



FY 2024

Comprehensive Maintenance Plan

Anne Arundel County Public Schools



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COUNTY PUBLIC SCHOOLS

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Purpose

The purpose of the annual Comprehensive Maintenance Plan (CMP) is to communicate to the Local Education Agency's (LEA's) stakeholders, including the State, the LEA's intentions for the coming fiscal year for its facilities-maintenance program.

Background

Under COMAR 14.39.02.18, each LEA must annually update and submit to the Interagency Commission on School Construction (IAC) a Board-approved CMP that is compatible with its local Educational Facilities Master Plan (EFMP) and its local Capital Improvement Program (CIP). The IAC requires that each LEA submit a CMP in order that the IAC may:

- Evaluate the degree to which the LEA is planning activities that should contribute to maintaining learning environments that are healthy, safe, and educationally sufficient for all the students that the LEA serves.
- Evaluate the degree to which the LEA is planning the activities that should maintain its facilities in a condition that will ensure that the LEA obtains the appropriate facilities longevity and value from the local and State investments made to date.
- Evaluate and compare each LEA's maintenance planning, both over time and across the state, in a manner that supports the identification of best practices that the IAC can then share with all LEAs.

Introduction and Supporting Information

Guiding Principles

The facilities inventory of an educational institution is its largest fiscal asset. The quality and condition of that asset should be preserved to help ensure the long-term financial health of the institution. AACPS Facilities Division is the steward that keeps that asset from becoming a liability. Our principal charge is to make certain that the building inventory maintains its ability to function as intended, that it is safe and legal, and that the asset life of the portfolio is managed to assure it performs through its expected life – and in most cases to perpetuate that life to the greatest extent possible.

Anne Arundel County Public Schools' (AACPS) CMP is designed to:

- Ensure continuation of a multi-year maintenance program so the business of education can be conducted in schools that are safe, healthy, and functionally efficient.
- Efficiently use all operations and/or maintenance resources, gaining the most return on the taxpayers' investment.
- Utilize data captured in our Computerized Maintenance Management System (CMMS), which provides a means of measuring actual progress against planned accomplishments. By tracking these trends, deficiencies may be maintained at a manageable level or used to reveal insufficiencies that must be addressed in future budget processes.
- Accurately report all deferred maintenance needs and associated costs not captured in the CMP five-year plan.

The CMP addresses component systems and their useful life expectancies in relation to the useful life expectancy of the total structure calculated at 50 years. Throughout the years, we replace components as necessary to ensure the 50-year life expectancy of the building. The CMP is utilized in the development of the CIP.

AACPS Facilities Division is working continuously to improve our operating methods, which increases our organizational effectiveness and efficiency. As recent members of [APPA](#) (Association of Physical Plant Administrators) we now have access to evaluation metrics and best practices of over 1,200 K12 and higher education institutions. This will aid in making the necessary adjustments to our standard operating procedures to ensure we provide the best service possible. Our efforts over the past fiscal year as well as our plans for improvement are reflected in this document and will refer to these standards and various other metrics.

Vision

Every facility requires ongoing maintenance to ensure the continued effectiveness in supporting the delivery of programs and services, to achieve the full expected lifespans of the

facility and its components, and to ensure fiscal sustainability.

Maintenance is a continuum of activities that range from predicting to preventing failures. Planned maintenance work includes preventive or predictive maintenance and corrective work which can be scheduled. Emergency or reactive work includes responding to power outages, pipe leaks, and repairs that are done when a failure has occurred. Capital renewal work is typically outsourced/contracted to external providers.

A highly effective maintenance program must include the tools, knowledge-equipped staffing, materials, and contracted support required to manage and implement operations and maintenance activities. Sufficient funds in the LEA’s operations, maintenance, and capital budgets are consistently required to provide these inputs.

The question of what resources are required for proper and sufficient operations and maintenance of a given facility – much less a portfolio of facilities – is a complex one. The costs vary significantly for each facility based upon its design and specific components, its age and condition, how much of the maintenance work needed to date has been performed in a timely manner, the quality and effectiveness of that maintenance work, and the “wear and tear” on the facility from its usage and from the environmental conditions present around the facility.

