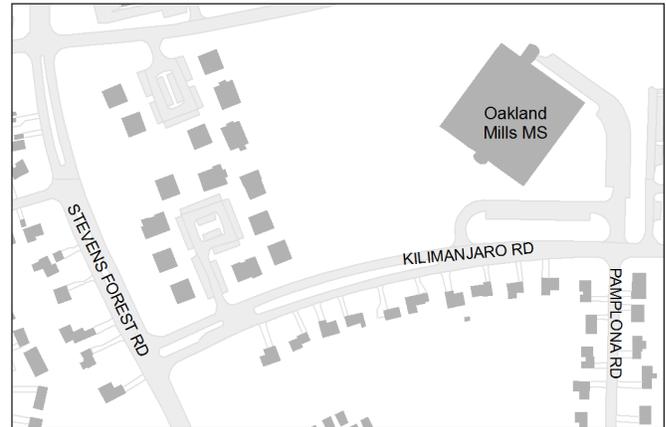
Community Use in FY15



Project Details

The project calls for a renovation of the existing building in accord 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

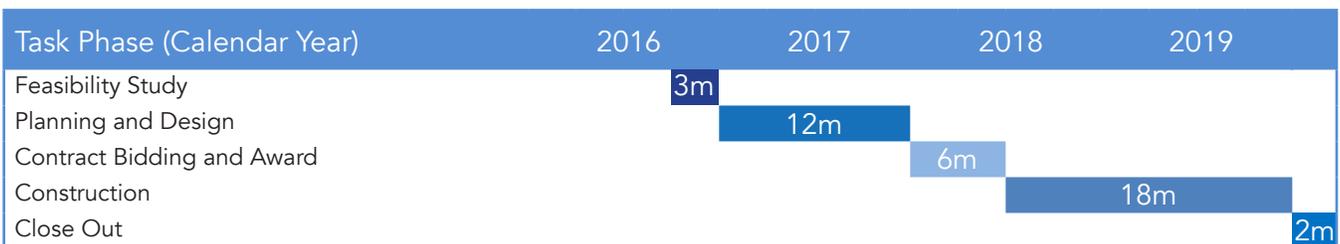


Budget Summary (In Thousands)			
Approved Appropriations			
FY 2015	Planning*	\$	2,300
Current & Future Requests			
FY 2017	Construction	\$	9,131
FY 2018	Construction	\$	11,131
FY 2019	Construction	\$	7,566
Total Project Cost Estimate			
Total		\$	27,828

* Planning funds received in Systemic Renovation Project.

The second year of funding for Oakland Mills Middle School will be in FY 2017. Planning funds were received in the Systemic Renovation Line in FY 2015. During FY 2017, the first year of construction will be implemented. The requested sum of \$27.8 million in FY 2017 through FY 2019 will allow construction to progress on schedule and work to be completed by August 2019.

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 August of 2019.

New HS #13: Project 1035

School site potentially located at HCPSS Central Office
10910 Clarksville Pike, Ellicott City, MD 21042



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

Project Purpose

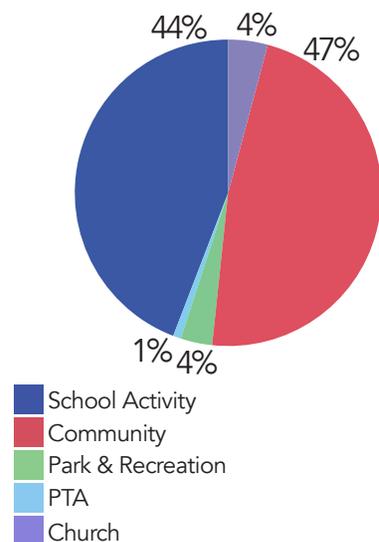
New HS #13 provides the HCPSS with the opportunity to expand college and career readiness programs for high school students across the county. Given the significant cost to build new facilities, it is recommended that this new high school be built to a larger capacity, up to 1,800 students.

Based upon enrollment projections, at least one additional high school is needed to accomodate growth. Balanced capacity utilization in the northeast region alone would require 1,000 additional seats by 2019. This capital budget recommends completion of New HS #13 in 2023. Planning would be initiated in FY 2017. 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. Wilde Lake High School serves as a comparison. Wilde Lake High School hosted 958,603 attendees for over 6,672 reservations after school hours and on weekends for a variety of events. The majority of the events were community and school related events, and the remaining reservations were Park and Recreation, church events, and PTA meetings.

Community Use in FY15

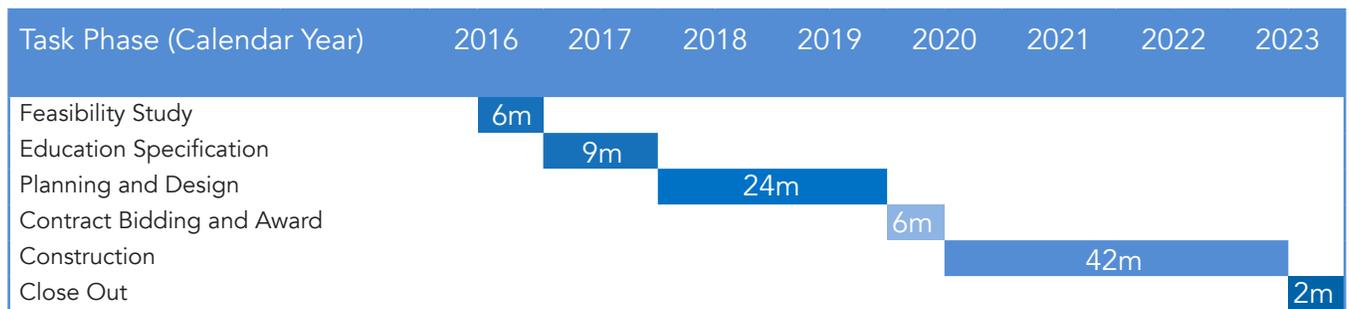




Planning for New HS #13 will occur during FY 2017 and FY 2018 with \$13.3 million requested to allow planning to progress on schedule. An extended planning period is necessary to develop education specifications for this new facility. Based upon this timeline, the Board will request construction funding for this project in FY 2019 through FY 2023 to complete work and have the school ready by August 2023.

Budget Summary (In Thousands)			
Current & Future Requests			
FY 2017	Planning	\$	3,300
FY 2018	Planning	\$	9,950
FY 2019	Construction	\$	23,250
FY 2020	Construction	\$	27,500
FY 2021	Construction	\$	36,500
FY 2022	Construction	\$	27,525
FY 2023	Construction	\$	10,500
Total Project Cost Estimate			
Total		\$	138,525

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 August of 2023.

Hammond High School Renovation: Project 1024

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

Marcy Leonard, Principal
 410.313.7615



Building Data

Year Built	1976
Age	39
Site Area (acres)	33.14
Last Renovation/Addition	2011
Current Relocatables	4
Current Capacity	1,220
9/2014 Enrollment	1,226

Projections/Capacity Utilization

2015 Projection	1,299
Projected Utilization	106%
2020 Projection	1,550
Projected Utilization	127%

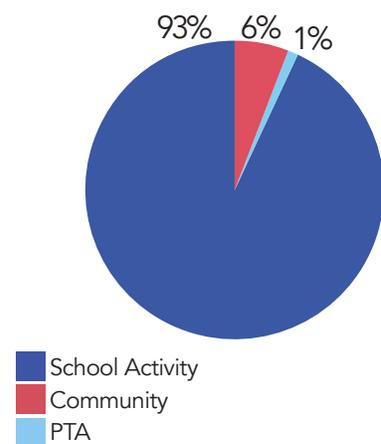
Project Purpose

The Hammond High School project will renovate the existing school. Hammond High School is a one-story building that first opened in 1976 and underwent some miscellaneous 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. The capacity of the school will remain unchanged upon completion of the proposed 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 215,000 was estimated for over 3,900 reservations at Hammond High School outside of school hours for events. Most after school activities at any high school are school related including after school programming, athletic activities, educational activities and performing arts.

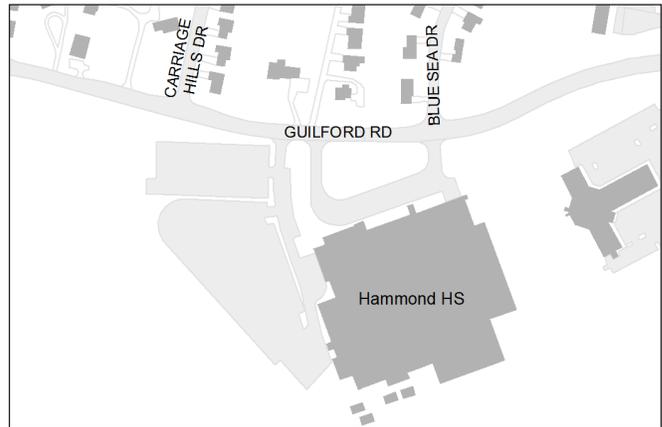
Community Use in FY15



Project Details

The project will consist of a complete systemic renovation 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 and sustainable practices thus yielding another USGBC LEED certified facility.

School Location Map

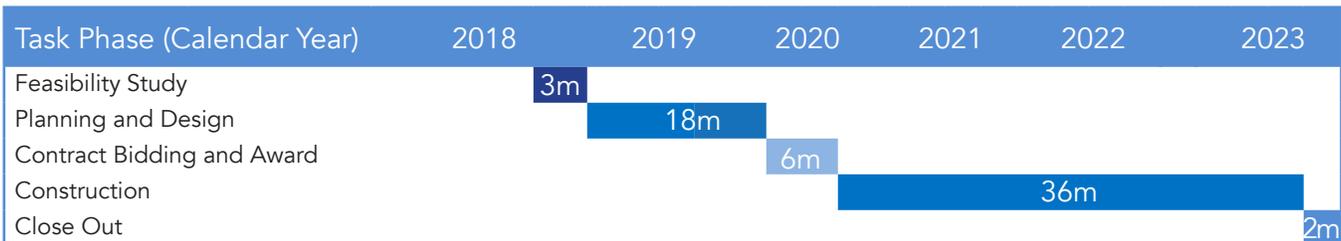


Budget Summary (In Thousands)

Current & Future Requests		
FY 2018	Planning	\$ 2,800
FY 2019	Planning	\$ 9,748
FY 2020	Construction	\$ 15,099
FY 2021	Construction	\$ 20,099
FY 2022	Construction	\$ 20,099
FY 2023	Construction	\$ 20,100
Total Project Cost Estimate		
Total		\$ 87,945

The first year of funding for Hammond High School is planned for FY 2018. During FY 2018, the first year of planning will be implemented. The requested sum of \$12.5 million in FY 2018 and FY 2019 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program in FY 2020 through FY 2023 totaling \$75.4 million to complete work and have the school ready by August 2023.

Project Timeline



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

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	76
Site Area (acres)	16.22
Last Renovation/Addition	2001
Current Relocatables	3
Current Capacity	662
9/2014 Enrollment	758

Projections/Capacity Utilization

2015 Projection	788
Projected Utilization	119%
2020 Projection	904
Projected Utilization	137%
Post-Renovation Cap.	818
Projected Util. 2019	111%

Project Purpose

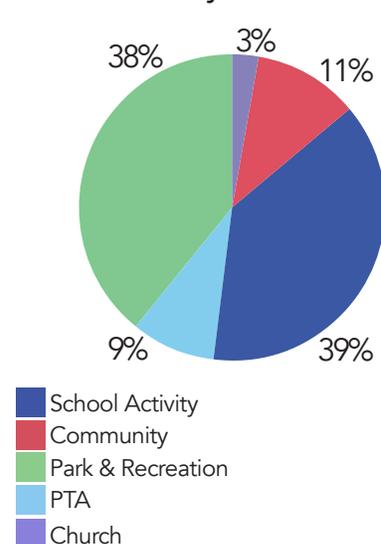
The Ellicott Mills Middle School project will add 156 seats of new capacity to the existing school. Ellicott Mills Middle School was originally built in 1939 and the replacement school is the third iteration of the current middle school prototype and opened in 2001. The projections in the 2015 Feasibility Study 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 in the 2015 Feasibility Study. 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 4,569 reservations brought citizens 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 nearly 550,000 was estimated for these activities. Athletic events and child care accounted for approximately half of the facility use. Other uses, which include after school activities and performing arts, make up the remaining reservations.

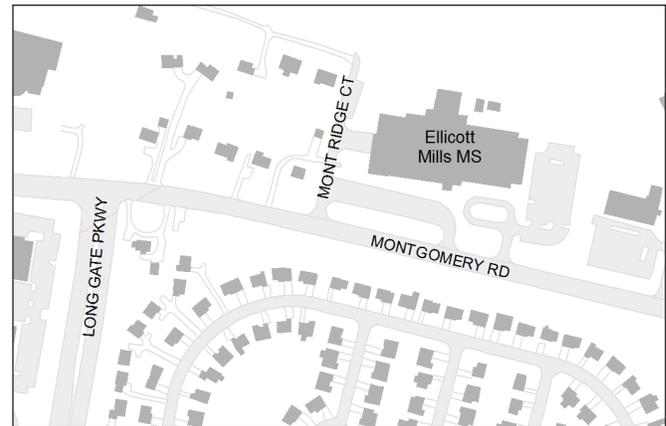
Community Use in FY15



Project Details

This project will include an addition and light 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



Budget Summary (In Thousands)

Current & Future Requests			
FY 2022	Planning	\$	544
FY 2023	Construction	\$	3,242
FY 2024	Construction	\$	2,162
Total Project Cost Estimate			
Total		\$	5,948

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. The requested sum of \$544 thousand in FY 2022 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program in FY 2023 and FY 2024 totaling \$5.4 million to complete work and have the school ready by August 2024.

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 August of 2024.

Oakland Mills High School Renovation: Project 1029

9410 Kilimanjaro Road, Columbia, MD 21045
<http://www.omhs.hcpss.org>

Karim Shortridge, Principal
 410.313.6945



Building Data

Year Built	1973
Age	42
Site Area (acres)	28.6
Last Renovation/Addition	2004
Current Relocatables	0
Current Capacity	1,400
9/2014 Enrollment	1,085

Projections/Capacity Utilization

2015 Projection	1,101
Projected Utilization	79%
2020 Projection	1,164
Projected Utilization	83%

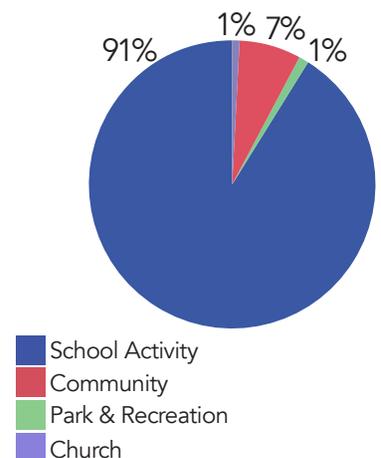
Project Purpose

The Oakland Mills High School project will renovate the existing school. Oakland Mills High School is a two-story building that opened in 1973 and underwent some miscellaneous renovation and addition work in 1991, 1992, and 2004. 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. The capacity of the school will remain unchanged upon completion of the proposed project. The complete scope of this project is defined by the BOE approved construction documents (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 High School

Over 4,261 reservations brought citizens and students into Oakland Mills High School after school hours and over the weekends for a variety of community and student programs, meetings, activities, and events. An attendance of 363,492 was estimated for these activities. After-school use of high schools is primarily school related activities. Other uses, which include church, after school activities, recreation and parks, community programs, and PTA make up the remaining reservations.

