



ACTION

**BOARD OF EDUCATION OF HOWARD COUNTY
MEETING AGENDA ITEM**

TITLE: Fiscal Year 2026 Comprehensive Maintenance Plan **DATE:** June 26, 2025

PRESENTER(S): Herbert R. Savje, Executive Director of School Facilities and Operations

STRATEGIC PLAN ALIGNMENT

Mission: HCPSS creates an innovative and accountable learning community where we expand opportunities and access, remove barriers, and foster an inclusive environment.

Key Commitment: Creating innovative learning and working environments.

Priority Area: Priority 4: Enhance Systemic Planning & Procedures

Goal: Ensure equitable distribution of resources to schools to better meet student needs.

OVERVIEW

The Comprehensive Maintenance Plan is published annually by the Howard County Public School System's Department of School Facilities. The maintenance objectives and methods are reflected with illustrations of some of the basic services, issues, and schedules necessary to keep facilities in as near original condition as possible to sustain a safe, clean, and optimum learning environment for Howard County Public School System students.

This publication meets the requirements of COMAR Chapter 23.03.02, Administration of the Public-School Construction Program, to submit an annual Comprehensive Maintenance Plan approved by the local board of education that describes a strategy for maintaining public school facilities.

Program charts with scheduled projects will likely require adjustments based on the approved Fiscal Year 2027 Operating and Capital Budgets and any required emergency expenditures caused by unforeseeable events.

RECOMMENDATION/FUTURE DIRECTION:

It is recommended that the Board approve the Howard County Board of Education 2026 Comprehensive Maintenance Plan for submission to the Public-School Construction Office.

SUBMITTED

BY:

Herbert R. Savje
Executive Director of School Facilities
and Maintenance

APPROVAL/

CONCURRENCE:

William J. Barnes
Superintendent

Karalee Turner-Little, Ph.D.
Deputy Superintendent

Cornell S. Brown, Jr.
Chief Operating Officer



2026 COMPREHENSIVE MAINTENANCE PLAN

Howard County Public School System

An Annual Review of Long-Range Maintenance Planning

2026 COMPREHENSIVE MAINTENANCE PLAN

APPROVED:

Ms. Jolene Mosley, Chair, Board of Education Date

Mr. William J. Barnes, Superintendent of Schools Date

Dr. Karalee Turner-Little, Deputy Superintendent Date

Mr. Cornell Brown Jr., Chief Operating Officer Date

Mr. Brian Hull, Chief Financial Officer Date

Mr. Herbert Savje, Executive Director of Building Maintenance
and Facility Operations Date

Table of Contents

A. Introduction and Supporting Information

A.1 Guiding Principles	6
A.2 Vision.....	6
A.3 Mission.....	6
A.4 Interrelationships	6
A.5 Long Term Focus.....	6
A.6 Near Term Focus	7
A.7 Computerized Maintenance Management System (CMMS)	7
A.8 Facility Assessment Process	10

B. Facility Outcomes

11

C. Resources and Inputs

17

C.1 Maintenance Staffing and Organization.....	26
C.2 Current Staffing Compared Against Industry Standards	30
C.3 Funding.....	34

D. Planned Actions

35

D.1 Planned Improvements.....	35
D.2 Planned Capital Project	36
D.3 Professional Development	37

E. Obstacles and Missing Resources

43

2026 COMPREHENSIVE MAINTENANCE PLAN

Prepared by
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This document is prepared in cooperation with the Offices of Building Maintenance, Custodial Services, Grounds Services, Energy and Integrated Pest Management, as planning for the FY 2027 Operating and Capital Budgets.

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

Electronic copy of the 2026 Comprehensive Maintenance Plan can be found on the school system's website at www.hcpss.org.

2026 COMPREHENSIVE MAINTENANCE PLAN

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A. Introduction and Supporting Information

A.1. Guiding Principles

The Department of School Facilities is charged with maintaining the facilities and grounds of the Howard County Public School System (HCPSS) in as near original condition as possible. The *Comprehensive Maintenance Plan* helps to ensure our schools and facilities are, and will be, cared for appropriately. It reflects the objectives and methods utilized to provide a safe, inclusive, and nurturing learning environment for Howard County's school community in support of an optimal learning environment. Basic services necessary to meet the objectives of the maintenance plan are outlined in this publication. This *Comprehensive Maintenance Plan* meets the requirement of Code of Maryland Regulations (COMAR) of the Public School Construction Regulations to submit an annual plan to the Maryland State Department of Education (MSDE) Interagency Commission on School Construction (IAC).

A.2. Vision

Maintains every facility in a quality manner through its diverse and talented workforce.

A.3. Mission

To create a safe and healthy educational environment and promote excellent customer service using the various talents of the facilities staff.

A.4. Interrelationships

Interrelationships are at the heart of decision making in operations. As a people-centered organization, the HCPSS values every student, employee, and community member, and welcomes their diverse and unique perspectives. The purpose of the Comprehensive Maintenance Plan (CMP) is to inform the State agencies and other stakeholders of our plan to maintain the school system's facilities. The CMP is also used in conjunction with the deferred maintenance and the Educational Facilities Master Plan (EFMP) to inform the Capital Improvement Plan (CIP) of the school system needs. The maintenance staff collaborates with the Office of Capital Planning and Construction to determine the systemic projects that are to be placed in the annual CIP.

A.5. Long Term

Drawing from the input of all stakeholders it becomes clear that the aspirations and goals of each group do not align with the limited funding allocations available. It is the responsibility of HCPSS operations staff to maintain a fiscally prudent long-term strategy to sustain our buildings while keeping an eye on the future. This long-term strategy takes into account proposed changes to law or code that may affect our budget while undertaking projects that, in some cases, can take several years in planning prior to coming to fruition.

Maintenance planning is constrained by real-world budgets. A variety of associated factors impact the levels of required maintenance and related costs from the design of buildings and specified equipment to how the buildings are used. Advances in technology, the age of each facility, and compliance with changes in building and life safety codes create challenges in meeting required maintenance levels and their associated costs.

A.6. Near Term

A well-planned maintenance program facilitates the continued efficient use of school buildings and facilities. This affects long-term savings relative to building modification and equipment replacement costs. The HCPSS operations strives to maintain facilities in a manner which minimizes short term/unforeseen repairs and redirects resources towards achieving long term sustainable building conditions. To achieve our near-term goal, the HCPSS will need to rely on the talent of our support staff. We will continue to offer our employees training, conducted both in-house and with third party instruction.

A.7. Computerized Maintenance Management System (CMMS)

HCPSS utilizes the computerized maintenance management system, Asset Essentials Enterprise: A cloud-based software which is owned by Brightly Software and is the software that the majority of Maryland Local Education Agencies (LEA) utilize. The HCPSS Asset Essentials software includes work order management, inventory management and preventive maintenance. The system provides the HCPSS with the ability to manage and track corrective maintenance (CM) and preventive maintenance (PM) work orders performed by maintenance, custodial, and grounds staff, as well as third party contractors. Asset Essentials improves communication with school administrators and streamlines how work orders are reported and tracks data points such as associated costs, response time, and type (PM/CM) of repairs.

Asset Essentials

HCPSS staff can track the work order, from the time it is requested, throughout the process. This includes assignment of the work order, ordering of materials or parts, to the completion of the corrective work.

Inventory

HCPSS tracks all inventory transactions. It helps users streamline the process of requesting, ordering, and tracking supplies and tools, as well as allocating supplies to upcoming work requests.

Preventive Maintenance

HCPSS generates and automatically schedules maintenance tasks within Asset Essentials with recurring work orders for in-house staff and 3rd party contractors to perform preventive maintenance of the assets.

HCPSS's computerized maintenance management system utilizes the roles of Global Administrator, Account Administrator, Global Technicians, Supervisor Lead, Maintenance Technicians and Power Requesters. The Custodial Day and Night Building Leads are categorized as Maintenance Technicians, not as Power Requesters due to being able to receive, acknowledge and perform work orders assigned to them.

Global Administrator

The Global Administrator has the highest level of access in Asset Essential Enterprise and is able to manage everything for all Regions and Sites.

Account Administrator

The Account Administrator role is used by the maintenance, grounds and custodial management team. They can manage access levels for folders in the repository, create user groups, and assign permissions to those groups. They can also delegate permission management privileges to user groups at the folder level.

Global Technicians

Global Technicians role is used by maintenance, grounds, and fleet department technicians to add their own labor hours and material purchases to work orders. They can change the status of work orders to mark them as work in progress or complete. They can only see work orders assigned to them on their homepage. They have the ability to search for all work orders via the Search For Box or Advanced Search.

Senior Lead

The Senior Lead role is used by the individual shop leads in the Building Maintenance and Grounds Departments to have access to all portions, except the Account Setup. On the home page, under the Work Orders by Status section, they can see all work orders assigned to them, all employees who report directly to them, and create work orders. They are responsible for reviewing their departments work orders for repair notes, labor transaction and cost of any materials after being completed by the Global Technicians before archiving the work order. They have access to all reports and can search for any work order via the Search For Box or Advanced Search.

Maintenance Technicians

The Maintenance Technicians' role is used by custodians to create work orders for their assigned locations. In the Work Orders by Status section of the homepage, they can see their requests for their assigned location. Maintenance Technicians have limited access to reports and can only search for work orders within their locations and crafts via the Search For Box or Advanced Search.

Power Requesters

The Power Requesters role is used by the Administration Office of the school site. They can see their requests for their assigned location.

HCPSS is currently working to manage and track the contractors' costs for the corrective and preventive maintenance that they perform.

HCPSS currently has over 16,000 assets inventoried in Asset Essentials. Included in the asset inventory is the custodial equipment used to maintain HCPSS facilities. Currently, HCPSS estimates that we have 10% of all assets inventoried, including the administrative buildings. Inventorying the assets in the HCPSS facilities is an ongoing process.

