BOARD OF EDUCATION OF HARFORD COUNTY DECISION ON

THE 2024 EDUCATIONAL FACILITIES MASTER PLAN AND COMPREHENSIVE MAINTENANCE PLAN

June 10, 2024 June 24, 2024

Background Information:

The <u>Rules, Regulations and Procedures for the Administration of the Public-School Construction Program</u> (PSCP) require that each Local Education Agency (LEA), submit annually, an amended copy of the Educational Facilities Master Plan (EFMP) by July 1, 2024. Additionally, the PSCP requires each LEA to prepare and submit an updated Comprehensive Maintenance Plan by October 1, 2024.

Discussion:

The EFMP is a planning tool that addresses the LEA's projected facility needs. Coordinating with HCPS stakeholders and the Harford County Government, the plan is reviewed and updated annually. The 2024 EFMP includes all the essential elements required by the State and has been reviewed by the appropriate school system personnel. The Capital Improvement Projects proposed in this plan will be the basis for the FY26 Capital Improvement Program. The EFMP Table of Contents and the Timeline of Capital Improvement Projects are attached.

The Timeline of Capital Projects includes project funding needs through FY 2032. The major project timeline has been updated to match anticipated funding, delaying the start of all listed projects by one year. The changes impact the start and end dates of the Old Post Road replacement School and Bel Air Middle School projects.

The State completes a facility assessment of all public schools in Maryland. The results of that assessment provide updated facility condition data. HCPS utilizes the resulting data with identified facility needs, capacity demands, Blueprint requirements and funding outlook to update the capital improvement priorities in the out years. HCPS has multiple capital needs. During the presentation, we will discuss anticipated State and local funding and the impact on the long-term capital plan.

The Comprehensive Maintenance Plan is a tool to develop and improve the facilities maintenance program. Utilizing the guidelines prescribed by the Interagency Committee, the Department of Facilities reviews and updates the plan annually. The 2024 Comprehensive Maintenance Plan Table of Contents is attached.

The information, analysis, and conclusions within these two documents serve as a guide in the development of the priorities for the Capital Improvement Program.

Superintendent's Recommendation:

The Superintendent of Schools recommends that the Board of Education endorse the 2024 Educational Facilities Master Plan and the 2024 Comprehensive Maintenance Plan for submission to the State.

Future Focused: HCPS Facilities Master Plan & Comprehensive Maintenance Plan





Discussion of current and long-term construction, maintenance, operation, and funding needs, which rely on State & Local Capital Investment.

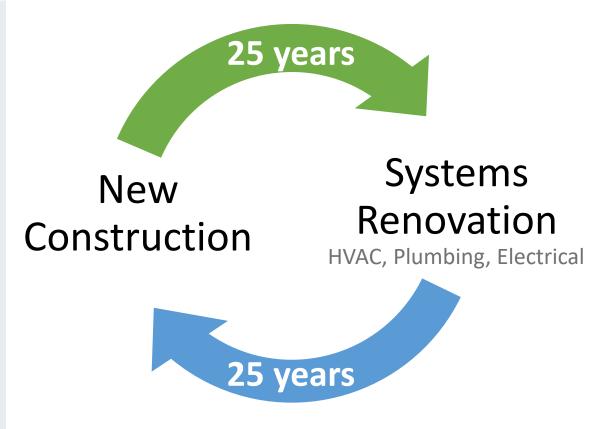
June 10, 2024

June 24, 2024



School Building Life Cycle







Current Practice due to Funding

1 Project Every 2 Years





New Construction



Limited
Reconstruction/
Systems Renovation



Current Timeline due to Funding

 $55 \times 1 \times 2 = 110 \text{ Year}$

Schools



Project





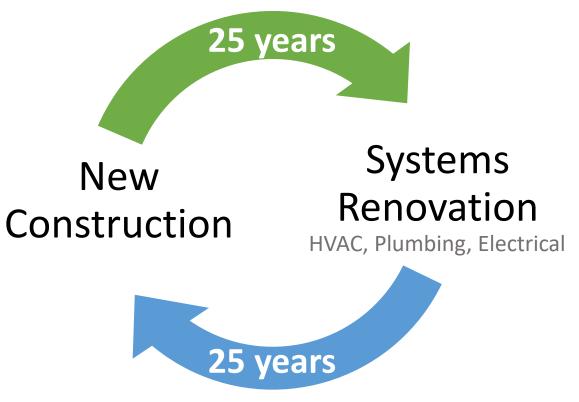


Construction cycle per school for renovations and/or new construction.



Best Practice







Funding Sources



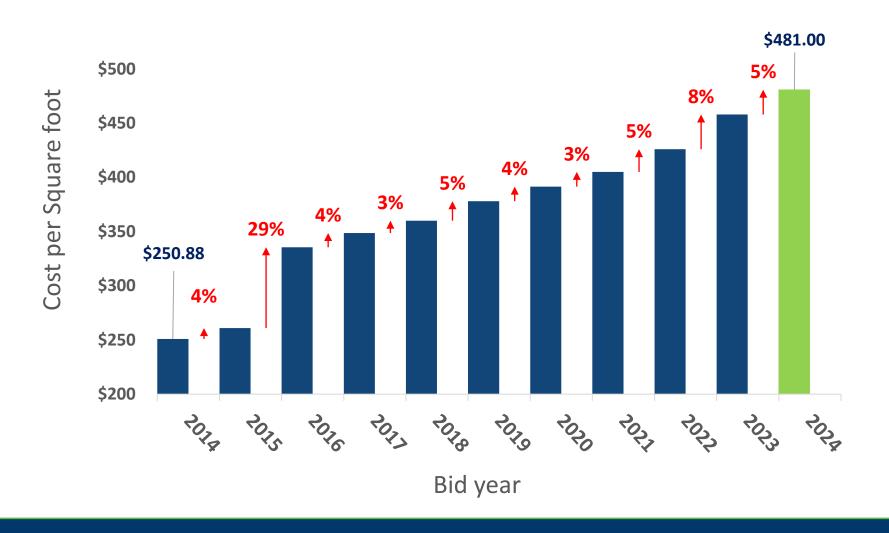
- State budget divides available capital funding to the 24 districts based on population & wealth.
- Average yearly capital funding from the State is \$15 million.



- State funded projects require a match of county funds.
- All projects needed outside of state funds require local funds.
- Current Harford County Government administration has indicated an annual \$50 million allocation to HCPS (Total Capital includes construction & other major needs, e.g. technology).
- HCPS provides the County with a list of projects based on need and county chooses projects to fund.

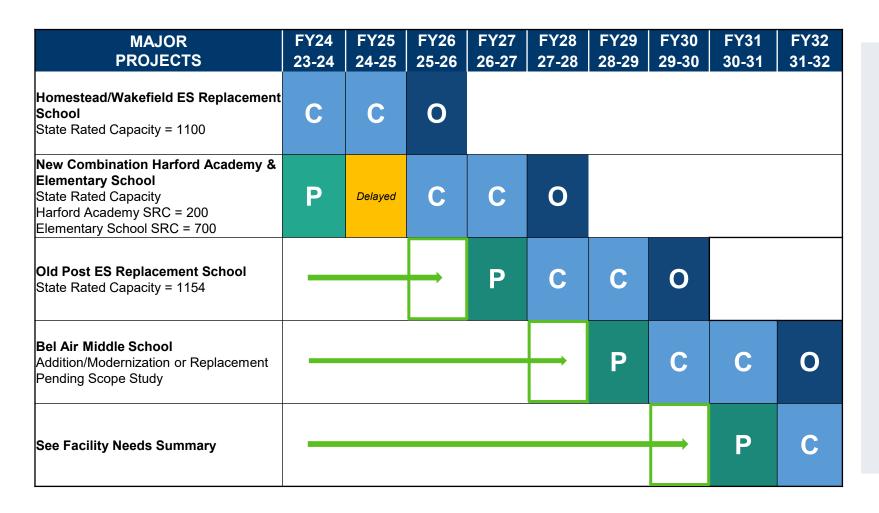


Challenge: Rising Costs





Challenge: Delays



Revised timeline due to Harford Academy delay.

P = Planning Local Funding

C = Construction State and Local Funding

> **O** = Occupancy No funding



Challenges: Impact to HCPS

Current funding does not meet the safety needs of our system. For a sustainable cycle we need 1 new building, and 2 systems renovations started each year.

 Example: HDMS/HS new construction was around \$100 million dollars.



Buildings not receiving timely systems renovations or new construction are increasingly more expensive to operate & maintain.

 Increased systems failures and emergency school closures occurring. HCPS's other capital needs (unrelated to aging buildings) are insufficiently supported.

- Examples:
 - Changing space needs due to Blueprint
 - Building capacity insufficient due to areas with growing enrollment
 - Vehicles and technology require replacement



What's Next

BOE Education Facilities & Comprehensive Plan Presentation & Vote June 24, 2024

Delayed timeline from Harford Academy is the main impact of this vote.

Submit Education Facilities & Comprehensive Plan Presentation to the State July 1, 2024

Prepare State & Local Capital Requests for presentation in September 2024

We will continue to discuss how our decisions and funding trends impact the Capital Budget.

Concerted, thoughtful, and collaborative advocacy to improve our local funding and to change our current practice of one project ever two years.





Educational Facilities Master Plan (EFMP)

- A comprehensive look at our facilities, their conditions, projected enrollments and needs across the school system.
- The 2024 EFMP includes all the essential elements required by the state and has been reviewed by the appropriate school system personnel.
- It serves as a basis for discussion of the FY2026 Capital Improvement Program.

Comprehensive Maintenance Plan

 A system-wide maintenance management plan for the maintenance of buildings, grounds, and fixed equipment through repairs or replacement during the 50-year life expectancy of the building.

Capital Improvement Program

- Financial tool for state and local budgeting.
- Planning Capital Improvements based on HCPS needs and longterm goals.

BOE Vote June 24th:

Requesting Approval for State Submission.

Continue Conversations



How we Set Priorities in the Plan

Priorities are frequently revaluated based on emergency system failures, new legislation, and new home construction in the county (building capacity).