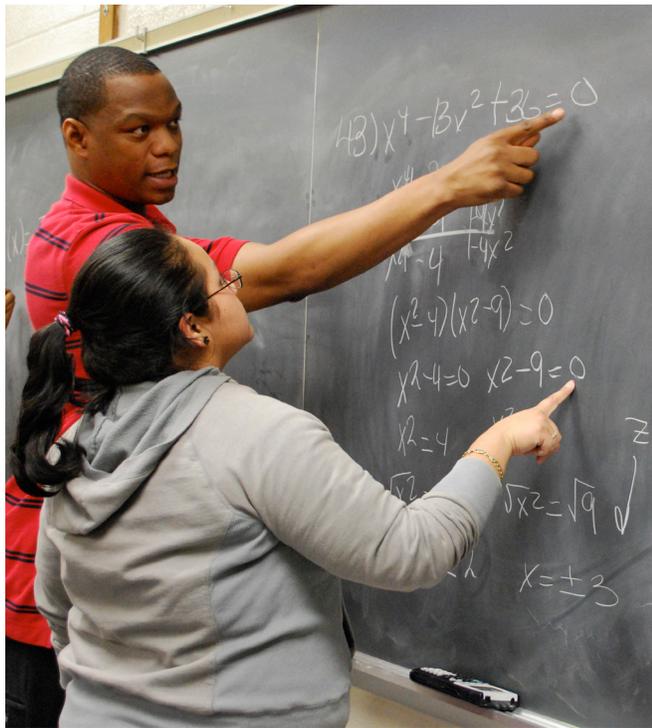
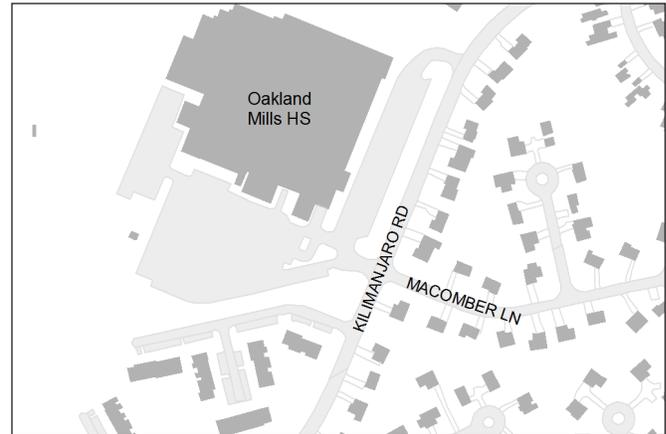
Community Use in FY15



Project Details

This project will consist of a complete systemic renovation 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 and sustainable practices thus yielding another USGBC LEED certified facility.

School Location Map

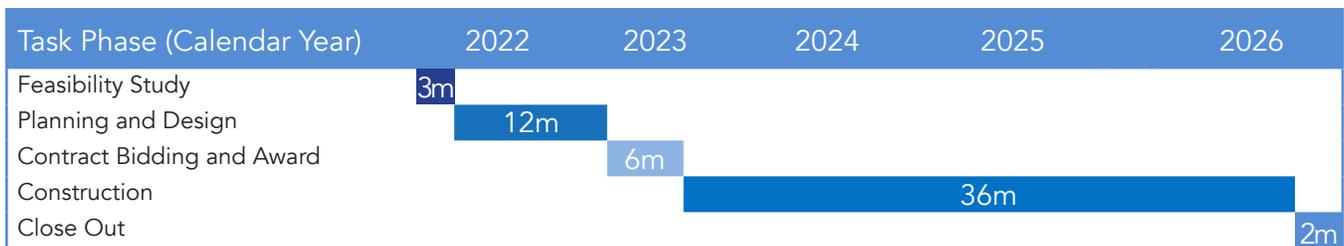


Budget Summary (In Thousands)

Current & Future Requests		
FY 2022	Planning	\$ 7,738
FY 2023	Construction	\$ 20,591
FY 2024	Construction	\$ 20,591
FY 2025	Construction	\$ 20,591
FY 2026	Construction	\$ 20,592
Total Project Cost Estimate		
Total		\$ 90,103

FY 2022 will be the first year of funding for Oakland Mills High School. During FY 2022, the first year of planning will be implemented. The requested sum of \$7.7 million in FY 2022 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program from FY 2023 through FY 2026 totaling \$82.4 million to complete the work by August 2026.

Project Timeline



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

Centennial High School Renovation: Project 1025

4300 Centennial Lane, Ellicott City, MD 21042
<http://www.chs.hcpss.org/>

Claire Hafets, Principal
 410.313.2856



Building Data

Year Built	1977
Age	38
Site Area (acres)	43
Last Renovation/Addition	2011
Current Relocatables	4
Current Capacity	1,360
9/2014 Enrollment	1,402

Projections/Capacity Utilization

2015 Projection	1,455
Projected Utilization	107%
2020 Projection	1,690
Projected Utilization	124%

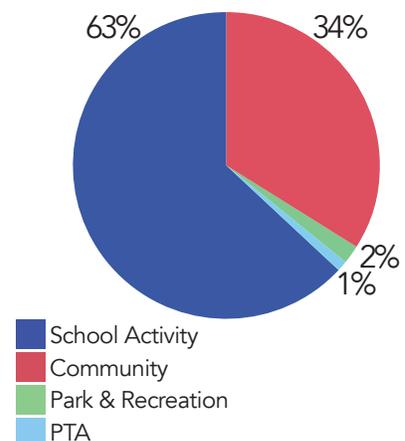
Project Purpose

The Centennial High School project will renovate the existing school. Centennial High School is a one-story building that opened in 1977 and had an addition completed in 2002, 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. The capacity of the school will remain unchanged upon completion of the proposed 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 Centennial High School

Over 5,613 reservations brought citizens and students into Centennial High School after school hours and on weekends for a variety of community and student programs, meetings, activities, and events. An attendance of 604,529 was estimated for these activities. After-school use of high schools is primarily school related activities like athletic and performance arts events. Other uses, which include training, elections, and other activities make up the remaining 37 percent.

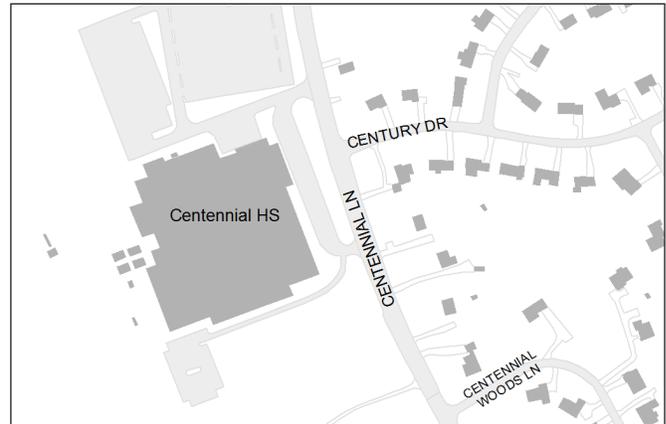
Community Use in FY15



Project Details

This project will consist of a complete systemic renovation 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 and sustainable practices thus yielding another USGBC LEED certified facility.

School Location Map



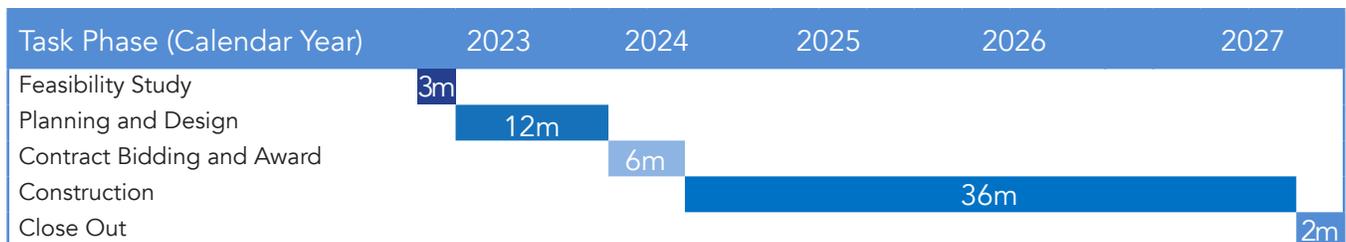
Budget Summary (In Thousands)

Current & Future Requests		
FY 2023	Planning	\$ 7,652
FY 2024	Construction	\$ 24,443
FY 2025	Construction	\$ 24,443
FY 2026	Construction	\$ 16,295
FY 2027*	Construction	\$ 16,298
Total Project Cost Estimate		
Total		\$ 89,129

*FY 2027 is beyond the Long-Range Master Plan.

FY 2023 will be the first year of funding for Centennial High School. During FY 2023, the first year of planning will be implemented. The requested sum of \$7.7 million in FY 2023 will allow planning to progress on schedule. Based upon the current plan, the Board will request construction funding for this program from FY 2024 through FY 2027 totaling \$81.5 million to complete work in the school by August 2027.

Project Timeline



The above chart shows the calendar year timeline for planning and construction for this project (in months). The Centennial High School Renovation project is scheduled for completion in August of 2027.

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

Sites to be determined.



Responding to the 2015 Feasibility Study

Planning and zoning changes require changes 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 Department of Planning and Zoning and Public Works staff 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 2017–2026 long-range plan requires three new elementary schools, one new middle school, and one new high school. Previous budgets introduced ES #42, ES #43, ES #44, MS #21, and HS #13.

Elementary School Needs

Elementary enrollment is projected to increase by 4,488 students by 2023 and the capacity utilization of all elementary schools combined will begin to exceed 110 percent by 2024. 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 recently completed comprehensive zoning increased the entire housing projection in 2014 by 996 units, most of which was in the east. New ES #42 will be built in the northeast region at Oxford Square. The needs of the southeast region are evident in the projections of Bollman Bridge Elementary School and Forest Ridge Elementary School. The location of ES #43 is to be determined. A location in close proximity to the planned Transit Oriented Development is desirable.



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 – Columbia West ES – 1040

Running Brook Elementary School (with expansion) is expected to exceed 110 percent utilization by 2016. 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.

ES #45 – Turf Valley ES – 1041

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 can absorb some growth. Considering the limited potential for expanding schools outside of the sewer service area, a Turf Valley school is planned. Land sites are being considered for this future school.

Middle School Needs

MS #21 – 1042

The opening of Thomas Viaduct Middle School in the 2014–2015 school year is a tangible reminder that growth is impacting middle school capacities as well. By 2028, three of five middle schools in the northeast region will have significant overcrowding. The same will be true for all three southeastern region middle schools. Site acquisition efforts are underway.

High School Needs

HS #14 – TBD

With the opening of New HS #13 in 2023, the need for New HS #14 is delayed beyond the Long-Range Master Plan. Should there be enrollment shifts, this project may need to begin sooner.

Systemic Renovations: Project 0980

Various locations.

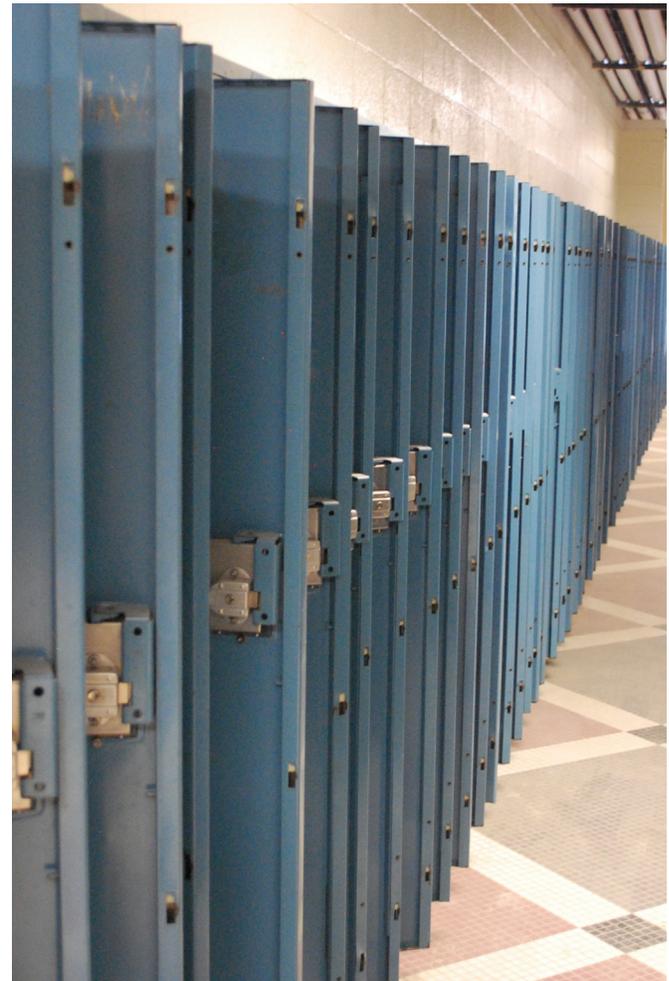


School Facilities is charged with maintaining the facilities and grounds of the Howard County Public School System (HCPSS) in as near original condition and effectiveness as possible. Actual costs incurred in the Systemic Renovations Project over the past five years is below.

Systemic Renovations Actual Expenses	
Fiscal Year	Actual Expense
FY 2011	\$ 16,533,132
FY 2012	\$ 25,048,690
FY 2013	\$ 21,798,947
FY 2014	\$ 15,593,468
FY 2015	\$ 11,565,498

Project Purpose

The systemic renovation project will include 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 2017 Request Analysis	
Project Funding (July 1, 2003 - June 30, 2016)	\$ 228,750,000
Project Cost-to-Date (through June 30, 2015)	(203,156,470)
FY 2016 Projected Costs	(17,825,774)
Available Project Funding (July 1, 2016)	\$ 7,767,756
Requested Budget FY 2017	\$ 19,268,000

Project Details

The FY 2017 Capital Budget request represents renovation work or planning for future construction at the following school system facilities:

Glenwood Middle School Boiler/Water Heater

Bonnie Branch Middle School HVAC

Manor Woods Elementary School RTU's

Talbott Springs Elementary School Renovation

Administration Building Systems Renovation



Systemic renovation projects include improvements and installation of systemic renovations at various school sites, including projects of a critical nature such as sprinkler repair, HVAC repair, and window replacement. The department publishes an annual Comprehensive Maintenance Program 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 Regulations. This document has been consulted in the development of this budget for potential systemic projects.

Roofing Projects: Project 0994



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 2011	\$ 5,339,927
FY 2012	\$ 4,841,087
FY 2013	\$ 3,093,044
FY 2014	\$ 5,468,035
FY 2015	\$ 3,400,190

Project Purpose

The 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 actually complex investments built to exact specifications. The 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.



FY 2017 Request Analysis		
Project Funding	\$	45,537,000
(July 1, 2003 - June 30, 2016)		
Project Cost-to-Date		(35,881,189)
(through June 30, 2015)		
FY 2016 Projected Costs		(8,285,472)
Available Project Funding	\$	1,370,339
(July 1, 2016)		
Requested Budget FY 2017	\$	-

Project Details

The roof system is the largest single area of the building that must endure the most severe weather conditions. The roof protects the structural integrity of the building, equipment, as well as its systems. Because of building age and environmental conditions, scheduled roof replacements must be completed to protect the investment that has 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.

Due to the age and current condition of school facilities roofs, HCPSS will not request funds for roof replacement in FY 2017. When feasible, Roofing Projects will be considered in conjunction with systemic renovations.



Playground Equipment: Project 0990

Various locations.



The Safety and Risk Management Office 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.