HCPSS has been building dedicated preventive maintenance programs for regularly scheduled maintenance and inspections to be performed with the goal of preventing expensive repairs and breakdowns before they occur. These exist in the following programs:

- Building Services
- Custodial Services
- Fleet
- Ground Services

This planned program includes, but is not limited to, air filter and belt replacements, lubrication of bearings, annual cleaning and tuning of boilers, water treatment, and maintenance of air-handling units, cooling towers, and chillers. Preventive maintenance is also performed on emergency generators, electrical panels, transfer stations, lighting, water heaters, fire extinguishers, playgrounds, security cameras, and roofing components to name a few. A daily domestic water treatment program is also implemented at seven locations with private domestic water supplies. 100% of preventive maintenance work orders are generated automatically within the CMMS by a PM schedule.

A.8. Facility Assessment Process

The State of Maryland, Interagency Commission on School Construction (IAC) has developed a plan to compare all state funded facilities to one another called the Facility Condition Index (FCI). The HCPSS, like the other LEA's, will rely primarily on the IAC's Statewide Facility Assessment of the facilities' major components to provide an overall FCI for each school. Future project selection and funding are to be based in part on the FCI score. The FCI is a condition assessment metric commonly used by facility management professionals. FCI quantifies the physical condition at a specific point in time. The formula is as follows:

$$FCI = (\text{Value to Replace}) \times (\text{Percent Degraded}) / (\text{Value to Replace})$$

The HCPSS Department of Building Maintenance tracks past and current maintenance costs for each building component to determine its remaining useful life. Deficiencies are tracked through the CMMS, Brightly software. These deficiencies are routed to the appropriate shop within Building Maintenance for inspection and corrective action. This allows the HCPSS to solve near term issues while tracking trends that influence long term planning for possible capital investments.

The HCPSS Offices of Building Maintenance, Grounds and Custodial Services utilize in house inspections and evaluations of various components and systems, as well as partnering with the State, insurers, and several outside vendors to convene regular walkthroughs and inspections of the HCPSS facilities. The HCPSS staff are working to include these documents in the CMMS software. We recognize the value of being proactive in our facility assessments. We strive to maintain our buildings and grounds in as near their original condition as possible even though some systems or equipment may be well past their expected useful life. We are judicious in our use of allocated resources and do all we can to create an environment where students and staff can thrive.

2026 COMPREHENSIVE MAINTENANCE PLAN

B. Facility Outcome

	Previous FY	Previous FY	Current FY
1) Facility Usability	Goal	Actual	Goal
A) For each active or holding PK-12 school facility, the number of facility days during which the facility could not support the delivery of the educational programs and services assigned to that facility and that are normally delivered in that facility.	0	5	0
2) Maintenance Work Orders			
i) Preventive Maintenance (PM)			
1. The number of PM WO's opened.	18,400	10,289	16,200
2. The percentage of PM WO's closed within 30 days.	90%	75%	80%
3. The total number of staff hours spent on PM Work.	35,000	21,296	30,800
4. The total number of contractor hours spent on PM work.	B	B	B
5. The total dollars spent on PM work completed by staff.	\$ 1,900,000	\$1,025,160	\$1,862,000
6. The total dollars spent on PM work completed by contractor.	\$1,300,000	\$1,002,894	\$1,100,000
7. The percentage of all maintenance work hours spent on PM	60%	48%	60%
ii) Corrective Maintenance (CM)			
1. The total number of CM WO's opened.	26,000	22,428	26,000
2. The percentage of CM WO's closed within 30 days.	75%	81%	75%
3. The percentage of CM WO's marked as Emergency or High.	< 1%	8.41%	< 1%
4. The total number of staff hours spent on CM work.	75,000	102,435	75,000
5. The total number of contractor hours spent on CM work.	N/A	N/A	N/A
6. The total dollars spent on CM work completed by staff.	\$2,100,000	\$4,789,516	\$3,440,000
7. The total dollars spent on CM work completed by contractor.	\$1,100,000	\$3,015,263	\$2,580,000
8. The mean time to repair the item for which a CM WO was opened.	<30 Days	39 Days	<30 Days
9. The percentage of CM WO's entered by central administrative or non-building level staff.	17%	18%	17%
10. The percentage of CM WO's entered by building level staff.	83%	80%	83%
3) Custodial			
A) The percentage of custodians trained on the LEA's Custodial Scope of work during the last two fiscal years.	100%	90%	100%

2026 COMPREHENSIVE MAINTENANCE PLAN

B) The percentage of custodial duties completed adequately (as assessed through the LEA's selected method of assessment and against the LEA's selected standard)	90%	80%	85%
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Key for the above Facility Outcome Chart:

1. A-Excluding weather events. Closings or early dismissals due to extended power outages or loss of HVAC.
2. B – indicates CMMS Software is not configured to track or provide this data.
3. For i and ii #6 & #7 above - Total dollars spent on CM work by staff and contractors includes Capital Funds.
4. For item 3b. The Actual is based on the use of SmartInspect software for building inspections.
5. For item 3c. Custodial: Custodial daily work tasks are not currently tracked by CMMS software.

Work Order Breakdown			
Office of:	CM WO's		PM WO's
Grounds	1,796		788
Custodial	857		1,987
Building Maintenance	19,773		7,514

2026 COMPREHENSIVE MAINTENANCE PLAN

CRITICAL SYSTEM INSPECTIONS AND FREQUENCY OF PREVENTIVE MAINTENANCE

*B - Building Maintenance; C – Custodial Services;
O – Contractor; G-Grounds; S-State Agency; X- Local, State,
Federal Code Compliant*

		Responsibility					Frequency				
Item	Procedure	Code Compliance	Building Service	Custodial Service	Ground Service	Other	Daily	Monthly	Quarterly	Semiannually	Annually
ADA Swings	Check safety/operation		B								B
Air Compressor	Check oil, belt tension, and drains		B								B
Air Cooled Chiller Monthly	Check Operation					O		O			
Air Cooled Chiller Spring	Check Operation		B			O					OB
Air Cooled Chiller Winterization	Check Operation		B			O					OB
Art Room Traps	Clean		B								B
Backflow Preventer	Inspection of device	X	B								B
Backflow Prevention Test	Test operation of device	X			G						G
Bathroom Inspections	Check partitions/hardware		B								B
Belts	Replace belts on units		B								B
Bermuda Fields Mowing	Maintain Fields				G			G			
Bleacher Inspection Interior/Exterior	Check safety of bleacher system	X	B		G						BG
Boiler PM	Check Operation/Maintenance		B								B
Boiler Start UP	Check Operation/Maintenance		B								B
Boiler Inspection	Maryland Dept of the Environment	X	B			S					BS
Booster Pumps	Inspect and clean		B								B
Burglar Alarm	Check Batteries and Zones		B							B	
Can Washes	Check heaters for Operation		B								B

2026 COMPREHENSIVE MAINTENANCE PLAN

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Item	Procedure	Responsibility					Frequency				
		Code Compliance	Building Service	Custodial Service	Ground Service	Other	Daily	Monthly	Quarterly	Semiannually	Annually
Chair Lifts	Inspection of Unit	X	B			O			O		
Concession Stands	Prepare for use/winterization		B							B	
Cooling Tower Spring	Clean and check operation		B								B
Cooling Tower Winterization	Drain/clean and check operation		B								B
CW Pumps	Check and lube bearings		B								B
Drive PM	Check Operation					O					O
Dryer Vent	Clean dryer vents					O					O
Electrical System	Inspection of System	X	B			OS					BOS
Elevators	Inspection of Unit	X				OS				O	S
Emergency Lighting	Test and Clean	X	B								B
Exhaust Fans	Check Operation		B								B
Exterior Doors	Check hardware/operation		B								B
Filters 1"	Replace Filters		B							B	
Filters 2" Merv 13	Replace Filters		B							B	
Filters 2" Merv 8, 4"&12"	Replace Filters		B								B
Fire Alarm System	Test of System	X	B			O				B	O
Fire Extinguishers	Check Charge and Location/Tags	X	B	C				C			B
Firefighter Recall Testing	Test Key function	X	B					B			
Game Prep Ballfields	Maintain Field				G		G				
Generators	Test Run 1/2 hr	X	B					B			
Generator Load Bank Testing	Check hardware/operation		B								B
Grease Interceptors	Cleaning of system	X				O					O

2026 COMPREHENSIVE MAINTENANCE PLAN

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O – Contractor; G-Grounds; S-State Agency; X- Local, State,
Federal Code Compliant*

Item	Procedure	Responsibility					Frequency				
		Code Compliance	Building Service	Custodial Service	Ground Service	Other	Daily	Monthly	Quarterly	Semiannually	Annually
Grills and Louvers	Clean			C						C	
Gymnasium Rope	Check safety of rope		B								B
Health Inspection	State Health Dept	X				S					S
Hot Water Pumps	Check and lube bearings		B								B
HVAC Summer PM	Check Operation and dampers		B								B
Interior Gym Main & Aux Scoreboard	Test functionality of unit		B								B
IPM Facility Inspection	Inspection of facility		B								B
IPM Grounds	Clean/maintenance school property				G		G				
Kitchen Hoods	Inspection of linkage box	X	B								B
Light-Exterior	Check Operation		B								B
Light-Interior	Check Operation		B								B
Main Distribution Panel	Check operation of panel		B								B
Mechanical Room Heaters	Check heaters for winter operation		B								B
MOSHA Inspection	Building Inspection	X				S					BS
Mowing	Mow School Property				G			G			G
Mower Service	Clean/Maintenance Equipment				G		G				
Oil/Water Separator ARL	Clean and inspection		B								B
PA Systems	Check Operation		B								B
Paved Surfaces	Survey, repair and maintenance				G						G
Pest Management	Treat for insects					O		O			
Pesticide Application	Apply pesticide				G						G