APPA provides standards for staffing both the custodial activities and the maintenance activities of facilities at various levels of functionality and fiscal sustainability, see [Attachment 1](#). The IAC in its annual [FY22 Maintenance Assessment Report](#) evaluates school facilities based on the following levels:

Operation/Maintenance Unit	APPA Level
Maintenance	Level 2- Comprehensive Stewardship
Custodial	Level 2- Ordinary Tidiness
Grounds	Level 2- High Level

The long-term goal of AACPS is to achieve these maintenance levels of service. Characteristics of Level 2 service levels are noted in [Attachment 1](#).

Mission

The mission of the AACPS Maintenance and Operations Departments is to ensure the continued effectiveness of the facility in supporting the delivery of programs and services to achieve the full expected lifespans of the facility and its components, and to ensure that each facility remains fiscally sustainable.

Interrelationships of Planning Documents

The CMP, [the long-range plan \(MGT Study\)](#), and the [Educational Facilities Master Plan \(EFMP\)](#) are utilized to develop the CIP. The CIP is governed by Title 5, Subtitle 3 of the Education Article, Annotated Code of Maryland and COMAR 14.39.02. CIP funding can be used for major new, renewal, and replacement projects, as well as for facility addition projects or capital maintenance projects (systemic renovations). The CIP is based on the facilities as a whole and references the EFMP, which provides organizational patterns, staffing ratios, transportation policies, site selection criteria, school attendance areas, current and future population distribution, enrollment data and facility needs analysis.

Funding for capital maintenance is limited so it is important that ACCPS' annual CMP and CIP are coordinated to ensure that maintenance-related capital projects are properly sequenced in relation to other facilities needs and support the board's educational and portfolio management objectives. AACPS is improving our efficiency by using best practices, including better training of staff, expanding the use of CMMS, and increasing knowledge of how to manage and reduce the total cost of ownership of facilities.

It should be noted that budgets for maintenance often compete directly with educational program budgets. Therefore, planning and building right-sized school facilities that are affordable to operate over their lifespans is essential to having highly functioning and fiscally sustainable schools.

Long-Term Strategic Focus

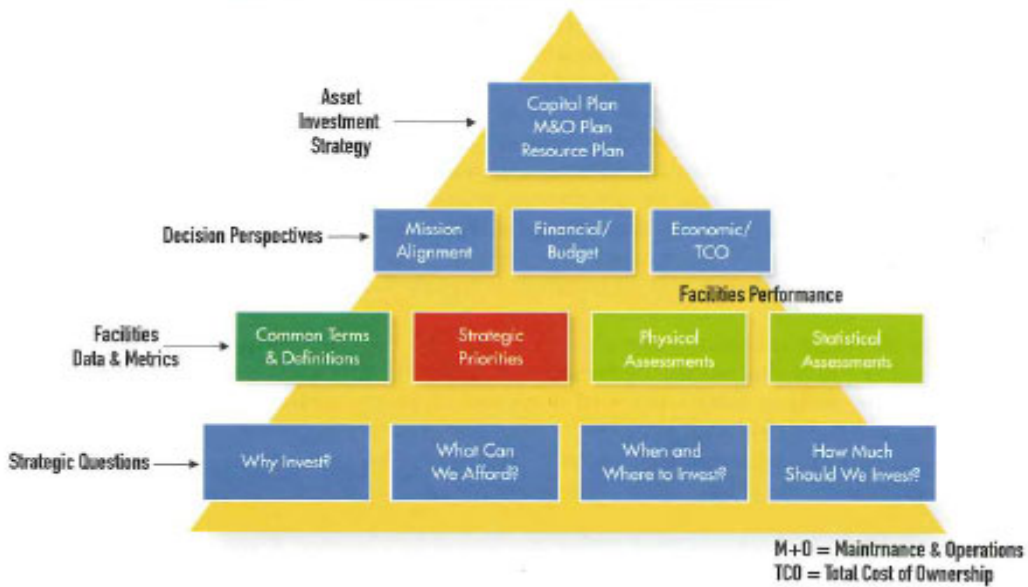
In school year 2022-2023, AACPS operated more than 126 facilities that enrolled over 84,000 students. These facilities include elementary, middle, and high schools as well as administrative and other educational centers. According to enrollment projections presented to the IAC on May 11, 2023, the Maryland Department of Planning projects growth of approximately 4600 students between September 2022 and September 2032. With increasing enrollment and square footage, capital and operating budgets will need to increase to maintain or increase the level of service. The long-term goal of AACPS is to achieve APPA Service Level 2 in the Maintenance, Custodial, and Grounds units. The IAC and APPA recommend these service levels to provide fiscally sustainable school facilities. Below is a table noting the long-term target and current service levels for AACPS.