Playground Actual Expenses	
Fiscal Year	Actual Expense
FY 2011	\$ -
FY 2012	\$ 398,430
FY 2013	\$ 240,677
FY 2014	\$ 8,506
FY 2015	\$ 503,412

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 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.



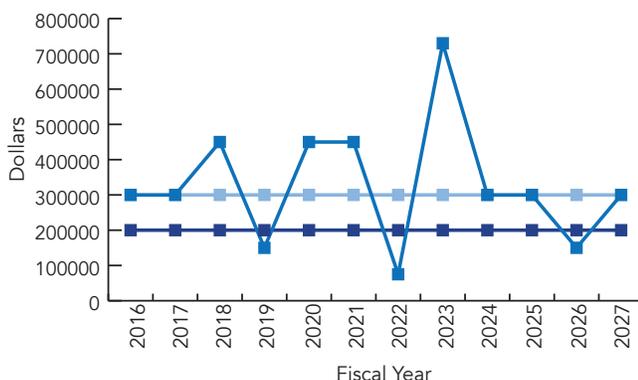
FY 2017 Request Analysis		
Project Funding (July 1, 2003 - June 30, 2016)	\$	2,380,000
Project Cost-to-Date (through June 30, 2015)		(2,236,512)
FY 2016 Projected Costs		(143,488)
Available Project Funding (July 1, 2016)	\$	-
Requested Budget FY 2017 Playground Equipment	\$	300,000



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. The \$300,000 request is adequate for the short-term. In future years, more than two playground replacements are needed in one year. The long-term plan could be adjusted to smooth out the number of replacements per year by advancing or delaying some projects. 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 Fiscal Year



Long-Term Plan	
Playground Site	Fiscal Year
Hollifield Station Elementary School	FY 2017
Manor Woods Elementary School	FY 2017
Bryant Woods Elementary School	FY 2018
Guilford Elementary School	FY 2018
Clarksville Elementary School	FY 2019
Triadelphia Ridge Elementary School	FY 2019
Worthington Elementary School	FY 2019
Bellows Spring Elementary School	FY 2020
Gorman Crossing Elementary School	FY 2021
Rockburn Elementary School	FY 2021
Thunder Hill Elementary School	FY 2021
Lisbon Elementary School	FY 2022
Centennial Lane Elementary School	FY 2022
St John's Lane Elementary School	FY 2022
West Friendship Elementary School	FY 2023
Atholton Elementary School	FY 2023
Dayton Oaks Elementary School	FY 2023
Cedar Lane School	FY 2023
Fulton Elementary School	FY 2024
Phelps Luck Elementary School	FY 2024
Bollman Bridge Elementary School	FY 2024
Bushy Park Elementary School	FY 2024
Cradlerock Elementary School	FY 2024
Veterans Elementary School	FY 2025
Ilchester Elementary School	FY 2025
Waterloo Elementary School	FY 2026
Clemens Crossing Elementary School	FY 2026
Northfield Elementary School	FY 2027
Ducketts Lane Elementary School	FY 2028
Stevens Forest Elementary School	FY 2028

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.

- Present Funding Level
- Requested Funding Level
- Estimated Requirements

Relocatable Classrooms: Project 0993



Project Purpose

The Relocatable Classrooms project will provide funds for the relocation of existing portable 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.

Relocatable Classrooms Actual Expenses	
Fiscal Year	Actual Expense
FY 2011	\$ 842,225
FY 2012	\$ 2,152,087
FY 2013	\$ 1,620,398
FY 2014	\$ 1,117,572
FY 2015	\$ 1,613,098

The School Planning Office evaluates relocatable classroom needs annually in a report to the Board of Education. After a decision is made, the Construction Office 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.

FY 2017 Request Analysis	
Project Funding	\$ 17,410,000
(July 1, 2003 - June 30, 2016)	
Project Cost-to-Date	(16,083,769)
(through June 30, 2015)	
FY 2016 Projected Costs	(1,326,230)
Available Project Funding	\$ -
(July 1, 2016)	
Requested Budget FY 2017	\$ 1,500,000



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, Waverly Elementary School, and Clarksville Middle School. These units are included in building capacity because they are considered permanent additions. In recent renovations, for example Bollman Bridge Elementary School, they have been replaced. Similar plans are underway at Deep Run Elementary School and Patuxent Valley Middle School.

The school system conducts annual 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 commiserate investment in brick and mortar construction.

In September 2015, there were 237 relocatable/modular classrooms in use (four are used for administrative purposes at the Central Office, all others are at school sites). The school system will continue to conduct an annual review 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 upon annually.

This work will be completed in the summer of 2016.



Site Acquisition and Construction Reserve: Project 0995



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 2011	\$ 51,795
FY 2012	\$ 4,126,230
FY 2013	\$ 526,091
FY 2014	\$ 4,258,073
FY 2015	\$ 22,850

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 a future school site that will be purchased directly by the county. For this reason, there is no request for FY17 funds for this project.



FY 2017 Request Analysis		
Project Funding (July 1, 2003 - June 30, 2016)	\$	20,836,000
Project Cost-to-Date (through June 30, 2015)		(17,959,460)
FY 2016 Projected Costs		(100,000)
Available Project Funding (July 1, 2016)	\$	2,776,540
Requested Budget FY 2017	\$	-

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 1021



The Technology Department oversees the Technology Project. A staff of 15 provides maintenance and support for approximately 37,000 computing devices, 4,000 printers, and 400 copier and multifunction devices (MFDs) throughout the system.

Technology Actual Expenses	
Fiscal Year	Actual Expense
FY 2011	\$ 8,027,642
FY 2012	\$ 5,335,262
FY 2013	\$ 5,714,919
FY 2014	\$ 3,606,457
FY 2015	\$ 5,226,710

Actual costs incurred in the Technology Project over the past five years is above.

Project Purpose

Technology Project funds are required for continuous improvements and upgrades to the HCPSS network infrastructure and computer systems to ensure that instruction and business technology needs are met in a standard and equitable manner. Technology refresh programs, known as "Replacement Plans," have been established to ensure that all HCPSS students and school-based staff are equipped with the appropriate computing and network resources. Replacement Plans are designed to ensure that these essential resources are kept current in order to meet instruction and business technology requirements.

FY 2017 Request Analysis		
Project Funding (July 1, 2003 - June 30, 2016)	\$	34,486,000
Project Cost-to-Date (through June 30, 2015)		(27,910,990)
FY 2016 Projected Costs		(6,575,010)
Available Project Funding (July 1, 2016)	\$	-
Requested Budget FY 2017	\$	5,000,000



Project Details

This project provides funding for technology equipment replacement. Computers for teachers and students have historically been the most significant use of this funding. In FY 2017, this project will fund a portion of Replacement Plans 2.0 and 3.0 which provide computers, printers, and copiers/multifunction devices (MFDs) to administrative employees (RP2.0) and curriculum programs (RP3.0) in all schools. This initiative is in support of Goals 1, 2, 3, and 4 of Vision 2018 by providing new technologies for the aforementioned areas.



In FY 2017, the Technology Department plans to replace 100% of school administrative-position computers, MFDs, and printers, and 37% of school curriculum program computers and printers. As part of this process, devices will have the latest approved operating systems and software. Professional development will be provided to staff as needed.

Replace Technology Purchased in 2012–2013 with Like Models						
Type	Position/Office/Program	Replacement Plan	Last Installed	Technology Type	Number	Total Cost
ES, MS, HS	School Administrative Positions	RP2.0	2012	Computers	1,472	\$ 1,669,602
ES, MS, HS	School Administrative Positions	RP2.0	2012	Printers	641	\$ 274,846
ES, MS, HS	School Administrative Offices	RP2.0	2012	MFDs	202	\$ 496,934
ES, MS, HS	School Curriculum Programs	RP3.0	2013	Computers	2,196	\$ 2,465,016
ES, MS, HS	School Curriculum Programs	RP3.0	2013	Printers	155	\$ 94,094
Total Requested Funding					4,666	\$ 5,000,492

In addition, there is a need to replace 1,830 General Purpose Fixed Lab computers in elementary and middle schools that were postponed due to reduced funding in FY 2015 and 1,610 computers in General Purpose Fixed Labs, General Purpose Mobile Labs, and high school media centers that were postponed due to reduced funding in FY 2016. Also, replacement of 3,720 MAP Testing Computers with a normal replacement schedule of FY 2017 will be deferred due to constrained funding available. The four-year warranties on all of these computers have expired and without costly upgrades the computers cannot reliably run the latest operating system and software. Also, deferred in FY 2017 will be 3,947 School Curriculum Programs computers from RP3.0.

Replace Technology Purchased in 2010–2013 with Like Models							
Deferred from Year	Type	Position/Office/Program	Replacement Plan	Last Installed	Technology Type	Number	Total Cost
2015	ES, MS	School General Purpose Fixed Labs	RP1.0	2011	Computers	1,830	\$ 2,239,920
2016	HS	School General Purpose Fixed Labs	RP1.5	2010	Computers	810	\$ 1,008,450
2016	HS	School General Purpose Mobile Labs	RP1.5	2010	Computers	405	\$ 282,285
2016	HS	School Media Centers	RP1.5	2010	Computers	395	\$ 275,315
2017	ES, MS	School MAP Testing	N/A	2013	Computers	3,720	\$ 2,046,000
2017	ES, MS, HS	School Curriculum Programs	RP3.0	2013	Computers	3,947	\$ 4,431,415
Total Deferred Funding						11,107	\$10,283,385

School Parking Lot Expansions: Project 1012

Various locations.



The Office of School Construction 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.

School Parking Lot Expansions Actual Expenses	
Fiscal Year	Actual Expense
FY 2011	\$ 28
FY 2012	\$ 1,976,199
FY 2013	\$ -
FY 2014	\$ -
FY 2015	\$ -

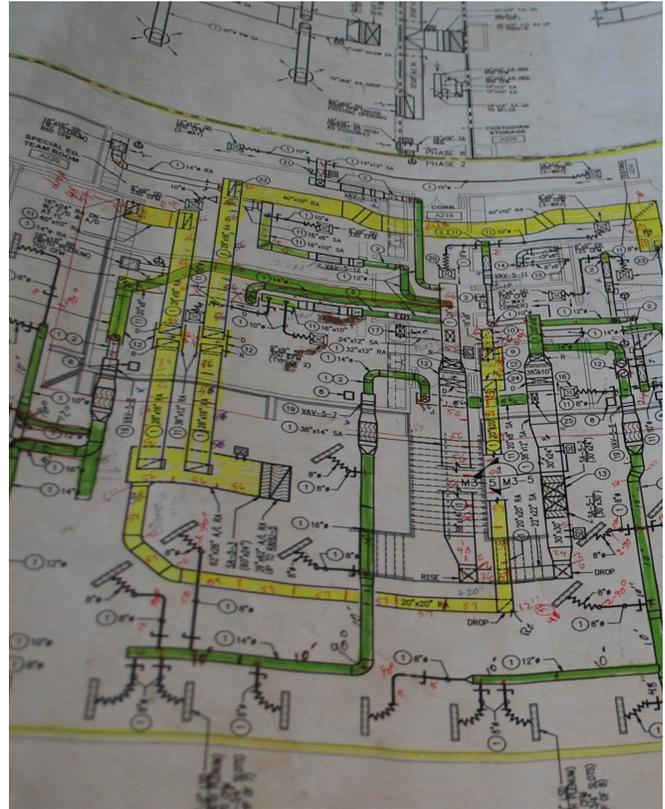
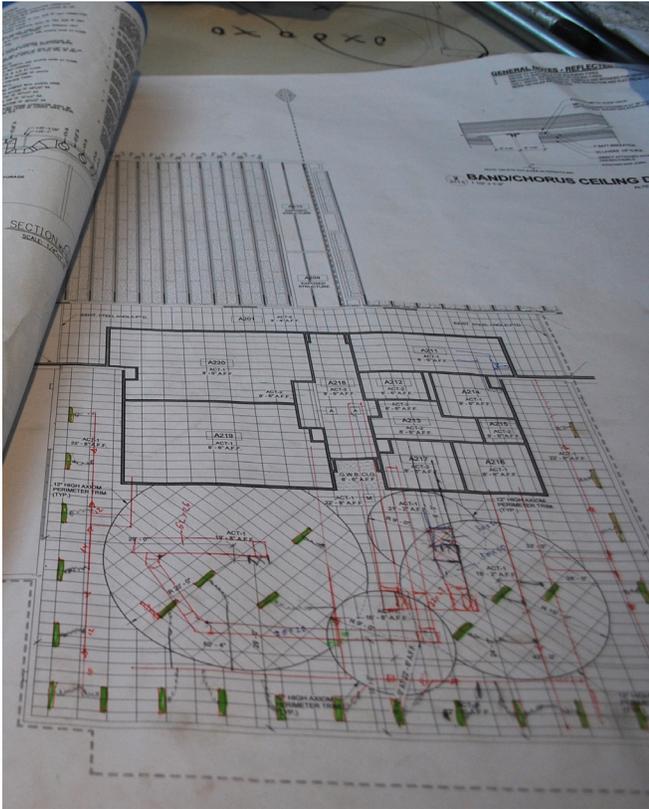
Project Purpose

Parking lot expansions are necessary due to the insufficient supply of spaces to meet existing needs. Funds are used for parking improvements on sites that are not slated for other construction projects. This project provides for the construction of additional parking spaces and modification of parking lots to improve traffic flow patterns at existing school sites.



FY 2017 Request Analysis		
Project Funding	\$	4,200,000
(July 1, 2003 - June 30, 2016)		
Project Cost-to-Date		(3,580,764)
(through June 30, 2015)		
FY 2016 Projected Costs		(450,000)
Available Project Funding	\$	169,236
(July 1, 2016)		
Requested Budget FY 2017	\$	-

Planning and Design: Project 1038



Project Purpose

The Planning and Design Project has been established to provide funding for feasibility 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 feasibility 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." The replacement of Wilde Lake Middle School is a good example. The feasibility study helped guide a decision to replace the school. Pricing for these studies is favorable because design consultants want to obtain the full design project. Through a feasibility study, the Board is able to examine the needs of an existing building as well as unexpected design circumstances. 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.

Proposed Feasibility Studies in FY 2017
New HS #13
Dunloggin Middle School Renovation/Addition
Hammond High School Renovation
Talbot Springs Elementary School Renovation
West Friendship Elementary School MBR

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 of 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 2011	\$ 189,386
FY 2012	\$ 74,420
FY 2013	\$ 77,734
FY 2014	\$ 119,445
FY 2015	\$ 23,580

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 justification.



Lift room for access to the stage.

FY 2017 Request Analysis	
Project Funding (July 1, 2003 - June 30, 2016)	\$ 5,428,000
Project Cost-to-Date (through June 30, 2015)	(4,767,407)
FY 2016 Projected Costs	(324,287)
Available Project Funding (July 1, 2016)	\$ 336,306
Requested Budget FY 2017	\$ 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.

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 is ongoing.



Elevator for transportation to the second-story level.