2026 COMPREHENSIVE MAINTENANCE PLAN

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Federal Code Compliant*

Item	Procedure	Responsibility					Frequency				
		Code Compliance	Building Service	Custodial Service	Ground Service	Other	Daily	Monthly	Quarterly	Semiannually	Annually
Playground Inspection	Inspection playgrounds	X			G				G		
Portable	Operation check/filter		B								B
Power PM (Switches/Receptacles)	Test Operation		B								B
Roof Inspections	Survey, repair and maintenance	X	B			O	B				BO
Scoreboards-Interior	Operation Check		B								B
Sprinkler System		X	B			O					BO
Stadium Pole Lighting	Check lighting operation		B								B
Stadium Scoreboards	Check Operation		B								B
Stadium Turf Fields	Maintenance of fields				G	O		G			O
State Fire Insp	Fire Marshall	X				S					S
Telecenter UPS	Check Power, Load Test		B								B
Transformers -HS	Check Operation		B								B
Underground Storage Tanks	Maryland Dept of the Environment	X	B			S					BS
Utility Shut Off	Conduct Safety Protocols			C				C			
Water Cooled Chiller Monthly	Operation of system					O		O			
Water Cooled Chiller-Spring	Punch tubes and operation check					O					O
Water Coolers	Clean and vacuum coils		B								B
Water Heaters	Check operation of unit		B								B
Water Treatment (PLBG)	Check operation		B				B				
Water Treatment (HVAC)	Chemical water treatment					O		O			
Window Shades and Blinds	Repair and/or replace		B	C			C				

C. Resources and Inputs

Efficient school building maintenance requires an effective organizational structure. The organizational chart, which follows this section, illustrates the structure of the Department of Building Maintenance.

Building Maintenance is responsible for maintaining buildings and equipment based on areas of assignment and specialty. Building Maintenance also manages contracted services where appropriate, for example, state-mandated third-party elevator inspections.

Custodial Services provides the HCPSS daily and periodic care of the buildings, equipment, and grounds. These services include daily cleaning and maintenance to promote a healthy and clean environment. Custodial Services' personnel assigned to each school also provide an invaluable service in security, detecting equipment malfunctions, and building deterioration, before they become costly repairs. Custodial Services also manages contracted services where appropriate, for example, trash and recycling services.

Grounds Services is responsible for the maintenance, replacement, and outside improvements to playgrounds, synthetic stadium fields, multipurpose fields, tracks, tennis courts, trees, shrubs, landscape, parking lots, pathways, and sidewalks. Grounds Services also manages contracted services where appropriate, for example, resurfacing parking lots, concrete walkways, stormwater retention ponds, and new playground construction. Grounds Services is also responsible for snow removal at all schools and HCPSS owned pathways.

Energy Management Services assists with electric and natural gas procurement, monitors resource consumption and utility bills, supervises program management of conservation measures, and facilitates involvement and education of the school community in the reduction of energy use. Examples of conservation projects include upgrades to lighting and heating, ventilating, and air conditioning (HVAC) equipment components. Selection for these projects is done through analyzing energy consumption at all locations and the availability of utility rebates or other incentives that would allow energy reduction and short payback timeframes.

Additionally, a decision is made at the time of a needed replacement to increase the efficiency of the new equipment. One example of involvement in energy conservation awareness is support of the Maryland Association of Environmental and Outdoor Education (MAEOE) Green Schools Program. The schools choosing to participate in this multi-year program can select from several broader, more diversified topics of sustainability concentrations, but almost always pick energy conservation as one of the pillars to focus on. Support ranging from school presentations to shared utility data analytics helps support increased awareness and decreased costs through school-based efforts.

The Integrated Pest Management (IPM) program is led by an IPM Specialist with specific training in entomology and pest management. This program is responsible for preventing various

2026 COMPREHENSIVE MAINTENANCE PLAN

pests from entering HCPSS facilities. HCPSS IPM program follows COMAR regulations, which requires the LEAs to implement a plan that relies on non-chemical methods to control the common pests, including but not limited to, ants, mice, exterior mammals, and stinging insects. The IPM program promotes the disruption of the pests with focus on deterring the entry into the facilities by finding and sealing gaps in exterior structure and the use of proper door sweeps, disruption in their feeding through proper food storage, and lastly promoting clean facilities including sweeping and vacuuming of floors; and trash management including use of trash bags in receptacles, daily removal of trash from facilities and maintaining clean dumpster areas.

The success of the program relies on collaboration between HCPSS IPM staff, Custodial, Grounds, and Maintenance staff. Education of the staff (both facilities and school based) and students is outlined in the HCPSS IPM plan, as well as being part of the state code. The IPM Specialist provides training to facilities staff, specifically during new custodial training. Training for the application of pesticides is also provided, along with school-based staff and students receiving informational packets at the beginning of the school year, as well as during the school year, announcing when and why pesticides are being applied.

Science/Career Day presentations for specific development of an online program to be completed as part of their staff's annual training has begun. Additionally, teachers at all levels can request curriculum-related IPM/Entomology/Forensic classes.

DEPARTMENT OF SCHOOL FACILITIES AND OPERATIONS			
OFFICE of FACILITY OPERATIONS			
Office	Title	Quantity (FTE)	Vacant (FTE)
Facility Operations	Executive Director, Facility Operations	1.0	0.0
Facility Operations	Administrative Assistant	1.0	0.0
Facility Operations	Date Processing Coordinator	1.0	0.0
Facility Operations	Energy Management Specialist	1.0	0.0
Facility Operations	Integrated Pest Management Specialist	1.0	0.0
		5 - Filled Positions	0 - Vacant Positions

DEPARTMENT OF SCHOOL FACILITIES AND OPERATIONS			
OFFICE of FLEET SERVICES			
Office	Title	Quantity (FTE)	Vacant (FTE)
Fleet Services	Managers	1.0	0.0
Fleet Services	Secretary	0.5	0.0
Fleet Services	Mechanics	6.0	0.0
		7.5 - Filled Positions	0 - Vacant Positions

2026 COMPREHENSIVE MAINTENANCE PLAN

DEPARTMENT OF SCHOOL FACILITIES AND OPERATIONS			
OFFICE of GROUNDS SERVICES			
Office	Title	Quantity (FTE)	Vacant (FTE)
Grounds Services	Managers	1.0	0.0
Grounds Services	Assistant Managers	1.0	0.0
Grounds Services	Secretary	0.5	0.0
Grounds Services	Lead Persons	6.0	0.0
Grounds Services	Groundskeeper II	5.0	0.0
Grounds Services	Groundskeeper I	24.0	4.0
Grounds Services	Irrigation Technicians	2.0	0.0
Grounds Services	Integrated Pest Management Scout	1.0	0.0
		40.5 - Filled Positions	4 - Vacant Positions

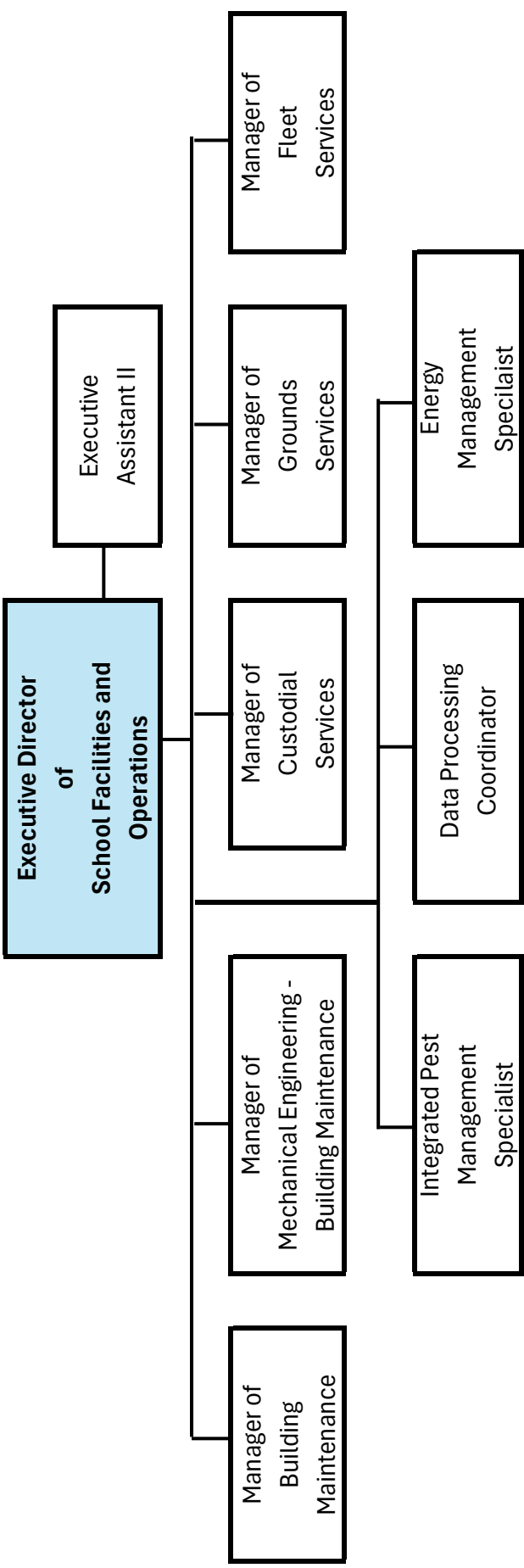
DEPARTMENT OF SCHOOL FACILITIES AND OPERATIONS			
OFFICE of CUSTODIAL SERVICES			
Office	Title	Quantity (FTE)	Vacant (FTE)
Custodial Services	Manager	1.0	0.0
Custodial Services	Assistant Managers	5.0	0.0
Custodial Services	Supervisor, Field Training	1.0	0.0
Custodial Services	Accounting Specialist	1.0	0.0
Custodial Services	Senior Lead	2.0	0.0
Custodial Services	Night Specialized Custodian	3.0	0.0
Custodial Services	Day Lead Custodian	76.0	2.0
Custodial Services	Night Lead Custodian	71.0	7.0
Custodial Services	Day Lead Custodian Floater	12.0	0.0
Custodial Services	Night Lead Custodian Floater	2.0	0.0
Custodial Services	Day Custodian	30.0	0.0
Custodial Services	Night Custodian	198.0	17.0
Custodial Services	Night Custodian Floater	2.0	0.0
Custodial Services	Part Time Night Custodian	13.0	0.0
Custodial Services	Mechanic, Preventive Maintenance	1.0	1.0
		413 – Filled Positions	27 – Vacant Positions