Operations/Maintenance Unit	Target APPA Level	Current APPA Level
Maintenance	Level 2- Comprehensive Stewardship	Between Level 2- Comprehensive Stewardship and Level 3- Managed Care
Custodial	Level 2- Ordinary Tidiness	Between Level 3- Casual Inattention and Level 4- Moderate Dinginess
Grounds	Level 2- High Level	Level 3- Moderate-Level

Characteristics of Level 2 service levels compared to current levels are noted in [Attachment 1](#).

Near-Term Focus

Our primary near-term focus will be on data and analytical elements of an asset investment strategy, as well as ways to clearly communicate and execute them in terms of objectives, work priorities, funding resources, and time. Collectively these components form an integrated framework for decision making. All these elements can be illustrated in the figure below. The key strategic questions are shown along the base of the pyramid and at the top of the pyramid are the direction setting instructions of a typical strategy, which includes a revised long-range capital development plan, a plan for maintenance and operations, and a plan for assembling needed resources over time.



Source: Rodney Rose, *Buildings... The Gifts that Keep on Taking- A Framework for Integrated Decision Making*, Alexandria, Virginia, APPA, 2007.

Computerized Maintenance Management System (CMMS)

Mechanics and select contractors (non-LEA staff) access their assigned work orders and record their actions electronically as they complete maintenance tasks each day. Utilizing a CMMS has given the Facilities Division the ability to better communicate with and serve our school-based customers. With it we track work orders, maintenance costs, and maintain historical data for reports such as this document.

Over the past seven years, the Facilities Division has integrated a web-based CMMS procured through Brightly, formerly Dude Solutions. A suite of software programs is utilized to support information related to the CMP.

We currently use the following modules:

- Maintenance Direct for work orders
- Capital Forecast for entry of our equipment data
- Inventory Direct for procurement of maintenance supplies and equipment
- PM Direct to automatically generate preventive maintenance schedules according to set periodic schedules.

Our CMMS is being used to manage and track the work of contractors (non-LEA staff) engaged to perform maintenance work. Contractor invoices are entered into the system for those without access to the CMMS to capture the contract service provided.

The types of preventive-maintenance work orders that are generated automatically within the CMMS are included in [Attachment 2](#).

Major building systems and components entered into the asset inventory within the CMMS are listed in [Attachment 3](#). Approximately 66% of HVAC equipment is currently entered in the CMMS. It is anticipated that all equipment will be entered into the CMMS by the end of FY 2024.

Facilities Assessment Process

Strategic Capital Development/ Renewal Plan

In February 2015, Anne Arundel County, Maryland contracted with MGT of America, Inc. (MGT) to prepare an update of the 2006 Strategic Facilities Utilization Master Plan for AACPS. MGT had prepared the original 2006 Strategic Facilities Utilization Master Plan for the school district. The 2015 update, like the original 2006 plan, was intended to address the long-term (ten year) facility needs of the district.

AACPS is currently in the process of developing an RFP for the next update of the Strategic

Capital Development/ Renewal Plan. The goal is to have an updated plan to help guide the development of the FY 2027 CIP. The timing of the updated plan also coincides with a two-phase redistricting effort that is currently underway.

Internal Facility Assessments

Following the publication or update to the Strategic Capital Development/ Renewal Plan, interim facility assessments are performed. AACPS uses a combination of third party and in-house assessments to evaluate the condition of our facilities every three years. The most recent of our in-house assessments took place in 2021 and is included in [Attachment 4](#) of this document. Our next in-house assessment will take place in 2024.

IAC Statewide Facility Assessment

The purpose of the Statewide Facilities Assessment (SFA) is to assess the condition and educational sufficiency of the school facilities that currently exist in Maryland, and does not make decisions about potential repairs, replacements, or new construction.

Data collection for the IAC’s first baseline SFA began in December 2020 and was completed in July 2021. Over seven months, the IAC assessed the physical condition and educational sufficiency of almost 1,400 public school facilities in the State of Maryland.