FY 2017

Superintendent's Proposed Capital Budget

**Wilde Lake MS (Grades 6-8)
REPLACEMENT SCHOOL**

Project: 1031

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan								
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Bonds	\$ 10,289	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,574
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	13,303	-	-	-	-	-	-	-	-	-	-	-	-	-	13,303
Transfer Tax	1,500	-	-	-	-	-	-	-	-	-	-	-	-	-	1,500
Z Bonds	4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	4,000
Total Funds	\$ 29,092	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,377

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan								
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Plans/Engineering	\$ 2,658	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,658
Construction	26,434	14,085	-	-	-	-	-	-	-	-	-	-	-	-	40,519
Equip./Furnishings	-	2,200	-	-	-	-	-	-	-	-	-	-	-	-	2,200
Total Expenditures	\$ 29,092	\$ 16,285	\$ -	\$ 45,377											

Project Commencement FY 2014

Project: 1031

FY 2017

Superintendent's Proposed Capital Budget

Patuxent Valley MS (Grades 6-8) RENOVATION

Project: 1033

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan								
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Bonds	\$ 6,141	\$ 10,890	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,031
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	10,604	-	-	-	-	-	-	-	-	-	-	-	-	-	10,604
Transfer Tax	1,400	-	-	-	-	-	-	-	-	-	-	-	-	-	1,400
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 18,145	\$ 10,890	\$ -	\$ 29,035											

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan								
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Plans/Engineering	\$ 1,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,360
Construction	16,785	10,640	-	-	-	-	-	-	-	-	-	-	-	-	27,425
Equip./Furnishings	-	250	-	-	-	-	-	-	-	-	-	-	-	-	250
Total Expenditures	\$ 18,145	\$ 10,890	\$ -	\$ 29,035											

Project Commencement FY 2015

Project: 1033

FY 2017

Superintendent's Proposed Capital Budget

Swansfield ES (Grades K-5) RENOVATION / ADDITION

Project: 1034

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program										Master Plan				
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total				
Bonds	\$ 11,773	\$ 12,722	\$ 1,407	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,902
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 11,773	\$ 12,722	\$ 1,407	\$ -	\$ 25,902											

Use of Funds	Approved Appropriation	Five-Year Capital Program										Master Plan				
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total				
Plans/Engineering	\$ 1,898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,898
Construction	9,875	12,722	453	-	-	-	-	-	-	-	-	-	-	-	-	23,050
Equip./Furnishings	-	-	954	-	-	-	-	-	-	-	-	-	-	-	-	954
Total Expenditures	\$ 11,773	\$ 12,722	\$ 1,407	\$ -	\$ 25,902											

Project Commencement FY 2015

Project: 1034

FY 2017

Superintendent's Proposed Capital Budget

Waverly ES(Grades K-5) RENOVATION / PHASE II ADDITION

Project: 0973

(In Thousands)

Source of Funds	Five-Year Capital Program					Master Plan						
	Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$ 3,770	\$ 9,589	\$18,396	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,755
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 3,770	\$ 9,589	\$18,396	\$ -	\$ 31,755							

Use of Funds	Five-Year Capital Program					Master Plan						
	Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	3,770	9,589	17,246	-	-	-	-	-	-	-	-	30,605
Equip./Furnishings	-	-	1,150	-	-	-	-	-	-	-	-	1,150
Total Expenditures	\$ 3,770	\$ 9,589	\$18,396	\$ -	\$ 31,755							

Project Commencement FY 2003

Project: 0973

FY 2017

Superintendent's Proposed Capital Budget

**New ES #42 (Grades K-5)
NEW SCHOOL**

Project: 1028

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan							
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total		
Bonds	\$ 2,807	\$20,658	\$ 4,132	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 44,123
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 2,807	\$20,658	\$ 4,132	\$ -	\$ 44,123									

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan							
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total		
Plans/Engineering	\$ 2,807	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,807
Construction	-	19,158	2,787	-	-	-	-	-	-	-	-	-	-	38,471
Equip./Furnishings	-	1,500	1,345	-	-	-	-	-	-	-	-	-	-	2,845
Total Expenditures	\$ 2,807	\$20,658	\$ 4,132	\$ -	\$ 44,123									

Project Commencement FY 2016

Project: 1028

FY 2017

Superintendent's Proposed Capital Budget

Oakland Mills MS (Grades 6-8) RENOVATION

Project: 1036

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan								
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Bonds	\$ -	\$ 9,131	\$ 11,131	\$ 7,566	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,828
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ 9,131	\$ 11,131	\$ 7,566	\$ -	\$ 27,828									

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan								
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	-	9,131	11,131	6,441	-	-	-	-	-	-	-	-	-	-	26,703
Equip./Furnishings	-	-	-	1,125	-	-	-	-	-	-	-	-	-	-	1,125
Total Expenditures	\$ -	\$ 9,131	\$ 11,131	\$ 7,566	\$ -	\$ 27,828									

Project Commencement FY 2016

Project: 1036

FY 2017

Superintendent's Proposed Capital Budget

New HS #13 (Grades 9-12) NEW SCHOOL

Project: 1035

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$ -	\$ 9,950	\$ 23,250	\$ 27,500	\$ 36,500	\$ 27,525	\$ 10,500	\$ -	\$ -	\$ -	\$ -	\$ 138,525
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ 9,950	\$ 23,250	\$ 27,500	\$ 36,500	\$ 27,525	\$ 10,500	\$ -	\$ -	\$ -	\$ -	\$ 138,525

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$ -	\$ 9,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,250
Construction	-	-	23,250	27,500	36,500	27,525	5,500	-	-	-	-	120,275
Equip./Furnishings	-	-	-	-	-	-	5,000	-	-	-	-	5,000
Total Expenditures	\$ -	\$ 9,950	\$ 23,250	\$ 27,500	\$ 36,500	\$ 27,525	\$ 10,500	\$ -	\$ -	\$ -	\$ -	\$ 138,525

Project Commencement FY 2018

Project: 1035

FY 2017

Superintendent's Proposed Capital Budget

Hammond HS (Grades 9-12) RENOVATION

Project: 1024

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$ -	\$ 2,800	\$ 9,748	\$ 15,099	\$ 20,099	\$ 20,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 87,945
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ 2,800	\$ 9,748	\$ 15,099	\$ 20,099	\$ 20,100	\$ -	\$ 87,945				

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$ -	\$ 2,800	\$ 9,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,548
Construction	-	-	-	15,099	20,099	19,850	-	-	-	-	-	75,147
Equip./Furnishings	-	-	-	-	-	250	-	-	-	-	-	250
Total Expenditures	\$ -	\$ 2,800	\$ 9,748	\$ 15,099	\$ 20,099	\$ 20,100	\$ -	\$ 87,945				

Project Commencement FY 2019

Project: 1024

FY 2017

Superintendent's Proposed Capital Budget

**New ES #43 (Grades K-5)
NEW SCHOOL**

Project: 1039

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ 5,380	\$ 20,166	\$ 15,125	\$ 15,124	\$ -	\$ -	\$ -	\$ 55,795
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ 5,380	\$ 20,166	\$ 15,125	\$ 15,124	\$ -	\$ -	\$ -	\$ 55,795

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ 5,380	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,380
Construction	-	-	-	-	-	20,166	15,125	12,624	-	-	-	47,915
Equip./Furnishings	-	-	-	-	-	-	-	2,500	-	-	-	2,500
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ 5,380	\$ 20,166	\$ 15,125	\$ 15,124	\$ -	\$ -	\$ -	\$ 55,795

Project Commencement FY 2024

Project: 1039

FY 2017

Superintendent's Proposed Capital Budget

Ellicott Mills MS (Grades 6-8)

ADDITION

Project: 1037

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 544	\$ 3,242	\$ 2,162	\$ -	\$ -	\$ 5,948
Paygo	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 544	\$ 3,242	\$ 2,162	\$ -	\$ -	\$ 5,948

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 544	\$ -	\$ -	\$ -	\$ -	\$ 544
Construction	-	-	-	-	-	-	-	3,242	1,912	-	-	5,154
Equip./Furnishings	-	-	-	-	-	-	-	-	250	-	-	250
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 544	\$ 3,242	\$ 2,162	\$ -	\$ -	\$ 5,948

Project Commencement FY 2022

Project: 1037

FY 2017

Superintendent's Proposed Capital Budget

Oakland Mills HS (Grades 9-12) RENOVATION

Project: 1029

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan									
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Bonds	\$	-	\$	-	\$	-	\$	7,738	\$	20,591	\$	20,591	\$	20,591	\$	90,103
Paygo		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	-	\$	-	\$	-	\$	7,738	\$	20,591	\$	20,591	\$	20,591	\$	90,103

Use of Funds		Five-Year Capital Program					Master Plan									
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Plans/Engineering	\$	-	\$	-	\$	-	\$	7,738	\$	-	\$	-	\$	-	\$	7,738
Construction		-	-	-	-	-	-	-	20,591	-	20,591	-	20,591	-	20,342	82,115
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-	250	250	250
Total Expenditures	\$	-	\$	-	\$	-	\$	7,738	\$	20,591	\$	20,591	\$	20,592	\$	90,103

Project Commencement FY 2022

Project: 1029

FY 2017

Superintendent's Proposed Capital Budget

Centennial HS (Grades 9-12) RENOVATION

Project: 1025

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,652	\$ 24,443	\$ 24,443	\$ 24,443	\$ 16,295	\$ 72,833
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,652	\$ 24,443	\$ 24,443	\$ 24,443	\$ 16,295	\$ 72,833

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,652	\$ -	\$ -	\$ -	\$ -	\$ 7,652
Construction	-	-	-	-	-	-	-	-	24,443	24,443	16,295	65,181	-
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,652	\$ 24,443	\$ 24,443	\$ 16,295	\$ 72,833	

Project Commencement FY 2023

Project: 1025

FY 2017

Superintendent's Proposed Capital Budget

New ES #44 (Grades K-5)
NEW SCHOOL

Project: 1040

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan														
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total								
Bonds	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	5,380	\$	20,166	\$	15,125	\$	40,671	
Paygo		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	5,380	\$	20,166	\$	15,125	\$	40,671	

Use of Funds		Five-Year Capital Program					Master Plan													
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total							
Plans/Engineering	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	5,380	\$	-	\$	-	\$	5,380
Construction		-	-	-	-	-	-	-	-	-	-	-	-	-	-	20,166	-	15,125	-	35,291
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	5,380	\$	20,166	\$	15,125	\$	40,671

Project Commencement FY 2025

Project: 1040

FY 2017

Superintendent's Proposed Capital Budget

New ES #45 (Grades K-5)
NEW SCHOOL

Project: 1041

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan										
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total					
Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,546	
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
State Aid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Transfer Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,380	\$ 20,166	\$ 25,546

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan										
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total					
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,380
Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20,166	20,166
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,380	\$ 20,166	\$ 25,546

Project Commencement FY 2026

Project: 1041

FY 2017

Superintendent's Proposed Capital Budget

New Middle School #21 (Grades K-5) NEW SCHOOL

Project: 1042

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan									
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Bonds	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	4,446	\$	4,446
Paygo		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	4,446

Use of Funds		Five-Year Capital Program					Master Plan									
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Plans/Engineering	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	4,446	\$	4,446
Construction		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	4,446

Project Commencement FY 2025

Project: 1042

FY 2017

Superintendent's Proposed Capital Budget

Systemic Renovations

Project: 0980

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$	111,343	\$19,268	\$31,604	\$45,245	\$45,594	\$24,473	\$26,350	\$38,507	\$40,432	\$42,454	\$44,576	\$ 469,846
Paygo		4,555	-	-	-	-	-	-	-	-	-	-	4,555
State Aid		80,429	-	-	-	-	-	-	-	-	-	-	80,429
Transfer Tax		6,100	-	-	-	-	-	-	-	-	-	-	6,100
Z Bonds		26,323	-	-	-	-	-	-	-	-	-	-	26,323
Total Funds	\$	228,750	\$ 19,268	\$31,604	\$45,245	\$45,594	\$24,473	\$26,350	\$38,507	\$40,432	\$42,454	\$44,576	\$ 587,253

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$	-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Construction		228,750	19,268	31,604	45,245	45,594	24,473	26,350	38,507	40,432	42,454	44,576	587,253
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	228,750	\$ 19,268	\$31,604	\$45,245	\$45,594	\$24,473	\$26,350	\$38,507	\$40,432	\$42,454	\$44,576	\$ 587,253

Project Commencement FY 2004

Project: 0980

FY 2017
Superintendent's Proposed Capital Budget

Roofing Projects

Project: 0994

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan									
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Bonds	\$	25,866	\$	-	\$	-	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	60,866
Paygo		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid		11,920	-	-	-	-	-	-	-	-	-	-	-	-	-	11,920
Transfer Tax		3,251	-	-	-	-	-	-	-	-	-	-	-	-	-	3,251
Z Bonds		4,500	-	-	-	-	-	-	-	-	-	-	-	-	-	4,500
Total Funds	\$	45,537	\$	-	\$	-	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	80,537

Use of Funds		Five-Year Capital Program					Master Plan									
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total			
Plans/Engineering	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Construction		45,537	-	-	-	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	80,537
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	45,537	\$	-	\$	-	\$	5,000	\$	5,000	\$	5,000	\$	5,000	\$	80,537

Project Commencement FY 2004

Project: 0994

FY 2017

Superintendent's Proposed Capital Budget

Playground Equipment

Project: 0990

(In Thousands)

Source of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					Total		
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026			
Bonds	\$ 1,800	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 4,800
Paygo	-	-	-	-	-	-	-	-	-	-	-	-	-	-
State Aid	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax	580	-	-	-	-	-	-	-	-	-	-	-	-	580
Z Bonds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$ 2,380	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 5,380

Use of Funds	Approved Appropriation	Five-Year Capital Program					Master Plan					Total		
		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026			
Plans/Engineering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction	2,380	300	300	300	300	300	300	300	300	300	300	300	300	5,380
Equip./Furnishings	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$ 2,380	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 5,380

Project Commencement FY 2002

Project: 0990

FY 2017

Superintendent's Proposed Capital Budget

Relocatable Classrooms

Project: 0993

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$	14,410	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 29,410
Paygo		-	-	-	-	-	-	-	-	-	-	-	-
State Aid		-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax		1,600	-	-	-	-	-	-	-	-	-	-	1,600
Z Bonds		1,400	-	-	-	-	-	-	-	-	-	-	1,400
Total Funds	\$	17,410	\$ 1,500	\$ 32,410									

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction		17,410	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	32,410
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	17,410	\$ 1,500	\$ 32,410									

Project Commencement FY 2004

Project: 0993

FY 2017

Superintendent's Proposed Capital Budget

Site Acquisition and Construction Reserve

Project: 0995

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$	9,425	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 27,425
Paygo		-	-	-	-	-	-	-	-	-	-	-	-
State Aid		2,594	-	-	-	-	-	-	-	-	-	-	2,594
Transfer Tax		8,817	-	-	-	-	-	-	-	-	-	-	8,817
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	20,836	\$ -	\$ 2,000	\$ 38,836								

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction		20,836	-	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	38,836
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	20,836	\$ -	\$ 2,000	\$ 38,836								

Project Commencement FY 2004

Project: 0995

FY 2017

Superintendent's Proposed Capital Budget

Technology

Project: 1021

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$	4,986	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,986
Paygo		-	-	-	-	-	-	-	-	-	-	-	-
State Aid		-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax		29,500	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	79,500
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	34,486	\$ 5,000	\$ 84,486									

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction		-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings		34,486	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	84,486
Total Expenditures	\$	34,486	\$ 5,000	\$ 84,486									

Project Commencement FY 2011

Project: 1021

FY 2017

Superintendent's Proposed Capital Budget

School Parking Lot Expansions

Project: 1012

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$	2,779	\$ -	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 8,179
Paygo		-	-	-	-	-	-	-	-	-	-	-	-
State Aid		1,421	-	-	-	-	-	-	-	-	-	-	1,421
Transfer Tax		-	-	-	-	-	-	-	-	-	-	-	-
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	4,200	\$ -	\$ 600	\$ 9,600								