2026 COMPREHENSIVE MAINTENANCE PLAN

DEPARTMENT OF SCHOOL FACILITIES AND OPERATIONS			
OFFICE of BUILDING MAINTENANCE			
Office	Title	Quantity (FTE)	Vacant (FTE)
Building Maintenance	Managers	2.0	0.0
Building Maintenance	Assistant Managers	1.0	0.0
Building Maintenance	Project Specialist	1.0	0.0
Building Maintenance	Accounting Assistant	1.0	0.0
Building Maintenance	Inventory Technician	1.0	0.0
Building Maintenance	Senior Leads	7.0	0.0
Building Maintenance	Carpenter I	8.0	0.0
Building Maintenance	Carpenter II	4.0	0.0
Building Maintenance	Roofer II	1.0	0.0
Building Maintenance	Roofer I	1.0	0.0
Building Maintenance	Registered Locksmith	2.0	0.0
Building Maintenance	Hardware Tech	1.0	0.0
Building Maintenance	Electricians	5.0	0.0
Building Maintenance	Generator Technicians	0.0	1.0
Building Maintenance	Master Electricians	3.0	0.0
Building Maintenance	Electronics Technicians	3.0	0.0
Building Maintenance	Fire Extinguisher Service Technician	1.0	0.0
Building Maintenance	Fire & Safety Technician	1.0	0.0
Building Maintenance	Fire & Safety Worker	2.0	0.0
Building Maintenance	Painters	2.0	0.0
Building Maintenance	Master Plumber	2.0	0.0
Building Maintenance	Water Treatment Operator	1.0	0.0
Building Maintenance	Journeyman Plumber	2.0	2.0
Building Maintenance	Building Automation Specialist	3.0	0.0
Building Maintenance	HVAC Technicians	9.0	4.0
Building Maintenance	HVAC Apprentice Technician	2.0	0.0
Building Maintenance	Mechanic Preventive Maintenance I	0.0	1.0
Building Maintenance	Mechanic Preventive Maintenance II	5.0	0.0
Building Maintenance	HVAC Master Technicians	2.0	0.0
Building Maintenance	Boiler Burner Specialist II	2.0	0.0
Building Maintenance	Boiler Burner Specialist I	1.0	0.0
		76 - Filled Positions	8 - Vacant Positions

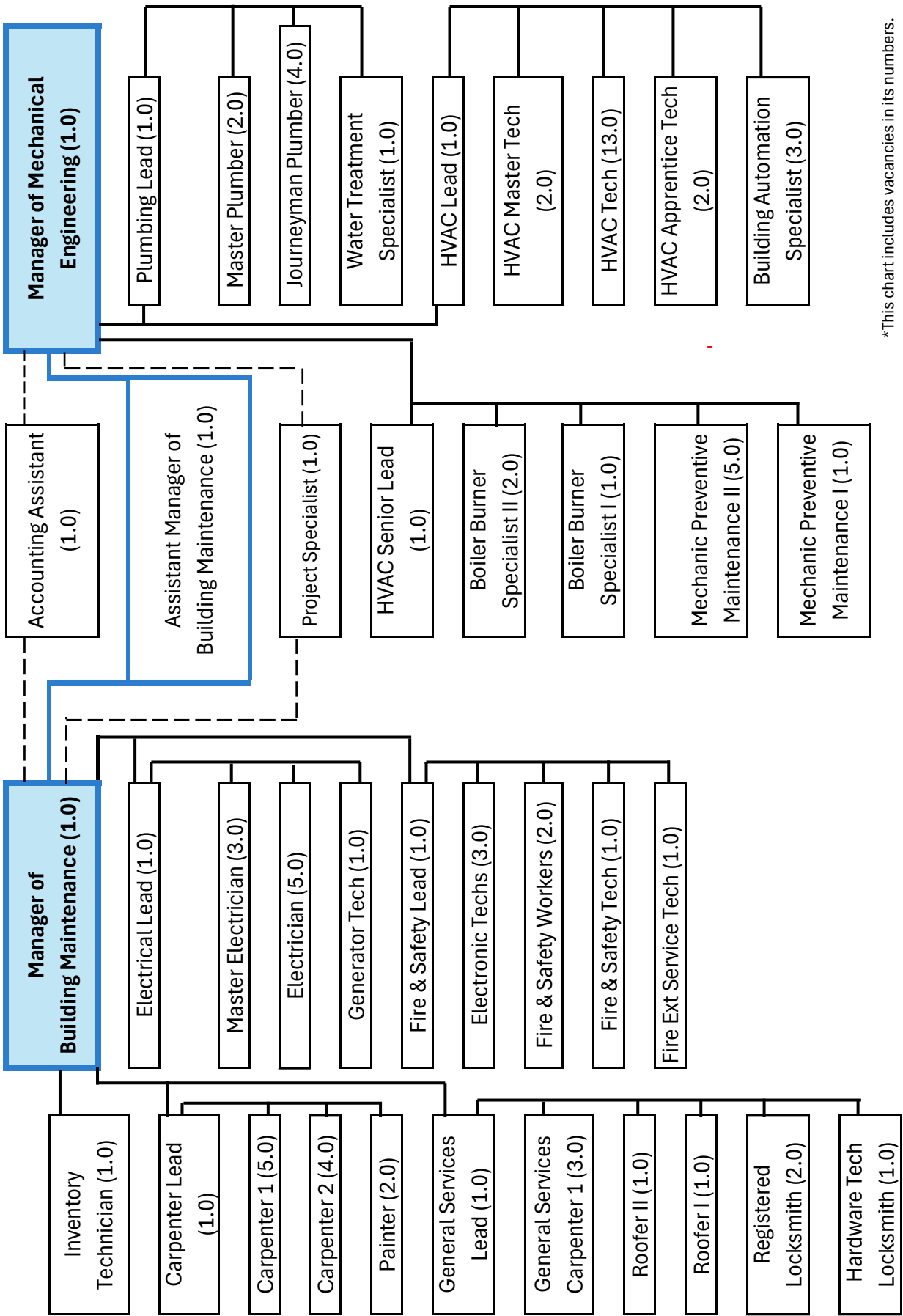
Howard County Public School System

School Facilities and Operations



Howard County Public School System

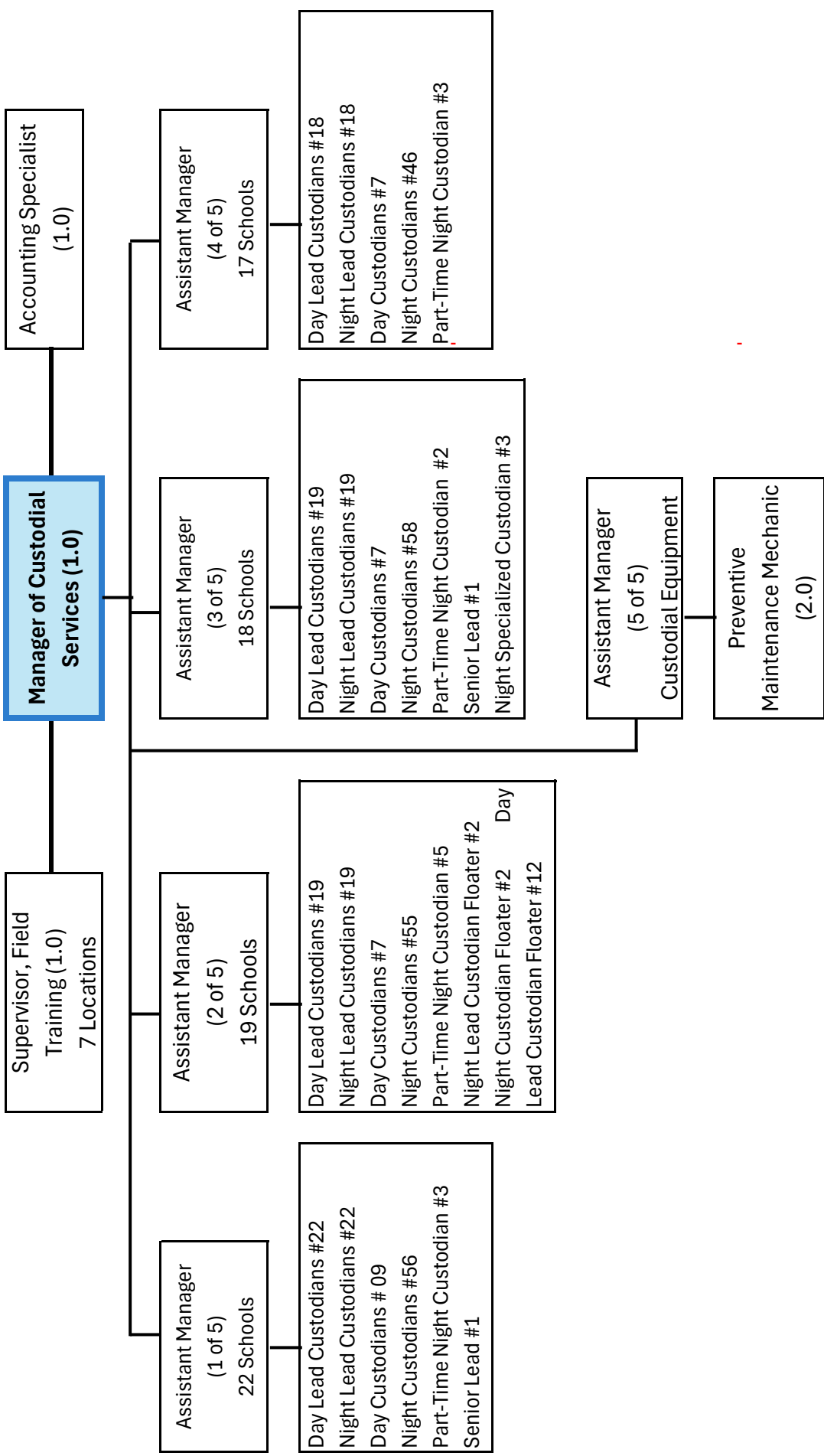
Office of Building Maintenance



*This chart includes vacancies in its numbers.