State Assessment

- All public schools in the State
- Facility Condition Index (FCI)
- Ranking of School facilities statewide
- Ranking of School facilities within HCPS
- Access to data

Identified Facility Needs

- Reoccurring system failures
- Increasing workorders
- Increasing maintenance Costs

Capacity Demands

- Evaluating capacity concerns
- Expanding program needs
- Potential area of need
- Anticipated timeline
- Addition / New School

Blueprint Requirements

- Expansion of Pre-K
- Support spaces



State Assessment: School Facility Conditions

Facility Condition Index	State Assessment Facility Condition Descriptions	# HCPS Schools			
15% and below	Feels like a new building!	3	Feels like new		
15-30%	Good condition. Comfortable. Appears to be in good overall repair. Generally, everything operates as intended.	2	Good, Comfortable		
30-45%	Condition is satisfactory, although some repairs are needed. Does not generally feel uncomfortable anywhere in the occupied spaces of the facility.	9	Satisfactory, Need Repairs		
45-60%	Visibly in need of repair. Conditions verge on uncomfortable with some areas of the facility worse than others. Building generally functions OK, but occasionally becomes unreliable.	25	Visibly Need Repairs		
Above 60%	Building functions have become unreliable. Not esthetically or environmentally comfortable in some or all areas of the facility.	13	Unreliable, Uncomfortable	8	, C





The decisions and advocacy we contemplate now will impact the safety, capacity, service, and academic and enrichment programs for our students and families for the next

100 Gears!

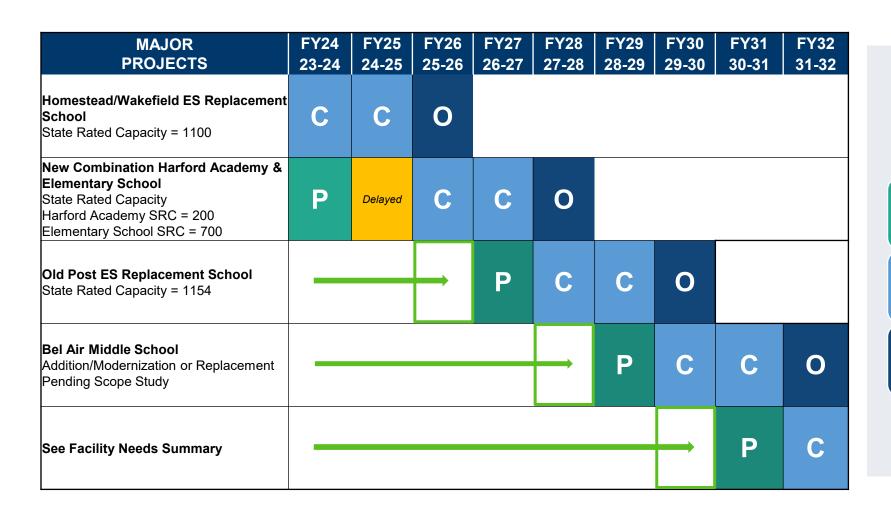


Educational Facilities Master Plan (EFMP)

- Purpose
 - ➤ State requirement
 - According to the Rules, Regulations, and Procedures for the Administration of the Public-School Construction Program
 - ➤ July 1 annual submission date
 - ➤ Planning tool
 - ➤ Basis for Capital Improvement Program
 - ➤ Snapshot of where we are
 - ➤ Opportunity to make a comprehensive review of facility needs
- The 2024 EFMP includes all the essential elements required by the state and has been reviewed by the appropriate school system personnel. It serves as a basis for discussion of the FY2026 Capital Improvement Program.



2024 Major Capital Projects



Revised timeline due to Harford Academy delay.

P = Planning Local Funding

C = Construction State and Local Funding

> **O** = Occupancy No funding



Future Capital Needs

SCHOOL	TYPE OF PROJECT	FISCAL YEAR
C. Milton Wright High School	Limited Renovation	TBD
Prospect Mill Elementary School	Roof Replacement	FY 25
North Harford High School	Roof Replacement	FY 26
Old Post Elementary School	Replacement	FY 27
Southampton Middle School	HVAC Systemic	FY 27
Hall's Cross Roads	Roof Replacement	FY 27
Darlington Elementary	Roof Replacement	FY 28
Riverside Elementary	Roof Replacement	FY 29
Bel Air Middle School	Addition - Renovation	FY 29
Havre de Grace Elementary School	Scope study needed	TBD
Edgewood Middle School	HVAC Systemic / Limited Renovation	TBD
Meadowvale Elementary School	Scope study needed	TBD
Magnolia Elementary School	Scope study needed	TBD
Existing Harford Academy Building	Renovation	TBD

2024 Changes

Major projects Deferred

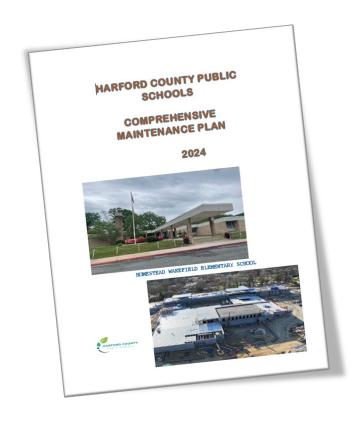
- Old Post Road Elementary School
- Bel Air Middle
 School

Systemic Project Deferred

- C. Milton Wright High School
- Southampton
 Middle School
 - All future needs
 Deferred



CMP Components



Bleacher Inspections and Repairs

Boiler Inspections

Boiler Replacements

Fire Alarm Replacements

Floor Covering Replacements

HVAC System Replacements

Painting

Paving – Overlay & Maintenance

Roof Replacements

Cleaning of On-Site Wastewater Systems

Underground Storage Tanks

Compliance Overview

Investigation of an Indoor Air Quality

Problem Form

Periodic Surveillance Form

Building Efficiency & Sustainability Survey

Work Order Program Screenshot

Work Order Comparisons

Work Order Report by Location

Work Order by Craft Fiscal Year

Work Order Summary by Craft

Organizational Chart

Investigation of an Indoor Air Quality

Problem Form

Periodic Surveillance Form

Building Efficiency & Sustainability Survey

Preventive Maintenance

Preventive Maintenance Inspection

Frequency

Preventive Maintenance Task Listing

Preventive Maintenance Air Filter



Discussion and Decision

The Superintendent of Schools recommends that the Board of Education endorse the 2024 Educational Facilities Master Plan and the 2024 Comprehensive Maintenance Plan for submission to the State.



2024 EDUCATIONAL FACILITIES MASTER PLAN



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Facilities Inventory

Relocatable Classroom Inventory

2023-24 Programs and Services by School HCPS

School Locator Map

School Map with Legislative Districts

Undeveloped HCPS Site Inventory

Parks and Recreation School Use List

Floor Plan Abbreviations

Facilities Inventory Section Format

ELEMENTARY SCHOOLS - FORM 101.1 & CURRENT FACILITIES INVENTORY DATA

Abingdon Elementary School

Bakerfield Elementary School

Bel Air Elementary School

Church Creek Elementary School

Churchville Elementary School

Darlington Elementary School

Deerfield Elementary School

Dublin Elementary School

Edgewood Elementary School

Emmorton Elementary School

Forest Hill Elementary School

Forest Lakes Elementary School

Fountain Green Elementary School

George D. Lisby Elementary School

Hall's Cross Roads Elementary School

Havre de Grace Elementary School

Hickory Elementary School

Homestead-Wakefield Elementary School

Jarrettsville Elementary School

Joppatowne Elementary School

Magnolia Elementary School

Meadowvale Elementary School

Norrisville Elementary School

North Bend Elementary School

North Harford Elementary School

Old Post Road Elementary School

Prospect Mill Elementary School

Red Pump Elementary School

Ring Factory Elementary School

Riverside Elementary School

Roye Williams Elementary School

William S. James Elementary School

Youth's Benefit Elementary School



MIDDLE SCHOOLS - FORM 101.1 & CURRENT FACILITIES INVENTORY DATA

Aberdeen Middle School
Bel Air Middle School
Edgewood Middle School
Fallston Middle School
Magnolia Middle School
North Harford Middle School
Southampton Middle School

HIGH SCHOOLS - FORM 101.1 & CURRENT FACILITIES INVENTORY DATA

Aberdeen High School
Bel Air High School
C. Milton Wright High School
Edgewood High School
Fallston High School
Joppatowne High School
North Harford High School

COMBINATION SCHOOLS - FORM 101.1 & CURRENT FACILITIES INVENTORY DATA

Havre de Grace Middle/High School Patterson Mill Middle/High School

SPECIALTY SCHOOLS - FORM 101.1 & CURRENT FACILITIES INVENTORY DATA

Swan Creek School Harford Technical High School Harford Academy School

OTHER FACILITIES - FORM 101.1 & CURRENT FACILITIES INVENTORY DATA

Administrative Building Facilities-Hickory Annex Forest Hill Annex-Food Services Harford Glen Environmental Center

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Elementary School Middle School High School

SECTION 7: FACILITY UTILIZATION AND NEEDS

Facility Needs Analysis
Facility Needs Summary – Form 101.3
Timeline of Capital Projects

Note: HCPS digital enrollment data was uploaded with the EFMP in excel format and not within this document.

LEA: HARFORD COU	NTY PUBLIC SO	CHOOLS		DATE: June 24, 2024				
EXISTING AND/OR PROPOSED SCHOOL	TYPE OF PROJECT	GRADES	SRC	ENROLI Actual 2022	LMENTS 7th Year	JUSTIFICATION FOR PROJECT	PLANNING REQUEST FISCAL YEAR	
Combination Special Education Public Day School (Harford Academy) & New Elementary School	Replacement	PreK - 12	200	142	142 + New Elementary School (598 capacity)	Create a new free-standing special educational facility and a new elementary school to add elementary capacity.	FY 26	
Harford Technical High School	Limited Renovation	9-12	1135	979	979	This is a limited renovation project to replace aging systems and address educational facility needs.	FY 24	
Aberdeen Middle School	HVAC Systemic	6-8	1624	1086	1130	A systemic renovation to address system failures in the building including, HVAC, building controls, electrical fire alarm, sprinkler, exterior doors and windows.	FY 24	
Havre de Grace Elementary School	Roof Replacement	PreK-5	542	566	589	Replace the end of life aged roof to address frequent leaks and and increased	FY 24	
C. Milton Wright High School	Limited Renovation	9-12	1613	1269	1354	This is a limited renovation project to replace aging systems and address educational facility needs.	TBD (Not Approved FY25)	
Prospect Mill Elementary School	Roof Replacement	PreK-5	611	587	596	Replace the end of life aged roof to address frequent leaks and and increased	FY 25	
Old Post Elementary School	Replacement	PreK-5	984	844	852	This is a replacement project to replace a three building aging elementary school.	FY 26	
North Harford High School	Roof Replacement	9-12	1210	848	876	Replace the end of life aged roof to address frequent leaks and and increased	FY 26	
Southampton Middle School	HVAC Systemic	6-8	1444	1175	1230	A systemic renovation to address system failures in the building including, HVAC, building controls, electrical fire alarm, sprinkler, exterior doors and windows.	FY 27	
				1	T			

454

454

Hall's Cross Roads

Roof

Replacement

PreK-5

552

FY 27

Replace the end of life aged roof to address

frequent leaks and and increased

HADEODD COLINITY DLIBLIC SCHOOLS

LEA: HARFORD COU	NTY PUBLIC SO	CHOOLS			DATE: June 24, 2024				
EXISTING AND/OR PROPOSED SCHOOL	TYPE OF PROJECT	GRADES	SRC	ENROLI Actual 2022	MENTS 7th Year	JUSTIFICATION FOR PROJECT	PLANNING REQUEST FISCAL YEAR		
Darlington Elementary	Roof Replacement	K-5	157	101	101	Replace the end of life aged roof to address frequent leaks and and increased	FY 28		
Riverside Elementary	Roof Replacement	PreK-5	588	440	514	Replace the end of life aged roof to address frequent leaks and and increased	FY 29		
Bel Air Middle School	Addition - Renovation	6-8	1243	1,138	1,218	This is a renovation and addition project to replace aging infrastructure and address future capacity needs.	FY 29		
Havre de Grace Elementary School	Scope study needed. Multi- Systemic or Addition - Renovation	PreK-5	542	566	589	This school has multiple systemic needs as well as capacity concerns. HCPS would like to complete a scope study to look at options to address the systemic concerns, moderenize the facility, and add capcity for	TBD		
Edgewood Middle School	HVAC Systemic Potential Limited Renovation	6-8	1295	1000	1009	A systemic renovation to address system failures in the building including, HVAC, building controls, electrical fire alarm, sprinkler, exterior doors and windows.	TBD		
Meadowvale Elementary School	Scope study needed. Multi- Systemic or Addition - Renovation	PreK-5	568	541	594	This school has multiple systemic needs as well as capacity concerns. HCPS would like to complete a scope study to look at options to address the systemic concerns, moderenize the facility, and add capcity for the anticipated growth in this area.	TBD		
Magnolia Elementary School	Scope study needed. Multi- Systemic or Addition - Renovation	PreK-5	561	500	534	This school has multiple systemic needs as well as capacity concerns. HCPS would like to complete a scope study to look at options to address the systemic concerns, moderenize the facility, and add capcity for the anticipated growth in this area.	TBD		
Halls Cross Roads	HVAC Systemic	PreK-5	552	454	454	This school has systemic needs. School is in process of a chiller replacement project.	TBD		

757

This school has systemic needs.