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$	240	\$ -	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 60	\$ 780
Construction		3,960	-	540	540	540	540	540	540	540	540	540	8,820
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	4,200	\$ -	\$ 600	\$ 9,600								

Project Commencement FY 2008

Project: 1012

FY 2017

Superintendent's Proposed Capital Budget

Planning and Design

Project: 1038

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$	-	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,000
Paygo		-	-	-	-	-	-	-	-	-	-	-	-
State Aid		-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax		300	-	-	-	-	-	-	-	-	-	-	300
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	300	\$ 300	\$ 3,300									

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$	300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 3,300
Construction		-	-	-	-	-	-	-	-	-	-	-	-
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	300	\$ 300	\$ 3,300									

Project Commencement FY 2016

Project: 1038

FY 2017

Superintendent's Proposed Capital Budget

Barrier-Free

Project: 0989

(In Thousands)

Source of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Bonds	\$	3,875	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 5,875
Paygo		303	-	-	-	-	-	-	-	-	-	-	303
State Aid		-	-	-	-	-	-	-	-	-	-	-	-
Transfer Tax		1,250	-	-	-	-	-	-	-	-	-	-	1,250
Z Bonds		-	-	-	-	-	-	-	-	-	-	-	-
Total Funds	\$	5,428	\$ 200	\$ 7,428									

Use of Funds		Five-Year Capital Program					Master Plan						
		Approved Appropriation	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	Total
Plans/Engineering	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Construction		5,428	200	200	200	200	200	200	200	200	200	200	7,428
Equip./Furnishings		-	-	-	-	-	-	-	-	-	-	-	-
Total Expenditures	\$	5,428	\$ 200	\$ 7,428									

Project Commencement FY 1989

Project: 0989

THE JIM ROUSE THEATRE
FOR THE PERFORMING ARTS



Superintendent's Proposed FY 2017 Capital Budget
Capital Improvement Program FY 2018–2022
Long-Range Master Plan FY 2017–2026

Section 4

Supporting Data

September 2015

MIDDLE SCHOOLS - Data for Demonstrative Purposes Only
 Capacity Utilization Rates with Board of Education's Approved FY 2016 Capital Budget Projects - Not Test for APEO
 Chart reflects May 2015 Projections, Board of Education's FY 2016 approved capacities, and no redistricting

Pre-Measures	2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		
	Capacity	Proj % Util.																					
Columbia - East	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	
Lake Elkhorn MS	643	643	643	643	503	503	503	503	564	564	564	564	563	563	563	563	549	549	549	548	548	568	568
Oakland Mills MS	506	506	506	506	434	434	434	434	474	474	474	474	472	472	472	478	478	478	478	484	484	482	482
Region MS Totals	1149	1149	1149	1149	937	937	937	937	1038	1038	1038	1038	1035	1035	1035	1035	1027	1027	1032	1032	1050	1050	
Columbia - West	506	506	506	506	574	574	574	574	542	542	542	542	549	549	549	549	553	553	555	555	564	564	
Harper's Choice MS	467	467	467	467	599	599	599	599	661	661	661	661	692	692	692	692	710	710	710	710	710	710	
Wild Lake MS	973	973	973	973	1266	1266	1266	1266	1173	1173	1173	1173	1234	1234	1234	1234	1312	1312	1312	1312	1312	1312	
Region MS Totals	1440	1440	1440	1440	1773	1773	1773	1773	1635	1635	1635	1635	1886	1886	1886	1886	2022	2022	2022	2022	2022	2022	
Northeastern	662	662	662	662	696	696	696	696	734	734	734	734	652	652	652	663	663	663	666	666	696	696	
Bonnie Branch MS	779	779	779	779	691	691	691	691	677	677	677	677	685	685	685	685	712	712	712	731	731	743	
Elkridge Landing MS	662	662	662	662	818	818	818	818	809	809	809	809	861	861	861	861	826	826	826	851	851	867	
Ellicott Mills MS	798	798	798	798	712	712	712	712	748	748	748	748	765	765	765	765	790	790	790	793	793	793	
Mayfield Woods MS	701	701	701	701	604	604	604	604	606	606	606	606	606	606	606	606	606	606	606	606	606	606	
Thomas Viaduct MS	3602	3602	3602	3602	3492	3492	3492	3492	3773	3773	3773	3773	3953	3953	3953	3953	4101	4101	4101	4389	4389	4594	
Region MS Totals	662	662	662	662	696	696	696	696	734	734	734	734	652	652	652	663	663	663	666	666	696	696	
Northern	779	779	779	779	812	812	812	812	860	860	860	860	899	899	899	899	1059	1059	1059	1059	1059	1059	
Burleigh Manor MS	565	565	565	565	644	644	644	644	656	656	656	656	672	672	672	672	687	687	687	683	683	697	
Dunloggin MS	643	643	643	643	723	723	723	723	738	738	738	738	756	756	756	756	781	781	781	789	789	804	
Parappoco MS	1987	1987	1987	1987	2084	2084	2084	2084	2254	2254	2254	2254	2284	2284	2284	2284	2415	2415	2415	2524	2524	2607	
Region MS Totals	3602	3602	3602	3602	3492	3492	3492	3492	3773	3773	3773	3773	3953	3953	3953	3953	4101	4101	4101	4389	4389	4594	
Southeastern	604	604	604	604	603	603	603	603	648	648	648	648	710	710	710	710	743	743	743	804	804	829	
Hammond MS	662	662	662	662	673	673	673	673	700	700	700	700	792	792	792	792	768	768	768	769	769	761	
Murray Hill MS	760	760	760	760	737	737	737	737	735	735	735	735	757	757	757	757	736	736	736	766	766	790	
Patuxent Valley MS	2026	2026	2026	2026	2013	2013	2013	2013	2143	2143	2143	2143	2259	2259	2259	2259	2249	2249	2249	2339	2339	2419	
Region MS Totals	604	604	604	604	603	603	603	603	648	648	648	648	710	710	710	710	743	743	743	804	804	829	
Western	643	643	643	643	606	606	606	606	562	562	562	562	552	552	552	552	548	548	548	572	572	590	
Clarksville MS	662	662	662	662	604	604	604	604	678	678	678	678	673	673	673	673	710	710	710	707	707	688	
Folly Quarter MS	545	545	545	545	561	561	561	561	559	559	559	559	559	559	559	559	570	570	570	570	570	590	
Glenwood MS	701	701	701	701	728	728	728	728	754	754	754	754	783	783	783	783	805	805	805	814	814	799	
Lime Kiln MS	798	798	798	798	757	757	757	757	798	798	798	798	820	820	820	820	833	833	833	858	858	984	
Mount View MS	3349	3349	3349	3349	3256	3256	3256	3256	3377	3377	3377	3377	3403	3403	3403	3403	3468	3468	3468	3576	3576	3651	
Region MS Totals	13086	13086	13086	13086	13050	13050	13050	13050	14044	14044	14044	14044	14446	14446	14446	14446	15541	15541	15541	15773	15773	16573	
Countywide Totals	13086	13086	13086	13086	13050	13050	13050	13050	14044	14044	14044	14044	14446	14446	14446	14446	15541	15541	15541	15773	15773	16573	

*A. Includes additions as reflected in FY 2016 CIP for Grades 6-8
 *R = Replacement school scheduled to open August 2017
 *NS = New middle school (Thomas Viaduct Middle School) under construction to open August 2014

HIGH SCHOOLS - Data for Demonstrative Purposes Only																											
Capacity Utilization Rates with Board of Education's Approved FY 2016 Capital Budget Projects - Not Test for APFO																											
Chart reflects May 2015 Projections, Board of Education's FY2016 approved capacities, and no redistricting																											
Pre-Measures		Capacity																									
		2016	2017	2018	2019	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27											
		1400	1400	1400	1400	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.												
Columbia - East		1400	1400	1400	1400	1153	82.4	1132	80.9	1114	79.6	1170	83.6	1164	83.1	1219	87.1	1277	91.2	1263	90.2	1274	91.0	1285	91.8	1263	90.2
Oakland Mills HS																											
Columbia - West		1424	1424	1424	1424	1297	91.1	1352	94.9	1399	98.2	1445	101.5	1526	107.2	1531	107.5	1554	109.1	1549	108.8	1528	107.3	1547	108.6	1534	107.7
Wilde Lake HS																											
Northeastern		1420	1420	1420	1420	1803	127.0	1885	132.7	1907	134.3	1977	139.2	2015	141.9	2029	142.9	2036	143.4	2036	143.4	1999	140.8	1991	140.2	2013	141.8
Howard HS																											
Long Reach HS		1488	1488	1488	1488	1626	109.3	1756	118.0	1828	122.8	1939	130.3	2047	137.6	2110	141.8	2259	151.8	2350	157.9	2440	164.0	2582	173.5	2681	180.2
Region HS Totals		2908	2908	2908	2908	3429	117.9	3641	125.2	3735	128.4	3916	134.7	4062	139.7	4139	142.3	4295	147.7	4386	150.8	4439	152.6	4573	157.3	4694	161.4
Northern		1615	1615	1615	1615	1231	76.2	1285	79.6	1341	83.0	1366	84.6	1420	87.9	1445	89.5	1481	91.7	1492	92.4	1487	92.1	1513	93.7	1524	94.4
McIntosh Ridge HS																											
Mt Hebron HS		1400	1400	1400	1400	1599	114.2	1649	117.8	1698	121.3	1760	125.7	1765	126.1	1803	128.8	1828	130.6	1843	131.6	1863	133.1	1875	133.9	1880	134.3
Region HS Totals		4375	4375	4375	4375	4310	98.5	4489	102.6	4643	106.1	4759	108.8	4875	111.4	4970	113.6	5055	115.5	5114	116.9	5167	118.1	5242	119.8	5290	120.9
Southeastern		1220	1220	1220	1220	1319	108.1	1387	113.7	1420	116.4	1512	123.9	1550	127.0	1624	133.1	1712	140.3	1726	141.5	1805	148.0	1831	150.1	1874	153.6
Hammond HS																											
Western		1360	1360	1360	1360	1439	105.8	1503	110.5	1557	114.5	1563	114.9	1623	119.3	1645	121.0	1674	123.1	1730	127.2	1751	128.8	1776	130.6	1802	132.5
Alhollon HS																											
Glennco HS		1420	1420	1420	1420	1221	86.0	1211	85.3	1281	90.2	1268	89.3	1277	89.9	1296	91.3	1290	90.8	1333	93.9	1356	95.5	1346	94.8	1346	94.8
River Hill HS		1488	1488	1488	1488	1224	82.3	1252	84.1	1257	84.5	1243	83.5	1258	84.5	1240	83.3	1237	83.1	1265	85.0	1263	84.9	1268	85.2	1270	85.3
Region HS Totals		5819	5819	5819	5819	5430	93.3	5595	96.2	5860	100.7	5913	101.6	6052	104.0	6091	104.7	6175	106.1	6335	108.9	6426	110.4	6476	111.3	6496	111.6
Countywide Totals		17146	17146	17146	17146	16938	98.8	17596	102.6	18171	106.0	18715	109.2	19229	112.1	19574	114.2	20068	117.0	20373	118.8	20639	120.4	20954	122.2	21151	123.4

Post-Measures Aggregate Plan		Capacity Utilization Rates with Proposed FY 2017 Capital Budget Projects - Not Test for APFO																									
		Chart reflects May 2015 Projections, Board of Education's FY 2017 Requested capacities and estimated redistricting																									
Capacity		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27					
		Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East		2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720				
Cradlerock ES	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398	398				
Jeffers Hill ES	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421	421				
Phelps Luck ES	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616	616				
Stevens Forest ES	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399	399				
Talbot Springs ES	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377	377				
Thunder Hill ES	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509	509				
Region Totals	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720	2720				
Columbia - West		361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361		
Bryant Woods ES	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326	326			
Clemens Crossing ES	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521			
Longfellow ES	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512	512			
New ES #414	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Running Brook ES	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515	515			
Swansfield ES	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521	521			
Region Totals	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430	2430			
Northeastern		751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751		
Belows Spring ES	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751			
Deep Run ES	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772	772			
Ducketts Lane ES	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669			
Elkridge ES	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760			
Ilchester ES	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653			
New ES #42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rockburn ES	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672	672			
Veterans ES	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788			
Waterloo ES	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663	663			
Worthington ES	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590			
Region Totals	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318	6318			
Northern		647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647		
Centennial Lane ES	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647	647			
Hollifield Station ES	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694	694			
Manor Woods ES	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681	681			
New ES #45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Northfield ES	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700			
St Johns Lane ES	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612	612			
Waverly ES	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638	638			
Region Totals	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972	3972			
Southeastern		424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424		
Arlington ES	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424	424			
Bollman Bridge ES	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666			
Forest Ridge ES	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669	669			
Gorman Crossing ES	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700			
Gullford ES	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465	465			
Hammond ES	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653	653			
Laurel Woods ES	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640	640			
New ES #43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Region Totals	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217	4217			
Western		788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788		
Bushy Park ES	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788			
Clarksville ES	612	612																									