Howard County Public School System

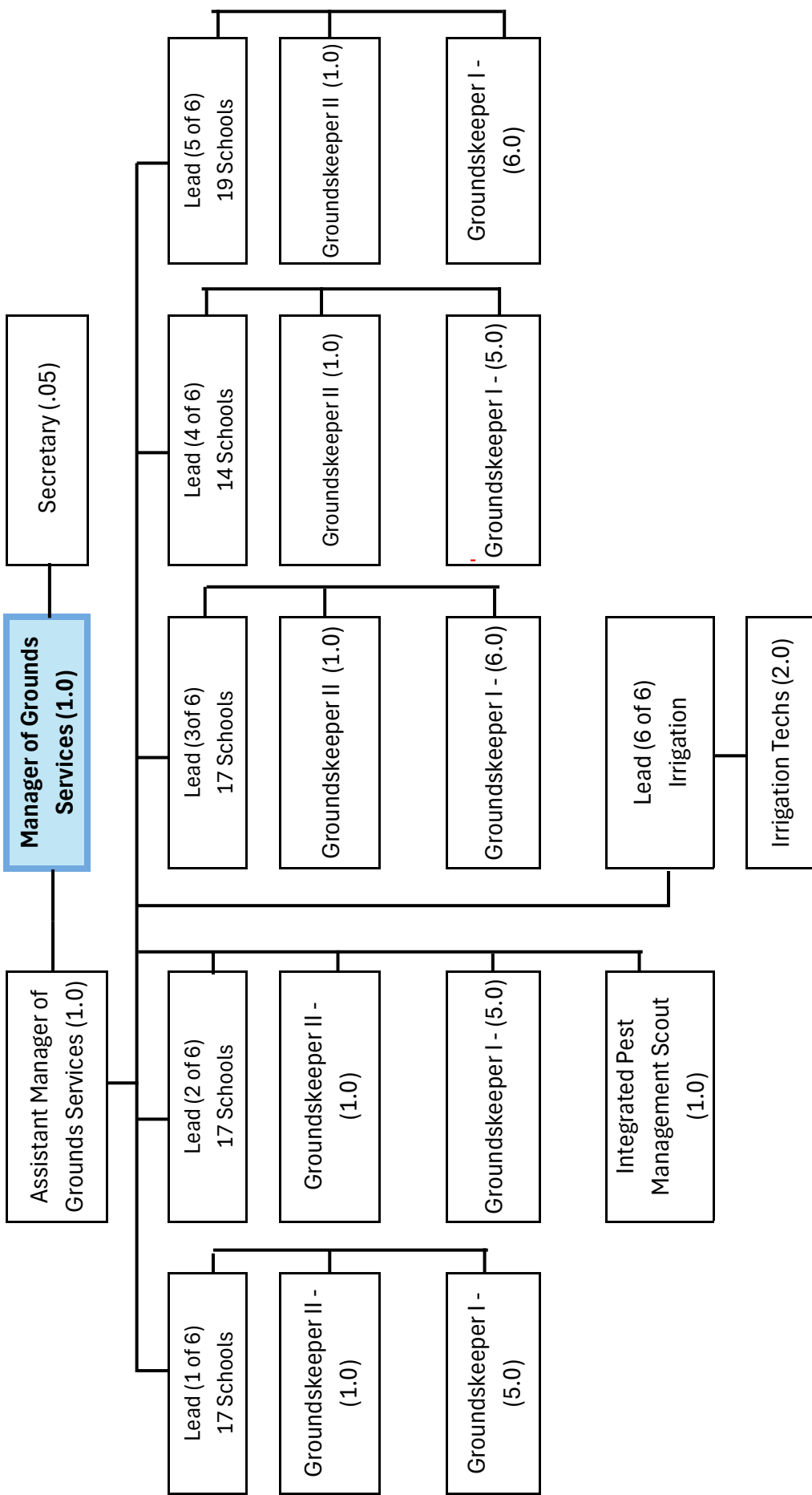
OFFICE of CUSTODIAL SERVICES



*This chart includes vacancie in its numbers

Howard County Public School System

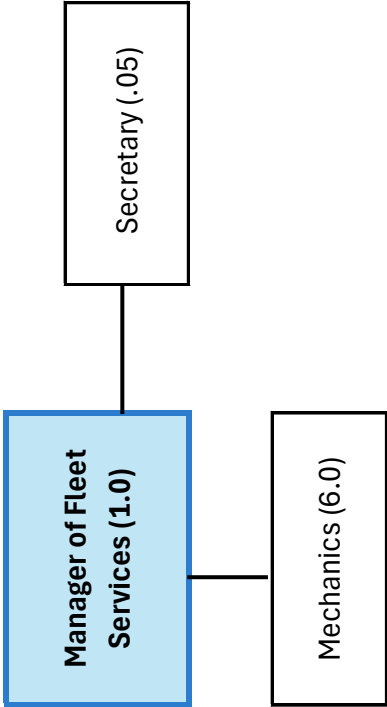
OFFICE of GROUNDS SERVICES



*This chart includes vacancie in its numbers

Howard County Public School System

OFFICE of FLEET SERVICES



C.1. Maintenance Staffing and Organization

HCPSS maintains 78 school buildings. For SY2026-27, there are 245 portables (relocatable classrooms), including multiple modular units. Other buildings include the Central Office Administration Building with four portables, the Central Office Annex at Old Cedar Lane, Faulkner Ridge Center, Office of Grounds and Fleet at Ridge Road, a Grounds Annex at the ARL campus and Old Bushy Park building. In addition, services are provided for leased warehouse space.

Factors affecting maintenance requirements include the age and usage of a building. Major renovations to buildings are performed to reduce maintenance requirements. Roofs, HVAC equipment, floor coverings, and other items which are not always replaced as part of a capital renovation project.

The Office of Building Maintenance disciplines are described below, with each group's current manpower. Each discipline identified below has a Senior Lead person who oversees the activities of the shop. The labor force for FY25 should increase from last year. However, due to the current budget climate, staffing is projected to remain unchanged. The number of workers added to Building Maintenance has not kept pace with the increased building square footage or tasks required to maintain the added building square footage, equipment, and sophisticated systems in new buildings, portables, and modular classrooms.

Carpentry, Flooring, Paint, and Portables

This group is responsible for the scheduling, bidding, and oversight of school painting (interior/exterior) projects, floor replacement (carpet/tile) projects, and the replacement and/or refinishing of hardwood flooring; including but not limited to gyms, auxiliary gyms, stages, and dance floors. They also manage all repairs to portable classrooms to resolve IEQ issues. They inspect and repair interior bleachers, gym equipment, and lockers. They are also involved with installation and/or removal of partitions and floor coverings. Additionally, they assist with Indoor Environmental Quality (IEQ) inspections, minor repairs, and restoration of facilities.

Team members consist of 1- Senior Lead, 9- Carpenters, 2- Painters

Building Envelope

This group is responsible for inspection, maintenance, and repairs to all building envelope systems, including but not limited to roofs, exterior walls, skylights, canopies, and foundations.

Team members consist of 1-Roof Mechanic II, 1-Roof Mechanic I, 1-Carpenter I

Doors, Windows, and Hardware

This group is responsible for inspection, maintenance, and repairs to all exterior and interior door and window systems, including the hardware traditional and electronic. They also provide keys for all staff at all facilities and maintain safe combinations. Additionally, they are also involved in barrier-free projects to accommodate students and staff with disabilities.

Team members consist of 1- Senior Lead, 2- Locksmiths, 1- Hardware Technician, 2-Carpenter I

Electrical

Building Maintenance maintains the main electrical power systems, including all electrical circuits serving classrooms, offices, kitchens, HVAC equipment, and exterior parking lot pole lighting. Maintain 97 emergency generators serving life safety equipment and emergency egress lighting. Maintain 50 elevators and 27 chair lifts, including periodic inspections and annual state inspections. Maintain 78 public address systems, which include correction clocks and class bell schedules. Maintain over 50 athletic field scoreboards, 26 interior gym scoreboards, and stadium field lighting for 13 high schools.

Team members consist of 1-Senior Lead, 3-Master Electricians, 5-Electricians, 1-Generator Technician

Fire and Safety

Building Maintenance maintains all building fire alarm systems, including annual life safety inspections. Maintain all building intrusion alarm systems including after-hour alarms, in cooperation with the Howard County 911 Call Center. Maintains over 4,000 fire extinguishers throughout the public school system wide. Maintains all cameras, call boxes at visitor entrances, and over 1,200 card readers at exterior doors for staff access.