Data collected in this first round of assessments will be updated annually, with 25% of schools in Maryland reassessed through site visits each year by the IAC. The following schools were assessed in FY 2023:

<ul style="list-style-type: none"> • Chesapeake Bay Middle • Millersville Elementary • Tracey’s Elementary • Central Middle • Ferndale Early Education Center • Oakwood Elementary • MacArthur Middle • Meade High • Windsor Farm Elementary • Center of Applied Technology South • Bodkin Elementary • Broadneck High • Piney Orchard Elementary • Chesapeake High 	<ul style="list-style-type: none"> • Sunset Elementary • Park Elementary • Cape St. Claire Elementary • Ridgeway Elementary • Brooklyn Park Elementary • Annapolis Middle • Linthicum Elementary • Severn River Middle • Magothy River Middle • Glendale Elementary • Odenton Elementary • Severna Park Elementary • Studio 39
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Overall, the goal of the SFA is to give the State the ability to identify the school facilities in Maryland with the highest needs, and therefore be better equipped to focus its available capital dollars on those facilities.

Assessments were conducted by a team of facility assessment experts, and the baseline first year assessment generated what is called a Facility Condition Index (FCI) score for each school that reflects that facility's physical condition as quantified as the depleted percentage of the useful lifespan. A lower FCI is better. The statewide average FCI currently is 47%, which equates to having a useful lifespan that is about halfway depleted. The FCI score allows building components, building components, building systems, and entire facilities across the state to be compared apples-to-apples. AACPS' district wide FCI is 44% which is in the top 5 best district wide FCI's in the state and AACPS is ranked the highest top largest counties, see below:

Top Five State FCI Rankings by LEA		
Rank	County	Calculated FCI
1	Dorchester	0.432
2	Talbot	0.436
3	Anne Arundel	0.438
4	Somerset	0.438
5	Caroline	0.454

Top Five Largest LEA by Student Enrollment FCI Ranking		
Rank	County	Calculated FCI
1	Anne Arundel	0.438
2	Montgomery	0.463
3	Baltimore	0.466
4	Baltimore City	0.476
5	Prince George's	0.520

The State's focus of putting more capital dollars towards districts that have higher FCIs puts AACPS at a disadvantage on receiving capital dollars. Additional revenue sources and advocacy on a legislative level will be required to reward high performing LEA maintenance and capital construction programs.

IAC Maintenance Effectiveness Assessment

Annually, the IAC performs maintenance-effectiveness assessments in a sample of schools in each jurisdiction. These assessments are conducted to ascertain the level and quality of maintenance being performed in public school buildings throughout the State.

In FY 2023, the IAC school maintenance assessors conducted assessments of 14 schools in Anne Arundel County. Below is a table showing the FY 2022 [Maintenance-Effectiveness Assessment \(MEA\)](#) results for the schools assessed.

School Name	Overall Rating
Hillsmere Elementary*	73.65%- Adequate
Pasadena Elementary	74.79%- Adequate
Ferndale Early Elementary Center	75.59%- Adequate
Severna Park Middle	73.15%- Adequate
Southern High	78.53%- Adequate
Marley Middle	73.11%- Adequate
Belvedere Elementary	76.78%- Adequate
Phoenix Academy	72.68%- Adequate
Marley Elementary	75.24%- Adequate
Brooklyn Park Elementary	74.43%- Adequate
Fort Smallwood Elementary	75.46%- Adequate
Arlington Echo Education Center	77.37%- Adequate
Arundel Middle	78.90%- Adequate
Jacobsville Elementary	77.44%- Adequate
Average Overall Rating for FY23	75.51%- Adequate