Post-Measures Aggregate Plan		MIDDLE SCHOOLS - Data for Demonstrative Purposes Only																							
		Capacity Utilization Rates with Proposed FY 2017 Capital Budget Projects - Not Test for APFO Chart reflects May 2015 Projections, Board of Education's FY 2017 Requested Capacities and estimated redistricting.																							
Capacity		2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27			
2016	2017	2018	2019	Proj	% Util.																				
Columbia - East		643	643	643	503	78.2	548	85.2	690	107.3	708	110.1	702	109.2	720	112.0	708	110.1	705	109.6	698	108.6	696	108.2	
Lake Elkhorn MS		506	506	506	506	100.0	438	86.6	559	110.5	573	113.2	592	117.0	580	114.6	576	113.8	580	114.6	579	114.4	585	115.6	
Oakland Mills MS		1149	1149	1149	937	81.5	986	85.8	1249	108.7	1281	111.5	1294	112.6	1300	113.1	1284	111.7	1285	111.8	1277	111.1	1281	111.5	
Region MS Totals		2298	2298	2298	1946	84.7	2172	94.6	2938	128.2	3062	133.4	3188	139.1	3180	138.4	3144	137.0	3180	138.4	3156	137.6	3152	137.2	
Columbia - West		506	506	506	574	113.4	595	117.6	661	130.6	661	130.6	661	130.6	661	130.6	661	130.6	661	130.6	661	130.6	661	130.6	
Harper's Choice MS		467	467	467	599	128.3	648	138.8	708	151.6	708	151.6	708	151.6	708	151.6	708	151.6	708	151.6	708	151.6	708	151.6	
Wildie Lake MS		973	1266	1266	1173	120.6	1243	98.2	1234	97.5	1281	101.2	1234	97.5	1266	100.0	1259	99.4	1312	103.6	1372	108.4	1425	112.6	
Region MS Totals		1440	1733	1733	1773	124.1	1891	132.8	1942	134.7	1942	134.7	1942	134.7	1942	134.7	1942	134.7	1942	134.7	1942	134.7	1942	134.7	
Northeastern		662	662	662	662	100.0	726	109.7	702	106.0	684	103.3	639	96.5	604	91.2	609	92.0	614	92.7	630	95.2	635	95.9	
Bonnie Branch MS		779	779	779	779	100.0	684	87.8	744	95.5	752	96.5	750	96.3	764	98.1	774	99.4	795	102.1	799	102.6	815	104.6	
Elkridge Landing MS		662	662	662	662	100.0	832	125.7	708	106.9	742	112.1	734	110.9	730	110.3	700	105.7	695	105.0	672	101.5	693	104.6	
Ellicott Mills MS		798	798	798	798	100.0	712	89.2	771	96.6	840	105.3	880	110.3	931	116.7	953	119.4	1010	126.6	1044	130.8	1050	131.6	
Mayfield Woods MS		0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
New MS #21		0	0	0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	
Thomas Viaduct MS		701	701	701	701	100.0	676	96.4	614	87.6	685	97.7	733	104.6	814	116.1	848	121.0	924	131.8	1000	142.7	1072	152.9	
Region MS Totals		3602	3602	3602	3492	96.9	3666	101.8	3539	98.3	3703	102.8	3736	103.7	3843	106.7	3884	107.8	4038	112.1	4145	110.3	4265	113.5	
Northern		779	779	779	812	104.2	837	107.4	852	109.4	863	110.8	869	111.6	901	115.7	953	122.3	997	128.0	1059	135.9	1092	140.2	
Burling Manor MS		565	565	565	644	114.0	649	114.9	709	125.5	712	126.0	718	126.5	729	128.3	735	129.0	733	127.7	740	130.0	739	129.0	
Dunloggin MS		643	643	643	723	112.4	744	115.7	667	103.7	663	103.1	681	105.9	704	109.5	708	110.1	709	110.3	707	110.0	717	111.5	
Patapsco MS		1987	1987	1987	2179	109.7	2230	112.2	2228	112.1	2238	112.6	2268	113.9	2334	117.4	2396	122.2	2439	123.5	2506	126.1	2548	128.2	
Region MS Totals		3602	3602	3602	3973	110.3	4088	113.5	4088	113.5	4101	113.9	4144	115.1	4267	118.5	4342	120.6	4486	124.6	4592	127.5	4688	129.9	
Southeastern		604	604	604	603	99.8	581	96.2	569	94.2	603	99.8	662	109.6	669	110.8	693	114.7	709	117.4	755	125.0	762	126.2	
Hammond MS		662	662	662	673	101.7	700	105.7	665	100.5	721	108.9	752	113.6	770	116.3	731	110.4	730	110.3	730	110.3	734	110.9	
Murray Hill MS		760	760	760	737	97.0	707	93.0	808	106.3	775	102.0	799	105.1	768	101.1	778	102.4	793	104.3	806	106.1	830	109.2	
Potuxent Valley MS		2026	2026	2026	2013	99.4	1988	98.1	2042	100.8	2099	103.6	2213	109.2	2207	108.9	2202	108.7	2232	110.2	2291	113.1	2326	114.8	
Region MS Totals		3602	3602	3602	3602	100.0	3602	100.0	3602	100.0	3602	100.0	3602	100.0	3602	100.0	3602	100.0	3602	100.0	3602	100.0	3602	100.0	
Western		643	643	643	606	94.2	565	87.9	549	85.4	563	87.6	564	87.7	554	86.2	548	85.2	552	85.8	572	89.0	584	90.8	
Clarksville MS		662	662	662	662	100.0	633	95.6	629	95.0	679	102.6	676	102.1	685	103.5	673	101.7	686	103.6	713	107.7	710	107.3	
Folly Quarter MS		545	545	545	561	102.9	561	102.9	533	97.8	559	102.6	578	106.1	590	108.3	559	102.6	567	104.0	570	104.6	596	109.4	
Glenwood MS		701	701	701	728	103.9	717	102.3	702	100.1	756	107.8	770	109.8	786	112.1	792	113.0	806	115.0	814	116.1	810	115.5	
Lime Kiln MS		798	798	798	798	100.0	779	97.6	877	109.9	896	112.3	900	112.8	896	112.3	912	114.3	933	116.9	982	123.1	1010	126.6	
Mount View MS		3349	3349	3349	3256	97.2	3255	97.2	3290	98.2	3456	103.2	3488	104.2	3511	104.8	3484	104.0	3544	106.4	3651	109.0	3710	110.8	
Region MS Totals		13086	13379	13379	13050	99.7	13368	99.9	13582	101.5	14058	105.1	14233	105.6	14461	107.3	14509	107.7	14850	110.2	15242	111.8	15555	114.1	
Countywide Totals		13086	13379	13379	13050	99.7	13368	99.9	13582	101.5	14058	105.1	14233	105.6	14461	107.3	14509	107.7	14850	110.2	15242	111.8	15555	114.1	

'A' includes additions as reflected in FY 2017 CIP for Grades 6-8

'R' = Replacement school scheduled to open August 2017

'NS' = New middle school

HIGH SCHOOLS - Data for Demonstrative Purposes Only Capacity Utilization Rates with Proposed FY 2017 Capital Budget Projects - Not Test for APFO Chart reflects May 2015 Projections, Board of Education's FY 2017 Requested capacities and estimated re-districting																								
Post-Measures Aggregate Plan	2016-17		2017-18		2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27			
	Capacity	Proj	% Util.	Capacity	Proj	% Util.	Capacity	Proj	% Util.	Capacity	Proj	% Util.	Capacity	Proj	% Util.	Capacity	Proj	% Util.	Capacity	Proj	% Util.	Capacity	Proj	% Util.
Columbia - East	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0
Oakland Mills HS	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0
Columbia - West	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0
Wilde Lake HS	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0	1424	1424	100.0
Northeastern	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0
Howard HS	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0
Long Reach HS	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
New HS #13	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Region HS Totals	2908	2908	100.0	2908	2908	100.0	2908	2908	100.0	2908	2908	100.0	2908	2908	100.0	2908	2908	100.0	2908	2908	100.0	2908	2908	100.0
Northern	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0
Centennial HS	1615	1615	100.0	1615	1615	100.0	1615	1615	100.0	1615	1615	100.0	1615	1615	100.0	1615	1615	100.0	1615	1615	100.0	1615	1615	100.0
Mariotts Ridge HS	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0	1400	1400	100.0
Mt Hebron HS	4375	4375	100.0	4375	4375	100.0	4375	4375	100.0	4375	4375	100.0	4375	4375	100.0	4375	4375	100.0	4375	4375	100.0	4375	4375	100.0
Region HS Totals	3429	3429	100.0	3429	3429	100.0	3429	3429	100.0	3429	3429	100.0	3429	3429	100.0	3429	3429	100.0	3429	3429	100.0	3429	3429	100.0
Southeastern	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0
Hammond HS	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0	1220	1220	100.0
Western	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0	1360	1360	100.0
Altonilton HS	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0	1420	1420	100.0
Glenellon HS	1551	1551	100.0	1551	1551	100.0	1551	1551	100.0	1551	1551	100.0	1551	1551	100.0	1551	1551	100.0	1551	1551	100.0	1551	1551	100.0
Reservoir HS	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0	1488	1488	100.0
River Hill HS	5819	5819	100.0	5819	5819	100.0	5819	5819	100.0	5819	5819	100.0	5819	5819	100.0	5819	5819	100.0	5819	5819	100.0	5819	5819	100.0
Region HS Totals	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0
Countywide Totals	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0	17146	17146	100.0

Public School Enrollment Actual for 1973–2014 and Estimated for 2015–2027

	Elementary Enrollment	K–5 Change	Middle Enrollment	6–8 Change	High Enrollment	9–12 Change	Sp. Ed. School Enrollment	Sp Ed. Change	K–12 Enrollment	K–12 Change
Actual Enrollment	1973	10,481	-	5,289	-	6,177	-	30	21,977	-
	1974	10,798	317	5,652	363	6,638	461	35	23,123	1,146
	1975	10,891	93	6,025	373	7,032	394	44	23,992	869
	1976	11,069	178	6,117	92	7,410	378	61	24,657	665
	1977	11,246	177	6,175	58	7,957	547	62	25,440	783
	1978	10,968	-278	6,080	-95	8,488	531	70	25,606	166
	1979	10,627	-341	6,163	83	8,530	42	80	25,400	-206
	1980	10,261	-366	6,337	174	8,547	17	83	25,228	-172
	1981	9,856	-405	6,409	72	8,468	-79	112	24,845	-383
	1982	9,486	-370	6,245	-164	8,387	-81	106	24,224	-621
	1983	9,414	-72	5,988	-257	8,458	71	103	23,963	-261
	1984	9,808	394	5,597	-391	8,723	265	124	24,252	289
	1985	10,439	631	5,496	-101	8,900	177	143	24,978	726
	1986	11,135	696	5,551	55	8,737	-163	173	25,596	618
	1987	12,155	1,020	5,727	176	8,675	-62	191	26,748	1,152
	1988	13,225	1,070	5,776	49	8,441	-234	147	27,589	841
	1989	14,160	935	6,235	459	8,305	-136	136	28,836	1,247
	1990	15,001	841	6,603	368	8,248	-57	150	30,002	1,166
	1991	15,805	804	7,058	455	8,527	279	70	31,460	1,458
	1992	16,456	651	7,382	324	8,858	331	60	32,756	1,296
	1993	17,155	699	7,958	576	9,107	249	58	34,278	1,522
	1994	17,767	612	8,510	552	9,611	504	62	35,950	1,672
	1995	18,226	459	8,843	333	10,181	570	73	37,323	1,373
	1996	18,795	569	9,066	223	10,713	532	82	38,656	1,333
	1997	19,241	446	9,293	227	11,387	674	89	40,010	1,354
	1998	19,849	608	9,669	376	12,020	633	95	41,633	1,623
	1999	20,395	546	10,177	508	12,481	461	103	43,156	1,523
	2000	20,821	426	10,672	495	12,927	446	105	44,525	1,369
	2001	21,000	179	11,138	466	13,479	552	115	45,732	1,207
	2002	21,012	12	11,446	308	14,080	601	112	46,650	918
	2003	20,792	-220	11,689	243	14,629	549	101	47,211	561
	2004	20,498	-294	11,754	65	15,235	606	95	47,582	371
	2005	20,412	-86	11,716	-38	15,580	345	87	47,795	213
	2006	20,318	-94	11,889	173	15,858	278	90	48,155	360
	2007	20,550	232	11,740	-149	16,094	236	96	48,480	325
2008	20,811	261	11,748	8	16,231	137	98	48,888	408	
2009	21,292	481	11,649	-99	16,657	426	85	49,683	795	
2010	21,814	522	11,472	-177	16,614	-43	91	49,991	308	
2011	22,246	432	11,523	51	16,627	13	93	50,489	498	
2012	22,735	489	11,483	-40	16,660	33	91	50,969	480	
2013	23,327	592	11,890	407	16,378	-282	86	51,681	712	
2014	23,698	371	12,276	386	16,438	60	99	52,511	830	
2015	24,085	387	12,734	458	16,611	173	104	53,534	1,023	
2016	24,587	502	13,050	316	16,938	327	104	54,679	1,145	
2017	25,113	526	13,368	318	17,596	658	104	56,181	1,502	
2018	25,641	528	13,568	200	18,171	575	104	57,484	1,303	
2019	26,034	393	14,044	476	18,715	544	104	58,897	1,413	
2020	26,639	605	14,215	171	19,229	514	104	60,187	1,290	
2021	27,184	545	14,446	231	19,574	345	104	61,308	1,121	
2022	27,731	547	14,491	45	20,068	494	104	62,394	1,086	
2023	28,186	455	14,841	350	20,373	305	104	63,504	1,110	
2024	28,511	325	15,227	386	20,639	266	104	64,481	977	
2025	28,822	311	15,541	314	20,954	315	104	65,421	940	
2026	28,989	167	15,773	232	21,151	197	104	66,017	596	
2027	29,126	137	15,921	148	21,642	491	104	66,793	776	

*Beginning of school year September 30th Official 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	12.3	3	\$ 447,569	1961	1980(A), 2001(R), 2002(R), 2006(R), 2007(R)
Bellows Spring ES	40.0	5	\$ 15,105,663	2003	2009(A), 2011(A)
Bollman Bridge ES	17.0	2	\$ 6,274,000	1988	1994(A), 2008(C), 2013(R/A)
Bryant Woods ES	9.30	4	\$ 695,406	1968	1983(A), 1984(A), 2004(R), 2007(R)
Bushy Park ES	19.2	-	\$ 24,000,000	2007	(R) Replaced Old Bushy Park with a new school
Centennial Lane ES	11.2	5	\$ 1,101,140	1973	1987(A), 2007(R), 2008(A)
Clarksville ES	10.7	1	\$ 435,986	1964	1980(A), 1986 HVAC, 2002(R/A), 2006(A)
Clemens Crossing ES	10.8	3	\$ 1,853,590	1979	1988(A), 2007(A), 2009(R)
Cradlerock ES	33.2	3	\$ 4,249,000	1976	1998(A), 2001(R), 2003(R), 2007(A), 1996 Dasher Green Head Start
Dayton Oaks ES**	22.7	-	\$ 21,804,000	2006	New school 2006
Deep Run ES	11.7	6	\$ 6,403,575	1990	1998(A), 2009(R/A)
Ducketts Lane ES	10.0	-	\$ 34,447,000	2013	New school 2013
Elkridge ES***	48.6	4	\$ 7,139,588	1992	1998, 2009(A)
Forest Ridge ES	20.9	5	\$ 6,050,000	1992	2001/2 (R)/(A), 2009(A)
Fulton ES ***	99.0	-	\$ 6,156,161	1997	2003(R/A), 2006(A)
Gorman Crossing ES	15.0	2	\$ 5,766,716	1998	2007(R/A), 2013(A)
Guilford ES	11.0	5	\$ 216,278	1954	1959(A), 1982(R/A), 1986(A), 1989, 2006(R)
Hammond ES***	35.0	1	\$ 2,381,673	1971	(Includes Hammond MS & Hammond ES) 1987(R/A), 1988/9(R/A), 1996/7 (A), 2007(R), 2011(R/A)
Hollifield Station ES	14.5	3	\$ 6,017,889	1997	2002(A), 2009(A/R)
Ilchester ES***	27.2	3	\$ 6,430,404	1996	2000/1, 2008(A/R)
Jeffers Hill ES	10.0	2	\$ 1,747,200	1975	1998/1999(R)
Laurel Woods ES	27.0	2	\$ 1,658,399	1973	1987(A), 2005(ROOFING PROJECT), 2006(R), 2008(A), 2015(A)
Lisbon ES	22.6	1	\$ 2,056,000	1976	1988(A), 2006(R)
Longfellow ES	9.5	-	\$ 775,481	1970	1986(R), 1994(A), 2008(A), 2015(R)
Manor Woods ES	43.2	1	\$ 5,900,000	1994	2004(R/A)
Northfield ES	10.0	1	\$ 20,330,000	1968	1986(R/A), 2007(A), 2011(R/A)
Phelps Luck ES	10.0	7	\$ 1,036,792	1972	1989(R/A), 1999(R/A), 2007(A), 2013(R/A)
Pointers Run ES	13.7	9	\$ 6,645,000	1991	2000, 2001/2(A), 2006(A), 2008(A)
Rockburn ES	8.7	1	\$ 5,849,000	1993	2004(R/A), 2007(R/A)
Running Brook ES	9.0	3	\$ 776,406	1970	1984(A), 2004(R), 2006(R), 2014(A)
St. John's Lane ES	10.0	6	\$ 235,985	1954	1988(A), 1959(A), 1966, 1975(R/A), 1988(A), 1995(A), 2000(R/A), 2009(A)
Stevens Forest ES	10.0	5	\$ 764,941	1972	1995(R/A), 2013(R/A)
Swansfield ES	10.0	12	\$ 764,941	1972	1988(A), 1998(R), 2008(R/A)
Talbott Springs ES	10.0	8	\$ 1,224,800	1973	1999(SPRINKLERS), 2000(R/A), 2008(R/A)
Thunder Hill ES	14.9	2	\$ 14,515,430	1970	1987, 1988(A), 1989(R), 2007(R/A), 2012(R/A)
Triadelphia Ridge ES***	78.3	-	\$ 6,219,488	1998	2006(R/A)
Veterans ES	23.7	5	\$ 19,000,000	2007	New school 2007
Waterloo ES	10.0	4	\$ 435,221	1964	1987(R/A), 1998(A), 2007(A), 2010(R)
Waverly ES	11.5	8	\$ 6,669,587	1990	2007(A)
West Friendship ES	17.9	-	Unknown	1925	(7 rm school (1925)) 1950(A), 1962(A), 1971(R/A), 1978(R/A), 2004(R), 2005(R)
Worthington ES	19.7	1	\$ 2,385,850	1976	1989(R/A), 1998(A), 2007, 2008(R)

* Estimated Investment: based on available records; in process of updating data.