Team members consist of 1-Senior Lead, 4-Technicians, 2-Fire & Safety Workers, 1-Fire Extinguisher Technician

Heating, Ventilation, and Air Conditioning (HVAC)

Building Services HVAC personnel perform routine and preventive maintenance such as adjustments, calibration, filter and belt changes, lubrication, cleaning, etc. This equipment requires more maintenance attention as it ages. There are four boiler mechanics with stationary engineers' licenses maintaining 169 boilers, 134 water heaters, and 470 pressure vessels. Only water- and air-cooled chillers are maintained through service contracts. All other related equipment, such as boilers, air-handling units, rooftop units, unit ventilators, heat pumps and fans for the geothermal systems, etc., are operated and maintained by Building Maintenance HVAC personnel. Adding to the complexity of the equipment that must be maintained is the introduction of geothermal systems in newly renovated schools, and the more widespread use of direct digital controls (DDC) in place of pneumatic controls.

2026 COMPREHENSIVE MAINTENANCE PLAN

The following personnel projection reflects the work assignments of this group. Team members consist of 2- Senior Leads, 3- Building Automation Specialists, 3- Boiler Mechanics, 6- Preventive Maintenance Mechanics, 13- HVAC Technicians, 2- HVAC Master Mechanics, 2- HVAC Apprentice Technicians.

Plumbing

The plumbing shop is responsible for installing, maintaining, and replacing sinks, toilets, water fountains, water heaters and tanks as well as repairing leaking valves, clogged drains, and toilets. Plumbers also assist the HVAC department in installing new fuel oil lines and performing repair projects in boiler rooms. The staff includes one licensed water treatment specialist who tests potable water at the 8 schools with private domestic water supplies and maintains one pool/therapy tank. The shop collaborates with Maryland Environmental Services (MES), a contractor who operates the four Sequencing Batch Reactor (SBR) plants, which require sophisticated technology to ensure the system is within its wastewater discharge permit requirements. Adding to the complexity of the equipment that must be maintained by this group is the introduction of Membrane Biological Reactor (MBR) Plants in newly renovated schools requiring wastewater management systems. Maryland Environmental Services assists with the management of these plants as well as the SBR plants.

Team members consist of 1- Senior Lead, 2- Master Plumbers, 4- Journeyman Plumbers, 1- Water Treatment Operator.

Parts Department

The parts department is responsible for the ordering and handling of parts and supplies used by all building maintenance groups.

Team members consist of 1- Inventory Technician

Specialists

There are three specialist positions that support school facilities. One specialist manages the Energy Management Program, one specialist manages the Integrated Pest Management Program, and one specialist manages the Computerized Maintenance Management System (CMMS).

Management

Management includes the Manager for the Office of Building Maintenance and a Mechanical Engineering Manager. There is also one Assistant Manager. Managers are needed for planning the work, scheduling the workforce, and inspecting work upon completion. Planning,

scheduling, and inspecting are important factors in efficient, cost-effective maintenance.

Groundskeepers

HCPSS Grounds Services maintains approximately 1,958 acres of property. This includes, but is not limited to, 259 fields, 127 baseball/softball fields, 107 multi-purpose fields and 25 stadium and Bermuda fields. Grounds Services is also responsible for snow removal at every school. All high school stadium fields have artificial turf installed. Team members consist of 6- Lead, 39- Groundskeepers. There are 5 area crews that maintain 15-17 school sites. Including 2-3 high schools per area crew. The addition of the new high school, Guilford Park HS has increased the total amount of maintained acreage, added five fields (one artificial), multiple stormwater management areas, outdoor basketball and tennis courts, and an abundant amount of paved areas for snow removal. The Grounds Services Department also has an individual irrigation crew. This consists of 1-Lead and 2-Technicians. There are 31 irrigated fields throughout HCPSS properties with an additional system at the HCPSS Administration Building. This consists of over 1,000 irrigation heads, multiple controllers, valves, and thousands of feet of piping.

Summary

The number of workers in the Office of Building Maintenance has not kept pace with the increased building square footage, or the tasks added to properly maintain aging facilities, their infrastructure or the equipment in new buildings, portables, and modular classrooms.

The chart below (C.2.) demonstrates that over the last twenty plus years, maintenance staff increases have significantly lagged behind the growth of additional building square footage and associated equipment requiring maintenance. In 1990, there were 61 maintenance workers to service 3.9 million square feet in the HCPSS facilities, or 64,000 square feet per worker. Currently HCPSS Department of Building Maintenance maintains a total square footage of school buildings and portables of approximately 8.759 million square feet with 79 employees, which equates to more than 110,878 square feet per worker. While the workforce remains extraordinarily productive (productivity benchmarks provided from APPA - Leadership in Educational Facilities), the department continues to rely on funding of contracted services to execute work for which in-house resources are insufficient.

The number of Grounds Service workers has not kept pace with the growth in athletic field renovations and management, stormwater management areas, irrigation design, installation, routine monitoring, and other maintenance tasks. To maximize effectiveness, HCPSS has expanded its long-term partnership with Howard County Recreation and Parks (HCRP). In 2013, HCRP renovated the fields at Laurel Woods ES and maintains them through a memorandum of understanding. HCRP continues to mow a number of HCPSS properties located adjacent to Park

2026 COMPREHENSIVE MAINTENANCE PLAN

locations (such as Dayton Oaks). HCPSS continues to seek opportunities to partner with HCRP moving forward.

Varying degrees of maintenance are required for these sites. In addition to the ongoing grass mowing in all areas of the school system, Grounds Services maintains driveways, walks, pathways, parking lots, paved play areas, tennis courts, running tracks, grass play areas, storm water ponds, and stadium fields. Trees and shrubs planted on school grounds need year-round attention for pruning, mulching, and spraying. Grounds Services is also responsible for maintaining outdoor equipment including, but not limited to, bleachers and playground equipment. Work orders for repairs or maintenance for these items are generated by quarterly inspections.

Custodial Services is committed to best practices that are responsive and provide staffing and resources needed to help create optimal learning and working environments for students, staff, and community. Each school year, the developed training objectives for supervisors and custodians are presented to staff. These include scope of work, technology, equipment maintenance, and emergency response, among other general training modules.

C.2. Current Staffing Compared Against Industry Standards

Metric	Industry Standards	FY25 Budgeted	FY25 Actual	FY26 Budgeted
a) Maintenance Staffing (FTEs) (Not including Grounds) (Not including administrative positions)	N/A	91	79	79
b) Maintenance Load (GSF per FTEs)	APPA Level 2-Comprehensive. Stewardship 67,456 sq ft/FTE, Level 3-Managed Care 94,439 sq ft/FTE, Level 4-Reactive Management 118,049 sq ft/FTE	96,257	110,878	110,878
c) Percent of Maint. Staff delivering bldg. services ("boots-on-the-ground")	N/A	95%	94%	94%
d) Custodial Staffing (FTEs) (Not including administrative positions)	N/A	425.5	425.5	420.5
e) Custodial Load (GSF/FTEs) (FTE's = 401.5 actual facility based custodians)	APPA Level 2-Ordinary Tidiness 16,700 sq ft/FTE, Level 3-Casual Inattention 26,500 sq ft/FTE, Level 4-Moderate Dinginess 39,500 sq ft/FTE	21,818	21,818	21,818

2026 COMPREHENSIVE MAINTENANCE PLAN

- A. Building Maintenance Staff numbers, current APPA Level 3/4 -Managed Care to Reactive Management
- B. Custodial Staff numbers, current APPA Level 3 -Casual Inattention
- C. Grounds Staff numbers, Current APPA Level 3 -Moderate Level
- D. Square footage per custodian is calculated based on the permanent 401.5 school-based custodians

School PSC No., Building Gross Square Footage, and Gross Property Acreage

School Name	School PSC No.	Building GSF	Gross Acreage	Notes
Applications and Research Laboratory	13.018	204,325		Shared
Atholton ES	13.030	52,666	12.31	
Atholton HS	13.013	250,465	36.28	
Bellows Spring ES	13.078	89,952	40.00	
Bollman Bridge ES	13.039	90,240	16.95	
Bonnie Branch MS	13.071	94,511	17.10	
Bryant Woods ES	13.079	44,401	9.25	
Burleigh Manor MS	13.046	102,663	27.00	
Bushy Park (Administration)	13.027	56,383		Shared
Bushy Park ES	13.085	116,818	19.20	
Cedar Lane (Administration)	13.038	50,763		Shared
Cedar Lane School	13.088	99,850		Shared
Centennial HS	13.036	204,145	43.00	
Centennial Lane ES	13.005	65,519	11.22	
Clarksville ES	13.037	63,375	10.69	
Clarksville MS	13.031	82,151	20.43	
Clemens Crossing ES	13.034	60,535	10.80	
Cradlerock ES / Lake Elkhorn MS	13.035	132,400	33.16	
Dayton Oaks ES	13.083	116,818	10.10	
Deep Run ES	13.042	94,570	11.67	
Ducketts Lane ES	13.086	102,705	10.10	
Dunloggin MS	13.001	79,220	20.00	
Elkridge ES	13.020	98,303	18.80	
Elkridge Landing MS	13.054	101,226	29.80	
Ellicott Mills MS	13.026	97,567	16.22	
Faulkner Ridge	13.080	47,400	9.01	
Folly Quarter MS	13.081	95,516	47.80	
Forest Ridge ES	13.047	81,823	20.85	
Fulton ES	13.063	88,812	18.00	
Glenelg HS	13.061	211,415	40.94	
Glenwood MS	13.069	75,000	30.00	
Gorman Crossing ES	13.068	86,776	15.00	
Guilford ES	13.033	51,306	11.00	