HVAC Systemic

PreK-5

Church Creek Elementary

TBD

LEA: HARFORD COUNTY PUBLIC SCHOOLS

n				1		T	ı		
EXISTING	TYPE			ENROLLMENTS		JUSTIFICATION	PLANNING		
AND/OR	OF	GRADES	SRC	A -41 0000	74b V	FOR	REQUEST		
PROPOSED SCHOOL	PROJECT			Actual 2022	7th Year	PROJECT	FISCAL YEAR		
						The school will be repurposed for another			
Existing Harford Academy	D +	A1/A	A 1 / A	A / / A	A 1 / A	use to be determined. Options include, but	TDD		
Building	Renovation	N/A	N/A	N/A	N/A	are not limited to, utilizing for expansion	TBD		
						space for Harford Technical High School.			

DATE:

June 24, 2024

2024 EDUCATIONAL FACILITIES MASTER PLAN Timeline of Capital Projects

Planning - Local Funding
Construction - State and Local Funding
Occupancy - No Funding

Capacity, Modernization and Addition Projects SRC - State Rated Capacity									
MAJOR	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	Comments
PROJECTS	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	- Communication
Homestead/Wakefield ES Replacement School (SRC= 1100)	С	0							Construction documents were approved and the project was scheduled to BID April 21, 2022, however, has been postponed due to the Town of Bel Air Planning Commission desire to have a connector road from East and West MacPhail Road across the Bel Air Campus. On December 8, 2022, a Consent Order was issued allowing HCPS to move forward with the project on a seperate timeline then the connector road dispute. HCPS recieved bids on March 9, 2023, the project has started and is on schedule to open for the 25/26 School Year.
New Combination Harford Academy & Elementary School (Harford Academy SRC = 200) (Elementary School SRC = 700)	Delayed working with county to obatin property within the PFA	ပ	С	0					The BOE approved a scope study in September, 2009 to replace the school on the Bel Air Campus. Due to funding constraints and Bel Air campus planning, the project was deferred. The BOE voted September of 2021 to replace the school on the Schuck's Road campus. In 2022, the BOE approved a plan to balance enrollment within the County. The plan included adding elementary capacity by building a combination John Archer & Elementary School on Schuck's Road. On April 25, 2022, the BOE approved a contract to complete the feasibility study. During the State site approval process, the Maryland Department of Planning directed HCPS to work with the county to either extend the PFA to include the Campus Hills site or locate a new site within the existing PFA. This has delayed the start of the construction for this project. HCPS worked with the County to obtain a centrally located site within the PFA. HCPS has submitted the property to the State Clearing house and the site was approved. Education Specifications were submitted to MSDE and HCPS anticipates the approval letter by July 2024. Update feasability layouts are being developed for the new site.
Old Post ES Replacement School (SRC = 1154)		Delayed one year due to funding constraints	Р	С	С	0			This project has been planned to follow Homestead/Wakefield ES and John Archer School for a number of years. The BOE approved a scope study recommendation to replace the school in August, 2009. This project was the #2 priority on the list of recommendations in the EFMP. HCPS recieve a waiver for an updated feasability Study March 22, 2024. Due to funding constraints and the delayed Harford Academy Project, this project has been delayed one year. HCPS will move into the Education Specification process in 2024/2025.
Bel Air Middle School Addition/Modernization or Replacement Pending Scope Study				Delayed one year due to funding constraints	Р	С	С	o	The BOE approved a plan to balance enrollment November of 2021. Part of that plan included adding Bel Air Middle School to the major projects timeline to address capacity and systemic needs. The school is 60 years old and has not had any building upgrades in 27 years. A scope study would be required to determine the best way to address the needs; but it would be either a modernization and addition project, or a full replacement. With the current timeline of one major project at a time, the project could be completed and occupied for the 31/32 school year.
Addition/Modernization or Replacement							Р	С	Address Schools having major systemic needs as well as program and capacity insufficiencies.See the Facility Needs Summary for needs identified.

HARFORD COUNTY PUBLIC SCHOOLS

COMPREHENSIVE MAINTENANCE PLAN

2024



HOMESTEAD WAKEFIELD ELEMENTARY SCHOOL





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BOARD OF EDUCATION OF HARFORD COUNTY INFORMATIONAL REPORT PRESENTATION OF

THE 2024 EDUCATIONAL FACILITIES MASTER PLAN AND COMPREHENSIVE MAINTENANCE PLAN

June 10, 2024

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The Timeline of Capital Projects includes project funding needs through FY 2033. The major project timeline has been updated to match anticipated funding, delaying the start of all listed projects by one year. The changes impact the start and end dates of the Old Post Road replacement School and Bel Air Middle School projects.

The State completes a facility assessment of all public schools in Maryland. The results of that assessment provide updated facility condition data. HCPS utilizes the resulting data with identified facility needs, capacity demands, Blueprint requirements and funding outlook to update the capital improvement priorities in the out years. HCPS has multiple capital needs. During the presentation, we will discuss anticipated State and local funding and the impact on the long-term capital plan.

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The information, analysis, and conclusions within these two documents serve as a guide in the development of the priorities for the Capital Improvement Program.

Superintendent's Recommendation:

The Superintendent of Schools recommends that the Board of Education accept the presentation of the 2024 Educational Facilities Master Plan and the 2024 Comprehensive Maintenance Plan.

HARFORD COUNTY PUBLIC SCHOOLS

COMPREHENSIVE MAINTENANCE PLAN

PURPOSE OF THE PLAN

This comprehensive maintenance plan is established to develop, maintain, and/or improve the maintenance program of the public school system to support the delivery of educational programs and services and to provide a safe and healthy environment as effectively and efficiently as possible.

OBJECTIVES OF MAINTENANCE

The primary objective of the maintenance program is the maintenance of buildings, grounds, and fixed equipment through repairs or replacement during the 40-year life expectancy of the building. Specifically, this can be further broken down as follows:

- 1.) To provide buildings which function at top efficiency.
- 2.) To maintain the plant buildings and grounds and fixed equipment in such a manner as to eliminate or reduce to acceptable levels fires, accidents, and safety hazards.
- 3.) To provide continuous use of facilities without disruptions to the educational program.
- 4.) To protect public property by planned, scheduled, and repair/preventive maintenance.
- 5.) To conserve energy by ensuring that the maximum results are obtained with minimum expenditure of energy.
- 6.) To provide a maintenance program which will produce the maximum amount of maintenance for the minimum dollars expended.

MAINTENANCE CATEGORIES

Scheduled Maintenance

- 1.) Preventive Maintenance It is the goal of a preventive maintenance program that equipment will be inspected and serviced as required to prevent costly failures. Attached to this Comprehensive Maintenance Plan is a detailed summary of the Preventive Maintenance Program. Along with this narrative is a TASK LISTING for one of the identified areas for Preventive Maintenance (Make-up Air Unit). Additionally, a list of thirty-three (33) identified areas of mechanical equipment is attached that is the major thrust of the program as well as the filter, drive belt and filter frame specifications.
- 2.) Scheduled Repairs Scheduled maintenance has the goal of keeping the facilities in proper operating condition through regular service of equipment and facilities. It is, therefore, imperative that a schedule be established to ensure proper budgeting.

The schedule itself is not an exact timetable because the exact month or even year of a failure or breakdown cannot be determined in advance. Rather, it is a prediction indicating that over a

period of time a piece of equipment must be replaced or serviced if it is expected to function properly. The frequencies used are those recommended by the Interagency Committee or are based on local experiences and conditions.

Repairs or replacements are not made strictly by the schedules but are made based on the necessity of corrective action. The schedule or replacement must be flexible but will be accurate from a long-range budget-planning standpoint.

- 3.) Modernization and Alterations Fence replacement at Forest Hill Elementary School, Emmorton Elementary School, and Meadowvale; sidewalk, curb, drain and gutter replacement at William S. James Elementary School and Emmorton Elementary School; sewer pipe correction at Meadowvale Elementary School; replace exterior lighting at Edgewood Middle School; replacements of 20 doors at Meadowvale Elementary School; wheelchair lift replacement at Hall's Cross Roads Elementary School.
- 4.) Preventive maintenance and repair on the boilers, sprinkler systems, stage rigging, and fire alarm systems throughout Harford County Public Schools. Preventive maintenance was performed at all three (3) natatorium locations.

Unscheduled Maintenance

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- 1.) Unscheduled Repairs Requests for repairs are received through our computerized work order system. They are then reviewed, prioritized, and assigned to appropriate personnel for completion. Acknowledgment copies are signed by school personnel when work is complete. A total of 18,021 work orders were submitted between 7/1/2023 5/7/2024. During that time period 16,094 work orders were completed. This computerized system allows for accurate inventory control and accurate tracking of labor, materials/parts, and all associated departmental costs. Currently, all buildings are set up to submit work requests electronically.
- 2.) Vandalism and Security Related Repairs Facilities is prepared to respond to any acts of vandalism or problems relating to proper building security twenty-four (24) hours a day seven (7) days a week.

While specifics relating to this area cannot be identified in advance, historical information and community trends are used to forecast needs.

Deferred Maintenance

1.) As a part of the prioritizing process, it becomes necessary, due to budget constraints, to defer some projects. This activity occurs in a minimal amount. Some other projects are deferred because of personnel shortages and are addressed later.

Capital Improvement Program

The Comprehensive Maintenance Plan (CMP) incorporates and mirrors many components of the CIP. Specific categories of the CMP are boiler replacement, floor covering replacement, fire alarm replacement, resurfacing, roof, HVAC, and vehicle replacement. Priorities are established with both programs in tandem.