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

***Acreage shared.

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***	27.2	2	\$ 7,819,520	1999	
Burleigh Manor MS	27.0	1	\$ 8,107,000	1992	
Clarksville MS	20.4	5	\$ 5,662,361	1979	2004, 2006(A), 2008(R), 2010(Masonry)
Dunloggin MS	20.0	5	\$ 1,963,323	1973	1999(R)
Elkridge Landing MS	48.6	2	\$ 9,000,000	1995	
Ellicott Mills MS	16.2	3	\$ 9,430,537	1939	1957(A), 1962(A), 1973(A), 2001(Replacement)
Folly Quarter MS***	78.3	-	\$ 11,077,000	2003	
Glenwood MS	30.0	6	\$ 1,179,168	1967	1999(R), 2000(R), 1986(A/C)
Hammond MS***	35.0	3	\$ 22,650,672	1971	See Hammond ES
Harper's Choice MS	19.7	5	\$ 1,974,697	1973	2001(R)
Lake Elkhorn MS***	33.2	1	\$ 4,244,500	1976	2002(R)
Lime Kiln MS***	99.0	-	\$ 8,420,400	1999	2005(A)
Mayfield Woods MS	27.0	2	\$ 8,501,354	1991	
Mount View MS	35.8	2	\$ 8,617,000	1993	
Murray Hill MS	25.0	6	\$ 7,858,000	1997	
Oakland Mills MS	20.0	-	\$ 1,803,876	1972	1998 (R)
Patapsco MS	21.1	2	\$ 1,391,791	1969	1974(R), 1996, 2003(R/A), 2004 (R/A)
Patuxent Valley MS	30.0	6	\$ 8,261,000	1989	
Thomas Viaduct MS	20.2	-	\$ 34,755,000	2014	
Wilde Lake MS	21.0	13	\$ 1,323,314	1969	1974(A), 1998(R)

HCPSS High Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Conversion (C), Projects
Atholton HS	36.3	-	\$ 1,423,493	1966	1972(A), 1977(A), 1988(R/A), 1997(R), 2003(R/A), 2015(R/A)
Centennial HS	43.0	4	\$ 6,337,867	1977	2002(R/A), 2011(A)
Glenelg HS	40.9	-	\$ 56,345,257	1958	1963(A), 1967, 1969(A), 1971(A), 1972(R), 1986(A), 1988(R/A), 2001(R/A), 2003, 2008(R/A), 2009 (Auditorium), 2011(HVAC)
Hammond HS	33.1	4	\$ 6,321,000	1976	1996(A), 1998(R), 2011(A)
Howard HS	41.0	15	\$ 698,781	1951	1960(A), 1964(A), 1971(A), 1975(A), 1977(R), 2001(R), 2002(R), 2004, 2006(A), 2009(R)
Long Reach HS	50.0	3	\$ 20,373,000	1996	
Marriotts Ridge HS	42.4	-	\$ 34,115,895	2005	
Mt. Hebron HS	40.1	4	\$ 55,560,000	1965	1968(A), 1972(A), 1976(A), 1978(R/A), 1983(R/A), 1999(R/A), 2004(R), 2005(R), 2011(R)
Oakland Mills HS	28.6	-	\$ 3,579,000	1973	1991(R/A), 1998(R), 2004(R/A)
Reservoir HS***	99.0	5	\$ 27,224,000	2002	
River Hill HS	64.2	-	\$ 21,473,000	1994	
Wilde Lake HS	31.3	-	\$ 21,202,391	1971	1996(Replacement)

HCPSS Special Schools	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Conversion (C), Projects
Applications & Research Lab***	45.5	-	\$ 1,502,581	1968	1970, 1974(A), 1986(A), 1997/1998(R), 2002(R), 2006(R)
Cedar Lane***	99.0	-	\$ 18,663,069	2005	2005(A)
Homewood***	45.5	1	\$ 8,620,912	2002	

HCPSS Other Facilities	Acreage	Current Relocatables	Original Construction Cost	Initially Complete	Renovations (R), Additions (A), Conversion (C), Projects
Admin. Building(Harriett Tubman)	3.6	-	\$ 256,664	1948	1953, 1956
Admin. Building(Central Office)***	45.5	4	\$ 3,657,660	1980	
Old Bushy Park***	12.0	-	\$ 2,931,991	1976	1988(A), school replaced 2007
Faulkner Ridge Resource Center	9.0	-	\$ 750,174	1969	
Old Cedar Lane	11.0	-	\$ 3,839,731	1981	

***Acreage shared.

ELEMENTARY SCHOOLS - MAY 2015 APFO Test
Capacity Utilization Rates with Board of Education's Approved FY 2016 Capital Budget Projects
Chart reflects May 2014 Projections, Board of Education's Requested FY 2016 capacities, and proposed redistricting associated with Capital Projects.

Region	2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28	
	Capacity	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.	Proj	% Util.
Columbia - East	2018	2019	2020	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021
Craddock ES	398	398	398	398	446	112.1	446	112.1	443	111.3	462	116.1	479	120.4	497	124.9	508	127.6	516	129.6
Jeffers Hill ES	421	421	421	421	392	93.1	392	93.1	396	94.1	402	95.6	410	97.4	415	98.6	415	98.6	421	100.0
Phelps Luck ES	616	616	616	616	546	88.6	546	88.6	561	91.1	568	92.1	573	93.0	573	93.0	573	93.0	577	93.7
Stevens Forest ES	399	399	399	399	460	115.3	460	115.3	469	117.5	487	121.8	470	117.8	478	119.8	478	119.8	482	120.8
Talbot Springs ES	377	377	377	377	382	101.3	382	101.3	381	101.1	391	103.7	395	104.8	399	105.8	405	107.4	411	109.0
Thunder Hill ES	509	509	509	509	523	102.8	522	102.6	527	103.5	536	105.3	542	106.5	545	107.1	556	109.2	562	110.4
Region Totals	2720	2720	2720	2720	2741	100.8	2751	101.1	2780	102.2	2816	103.5	2855	105.0	2892	106.3	2935	107.9	2969	109.2
Columbia - West	361	361	361	361	371	102.8	381	105.5	384	106.4	389	107.8	392	108.6	397	110.0	400	110.8	404	111.9
Bryant Woods ES	521	521	521	521	524	100.6	524	100.6	521	100.0	521	100.0	497	95.4	493	94.6	495	95.0	499	95.8
Clemens Crossing ES	512	512	512	512	442	86.3	435	85.0	429	83.8	429	83.8	439	85.7	444	86.7	449	87.7	452	88.3
Longfellow ES	515	515	515	515	727	141.2	779	151.3	894	173.6	950	184.5	1023	198.6	1047	203.3	1076	208.9	1104	214.4
Running Brook ES	621	621	621	621	566	91.1	557	89.7	554	89.2	562	90.5	571	91.9	576	92.8	581	93.6	589	94.8
Swainsfield ES	250	250	250	250	2670	106.4	2670	106.4	2788	110.2	2851	112.7	2889	114.2	2922	115.5	2957	116.9	3001	118.6
Region Totals	621	621	621	621	566	91.1	557	89.7	554	89.2	562	90.5	571	91.9	576	92.8	581	93.6	589	94.8
Northeastern	751	751	751	751	886	118.0	917	122.1	936	124.6	938	124.9	923	122.9	922	122.8	917	122.1	899	119.7
Bellevue Spring ES	772	772	772	772	818	105.8	845	109.5	867	112.3	867	112.3	870	112.7	862	111.7	865	112.0	869	112.6
Deep Run ES	669	669	669	669	1091	163.1	1178	176.1	1308	195.5	1336	199.7	1314	196.4	1282	191.6	1251	187.0	1199	179.2
Ducketts Lane ES	760	760	760	760	886	116.6	896	117.9	898	118.2	909	119.6	924	121.6	946	124.5	969	127.5	998	131.3
Elkridge ES	653	653	653	653	601	92.0	579	88.7	601	92.0	639	97.9	671	102.8	691	105.8	726	111.2	747	117.0
Elchester ES	788	788	788	788	614	78.0	614	78.0	651	82.6	687	87.1	712	90.1	733	92.9	756	95.8	782	99.1
New ES #42	672	672	672	672	610	90.8	597	88.8	614	91.4	651	96.9	687	102.2	712	106.0	733	109.1	766	112.6
Rockburn ES	788	788	788	788	926	117.5	926	117.5	926	117.5	926	117.5	926	117.5	926	117.5	926	117.5	926	117.5
Veterans ES	663	663	663	663	670	101.1	674	101.7	685	103.3	700	105.6	703	106.0	712	107.4	721	108.7	732	110.4
Waterloo ES	590	590	590	590	527	89.3	523	88.6	502	85.1	512	86.8	534	90.5	554	93.9	582	98.6	607	102.9
Worthington ES	7106	7106	7106	7106	6969	98.1	7072	99.5	7216	101.5	7449	104.8	7509	105.7	7577	106.6	7655	107.7	7785	109.6
Region Totals	7106	7106	7106	7106	6969	98.1	7072	99.5	7216	101.5	7449	104.8	7509	105.7	7577	106.6	7655	107.7	7785	109.6
Northern	647	647	647	647	756	116.8	790	122.1	810	125.2	818	126.4	822	127.0	826	127.7	831	128.4	836	129.2
Centennial Lane ES	694	694	694	694	730	105.2	748	107.8	792	114.1	823	118.6	851	122.6	860	123.9	852	122.8	838	120.7
Hollyfield Station ES	681	681	681	681	1025	150.5	1126	165.3	1230	180.6	1307	191.9	1367	200.7	1354	198.8	1313	192.8	1280	185.0
Manor Woods ES	700	700	700	700	714	102.0	721	103.0	727	103.9	738	105.4	742	106.0	764	109.1	783	111.9	828	118.3
Northfield ES	612	612	612	612	762	124.5	751	122.7	773	126.3	774	126.5	784	128.1	787	128.6	809	132.2	824	134.6
St. Johns Lane ES	738	738	738	738	645	87.4	635	86.0	614	83.2	613	83.1	621	84.1	634	85.9	661	89.6	692	93.8
Waverly ES	4072	4072	4072	4072	4632	113.8	4771	117.2	4946	121.5	5158	126.7	5205	127.8	5244	128.8	5294	130.0	5296	130.1
Region Totals	4072	4072	4072	4072	4632	113.8	4771	117.2	4946	121.5	5158	126.7	5205	127.8	5244	128.8	5294	130.0	5296	130.1
Southeastern	424	424	424	424	403	95.0	416	98.1	416	98.1	416	98.1	422	99.5	425	100.2	428	100.9	434	102.4
Arlinton ES	666	666	666	666	794	119.2	841	126.3	870	130.6	893	134.1	903	135.6	919	138.0	934	140.2	938	140.8
Bolman Bridge ES	669	669	669	669	935	139.8	979	146.3	1017	152.0	1024	153.1	1048	156.7	1078	161.1	1085	162.2	1075	160.7
Forest Ridge ES	700	700	700	700	739	105.6	736	105.1	745	106.4	744	106.3	741	105.9	731	104.4	724	103.4	712	101.7
Gorman Crossing ES	465	465	465	465	498	107.1	507	109.0	514	110.5	505	108.6	511	109.9	518	111.4	530	114.0	530	114.0
Guilford ES	653	653	653	653	622	95.3	622	95.3	645	98.8	689	105.5	713	109.2	732	112.1	755	115.6	780	119.4
Hammond ES	640	640	640	640	573	89.5	559	87.3	547	85.5	558	87.2	552	86.3	554	86.6	555	86.7	558	87.2
Laurel Woods ES	4217	4217	4217	4217	4564	108.2	4663	111.1	4798	113.8	4848	115.0	4900	116.2	4960	117.6	5006	118.7	5039	119.5
Region Totals	4217	4217	4217	4217	4564	108.2	4663	111.1	4798	113.8	4848	115.0	4900	116.2	4960	117.6	5006	118.7	5039	119.5
Western	788	788	788	788	569	72.2	565	71.7	575	73.0	583	74.0	573	72.7	581	73.7	600	76.1	607	77.0
Bushy Park ES	612	612	612	612	382	62.4	382	62.4	378	61.8	377	61.6	384	62.7	387	63.2	391	63.9	395	64.5
Clarksville ES	788	788	788	788	576	73.1	545	69.2	531	67.4	520	66.0	531	67.4	535	67.9	539	68.4	551	69.9
Dayton Oaks ES	788	788	788	788	918	116.5	929	117.9	929	117.9	929	117.9	929	117.9	929	117.9	929	117.9	929	117.9
Fulton ES	527	527	527	527	346	65.7	346	65.7	344	65.3	344	65.3	344	65.3	344	65.3	344	65.3	344	65.3
Lisbon ES	744	744	744	744	749	100.7	729	98.0	734	98.7	747	100.4	744	99.7	744	100.0	758	101.9	769	103.4
Pointers Run ES	581	581	581	581	641	110.3	638	109.8	651	112.0	666	114.6	681	118.8	697	122.7	713	127.7	729	132.7
Triadelphia Ridge ES	414	414	414	414	261	63.0	252	60.9	244	58.9	245	59.2	252	60.9	257	62.1	262	63.3	265	64.0
West Friendship ES	5242	5242	5242	5242	4465	85.2	4386	83.7	4386	83.7	4361	83.3	4361	83.3	4372	83.4	4399	83.9	4433	84.6
Region Totals	5242	5242	5242	5242	4465	85.2	4386													

MIDDLE SCHOOLS - MAY 2015 APFO Test

Capacity Utilization Rates with Board of Education's Approved FY 2016 Capital Budget Projects

Chart reflects May 2014 Projections, Board of Education's Requested FY 2016 capacities, and proposed redistricting associated with Capital Projects.