2026 COMPREHENSIVE MAINTENANCE PLAN

School Name	School PSC No.	Building GSF	Gross Acreage	Notes
Guilford Park HS	13.090	284,241	77.00	
Hammond ES/MS	13.064	160,829	47.48	
Hammond HS	13.016	197,023	33.14	
Hanover Hills ES	13.089	116,633	8.02	
Harper's Choice MS	13.003	79,220	19.67	
Hollifield Station ES	13.067	85,627	14.50	
Homewood School	13.091	61,421		Shared
Howard HS	13.012	284,241	41.00	
Ilchester ES	13.057	75,438	10.10	
Jeffers Hill ES	13.014	52,851	10.00	
Land Bank			181.19	
Laurel Woods ES	13.065	73,448	27.00	
Lime Kiln MS	13.070	95,092	27.00	
Lisbon ES	13.004	55,999	22.55	
Long Reach HS	13.055	234,007	50.00	
Longfellow ES	13.056	68,590	9.50	
Manor Woods ES	13.052	77,169	43.23	
Marriotts Ridge HS	13.082	251,645	42.40	
Mayfield Woods MS	13.045	100,894	20.00	
Mt Hebron HS	13.019	212,370	40.05	
Mt View MS	13.049	106,736	35.75	
Murray Hill MS	13.059	106,700	25.00	
Northfield ES	13.048	77,772	10.00	
Oakland Mills HS	13.002	204,578	28.60	
Oakland Mills MS	13.008	81,036	20.00	
Patapsco MS	13.051	90,859	21.13	
Patuxent Valley MS	13.041	106,987	30.00	
Phelps Luck ES	13.024	75,695	10.00	
Pointers Run ES	13.044	88,201	13.70	
Reservoir HS	13.077	241,321	41.00	
River Hill HS	13.053	236,181	64.20	
Rockburn ES	13.050	86,512	8.74	
Running Brook ES	13.066	62,289	9.00	
St John's Lane ES	13.028	65,580	10.00	
Stevens Forest ES	13.022	56,481	10.00	
Swansfield ES	13.023	80,982	10.00	
Talbott Springs ES	13.007	53,942	10.00	
Thomas Viaduct MS	13.087	95,838	22.00	
Thunder Hill ES	13.075	64,402	14.93	

2026 COMPREHENSIVE MAINTENANCE PLAN

School Name	School PSC No.	Building GSF	Gross Acreage	Notes
Triadelphia Ridge ES	13.073	71,137	30.50	
Veterans ES	13.084	116,818	23.66	
Waterloo ES	13.062	74,313	10.00	
Waverly ES	13.043	115,822	11.49	
West Friendship ES	13.032	47,810	17.85	
Wilde Lake HS	13.058	258,098	31.25	
Wilde Lake MS	13.060	106,221	21.00	
Worthington ES	13.010	60,999	19.69	
Central Office		69,720		Shared
TOTAL		8,759,387	1,900.00	

Note: "Shared" indicates the school shares a campus with another school facility.

2026 COMPREHENSIVE MAINTENANCE PLAN

C.2. Funding

The approved FY2025 operating budget for HCPSS requests the funding needed to maintain existing levels of services and support for our students and staff. Operation of Plant provides custodial, utilities, trash collection, and other cost to operate school facilities. Operation of Plant includes the school system's logistics center, courier mail services, security, and risk management functions. The Maintenance of Plant includes programs to maintain and repair school facilities. This includes building maintenance, fleet management, custodial services, grounds, and pest management services.

	Industry Standard	FY25 Goal/ Budget	FY25 Goal/Budget per GSF	FY25 Actual	FY25 Actual Per GSF	FY26 Goal/ Budget	FY26 Goal/Budget per GSF
Spending							
Preventive Maintenance	N/A	\$1,052,400	0.11	\$ 2,028,054	0.23	\$2,962,000	0.34
Corrective Maintenance	N/A	\$4,725,445	0.54	\$ 7,804,863	0.89	\$6,020,000	0.69
Deferred Maintenance (if applicable)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Maintenance	(CRV X .03)	\$5,777,845	0.66	\$ 9,832,917	1.12	\$8,982,000	1.03
All Maintenance, per GSF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Operations	(CRV) x .01	50,082,348	5.72	50,082,348	5.72	65,319,489	7.46
Operations, per GSF	N/A	N/A	N/A	N/A	N/A	N/A	N/A
M&O Combined	(CRV x .04)	55,860,193	6.38	59,915,265	6.84	74,301,489	8.48
M&O Combined, per GSF	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Planned Actions

D.1. Planned Improvements

The Grounds Department is researching multiple ways to introduce Going Green into methods and equipment used in the daily maintenance of the facilities. As gas powered equipment reaches the end of its serviceable life Grounds has replaced it with several battery powered pieces of equipment. These include chainsaws, trimmers, and blowers. These purchases, and future purchases of battery-powered equipment, are designed to align with HCPSS Policy 6080, Sustainability.

Grounds also purchased two additional spray rig tanks to assist during weather events and the snow removal process by utilizing a brine solution for ice events and pretreatment for plowing operations. Brine is a cleaner, cheaper, and more efficient product during snow events instead of a pelletized ice melt (salt) product. We are working with local professionals to retrofit some of our trailers to support additional brine tanks with spray attachments to perform this operation.

With new Federal, State, and Local legislation passed for Pesticides and Fertilizer Reduction Program, the Grounds Department is currently putting extensive research into our current practices regarding the use of these products. Working closely with our IPM Specialist, Grounds staff and IPM scout, multiple soil samples are taken, we perform frequent evaluations of our maintenance plans and adhere to new guidelines and restrictions. This drastically reduces our usage of pesticides and fertilizers. We are utilizing the best maintenance practices to reduce the number of weeds and other pests naturally and mechanically, thus reducing the need for added chemicals or fertilizers. The healthier the turf is, the fewer pests and weeds there will be.

2026 COMPREHENSIVE MAINTENANCE PLAN

D.2. Planned Capital Projects – Building Maintenance and Grounds

School	Description	Budget Cost	Construction Timeframe
Atholton ES	Gym A/C	\$500,000	2026 Summer
Atholton ES	Elevator Modernization	\$355,000	2026 Summer
Atholton ES	Playground Replacement (2-5)	\$130,000	2025 Summer
Atholton ES	Playground Replacement (5-12)	\$185,000	2025 Summer
Atholton ES	Paving	\$100,000	2025 Summer
Bellows Springs ES	Paving	\$125,000	2025 Summer
Bollman Bridge ES	Playground Replacement (5-12)	\$375,000	2025 Summer
Bollman Bridge ES	Playground Replacement (K-2)	\$275,000	2025 Summer
Centennial HS	DDC Conversion (Bid Package 1, Phase 2)	\$550,000	2026 Summer
Centennial HS	DDC Conversion (Bid Package 2)	\$616,000	2026 Summer
Centennial HS	Gym A/C	\$1,945,668	2026 Summer
Central Office/Admin Building	Exterior Windows & Doors Replacement	\$1,000,000	2026 Summer
Clarksville MS	Roof Replacement	\$3,000,000	2026 Summer 2027 Summer
Cradlerock ES / Lake Elkhorn MS	Gym A/C	\$564,553	2026 Summer
Dayton Oaks ES	Paving	\$50,000	2025 Summer
Dunloggin MS	FACS Classroom Domestic Water Pipe Replacement	\$60,000	2026 Summer
Elkridge Landing MS	Gym A/C	\$730,945	2026 Summer
Forest Ridge ES	Gym A/C	\$500,000	2026 Summer
Guilford ES	Roof Replacement	\$2,800,000	2026 Summer 2027 Summer
Guilford ES	Gym A/C	\$442,770	2026 Summer
Howard HS	Partial Roof Replacement	\$1,000,000	2026 Summer
Lime Kiln ES	Paving	\$100,000	2025 Summer
Lisbon ES	Gravity Domestic Water Tank Building	\$3,000,000	2026 Summer
Marriott's Ridge	Track Replacement	\$185,000	2025 Summer
Mt. Hebron HS	Paving	\$75,000	2025 Summer
River Hill HS	FACS Classroom Domestic Water Pipe Replacement	\$60,000	2026 Summer
St John's Lane ES	Playground Replacement (K-2)	\$130,000	2025 Summer
Various	System-wide Camera Upgrades	2,000,000	2025-2026
Various Pathways	Paving	\$150,000	2025 Summer
Various	Kitchen Lead Remediation (6 kitchens)	\$300,000	2026 Summer
Waterloo ES	Playground Replacement (5-12)	\$185,000	2025 Summer
TOTAL		\$21,489,936	

D.3. Professional Development

A vital part of the near term in HCPSS is recognizing that our people are an integral part of our maintenance program. In acknowledging this, we realize that investing in our team is equally as important as investing in our facilities.

HCPSS recognizes the value in its team members. We are a learning environment, and this permeates at every level of our operations program. Workforce development, continuing education, training, and apprenticeship programs help HCPSS create a world-class staff that allows us to maintain buildings in optimal condition with limited resources. In short, its people allow HCPSS to remain productive despite budget constraints. Employees in the HVAC Shop have received training in the use of new refrigerants and in the use of the computerized building automation system.

HVAC Apprenticeship Program

The Howard County Public School System (HCPSS) registered with the Maryland Apprenticeship and Training Program in May 2019. Two individuals applied and were accepted into the program in July 2019. Both participants receive 40 hours per week of on-the-job training within the HVAC Shop in the Department of Building Maintenance at the HCPSS, under the guidance of a Master HVAC Mechanic.

The participants are sponsored by HACC of Maryland Apprenticeship Program, (Heating & Air Conditioning Contractors of MD), and attend two evening HVACR training classes per week at area community colleges. Graduating from the four-year program with an apprenticeship completion certification allows them to apply for and be granted a state Journeyman License without taking the exam. Also, participants can choose to sit for a skip test, based on their HVAC knowledge, and if they receive a passing grade, are allowed to move one year ahead in the program and graduate in only three years.