BLEACHER INSPECTIONS AND REPAIRS

School	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Bel Air High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
C. Milton Wright High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Edgewood High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Fallston High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Harford Technical High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Joppatowne High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
North Harford High	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Patterson Mill High/Middle	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Aberdeen Middle	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Bel Air Middle	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Edgewood Middle	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Fallston Middle	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Havre de Grace High/Middle	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out	In/Out
Magnolia Middle	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
North Harford Middle	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Southampton Middle	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Abingdon Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Church Creek Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Deerfield Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Emmorton Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Forest Hill Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Forest Lakes Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Fountain Green Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Joppatowne Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
North Bend Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Prospect Mill Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Red Pump Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Ring Factory Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Swan Creek	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
Youth's Benefit Elementary	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor

BOILER INSPECTIONS

School	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High	X	X		X		X	
Bel Air High			X		X		X
C. Milton Wright High	X	X		X		X	
Edgewood High	X	X		X		X	
Fallston High			X		X		X
Harford Technical High			X		X		X
Joppatowne High	X	X		X		X	
Patterson Mill High/Middle			X		X		X
Aberdeen Middle	X	X		X		X	
Bel Air Middle – Pent Houe 24 Boiler Room 23			X		X		X
Edgewood Middle			X		X		X
Fallston Middle			X		X		X
Havre de Grace Middle/High			X		X		X
Magnolia Middle	X	X		X		X	
North Harford Middle	X	X		X		X	
Southampton Middle			X		X		X
Abingdon Elementary	X	X		X		X	
Bakerfield Elementary			X		X		X
Church Creek Elementary	X	X		X		X	
Churchville Elementary	X	X		X		X	
Deerfield Elementary	X	X		X		X	
Emmorton Elementary (3)	X	X		X		X	
Forest Hill Elementary	X	X		X		X	
Forest Lakes Elementary	X	X		X		X	
Fountain Green Elementary			X		X		X
Hall's Cross Roads Elementary	X	X		X		X	
Havre de Grace Elementary			X		X		X

BOILER INSPECTIONS

School	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Hickory Elementary			X		X		X
Homestead/Wakefield-Primary	X	X					
Jarrettsville Elementary			X		X		X
Joppatowne Elementary			X		X		X
Magnolia Elementary			X		X		X
Meadowvale Elementary	X	X		X		X	
North Bend Elementary			X		X		X
North Harford Elementary			X		X		X
Red Pump Elementary	X	X		X		X	
Ring Factory Elementary			X		X		X
Swan Creek	X			X		X	
Old Post Road – Primary	X	X		X		X	
Old Post Road – Intermediate	X	X		X		X	
William S. James Elementary	X	X		X		X	
Youth's Benefit Elementary	X	X		X		X	
Harford Academy			X		X		X
A. A. Roberty			X		X		X
Harford Glen			X		X		X
Facilities			X		X		X

BOILER REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High (2)	2004							
Bel Air High (6)	2009							
C. Milton Wright High (2)	1978							X
Edgewood High (6)	2010							
Fallston High (5)	2015							
Harford Technical High (3)	00,01				X			
Joppatowne High (2)	2022							
Patterson Mill Middle/High (2)	2006							
Aberdeen Middle (2)	2003				X			
Bel Air Middle (5)	22,00							
Edgewood Middle (6)	2005							
Fallston Middle (2)	1992							
Havre de Grace Middle/High (4)	2021							
Magnolia Middle (4)	2015							
North Harford Middle (4)	2008							
Southampton Middle (4)	2010							
Abingdon Elementary (3)	2023							
Bakerfield Elementary (2)	1999							
Church Creek Elementary (5)	93,16				X			
Churchville Elementary (4)	1998							
Deerfield Elementary (2)	2010							
Emmorton Elementary (3)	1993							
Forest Lakes Elementary (2)	1997							
Fountain Green Elementary (2)	1993				X			
Hall's Cross Roads Elem. (2)	1993							
Havre de Grace Elementary (2)	1989							
Hickory Elementary (2)	1996			X (Burner)				
Homestead Elementary	1984				X			
Jarrettsville Elementary (3)	2012							

BOILER REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Joppatowne Elementary (2)	2009							
Magnolia Elementary (2)	1974						X	
Meadowvale Elementary (2)	1991							
North Bend Elementary (2)	2021							
North Harford Elementary (2)	2013							
Red Pump Elementary (3)	2011							
Ring Factory Elementary (2)	1990							
Swan Creek (2)	2023							
Old Post Road– Primary (2)	1974							
Old Post Road–Intermediate (2)	2012							X
William S. James Elementary (4)	2014							
Youth's Benefit (4)	2017							
Harford Academy (2)	2009					X		
A. A. Roberty (1)	2006				X			
Harford Glen (4)	2018/2020							

FIRE ALARM REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High	2004							
Bel Air High	2009							
C. Milton Wright High	1996				X			
Edgewood High	2010							
Fallston High	2009							
Harford Tech. High	2000			X				
Joppatowne High	2020							
North Harford High	2005							
Patterson Mill High/Middle	2007							
Aberdeen Middle	2000	X						
Bel Air Middle	2023							
Edgewood Middle	2005						X	
Fallston Middle	1993	X						
Havre de Grace Middle/High	2021							
Magnolia Middle	2014							
North Harford Middle	2003							
Southampton Middle	2003					X		
Abingdon Elementary	2018							
Bakerfield Elementary	2000							
Bel Air Elementary	2018							
Church Creek Elem.	1994	X						
Churchville Elem.	2000							
Darlington Elementary	2016							
Deerfield Elementary	2010							
Dublin Elementary	2012							
Edgewood Elementary	2001							
Emmorton Elementary	2010							
Fountain Green Elem.	2023							

FIRE ALARM REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Forest Lakes Elementary	1997							
George D. Lisby @ Hillsdale	2021							
Hall's Cross Roads Elem.	1997							
Havre de Grace Elem.	2022							
Hickory Elementary	1997							
Homestead Elementary	2009			X				
Jarrettsville Elementary	2010							
Joppatowne Elementary	2009							
Magnolia Elementary	2009				X			
Meadowvale Elem.	2001							
Norrisville Elementary	2011							
North Bend Elementary	2020							
North Harford Elem.	2002							
Prospect Mill Elem.	2012							
Red Pump Elem.	2011							
Ring Factory Elem.	2007							
Riverside Elementary	2018							
Roye-Williams Elem.	2021			X				
Swan Creek	1965							
Old Post Rd. – Intermediate	2013					X		
Old Post Rd.– Primary	2014					X		
William S. James Elem.	2004							
Youth's Benefit Elementary	2017							
Harford Academy	2006			X				
Harford Glen – Bldg. A	1997				X			
Harford Glen – Bldg. B	1997				X			
Harford Glen – Cafeteria	2014				X			

FLOOR COVERING REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High	2003							
Bel Air High	2009							
C. Milton Wright High	2010							
Edgewood High	2010							
Fallston High	2001							
Harford Technical High	2000							
Joppatowne High	2003							
North Harford High	2006							
Patterson Mill Middle/High	2007							
Aberdeen Middle	2003							
Bel Air Middle (Media)	2012							
Edgewood Middle	2003							
Fallston Middle	2022							
Havre de Grace Middle/High	2021							
Magnolia Middle	2000							
North Harford Middle	1997							X
Southampton Middle	2000							
Abingdon Elementary	2021							
Bakerfield Elementary	2000							
Bel Air Elementary	2008							
Church Creek Elementary	1994	X		X				
Churchville Elementary	1998						X	
Churchville Elementary – Gym	2021							
Darlington Elementary	2016							
Deerfield Elementary	2010							
Dublin Elementary	2011							
Edgewood Elementary	2002							
Emmorton Elementary	2021							

FLOOR COVERING REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Forest Hill Elementary	2000							
Fountain Green Elementary	2023							
Forest Lakes Elementary	1997							
George D. Lisby Elem. (VCT)	1968							
Hall's Cross Roads Elementary	2017							
Havre de Grace Elementary	2012							
Hickory Elementary	1997					X		
Homestead Elementary	2009							
Jarrettsville Elementary	2007							
Joppatowne Elementary	2009							
Magnolia Elementary	2021							
Meadowvale Elementary	2001							
Meadowvale Elementary – Gym	2020							
Norrisville Elementary	1997							
North Bend Elementary	2014							
North Bend Elementary - Gym	2020							
North Harford Elem. (VCT)	1997							
Prospect Mill Elementary	2006							
Red Pump Elementary	2011							
Ring Factory Elementary -Carpet	2010							
Ring Factory Elementary - Gym	2021							
Riverside Elementary (Media)	2010							
Roye-Williams Elementary	2021							
Swan Creek (Media)	2007							
Old Post Road – Primary	1997							
Old Post Road – Intermediate	1997							
William S. James Elementary	1997				X			
Youth's Benefit Elementary	2017							
Harford Academy (VCT)	1998							

HVAC SYSTEM REPLACEMENTS (Roof Top Units and Chillers)

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High	2005							
Bel Air High	2009							
C. Milton Wright High	2001				X			
Edgewood High	2010							
Fallston High	2016							
Harford Technical High	1998	X			X			
Joppatowne High	2022							
North Harford High	2007	X						
Patterson Mill High/Middle	2020							
Aberdeen Middle	2014							
Bel Air Middle	2007							
Edgewood Middle	2018					X		
Fallston Middle	2019							
Havre de Grace Middle/High	2021							
Magnolia Middle	2014							
North Harford Middle	2015							
Southampton Middle	2010					X		
Abingdon Elementary	2001/1992							
Bakerfield Elementary	1998							
Church Creek Elementary	2013							
Churchville Elementary	2017							
Darlington Elementary	2015							
Dublin Elementary	2015							
Edgewood Elementary	2001						X	
Emmorton Elementary	2013							
Forest Hill Elementary	2022							

HVAC SYSTEM REPLACEMENTS (Roof Top Units and Chillers)

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Forest Lakes Elementary	2014							
Fountain Green Elem.	2009	X						
George D. Lisby Elem. @ Hillsdale	2021							
Hall's Cross Roads Elem.	2010			X				
Harford Glen	2009				X			
Havre de Grace Elem.	2013					X		
Hickory Elementary	2019			X (Burner)				
Homestead Elementary	2007	X						
Jarrettsville Elementary	2012							
Magnolia Elementary	2003			X				
Meadowvale Elementary	2002						X	
Norrisville Elementary	2014							
North Bend Elementary	2020							
North Harford Elem.	2012							
North Harford High	2006				X			
Patterson Mill Middle/High	2006							
Prospect Mill Elementary	2016							
Red Pump Elementary	2011							
Ring Factory Elementary	2015							
Riverside Elementary	2018							
Roye-Williams Elementary	2018							
Old Post Rd – Intermediate	2012							
Old Post Rd – Primary	1996							
William S. James Elementary	2014							
Youth's Benefit Elementary	2017							
Harford Academy	2009							
K Buildings (Total of 14)	68,70							

PAINTING

School	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High							
Bel Air High	X	X					
C. Milton Wright High						X	
Edgewood High							X
Fallston High							
Harford Technical High				X			
Joppatowne High			X				
North Harford High					X		
Aberdeen Middle				X			
Bel Air Middle			X				
Edgewood Middle						X	
Fallston Middle	X	X					
Havre de Grace Middle/High							
Magnolia Middle							
North Harford Middle							X
Patterson Mill Middle/High							
Southampton Middle							
Abingdon Elementary							
Bakerfield Elementary							
Bel Air Elementary	X	X					
Church Creek Elementary	X	X					
Churchville Elementary							X
Darlington Elementary							
Deerfield Elementary						X	
Dublin Elementary							
Edgewood Elementary							
Emmorton Elementary							
Forest Hill Elementary							X