Capacity	2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25		2025-26		2026-27		2027-28	
	2018	2019	2020	2021	2019	2020	2021	2022	2022	2023	2023	2024	2024	2025	2025	2026	2026	2027	2027	2028
Columbia - East	643	643	643	643	626	97.4	625	97.2	624	97.0	611	95.0	611	95.0	610	94.9	627	97.5	634	98.6
Lake Ekhorn MS	506	506	506	506	518	102.4	519	102.6	516	102.0	513	101.4	521	103.0	528	104.3	528	104.3	530	104.7
Oakland Mills MS	1149	1149	1149	1149	1144	99.6	1139	99.1	1141	99.3	1137	99.0	1131	98.4	1132	98.5	1155	100.5	1164	101.3
Region MS Totals	1149	1149	1149	1149	1144	99.6	1139	99.1	1141	99.3	1137	99.0	1131	98.4	1132	98.5	1155	100.5	1164	101.3
Columbia - West	506	506	506	506	612	120.9	591	116.8	616	121.7	596	117.8	590	116.6	584	115.4	587	116.0	592	117.0
Harpers Choice MS	760	760	760	760	741	97.5	740	97.4	768	101.1	787	103.6	834	109.7	875	115.1	922	121.3	949	124.9
Wide Lake MS	1266	1266	1266	1266	1353	107.5	1331	105.1	1384	109.3	1383	109.2	1424	112.5	1459	115.2	1509	119.2	1541	121.7
Region MS Totals	1266	1266	1266	1266	1353	107.5	1331	105.1	1384	109.3	1383	109.2	1424	112.5	1459	115.2	1509	119.2	1541	121.7
Northeastern	662	662	662	662	735	111.0	749	113.1	667	100.8	649	98.0	657	99.2	650	98.2	657	99.2	673	101.7
Bonnie Branch MS	779	779	779	779	742	95.3	747	95.9	782	100.4	798	102.4	816	104.7	838	107.6	845	108.5	844	108.3
Elkridge Landing MS	662	662	662	662	883	128.7	852	107.9	937	111.1	929	113.6	931	113.8	917	112.1	926	113.2	926	113.2
Ellicott Mills MS	798	798	798	798	851	106.6	863	108.1	901	112.9	916	114.8	964	120.8	1007	126.2	1021	127.9	1020	127.8
Mayfield Woods MS	701	701	701	701	733	104.6	803	114.6	891	127.1	899	128.2	966	137.8	1026	146.4	1093	155.9	1103	157.3
Thomas Viaduct MS	3602	3788	3758	3788	4028	107.2	4051	107.8	4178	111.2	4191	111.5	4334	115.3	4438	118.1	4542	120.9	4566	121.5
Region MS Totals	3602	3788	3758	3788	4028	107.2	4051	107.8	4178	111.2	4191	111.5	4334	115.3	4438	118.1	4542	120.9	4566	121.5
Northern	779	779	779	779	767	98.5	782	100.4	808	103.7	829	107.7	892	114.5	938	120.4	999	128.2	1009	129.5
Burleigh Manor MS	565	662	662	662	674	119.3	678	102.4	689	104.1	712	107.6	722	109.1	720	108.8	721	108.9	735	111.0
Dunloughin MS	643	643	643	643	752	117.0	768	119.4	773	120.2	753	117.1	786	122.2	789	122.7	812	126.3	818	127.2
Patapsco MS	1987	2084	2084	2084	2228	116.9	2259	108.4	2324	111.5	2361	113.3	2446	117.4	2485	119.2	2532	121.5	2562	122.9
Region MS Totals	1987	2084	2084	2084	2228	116.9	2259	108.4	2324	111.5	2361	113.3	2446	117.4	2485	119.2	2532	121.5	2562	122.9
Southeastern	604	604	604	604	629	104.1	654	108.3	685	113.4	709	117.4	738	122.2	758	125.5	771	127.6	779	129.0
Hammond MS	662	662	662	662	746	112.7	810	122.4	839	126.7	800	120.8	792	119.6	804	121.5	804	121.5	798	120.5
Murray Hill MS	760	760	760	760	844	111.1	838	110.3	878	115.5	911	119.9	948	124.7	976	128.4	1018	133.9	1068	140.5
Patuxent Valley MS	2026	2026	2026	2026	2302	113.6	2398	118.4	2402	118.6	2420	119.4	2478	122.3	2538	125.3	2593	128.0	2645	130.6
Region MS Totals	2026	2026	2026	2026	2302	113.6	2398	118.4	2402	118.6	2420	119.4	2478	122.3	2538	125.3	2593	128.0	2645	130.6
Western	643	643	643	643	521	81.0	537	83.5	490	76.2	470	73.1	476	74.0	482	75.0	479	74.5	474	73.7
Clarksville MS	662	662	662	662	649	98.0	706	106.6	710	107.3	700	105.7	723	109.2	732	110.6	719	108.6	709	107.1
Folly Quarter MS	545	545	545	545	497	91.2	521	95.6	523	96.0	485	89.0	493	90.5	487	89.4	512	93.9	507	93.0
Glenwood MS	701	701	701	701	724	103.3	774	110.4	786	112.1	788	112.4	804	114.7	811	115.7	797	113.7	776	110.7
Lime Klin MS	798	798	798	798	832	104.3	848	106.3	867	108.6	875	109.6	892	110.5	922	115.5	938	117.5	960	120.3
Mount View MS	3349	3349	3349	3349	3223	96.2	3386	101.1	3385	101.1	3378	100.9	3434	102.5	3445	102.9	3426	102.3	3426	102.3
Region MS Totals	3349	3349	3349	3349	3223	96.2	3386	101.1	3385	101.1	3378	100.9	3434	102.5	3445	102.9	3426	102.3	3426	102.3
Countywide Totals	13379	13632	13632	13632	13888	103.8	14441	105.9	14787	108.5	14810	108.6	15191	111.4	15486	113.6	15769	115.6	15999	117.4

A: capacity includes additions as reflected in FY 2016 CIP for Grades 6-8 between 2015 and 2021.

R: Replacement school scheduled to open August 2017.

Partially and Fully Funded Projects in Process

Project Name	Project Number	Appropriation	Proposed Completion	Project Status
Planning				
Waverly Elementary School Renovation/Phase II Addition	E0973*	\$ 6,170,000	2018	Planning
New ES # 42	E1028	\$ 2,807,000	2018	Planning
Oakland Mills Middle School Renovation	E1036*	\$ 2,300,000	2019	Planning

Construction				
Atholton High School Renovation/Addition	E1015	\$ 61,069,000	2015	Under construction
Longfellow Elementary School Renovation	E1027*	\$ 18,517,000	2015	Under construction
Laurel Woods Elementary School Addition	E1032	\$ 8,023,000	2015	Under construction
Deep Run Elementary School Renovation/Addition	E1030*	\$ 20,154,000	2016	Under construction
Patuxent Valley Middle School Renovation	E1033	\$ 18,145,000	2017	Under construction
Wilde Lake Middle School Replacement School	E1031	\$ 29,092,000	2017	Under construction
Swansfield Elementary School Renovation/Addition	E1034	\$ 11,773,000	2018	Under construction

*Planning funds appropriated under E0980.

Facilities Constructed With Assistance From Maryland School Construction Funds (1980–2015)				
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		

Additions/Renovations Constructed with Assistance From Maryland School Construction Funds (1980–2016)				
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			
	Waterloo			
2000–2001	Ilchester			
	Pointers Run			
	St. John's Lane			
	Talbott Springs			
2001–2002	Forest Ridge			
	Pointers Run			
2002–2003	Atholton		Centennial	
	Clarksville			
	Hollifield Station			
2003–2004	Fulton	Patapsco	Atholton	
2004–2005	Manor Woods	Clarksville	Mt. Hebron	
	Rockburn		Oakland Mills	
	Clarksville		Howard	
2006–2007	Fulton			
	Pointers Run			
	Triadelphia Ridge			
	All Day K			
2007–2008	All Day K			
	Waverly			
	Centennial Lane			
2008–2009	Clarksville			
	All Day K	Clarksville	Glenelg	
	Centennial Lane			
	Worthington			
2009–2010	All Day K			
	Clemens Crossing			
	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
	Laurel Woods			

Glossary of Terms

ADA: Americans with Disabilities Act.

ADDITION (SCHOOL): Any type of space that adds capacity or provides space for a new program.

BUILDING: A structure, either permanent or relocatable, consisting of constructed walls, a roof, and a floor. A structure that has the same floors, ceiling, and walls and is not separated by an open air space is considered one building.

PERMANENT: A structure built with a fixed foundation that has permanently attached walls, a roof, and a floor that cannot be moved or transported either as a unit or in sections.

RELOCATABLE: A building or portion of a building made up of prefabricated units that may be disassembled and reassembled frequently, or a single unit of construction consisting of walls, roof, and floor that is movable as a unit either on wheels or by a truck. Mobile, demountable, dividable, modular, and portable buildings are types of relocatable units.

CAFETORIUM: A space within an educational facility that is used as both a cafeteria and an auditorium.

CAPACITY: Number of students that may be housed in a facility at any given time based on a utilization percentage of the total number of existing satisfactory student stations.

CIP: Capital Improvement Program.

CLASSROOM: An instructional space requiring no special design or equipment and used for housing general programs such as language arts, social studies, and mathematics.

CLEAN AIR ACT: This program includes projects to convert or replace cooling equipment in school facilities so that they will no longer use ozone-depleting refrigerants.

COMAR: Code of Maryland Regulations.

COURTYARD: A large open space, usable by the student body or faculty, enclosed or surrounded by buildings.

COVERED WALKWAY: Enclosed or unenclosed covered passageways connected to a building outside the exterior walls.

EDUCATIONAL FACILITIES: Buildings and equipment, structures, and special educational use areas that are built, installed, or established to serve primarily educational purposes and secondarily social and recreational purposes of the community and which may lawfully be used as authorized by the Maryland Statutes and approved by Boards.

FEASIBILITY STUDY: The examination and analysis of information related to projected educational facilities to determine whether they are reasonable and possible.

FY: Fiscal Year.

G.S.F.: Gross Square Feet.

GYMNASIUM: An instructional area designed or adapted specifically for physical education activities. Regular or special classrooms connected to, or contained in, gymnasiums are recorded individually as regular or special classrooms and not as part of the gymnasium.

GYMNATORIUM: A space within an educational facility that is used both as a gym and an auditorium.

HVAC: Heating, ventilation, air conditioning, and refrigeration.

KINDERGARTEN CLASSROOM: A special classroom designed or provided with special built-in equipment for use by a group or class organized to provide educational experiences for children preceding the first grade. Room must not be located above the first floor and must have self-contained rest rooms.

Glossary of Terms

LABORATORY: An instructional area designed for and furnished with specialized equipment to serve the needs of a particular program of study. Included in this category are science laboratories, language laboratories, reading laboratories, and vocational/technology laboratories.

LEED: Leadership in Energy and Environmental Design is a green building certification program.

LIMITED RENOVATION (LR): Includes projects that upgrade or replace a minimum of five major building systems and include widespread educational or architectural enhancements in schools or part(s) of schools that have been in use for more than 15 years. A limited renovation upgrades an existing building and site, or a portion of a building and site, to achieve many, but not all, of the current educational, building performance, and aesthetic qualities of a new school. A limited renovation allows further participation by the state within 15 years after the project is placed in service for projects that were not included in the original awarded scope of the Limited Renovation.

LONG-RANGE PLANNING: Devising a systematic method based on educational information and needs, carefully analyzed, to provide the facilities to meet the goals and objectives of the educational agency for a period of five years.

MAINTENANCE AND REPAIRS: The upkeep of educational and ancillary plants, including, but not limited to, roof or roofing replacement short of complete replacement of membrane or structure; repainting of interior or exterior surfaces; resurfacing of floors; repair or replacement of glass; repair of hardware, furniture, equipment, electrical fixtures, and plumbing fixtures; and repair or resurfacing of parking lots, roads, and walkways. "Maintenance and repair" will not include renovations except for the replacement of equipment with new equipment of equal systems meeting current code requirements, provided that the replacement item neither places increased demand upon utilities services or structural supports nor adversely affects the function of safety to life systems.

MEDIA CENTER: An area specifically designed or adapted as a place for studying, reading, and the custody, circulation, and administration of a collection of books, manuscripts, and periodicals kept for use by the student body.

MULTIPURPOSE ROOM: An instructional area designed or adapted specifically for two or more of the combined functions that might normally be used for assemblies, physical education, lunch, music, clubs, audiovisual work, and library services. Separate gymnasiums and cafeteriums are not classified as multipurpose rooms.

MUSIC ROOM: An instructional area designed or provided with special built-in equipment for learning activities involving choral and instrumental music.

NEW CONSTRUCTION: Any construction of a building or unit of a building in which the entire work is new or an entirely new addition connected to an existing building or which adds additional square footage to the space inventory.

N.S.F.: Net Square Feet.

PARCEL: The unique acreage of contiguous land. Typically consists of a plot of land that is not divided by a county, city, state, or federally owned or maintained road or highway.

PROJECT FEASIBILITY STUDY: A project and site evaluation study to determine the suitability of the site for the project in question. A pre-design architectural study which may look at various scenarios before an architect is engaged to design the renovation or new construction.

PUBLIC SCHOOL CONSTRUCTION PROGRAM (PSCP): The Maryland Public School Construction Program funds the cost of constructing certain school capital improvements or portions thereof up to the extent of the approvals by the Board of Public Works and consistent with the current regulations, subject to annual appropriations.

Glossary of Terms

RENOVATION: The rejuvenating or upgrading of existing facilities by installation or replacement of materials and equipment and includes, but is not limited to, interior or exterior reconditioning of facilities and spaces; air-conditioning, heating, or ventilation equipment; fire alarm systems; emergency lighting; electrical systems; and complete roofing or roof replacement, including replacement of membrane or structure. (In this context, the term "materials" does not include instructional materials.) PSCP distinguishes between different types of renovations, depending upon their scope.

REPLACEMENT: Projects to replace the majority or the entirety of an existing school where the cost of renovation is prohibitive, or site/building layout and other technical factors make renovation of the entire structure infeasible. Replacement may include expansion to increase capacity, and must typically be justified on the basis of a feasibility study.

RESOURCE ROOM: An instructional space used primarily to enhance and support, not supplant, instruction received in regular or special classrooms. Generally designed to accommodate fewer students than other classrooms.

ROOM: A space enclosed on all sides. Alcoves or recesses are not considered separate rooms and should be included in the NSF of the room where such spaces are found.

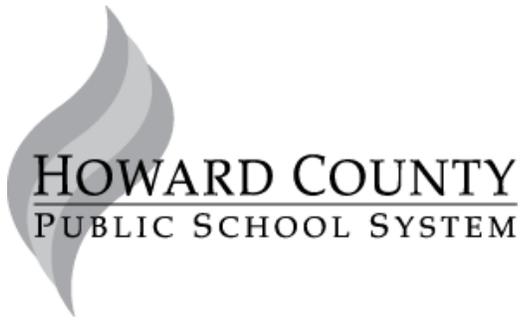
SITE: A space of ground occupied or to be occupied by an educational facility or program.

SITE DEVELOPMENT: Site development means work that must be performed on an unimproved site in order to make it usable for the desired purpose; or, work incidental to new construction or to make an addition usable.

SITE IMPROVEMENT: The work that must be performed on an existing site to improve its utilization, correct health and safety deficiencies meet special program needs or provide additional service areas. Site improvement incident to

construction is the work that must be performed on a site as an accompaniment to the construction of an addition to an educational facility or for a modernization project.

USGBC: U.S. Green Building Council administers the LEED building program which certifies green buildings.



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

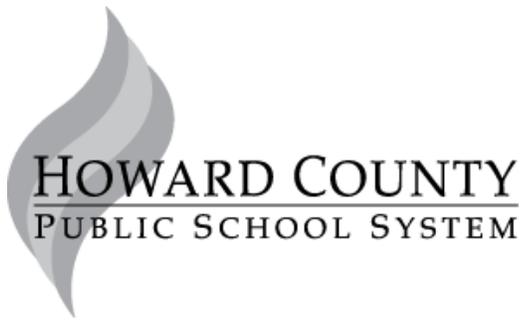
General Educational Specifications High Schools

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.

ADOPTED: September 13, 1990

AMENDED: January 14, 2010

EFFECTIVE: July 1, 2010