The two original apprentices, who graduated from the program and received their Maryland Journeyman License, were promoted to and are working as HVAC Technicians for HCPSS. The Office of Building Maintenance continues this program and currently has two apprentices enrolled working towards their MD. Journeyman License.

Continuing Training Program (Annually for all staff): Vector Solutions, K-12 Edition is standard Training for all staf

Active Shooter

This course intends to prepare personnel for “active shooter” situations by providing information on how they occur and how they may be more effectively prevented.

Safety Care Basics

This course provides training in basic safety while working in a school environment. FERPA: Confidentiality of Records

This course addresses training needs relating to student education records.

Understanding Disabilities

This course covers applicable legislation, compliance, disability categories, and specialized instruction impacting students with disabilities across multiple educational settings and programs.

Students Experiencing Homelessness: Awareness and Understanding

Homelessness affects hundreds of thousands of children every year and can be a barrier to education in many ways. This course provides education to recognize and address this issue.

Health Emergencies: Life-Threatening Allergies

This course is a concise tutorial designed for all staff members. Life-threatening allergies are steadily increasing, and all employees must know the basics and be ready to respond to ensure the safety of students and staff.

Bullying Prevention

This course covers the topic of bullying prevention.

Child Abuse: Mandatory Reporting

This course provides background information on the different types of child abuse/child maltreatment.

Bloodborne Pathogen Exposure Prevention

Working in any environment with a high concentration of people can increase the risk of exposure to germs and infectious agents on a daily basis. This course educates staff on proper procedures for addressing exposure.

Sexual Harassment: Staff-to-Staff

This course provides staff members with a basic understanding of staff-to-staff sexual harassment as well as strategies to maintain a harassment-free environment in the workplace.

Custodial Services

The Office of Custodial Services uses several strategies to collaborate with school-based custodial staff in order to support their professional growth. HCPSS provides training in a variety of formats to best meet staff needs. Formats include individual, small group, hands-on, virtual, and formal classroom training. HCPSS offers a variety of topics to meet staff needs, from technology training to training with everyday tasks.

The office provides training that is specifically geared to help supervisors grow their leadership skills and maximize their job performance. HCPSS offers supervisory training on topics such as coaching/mentoring staff, communication skills, equipment maintenance, state inspection, Asset Essentials, Workday, and other technology tools.

In addition, tailored courses are offered to aspiring supervisors, such as resume writing classes and interviewing skills. The office utilizes Frontline to advertise and schedule training. HCPSS also works to ensure that information is communicated to staff in a clear, accessible way.

The Field Training Supervisor continues to maintain the department's Canvas page with relevant, updated information. We also collaborate on the Emergency Procedures Booklet and send regular email reminders about procedures and maintenance.

2026 COMPREHENSIVE MAINTENANCE PLAN

<u>Custodial Services Training Classes</u>	<u>Frequency</u>
New Hire Training (Workday, Equipment, GHS, Floor Care, Bloodborne Pathogens, Daily Cleaning Tasks)	Monthly
Frontline Training Absence Management Training	Yearly
Maintaining Health and Safety During Virtual Learning	As needed
Maintaining Health and Safety During Hybrid Learning	As needed
Documentation Training (1 Supervisor) (1 All Staff)	Upon promotion/Refreshers as needed
Asset Essentials Training (Management)	Yearly
Asset Essentials PSCP Work Order Training	Yearly
Workers Compensation and Safety Training	Yearly
Supervisor Leadership Training	Upon promotion
Stripping and Waxing VCT Floors Training	Yearly
Basic Floor Care Training	Yearly
Supervisor Conflict Resolution Training	Yearly
Supervisor Interview Preparation and Resume Writing	Yearly
New Supervisor Training	Upon promotion
Equipment Training Class	Yearly
Workday Training	Yearly
Service Finder Training (New Supervisors)	Monthly as required
Asset Essentials Training (New Supervisors) Workorder, Scheduling AIR, Completing Monthly PM Workorders- Fire Extinguisher and Utility Shut Off)	Monthly as required
Frontline Training (New Supervisors)	Monthly as required
Indoor Equipment Training (New Supervisors)	Monthly as required
Computer Basics Training	Monthly as required
Outdoor Equipment Training (New Supervisors)	Monthly as required
Gym Floor Maintenance Training (New gym floor Quickpass System)	Monthly as required
Drain Trap Maintenance	Yearly

Grounds

The Grounds Department staff members attend frequent training sessions, seminars, and programs to stay up to date for new regulations and best practice guidelines. The department also keeps a close relationship with the University of Maryland's Agronomy and Pathology Departments, as well as the Department of Agriculture, to stay up to date on all current turf-related research and educational opportunities.

In 2023, the Grounds Department trained their staff with an introduction to stormwater management through the Chesapeake Bay Landscape Professional (CBLP) Crews course. They now have a greater understanding of how to provide better service and an understanding of the vegetation and their roles for the 120 plus stormwater management areas currently in our system. To achieve prolonged sustainability, new bioswales, and stormwater management areas will be strategically installed. These new initiatives will provide an opportunity for educational and stewardship programs for our students, parents, and community.

All certified and registered pesticide and fertilizer applicators attend a one-day Conference at Turf Valley Resort for recertification annually. This event is hosted by the Maryland Turfgrass Council (MTC), and course material is presented by University of Maryland, Penn State, and Rutgers professors. Grounds Services had two additional employees obtain their Pesticide and Fertilizer applicators Certifications this year.

We will conduct quarterly safety and equipment training for all staff members. These will include operation, small maintenance, and industry standards on equipment, vehicles, and trailers. Industry professionals and local Vendor representatives will conduct some of these training sessions. The office of Grounds Services will establish several trainings in 2025 to adhere to MOSH safety standards for training. These will include forklift, heavy equipment operation, chainsaw safety, hazardous materials handling and storage, and proper load carrying for equipment transported by trailer. This training will be for all staff that perform any of these essential job functions. They will be documented in Workday and logged onto a training spreadsheet.

IPM training will be conducted yearly to comply and adhere to industry standards and practices. This training will be provided by our in-house IPM Specialist in conjunction with the MD Dept. of Agriculture.

Technology and support training will be conducted on an as-needed basis for those who need refresher training for our daily online applications. These programs include Workday, Asset Essentials, and Frontline. All new hires will be trained in these within a short time of their starting date.

CDL training is offered for all new hires and those who currently do not possess this license.

This training is done in-house by a Certified Trainer. This past year, Grounds Services had three additional employees obtain their Class A CDL licenses.

The Grounds Services Department is also training more staff to get their playground certification through the CPSI (Certified Playground Safety Inspectors) course. Quarterly inspections are performed to ensure the safety of students and community patrons. Having multiple certified staff members, it will take less time to perform these inspections. Grounds Services has two employees who are preparing to take the CPSI (Certified Playground Safety Inspector) certification. There are currently four CPSI Certified staff members.

Energy Management

The Energy Management Specialist attends multiple conferences, seminars, and training throughout the year to ensure a comprehensive understanding of new technologies and improved energy efficiencies and strategies. Training is provided by local and regional industry experts to bring awareness of emerging technologies and current conservation measures and best practices. Additionally, they participate in a joint effort of state and local jurisdictions to develop and implement proposed legislation that fosters Sustainability. Furthermore, the specialist attends the Baltimore Regional Cooperative Purchasing Committee meetings, in which local jurisdictions collaborate to purchase energy through the wholesale market. The meetings allow for the exchange of resources and technical information regarding market strategies to manage the risk of market volatility, providing an optimal price for energy in the Maryland deregulated market.

As an example of current training, recent legislation requires documentation of building energy performance standards and comes with new tasks and responsibilities. The Energy Management Specialist went through training to learn how to develop the documentation needed to apply for the waivers for school buildings, as well as the procedures to comply with this new law with regards to the remaining HCPSS facilities. Ensuring that HCPSS adheres to federal, state and local laws relating to energy falls uniquely in this department and is a high priority. Training in software and state websites for this new requirement was needed to support proper compliance.

E. Obstacles and Missing Resources

HCPSS knows that routine and unexpected maintenance is bound to arise and must develop and implement a plan for dealing with these on a timely basis. There are many challenges when it comes to effective facilities maintenance. It will have a direct impact on the student and staff health and day-to-day building operations. We are committed to information-based decision-making in all aspects of maintenance management. We also focus on best practices to help develop a plan that meets the needs of our organization.

Similar to other LEAs in Maryland, the HCPSS has experienced reductions in both funding and personnel. As a result, the HCPSS is facing the following challenges associated with providing necessary maintenance activities:

- Reductions in preventive maintenance activities due to reductions in staff positions.
- Increased requests for corrective maintenance due to reductions in preventive maintenance.
- Increased costs associated with utilizing outside contractors to compensate for reductions in staff positions.
- Difficulty hiring/retaining qualified personnel due to lower pay when compared to outside contractors.
- Difficulty obtaining adequate State and local funding for preventive maintenance activities, which prevents the move from a corrective maintenance position to a more preventive maintenance position.
- Difficulty obtaining adequate State and local funding to replace aging infrastructure and assets.
- Increased costs associated with maintaining aging infrastructure and assets.
- Reductions in the frequency of performing certain duties due to staff reductions and budget restraints.
- Increased costs associated with parts as result of global inflation.
- End of ESSER III funding program in FY2025.
- Supply chain issues continue to affect our ability to source parts to service our building equipment and systems effectively and efficiently.
- Experiencing consistent absenteeism in the Custodial Department resulting in an average of 65 personnel absent daily, which accounts for 15% of the operation.