PAINTING

School	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Forest Lakes Elementary					X		
Fountain Green Elementary				X			
George D. Lisby @ Hillsdale							
Hall's Cross Roads Elementary					X		
Havre de Grace Elementary				X			
Hickory Elementary			X				
Homestead Elementary							
Jarrettsville Elementary							X
Joppatowne Elementary	X	X					
Magnolia Elementary			X				
Meadowvale Elementary							
Norrisville Elementary						X	
North Bend Elementary							
North Harford Elementary					X		
Prospect Mill Elementary							
Red Pump Elementary							
Ring Factory Elementary							
Riverside Elementary			X				
Roye-Williams Elementary							
Swan Creek							
Old Post Road - Primary						X	
Old Post Road - Intermediate						X	
Wm. S. James Elementary			X				
Youth's Benefit					X		
Harford Academy				X			

PAVING – OVERLAY & MAINTENANCE

School	Planned FY 24	Actual FY 24	Planned FY 24	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High – South							
Bel Air High							
C. Milton Wright High							
Edgewood High							
Fallston High							
Harford Technical High			X				
Joppatowne High							
North Harford High							
Aberdeen Middle					X		
Bel Air Middle							
Edgewood Middle							
Fallston Middle							
Havre de Grace Middle/High							
Magnolia Middle							
North Harford Middle				X			
Patterson Mill Middle/High							
Southampton Middle							
Abingdon Elementary							
Bakerfield Elementary							
Bel Air Elementary							
Church Creek Elementary							
Churchville Elementary							
Darlington Elementary							
Deerfield Elementary							
Dublin Elementary							
Edgewood Elementary							
Emmorton Elementary							

PAVING – OVERLAY & MAINTENANCE

School	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Forest Hill Elementary							
Forest Lakes Elementary							
Fountain Green Elementary							
George D. Lisby Elem. At Hillsdale				X			
Hall's Cross Roads Elementary							
Havre de Grace Elementary				X			
Hickory Elementary							
Homestead Elementary							
Jarrettsville Elementary							
Joppatowne Elementary							
Magnolia Elementary							
Meadowvale Elementary							
Norrisville Elementary							
North Bend Elementary							
North Harford Elementary							
Prospect Mill Elementary							
Red Pump Elementary							
Ring Factory Elementary							
Riverside Elementary							
Roye-Williams Elementary							
Swan Creek							
Old Post Road – Primary	X						
Old Post Road-Intermediate	X						
William S. James Elementary							
Youth's Benefit Elementary							
Harford Academy							
Hickory Annex							

ROOF REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High	2004							
Bel Air High	2009							
C. Milton Wright High	1995, 2003, 2006							
Edgewood High	2010							
Fallston High	2008, 2011							
Harford Technical High	1998, 1999							
Joppatowne High	2008, 2018							
North Harford High	1993, 1999, 2007				X			
Aberdeen Middle	2020							
Bel Air Middle	2021							
Edgewood Middle	1997, 2005							
Fallston Middle	1993, 2006							
Havre de Grace Middle/High	2020							
Magnolia Middle	2002							
North Harford Middle	2008							
Patterson Mill Middle/High	2007							
Southampton Middle	2009							
Abingdon Elementary	1992, 2001							
Bakerfield Elementary	2022							
Bel Air Elementary	2007							
Church Creek Elementary	1994, 2001							
Churchville Elementary	2016							
Darlington Elementary	1993						X	
Deerfield Elementary	2010							
Dublin Elementary	2006							
Edgewood Elementary	2001							
Emmorton Elementary	1994							
Forest Hill Elementary	2000							

ROOF REPLACEMENTS

School	Date Installed	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Forest Lakes Elementary	1997							
Fountain Green Elementary	1993							
George D. Lisby @ Hillsdale	2014							
Hall's Cross Roads Elementary	1992					X		
Havre de Grace Elementary	2023							
Hickory Elementary	2020							
Homestead Elementary	1985, 1997							
Jarrettsville Elementary	2003							
Joppatowne Elementary	1994, 1995, 2008							
Magnolia Elementary	2001							
Meadowvale Elementary	2001							
Norrisville Elementary	1996, 1997							
North Bend Elementary	2011							
North Harford Elementary	2018							
Prospect Mill Elementary	1993, 2011	X		X				
Red Pump Elementary	2010							
Ring Factory Elementary	2010							
Riverside Elementary	1993, 1995							X
Roye Williams Elementary	1993, 1995, 2004							
Swan Creek	2022							
Old Post Road-Prim	1991, 1992, 1999							
Old Post Road-Int	1997							
William S. James Elementary	1995							
Youth's Benefit Elementary	2017							
Harford Academy	2005							

CLEANING OF ON-SITE WASTEWATER SYSTEMS

School	Planned FY 24	Actual FY 24	Planned FY 25	Planned FY 26	Planned FY 27	Planned FY 28	Planned FY 29
Aberdeen High – Grease Trap	X	X	X	X	X	X	X
Bel Air High – (2) Grease Traps	X	X	X	X	X	X	X
Edgewood High – (2) Grease Traps	X	X	X	X	X	X	X
Fallston High – WWTP & Grease Trap	X	X	X	X	X	X	X
Harford Technical High - WWTP & Grease Traps	X	X	X	X	X	X	X
North Harford High - WWTP & Grease Trap	X	X	X	X	X	X	X
Fallston Middle – Grease Trap	X	X	X	X	X	X	X
North Harford Middle – Grease Trap	X	X	X	X	X	X	X
Patterson Mill Middle/High - Grease Trap	X	X	X	X	X	X	X
Churchville Elementary – Septic Tank	X	X	X	X	X	X	X
Darlington Elementary - Septic Tank	X	X	X	X	X	X	X
Deerfield Elementary – Grease Trap	X	X	X	X	X	X	X
Dublin Elementary – Septic Tank	X	X	X	X	X	X	X
Edgewood Elementary – Grease Trap	X	X	X	X	X	X	X
Forest Hill Elementary–Septic Tank & Grease Trap	X	X	X	X	X	X	X
Jarrettsville Elementary – Septic Tank	X	X	X	X	X	X	X
Norrisville Elementary–Septic Tank &Grease Trap	X	X	X	X	X	X	X
North Bend Elementary – Septic Tank	X	X	X	X	X	X	X
North Harford Elementary – Septic Tank	X	X	X	X	X	X	X
Prospect Mill Elementary – Grease Trap	X	X	X	X	X	X	X
Red Pump Elementary – Grease Trap	X	X	X	X	X	X	X
Youth's Benefit – WWTP & Grease Trap	X	X	X	X	X	X	X
Harford Glen – Grease Trap	X	X	X	X	X	X	X
Harford Glen House – Septic Tank	X	X	X	X	X	X	X
Harford Academy – Grease Trap	X	X	X	X	X	X	X
Havre de Grace Middle/High – Grease Trap (2)	X	X	X	X	X	X	X

UNDERGROUND STORAGE TANKS

SCHOOL	TEST TYPE	PRODUCT	GALLONS	TANK NO.	INSTALL DATE	LAST TEST	PASS/ FAIL	TEST COMPANY	TYPE OF TANK	TEST PIPES PLACED	MAN WAY	CERTON FILE
		SPIL	L BUCKET IN	NSPECTIONS	S ARE TO BE	CONDU	CTED AN	NUALLY ON A	LL USTs			
2024												
2025												
2026												
HALL'S CROSS ROADS	CATHODI C	#2 OIL	10000	1	1987	2020	P	Eldreth	Steel	YES	YES	YES
2027												
2028												
FALLSTON MIDDLE	SUMP	#2 OIL	20000	1	1993	2017	P	Rellek	ST-FRP	YES	YES	YES
HALL'S CROSS ROADS	SUMP	#2 OIL	10000	1	1987	2017	P	Eldreth	Steel	YES	YES	YES
HOMESTEAD ELEM	SUMP	#2 OIL	10000	1	1966	2017	P	Eldreth	Steel	YES	YES	YES
MAGNOLIA ELEM.	SUMP	#2 OIL	10000	1	1990	2017	P	Eldreth	ST-FRP	YES	YES	YES
NORTH HARFORD ELEM.	SUMP	#2 OIL	10000	1	1984	2017	P	Eldreth	Steel	YES	NO	YES
OLD POST ROAD	SUMP	#2 OIL	10000	1	1990	2017	P	Eldreth	Steel	NO	YES	YES
2031												
HALL'S CROSS ROADS	CATHODI C	#2 OIL	10000	1	1987	2020	P	Eldreth	Steel	YES	YES	YES
2033												
FALLSTON MIDDLE	SUMP	#2 OIL	20000	1	1993	2017	P	Rellek	ST-FRP	YES	YES	YES
HALL'S CROSS ROADS	SUMP	#2 OIL	10000	1	1987	2017	P	Eldreth	Steel	YES	YES	YES
HOMESTEAD ELEM	SUMP	#2 OIL	10000	1	1966	2017	P	Eldreth	Steel	YES	YES	YES
MAGNOLIA ELEM.	SUMP	#2 OIL	10000	1	1990	2017	P	Eldreth	ST-FRP	YES	YES	YES
NORTH HARFORD ELEM.	SUMP	#2 OIL	10000	1	1984	2017	P	Eldreth	Steel	YES	NO	YES
OLD POST ROAD	SUMP	#2 OIL	10000	1	1990	2017	P	Eldreth	Steel	NO	YES	YES
HALL'S CROSS ROADS	CATHODI C	#2 OIL	10000	1	1987	2020	P	Eldreth	Steel	YES	YES	YES

COMPLIANCE OVERVIEW

Environmental compliance requirements impact every area of facilities. Regulations dictate close attention to issues such as asbestos containing materials, integrated pest management, underground storage tank systems, wastewater, lead containing materials, hazardous substances, storm water management, carbon monoxide, drinking water quality, indoor air, and radon. Compliance encompasses the conditions, safety and operation of all the buildings and occupants throughout the school system and the Department of Facilities personnel. When age and condition of buildings and equipment warrant additional monitoring, environmental personnel ensure acceptable performance is maintained by visual and quantitative analysis. Monitoring of water treatment is performed in accordance with the Lead and Copper Rule and Safe Drinking Water Act. Additionally, water system corrosion control is administered as prescribed by Maryland Department of Environment (MDE). Concerns about indoor air quality are addressed by bi-annual site assessments. Any additional mechanical work required is coordinated through the Department of Facilities. Monitoring for radon has been done in buildings throughout Harford County Public Schools. Follow-up actions including remediation and monitoring has been performed at sites where radon levels indicated. Additional monitoring will also be performed periodically to ensure continued acceptable radon levels in Harford County Public Schools buildings. Harford County Public Schools Facilities responds effectively to the constantly increasing number and complexity of Environmental Regulations.



INVESTIGATION OF AN INDOOR AIR QUALITY PROBLEM

Date Notified	d:	Who Reported:	
Position:			
People Prese	nt:		
I. Descr	ription of problem/sym	uptoms:	
II. Physi	ical assessment:		
III. Reco	mmendation:		
Signatures:	Investigator:	Date:	
	Principal:	Date:	



HARFORD COUNTY PUBLIC SCHOOLS PERIODIC SURVEILLANCE

Periodic surveillance shall be performed formally by Harford County Public School personnel approximately every six months. Please return form Ryan Barrie, Environmental Specialist, in the Facilities Department.

School Name	Today's Date
Date Noted	Performed by: Name and Position
Changes in Material:	
Conditions:	

HCPS Building Efficiency and Sustainability Survey

hool: Date: oms Inspected: Inspected by:			
moposida by.			
is survey is to be used to evaluate the efficiency of the			
rounding grounds. It is meant to be a useful tool in deter ciency and conservation issues, as well as identifying a			
pected in this checklist are outlined in the administrative pro			
Site Grounds	Υ	N	Comment
Outside security lights are functioning			
Outside security lights are off in day-light hours			
Outside parking and sidewalk lights are functioning			
Outside parking and sidewalk lights are off during day-light hours			
Recycling and waste receptacles are on-site and properly used			
Recycling receptacles are available for community and event use			
Appropriate use of shading and canopy use			
Evidence of Ground Erosion or run-off			
Building Envelope	Υ	N	
Exterior doors and windows are functioning properly and draft free			
Weather stripping and caulk are appropriate and functioning			
Structure is sound with no serious penetrations or areas of draft			
Window coverings are used appropriately to maximize daylight use			
Window coverings are closed in evening hours to resist temp change			
Recycling and waste receptacles are on-site and properly used			
Pagauras usage	Υ	N	
Resource usage Sinks and water fountains appear to be functioning and leak	1	IN	
free			
Toilets are functioning and do not appear to be running			
Paper towel and toilet paper dispensers are functioning			
Electrical	Υ	N	Comment
Light level is appropriate for needs			
Light level is appropriately efficient i.e. fluorescent			
Lights are off in unoccupied areas of the building			
Fixtures are clean and functioning			
Accent lighting is minimal and appropriately used			
Half-lighting or task-lighting is used where appropriate			·

	Y	N	Comment
Other			
Evidence of educational materials stressing conservation			
Evidence of exceptional environmental stewardship			
COMMENTS OR SUGGES	TIONS	:	

Please return to: Facilities Department

July 2019

HARFORD COUNTY PUBLIC SCHOOLS

Preventive Maintenance

July 2024

Status/Remarks

Preventive maintenance is the proactive application of proper inspection and servicing techniques to plant and equipment systems associated with the Harford County Public Schools on a continuous selective cyclical and routine basis.

With the augmentation of a Computerized Maintenance Management System, this approach will afford the advantage of protecting capital investment by permitting the application of adjustments, replacement of wear and tear components and calibration of devices under controlled conditions, and either effecting quick, simple solutions or else generating pertinent work orders to the cognizant maintenance section for repair before the equipment fails or breaks down.

Representative Accomplishments

- 1. Essential Equipment Preventive Maintenance Field Audits of the entire school system, an open-ended and ongoing process, including the formulation & usage of projections for new school facilities, those schools undergoing major renovation/reconstruction & the prompt replacement of projection data with actual data complete with impact analysis upon the completion of the new/major renovation/reconstruction activity.
- 2. The formulation & periodic updating of equipment task listing criterion for over 30 major and sub-equipment categories serving as a basis upon which to plan, organize, analyze & process a high volume of data.
- 3. The development, utilization, and continuous revision of an analytical technique of a Preventive Maintenance Subtotals Equipment Task Network, to include the establishment of per unit annual coverage capability factors, as the essential vehicle to array and manage the equipment regarding frequency and specifics of PM service intervals within the five major HCPS geographical school zones delineated by PM. This approach facilitates obtaining maximum economy and efficiency.
- 4. The identification of selective essential rates of coverage of the school system, given the available PM staffing levels, system size & criticality of service to specify realistic initial/modified program implementation levels as well as to provide a sound foundation and benchmarking for future expansion.
- 5. The application of functional, durable identification labeling to the thousands of items of equipment audited to include ongoing updating, as required (replacements, modifications, etc.). This includes innovative classroom ceiling grid labeling for those equipment installations aloft above ceiling level.

CONTINUED

- 6. Development, utilization, and continuous updating of logistical system encompassing the PM Team HVAC air filter/frame general specifications, comprehensive expendables inventory instruments for drive belts, air filter media and air filter frames and procurement contract rider for the last 3(+) consecutive years with the Baltimore and/or Howard County Public School Systems and pricing request/order procedures. Some samples are included.
- 7. The implementation of an Electric Service Entrance Equipment Maintenance/PM Program to provide much needed attention to the Main Electrical Services at the schools on a regular basis to include substantial follow-up on deficiencies encountered. Proactive role in the implementation of a MABE funded Thermographic Imaging/Infrared Testing thrust for electrical distribution equipment which further assists the Maintenance/PM action by helping uncover incipient deficiencies before they cause unscheduled electrical outages, equipment damage or possibly fire.

A sample Preventive Maintenance checklist for annual indirect gas fired make-up air unit inspections is attached. The generation/modification of PM checklists is an evolving, ongoing process.

HARFORD COUNTY PUBLIC SCHOOLS

Preventive Maintenance Program JULY 2022

Preventive Maintenance Inspection Frequency

Item	Description	A	Bi-A	Semi-	Tri-A	<u>Quar</u>	Semi-Q	Mo.	Bi- Mo.	FI*	*** a .
1.	Air Handling Unit (AHU)	X		X**		X				X	
2.	Circulator Pump (CP)	c. X									
3.	Circulator Pump (CP)>/=50HP				c. X						X
4.	Exhaust Fan (EF)	X									
5.	Vane Axial Exhaust Fan (VAEF)	a x	a x					b. X			
6.	Heat Pump (HP) – General			X						X	
7.	Heat Pump (HP) – Relocatable						X				
8.	Water to Air Geothermal Heat Pump	X		X				X			
9.	Roof Top Unit (RTU)	X				X				X	
10.	Return Air Fan (RAF)	X						X			
11.	Supply Air Fan (SAF)	X		X				X		X	
12.	Air Cleaner/Purifier			X**				X			
13.	Unit Heater Ventilator Electrical(UHV-E)			X		X				X	
14.	Energy Recovery Ventilator	X				X		X			
15.	Energy Recovery Unit (ERU)	X		X		X		X			
16.	Electric Unit Heater (EUH)			X							
	Cabinet Unit Heater Electrical (CUH)	X				X					
18.	A/C Only Unit (Electrical)			X		X				X	
19.	Fan Coil Unit Electrical (FCU)	X				X					
20.	Fan Powered Mixing Box Electrical (FPMB)			X		X					

Preventive Maintenance Inspection Frequency

Item	Description	A	Bi-A	Semi-	Tri-A	Quar	Semi-Q	Mo.	Bi- Mo.	FI.	*** a.
21.	UHV – Gas			X							
22.	Unit Heater – Gas (GUH)			X							
23.	Indirect Gas Fired Make-up Air Unit	Sample X		X		X					
24.	UHV-Water/Steam			X		X				X	
25.	Cabinet Unit Heater – Water Steam (CUH)	X								X	
26.	Fan Coil Unit – Water/Steam (FCU)	Х				X				X	
27.	A/C only Unit (Water/Steam)			X		X					
28.	Horizontal A/C Unit (H A/C)			X					X		
29.	Fan Powered Mixing Box – Water/Steam (FPMB)			X		X				X	
30.	Unit Heater (UH) Water/Steam			X							
31.	Wall Fan (WF)	X									
32.	Water Cooler (WC)			X							
33.	Window A/C (WAC)			X							

Sample Preventive Maintenance Checklist attached.

Not all PM service frequencies apply to all schools.

- a. By others Outside the scope of PM
- b. Or at every 720 hrs. of operation using retrofitted elapsed run time hour meter.
- c. Or, for 1760 rated RPM machine motors, at each 7400 hours of accumulated run time (4250 hrs., machine pumps) NEMA 280-360 fr; 3500 hours NEMA 360-5800; with prescribed periodic purging and replacement of lubricant or per manufacturer's instructions using retro-fitted elapsed run time hours metering.

^{*} Air filter change and inspection service only – custom, variable frequency.

^{**}Selectively applied, custom service.

^{***} Overhaul/General Take-Down Inspection. Frequency TBD, hourly basis.

[•] At selective essential rates of coverage. PM service frequencies are custom tailored to each facility.

HARFORD COUNTY PUBLIC SCHOOLS TASK LISTING FOR PREVENTIVE MAINTENANCE CLASSIFICATIONS FORM

GAS FIRED MAKE-UP AIR UNIT (560IGFMUAU) ANNUAL INSPECTION (FALL)

SAFETY PRECAUTIONS

- Lock-out the gas and the electrical power to the unit before performing any maintenance or service operations on this equipment.
- Wait for all rotating components to come to a complete stop prior to entering the equipment.
- Clear snow away from roof mounted units. Keep the snow clear of the intake, access doors and any vent piping.
- Do not allow water or solvents to enter the motor or bearings. Motors and bearings should never be sprayed with steam, water or solvents.
- Exercise caution when venting the coils. High pressure and/or high temperature fluids can cause serious injury.

GENERAL INSPECTION PROCEDURES

1. *Fan Wheel*: Keep the fan wheel clean for proper operation. Accumulated dirt and oil will cause imbalance.

2. Cooling Coils

- a. Inspect the coil for signs of corrosion and/or leaks. Repair any leaks as required.
- b. Inspect coil surface for foreign material. If the coil surface needs to be cleaned, then direct the cleaning agent into the leaving airside so that foreign material will be washed out of the coil rather than being pushed farther into it.
- c. Inspect and clean the drain pan to prevent the growth of algae and other organisms. Add condensate drain capsules as needed.

3. Chilled Water Coils

- a. Test the circulating fluid for sediment, corrosive products, and biological contaminants and take the necessary corrective measures.
- b. Maintain adequate fluid velocities and proper filtering of the fluid.
- c. If automatic air vents are not utilized, periodic venting of the coil is recommended to remove accumulated air.

4. Evaporative Coolers

- a. Shut off the water and drain all the lines when the outside temperature drops below 45°F.
- b. Remove drain plugs for the winter.
- c. Clean all interior parts of any mineral deposits or foreign materials that may have built-up during the cooling season.
- d. Replace any worn or non-functioning parts.

5. Gas Line

- a. Remove the drip leg and clean any liquid or debris that may have accumulated.
- b. After cleaning the drip leg, reattach it.
- 6. *Vent Piping*: Remove any debris from the drip legs in the combustion air and exhaust pipes.
- 7. **Burners and Orifices**: Before each heating season examine the burners and gas orifices to make sure they are clear of any debris such as spider webs, etc. Then clean the burners as follows:
 - a. Turn off both electrical and gas supplies to the unit.
 - b. Disconnect union between manifold and gas valve.
 - c. Remove manifold and burner assembly.
 - d. Inspect and clean orifices and burners as necessary. Avoid using any hard or sharp instruments which could cause damage to the orifices or burners.
 - 1. Remove any soot deposits from the burner with a wire brush.
 - 2. Clean the ports using an aerosol degreaser or compressed air.
 - 3. Wipe the inside of the burner clean. Cleaning the burner with a degreaser will retard the future build-up of dirt.
 - 4. Before reinstalling the burner assembly, look down the heat exchanger tubes to make sure they are clear of any debris.
 - 5. Reinstall manifold and burner assembly, reconnect wire leads and gas supply piping.
 - 6. Turn on the electrical power and gas supply.
 - 7. Follow the start-up procedure to light the burners and verify proper operation.

8. Heat Exchanger

- a. Check the heat exchanger annually for cracks.
- b. If a crack is detected, the heat exchanger should be replaced before the unit is put back into operation.
- c. Airflow across the heat exchanger should be checked to make sure the blower is operating properly.
- 9. *Flue Collector Box*: The flue passageway and flue collector box should be inspected prior to each heating season and cleared of any debris.
- 10. *Electrical Wiring*: The electrical wiring should be checked annually for loose connections or deterioration.

Tools needed to complete the Preventive Maintenance:

Hand Tools Wire Brush Fiberglass step ladder, as required.

VOM Respirator Full face safety goggles H2O Test Kit Pipe Cleaner Portable Air Compressor

Vacuum Cleaner

Materials List: Coil Cleaner, Aerosol Degreaser, Condensate Drain Tabs

Special Notes:

- 1. Coordination with Energy Manager required in advance if building is otherwise shut-down by EMS e.g., schools closed.
- 2. Disconnect and secure to the OFF position, all sources of power to the equipment prior to servicing, per standard Lock-Out Tag-Out Procedures. In the case of the exception in which the equipment must be temporarily energized for troubleshooting, observation, diagnostic measurements or related servicing actions, **exercise extreme caution**.
- 3. Check all work and restore power upon completion of the Preventive Maintenance work activity.
- 4. For further technical details, refer to the instruction manual.
- 5. Safety glasses and gloves required as needed.

PREVENTIVE MAINTENANCE – AIR FILTER ORDER FORM

ITEM NO.	QTY (ea., or as noted)	SIZE ("or as indicated)	POLY ROLL (Spec 1)	POLY PAD (Spec 2)	PAD FRAME (Spec 3)	POLY BAG HDR (Spec 4)	RIGID PAD (Spec 5)	POLY T/A (Spec 6)	OTHER	OTHER	TAG BOXES	UNIT PRICE \$	SUB TOTAL \$
	,		(Opec 1)	(Opco 2)	(Орес о)	(Орсс ч)	(00000)	(Opec o)					
		1	1		<u>l</u>		SUBT	OTAL:	Grand	Total I	f PGS 2/3		
							<u></u>		Not Use				
	\ID			\\\\\\	ALL/FAX/E-I			\ /E^ \ /	MAILORDE!				
OR	DER	ER/FRAME PRICE RE	QUEST [~LL/F <i>A</i> X/E-I	VIAIL 🗀		ONFIRMAT	ΓΙΟΝ				
										TRACKING	P.O. #: Date:		
											Date: PM Zone:	•	

<u>PREVENTIVE MAINTENANCE – AIR FILTER ORDER FORM</u>

ITEM NO.	QTY (ea., or as noted)	SIZE ("or as indicated)	FOAM ROLL (Spec 7)	PLEAT- STANDARD CAPACITY (Spec 8)	RIGID BOX NH (Spec 9)	BAG EXTENDED SURFACE (Spec 10)	PLEAT MERV 8 (Spec 11)	FOAM PLASTIC FRAME (Spec 12)	OTHER	OTHER	TAG BOXES	UNIT PRICE \$	SUB TOTAL \$
	,		(Spec 1)	(Spec o)	(Spec 9)	(Spec 10)	(Spec 11)	(Spec 12)					
											SUBTOTAL:		
								CP	AND TOT				
GRAND TOTAL [If P3 Is Not Used]:													
AIR FIL ORDEF	TER/FR/ R 🗌 PR	AME IICE REQUEST	г□	WILL		E-MAIL□ FOR CONFI		ALL/FAX/E-I	MAIL 🗆	TRA	ACKING P.O. #:		
											Date:		
											PM Zone:		

<u>PREVENTIVE MAINTENANCE – AIR FILTER ORDER FORM</u>

ITEM NO.	QTY (ea., or as noted)	SIZE ("or as indicated)	RIGID BOX SH (Spec 13)	POLY BAG WIRE (Spec 14)	PLEAT- MERV 11 ® FARR HR (Spec 15)	EXTEN SUR SEP; 65% FLA- PRECI (Spec 16)	BAG DUSTLOC⊚ CUBE MTL HDR (Spec 17)	BAG DUSTLOC _® CUBE WIRE HDR (Spec 18)	OTHER	OTHER	TAG BOXES	UNIT PRICE \$	SUB TOTAL \$
		SUBTOTAL:											
										GRA	AND TOTAL:		
ORDEF	AIR FIL [*] R	TER/FRAME LICE REQUES	т 🗆	WILL	CALL/FAX/I	E-MAIL FOR CONF	PLEASE CA	ALL/FAX/E-N	MAIL 🗆	TRA	ACKING P.O. #:		
											Date: PM Zone:		

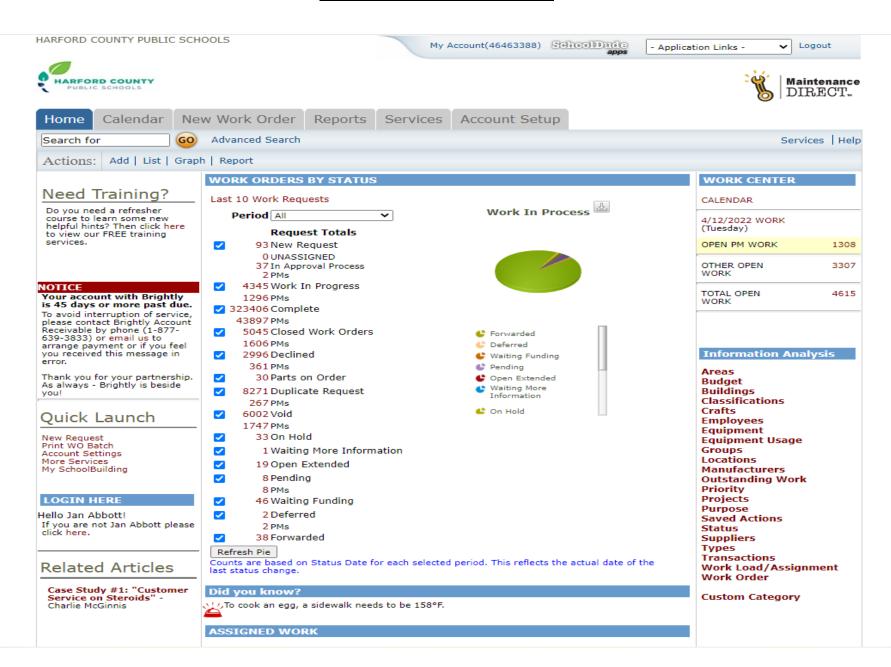
PREVENTIVE MAINTENANCE – AIR FILTER ORDER FORM

ITEM NO.	QTY (ea., or as noted)	SIZE ("or as indicated)	PLEAT MERV 6 FARR® (Spec 19)	PLEAT PNL MERV 7 AIRGUARD (Spec 20)	PLEAT RIGID BOX 65% NH (Spec 21)	PLEAT RIGID BOX 65% SH (Spec 22)	Au MET MESH Preci-aire (Spec 23)	POLY RING (Spec 24)	OTHER	OTHER	TAG BOXES	UNIT PRICE \$	SUB TOTAL \$
											SUBTOTAL:		
										GRA	AND TOTAL:		
	AIR FIL	TER/FRAME	W	ILL CALL/F	AX/E-MAIL	☐ PLEAS	E CALL/FAX	X/E-MAILOR	RDER 🗌				
	PRICE REQUEST FOR CONFIRMATION TRACKING P.O. #: Date: PM Zone:												

PREVENTIVE MAINTENANCE – AIR FILTER ORDER FORM

ITEM NO.	QTY (ea., or as noted)	SIZE ("or as indicated)	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED	OTHER	OTHER	OTHER	TAG BOXES	UNIT PRICE \$	SUB TOTAL \$
				·	ı	ı	ı	ı	ı		SUBTOTAL:		
	GRAND TOTAL:												
ORDE	AIR FILTER/FRAME WILL CALL/FAX/E-MAIL PLEASE CALL/FAX/E-MAIL TRACKING P.O. #: ORDER PRICE REQUEST FOR CONFIRMATION TRACKING P.O. #: Date:												

WORK ORDER PROGRAM



WORK ORDER FISCAL YEAR

Fiscal Year	#Created	# Completed	Complete		% Routine (No PM) Complete <= 7 Work Days	% PM Complete <= 22 Work Days
2023/2024	18164	11764	65%	22	45%	55%
2022/2023	21981	19379	88%	41	47%	49%
2021/2022	21782	19780	91%	29	52%	68%
2020/2021	19238	17818	93%	22	56%	73%
2019/2020	18286	17243	94%	30	50%	59%
2018/2019	21553	20827	97%	27	58%	75%
2017/2018	21763	21074	97%	26	59%	70%
2016/2017	20717	20153	97%	28	59%	76%
2015/2016	20432	19847	97%	30	55%	83%
2014/2015	18540	17904	97%	34	53%	82%
2013/2014	17723	17039	96%	42	49%	82%

WORK ORDER REPORT BY LOCATION

Location	Fiscal Year	# Created	# Completed	% Complete	Avg Work Days to Comp	% Routine (No PM) Comp <= 7 Work Days	% PM Comp <= 22 Work Days
A. A. Roberty Building	2022/2023	169	111	66%	21	38%	29%
Aberdeen High	2022/2023	500	302	60%	19	48%	58%
Aberdeen Middle	2022/2023	270	178	66%	18	49%	71%
Abingdon Elementary	2022/2023	343	229	67%	19	52%	61%
Bakerfield Elementary	2022/2023	261	174	67%	18	56%	72%
Bel Air Elementary	2022/2023	204	139	68%	20	50%	66%
Bel Air High	2022/2023	596	381	64%	17	50%	55%
Bel Air Middle	2022/2023	308	220	71%	18	55%	56%
C Milton Wright High	2022/2023	408	265	65%	20	55%	53%
CEO- Swan Creek	2023/2024	322	187	58%	22	42%	60%
Church Creek Elementary	2023/2024	186	121	65%	23	43%	47%
Churchville Elementary	2023/2024	353	212	60%	28	28%	64%
Darlington Elementary	2023/2024	185	116	63%	20	47%	59%
Deerfield Elementary	2023/2024	307	211	69%	24	40%	54%
Dublin Elementary	2023/2024	204	138	68%	-	-	-
Edgewood Bus Lot	2023/2024	3	0	0	19	48%	69%
Edgewood Elementary	2023/2024	208	138	66%	23	40%	49%
Edgewood High	2023/2024	645	424	66%	23	46%	49%
Edgewood Middle	2023/2024	395	266	67%	21	44%	66%
Emmorton Elementary	2023/2024	215	149	69%	26	35%	39%
Fallston High	2023/2024	584	408	70%	18	51%	42%
Fallston Middle	2023/2024	477	280	58%	12	47%	75%
Forest Hill Annex	2023/2024	58	35	60%	24	43%	50%
Forest Hill Elementary	2023/2024	258	178	69%	91	0%	-
Forest Lakes Elementary	2023/2024	248	163	66%	24	39%	56%
Fountain Green Elementary	2023/2024	188	121	64%	22	41%	58%
George Lisby Elem at Hillsdale	2023/2024	187	110	59%	16	47%	74%
Halls Cross Roads Elementary	2023/2024	314	202	64%	17	56%	69%
Harford Academy	2023/2024	294	196	67%	20	43%	58%

WORK ORDER REPORT BY LOCATION CONTINUED

Location	Fiscal Year	# Created	# Completed	% Complete	Avg Work Days to Comp	% Routine (No PM) Comp <= 7 Work Days	% PM Comp <= 22 Work Days
Harford Glen	2023/2024	147	97	66%	27	39%	39%
Harford Technical High	2023/2024	625	431	69%	25	44%	42%
Havre de Grace Elementary	2023/2024	425	291	68%	23	41%	67%
Havre De Grace Middle/High	2023/2024	332	187	56%	23	41%	55%
Hickory Annex	2023/2024	510	232	45%	35	66%	13%
Hickory Bus Lot	2023/2024	1	0	0%	-	-	-
Hickory Elementary	2023/2024	254	141	56%	16	48%	75%
Homestead Wakefield - Homestead	2023/2024	264	183	69%	33	47%	57%
Jarrettsville Elementary	2023/2024	227	153	67%	23	47%	55%
Joppatowne Elementary	2023/2024	220	140	64%	24	54%	51%
Joppatowne High	2023/2024	456	317	70%	25	39%	53%
Magnolia Elementary	2023/2024	334	234	70%	21	41%	56%
Magnolia Middle	2023/2024	457	314	69%	21	43%	45%
Meadowvale Elementary	2023/2024	300	208	69%	18	52%	55%
Norrisville Elementary	2023/2024	229	131	57%	25	45%	51%
North Bend Elementary	2023/2024	270	180	67%	26	31%	56%
North Harford Elementary	2023/2024	174	112	64%	31	33%	53%
North Harford High	2023/2024	683	422	62%	21	37%	55%
North Harford Middle	2023/2024	409	263	64%	22	39%	48%
Old Post Intermediate	2023/2024	162	105	65%	28	36%	52%
Old Post Primary	2023/2024	248	175	71%	22	42%	59%
Patterson Mill Middle/High School	2023/2024	562	385	69%	16	50%	60%
Prospect Mill Elementary	2023/2024	262	172	66%	17	54%	58%
Red Pump Elementary	2023/2024	326	207	63%	22	34%	63%
Ring Factory Elementary	2023/2024	181	115	64%	21	60%	60%
Riverside Elementary	2023/2024	182	116	64%	25	40%	70%
Roye Williams Elementary	2023/2024	249	172	69%	25	42%	63%
Southampton Middle	2023/2024	360	249	69%	20	55%	39%
William S James Elementary	2023/2024	241	152	63%	18	46%	74%
Youth's Benefit Elementary	2023/2024	349	210	60%	27	42%	47%

WORK ORDER BY CRAFT FISCAL YEAR

Craft	Fiscal Year	# Created	# Completed	% Complete	Avg Work Days to Comp	% Routine (No PM) Comp <= 7 Work Days	% PM Comp <= 22 Work Days
Alarm	2023/2024	129	107	83%	22	36%	-
Appliance Repair	2023/2024	32	15	47%	18	40%	-
Asbestos	2023/2024	3	2	67%	9	50%	-
Bleachers	2023/2024	29	21	72%	14	65%	0%
Boiler	2023/2024	161	83	52%	39	26%	100%
Building Automation	2023/2024	598	474	79%	14	58%	100%
Carpentry	2023/2024	1074	765	71%	15	54%	62%
Ceiling Tile	2023/2024	84	61	73%	13	64%	-
Communications	2023/2024	12	2	17%	1	100%	-
Concrete	2023/2024	37	22	59%	28	36%	-
Custodial	2023/2024	371	206	56%	15	55%	34%
Custodial Equipment Repair	2023/2024	304	184	61%	25	35%	-
Doors and Hardware	2023/2024	963	651	68%	15	57%	60%
Electrical	2023/2024	989	653	66%	15	47%	17%
Elevators	2023/2024	64	47	73%	6	70%	-
Energy Management System	2023/2024	192	175	91%	26	26%	100%
Environmental Services	2023/2024	55	47	85%	29	22%	100%
Equipment	2023/2024	23	5	22%	35	20%	-
Exhaust Fans	2023/2024	36	21	58%	15	40%	-
Fence Repair	2023/2024	17	12	71%	56	17%	-
Fire Alarm System	2023/2024	143	115	80%	18	49%	-
Fire Extinguishers	2023/2024	42	19	45%	19	53%	-
Flooring	2023/2024	78	49	63%	18	37%	-
Food Services	2023/2024	448	212	47%	54	14%	-
Fuel Delivery	2023/2024	77	58	75%	10	74%	-
Furniture Repair	2023/2024	121	89	74%	15	49%	-
Glass\Window Repairs	2023/2024	165	108	65%	16	37%	-
Graffiti	2023/2024	18	15	83%	17	60%	-
Grass Cutting	2023/2024	1632	907	56%	22	0%	65%

WORK ODER BY CRAFT FISCAL YEAR CONTINUED

Craft	Fiscal Year	# Created	# Completed	% Complete	Avg Work Days to Comp	% Routine (No PM) Comp <= 7 Work Days	% PM Comp <= 22 Work Days
Grounds	2023/2024	883	414	47%	34	41%	56%
Grounds Equipment Repair	2023/2024	423	260	61%	23	60%	69%
Gym Equipment	2023/2024	88	25	28%	18	48%	100%
Heating/Ventilation /Air Cond.	2023/2024	2938	2149	73%	26	37%	34%
Indoor Air Quality	2023/2024	9	8	89%	10	63%	-
Key and Lock	2023/2024	591	418	71%	12	50%	-
Lighting (Indoor)	2023/2024	260	183	70%	16	44%	-
Lighting (Outdoor)	2023/2024	86	43	50%	21	33%	-
Locker Repair	2023/2024	193	157	81%	13	37%	-
Miscellaneous	2023/2024	132	93	70%	14	47%	-
Missing Craft	2023/2024	18	1	6%	2	100%	-
Moving	2023/2024	307	205	67%	32	24%	-
Operational Services	2023/2024	51	46	90%	2	98%	-
Painting	2023/2024	342	204	60%	23	27%	20%
Parking Lot Striping	2023/2024	9	5	56%	20	20%	-
Paving	2023/2024	37	7	19%	59	29%	-
Pest Control	2023/2024	595	525	88%	7	87%	95%
Playground	2023/2024	202	49	24%	37	33%	15%
Plumbing	2023/2024	2095	1357	65%	20	43%	55%
Pool	2023/2024	14	7	67%	78	33%	-
Refrigeration	2023/2024	9	6	50%	41	0%	-
Roof	2023/2024	495	180	36%	47	16%	8%
Scissor Lifts	2023/2024	81	12	15%	25	25%	-
Sewage/Water Treatment Plant	2023/2024	43	30	70%	86	-	3%
Shades/Blinds	2023/2024	45	30	67%	26	27%	-
Snow Removal	2023/2024	3	3	100%	.6	100%	-
Sprinkler System	2023/2024	37	11	30%	36	27%	-
Structure	2023/2024	80	56	70%	23	-	80%
Water Quality	2023/2024	156	124	79%	78	67%	2%
Weed Control	2023/2024	27	26	96%	6	81%	-

WORK ORDER SUMMARY BY CRAFT

Craft	Fiscal Year	# Created	In Progress	# Completed	On Hold	Pending	No Funding	Declined	Duplicate
Alarm	2023/2024	129	19	107	0	0	0	0	3
Appliance Repair	2023/2024	32	14	15	0	0	0	3	0
Asbestos	2023/2024	3	1	2	0	0	0	0	0
Bleachers	2023/2024	29	8	21	0	0	0	0	0
Boiler	2023/2024	161	78	83	0	0	0	0	0
Building Automation	2023/2024	598	120	474	0	0	0	3	1
Carpentry	2023/2024	1074	293	765	0	0	0	12	3
Ceiling Tile	2023/2024	84	22	61	0	0	0	1	0
Communications	2023/2024	12	0	2	0	0	2	8	0
Concrete	2023/2024	37	11	22	0	0	0	3	1
Custodial	2023/2024	371	154	206	0	0	0	8	3
Custodial Equipment Repair	2023/2024	304	107	184	0	0	0	5	8
Doors and Hardware	2023/2024	963	291	651	0	0	0	12	9
Electrical	2023/2024	989	314	653	0	0	0	13	9
Elevators	2023/2024	64	16	47	0	0	0	0	1
Energy Management System	2023/2024	192	16	175	0	0	0	1	0
Environmental Services	2023/2024	55	6	47	0	0	0	2	0
Exhaust Fans	2023/2024	36	15	21	0	0	0	0	0
Fence Repair	2023/2024	17	4	12	1	0	0	0	0
Fire Alarm System	2023/2024	143	28	115	0	0	0	0	0
Fire Extinguishers	2023/2024	42	18	19	0	0	5	0	0
Flooring	2023/2024	78	27	49	0	0	0	1	1
Food Services	2023/2024	448	195	212	8	4	0	10	19
Fuel Delivery	2023/2024	77	19	58	0	0	0	0	0
Furniture Repair	2023/2024	121	30	89	0	0	0	1	1
Glass\Window Repairs	2023/2024	165	54	108	0	0	0	0	3
Grass Cutting	2023/2024	1632	299	907	0	54	0	372	0
Grounds	2023/2024	883	402	414	3	7	4	46	7

WORK ORDER SUMMARY BY CRAFT CONTINUED

Craft	Fiscal Year	# Created	In Progress	# Completed	On Hold	Pending	No Funding	Declined	Duplicate
Heating/Ventilation /Air Cond.	2023/2024	2938	696	2149	5	14	0	31	41
Indoor Air Quality	2023/2024	9	1	8	0	0	0	0	0
Key and Lock	2023/2024	591	150	418	0	0	0	17	6
Lighting (Indoor)	2023/2024	2	0	0	0	0	0	2	0
Lighting (Outdoor)	2023/2024	260	75	183	0	0	0	0	2
Locker Repair	2023/2024	86	42	43	0	0	0	0	1
Miscellaneous	2023/2024	193	35	157	0	0	1	0	0
Missing Craft	2023/2024	132	11	93	3	0	4	20	1
Moving	2023/2024	18	16	1	0	1	0	0	0
Operational Services	2023/2024	307	49	205	30	0	0	17	6
Painting	2023/2024	342	124	204	0	0	0	9	5
Parking Lot Striping	2023/2024	9	4	5	0	0	0	0	0
Paving	2023/2024	37	27	7	0	0	3	0	0
Pest Control	2023/2024	595	63	525	0	0	0	1	6
Playground	2023/2024	202	150	49	0	0	0	2	1
Plumbing	2023/2024	2095	711	1357	0	0	0	9	18
Pool	2023/2024	14	6	7	0	0	0	1	0
Refrigeration	2023/2024	9	1	6	0	0	0	1	1
Remodeling	2023/2024	2	1	1	0	0	0	0	0
Roof	2023/2024	495	310	180	0	2	0	1	2
Scissor Lifts	2023/2024	81	49	12	0	0	0	20	0
Sewage/Water Treatment Plant	2023/2024	43	13	30	0	0	0	0	0
Shades/Blinds	2023/2024	45	15	30	0	0	0	0	0
Snow Removal	2023/2024	3	0	3	0	0	0	0	0
Sprinkler System	2023/2024	37	26	11	0	0	0	0	0
Structure	2023/2024	80	24	56	0	0	0	0	0
Waste Management	2023/2024	10	5	4	0	0	0	1	0
Water Quality	2023/2024	156	32	124	0	0	0	0	0
Weed Control	2023/2024	27	0	26	0	0	0	0	1

HARFORD COUNTY PUBLIC SCHOOLS

Facilities Management Department 410-638-4088