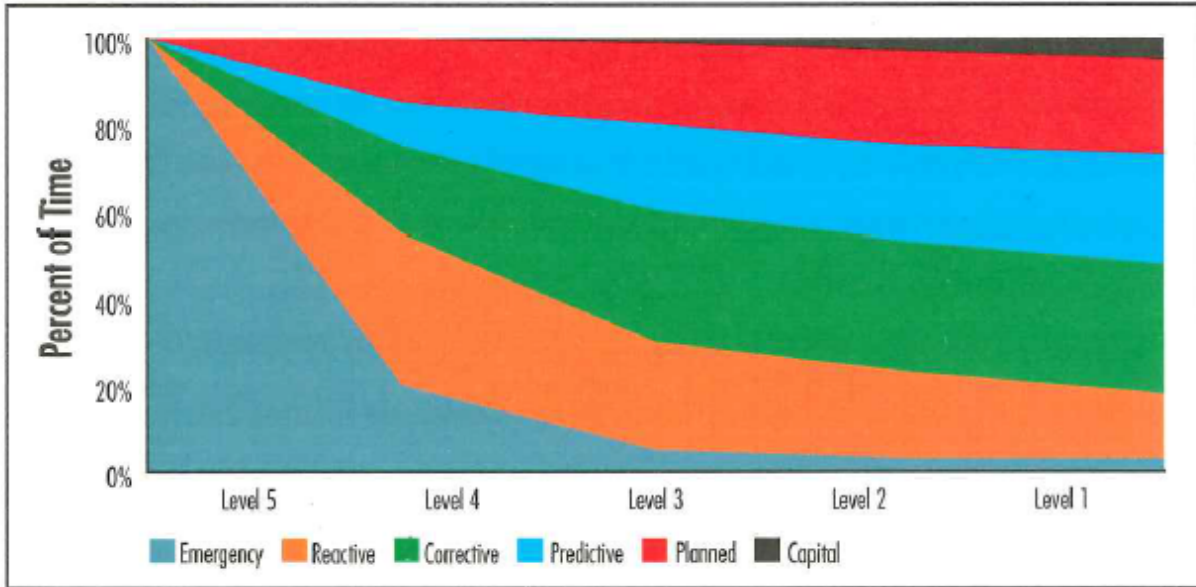
*Hillsmere Elementary was assessed prior to the opening of the replacement school in 2023.

The MEA, first implemented in FY 2021, has changed the scoring metric over the years, putting additional weight on preventive maintenance plans and the use of CMMS. The new assessment reflects a more stringent and objective approach to evaluating the effectiveness of facility maintenance. In the new MEA, an assessment score of “adequate” 70% to 79% indicates that the facility is being sufficiently maintained so that it will achieve its expected life span. AACPS’ average rating for FY 2023 is 75.51%. This equates to an overall rating of Adequate.

Facility Outcomes

“If it’s there and it isn’t working correctly, it is maintenance; if it isn’t there, it is not maintenance.”- APPA Maintenance-Operational Guidelines for Educational Facilities, Third Edition

Maintenance is a range of activities that vary from predicting to preventing failures. One way to describe the range of activities is shown in the graph below. When resources are limited (APPA Level 5), our facility professionals are limited to responding to requests and emergencies and have limited ability to plan maintenance work or to perform preventative work. At the other extreme (APPA Level 1), there are sufficient resources to do preventative maintenance and to utilize tools to predict maintenance needs, either by observation or reliability-based measures. Other discretionary maintenance activities can be performed with the overall goal of limiting unplanned failures of equipment and minimizing reactive work. Between these two extremes are varying amounts of preventive, reactive, and emergency work.



Source: APPA, *Maintenance Operational Guidelines for Educational Facilities, Third Edition*, Alexandria, Virginia, APPA, 2022.

The sustainability and effectiveness of building maintenance under APPA Service Levels 1-5 varies considerably. The graph above shows APPA service levels on the horizontal axis to demonstrate the connection between maintenance activities and how resources are likely allocated. The highest level of service, APPA Level 1, consists of funded capital renewal expenditures, a large percentage of time allocated to planned and predictive maintenance, and lower percentages of time allocated to reactive and emergency maintenance. When LEA's perform higher levels of maintenance, fewer unplanned problems occur, and more capital renewal projects can be allocated with the available funds. At the other extreme, APPA Level 5- Crisis Response, an LEA will spend most of their time reacting to emergencies.

When more planned maintenance is completed, the percentage of emergency or reactive maintenance decreases. Examples of these planned maintenance activities include replacing capital equipment at the end of its useful life in lieu of running until failure and scheduling equipment repairs during off-season times. As more resources are available, our maintenance team can assign staff to planned work.

Facility Usability

The table below indicates the number of facility-days in FY 2023 during which facilities could not support delivery of educational programs and services assigned to that facility due to maintenance and construction activities.

Event Type	ASTM Uniformat II Level 2 Group Element/Reason	Facility-days	Dates
Maintenance- Emergency			
Hilltop ES	D30 HVAC	0.5	10/17/22
Bates MS	D30 HVAC	0.5	1/2/23
Severn ES	D30 HVAC	0.5	3/20/23
Subtotal		1.5	
Construction- Major Capital			
Hillsmere ES	School Move	1	6/13/23
Quarterfield ES	School Move	1	6/13/23
Rippling Woods ES	School Move	1	6/13/23
Bates MS	School Move	1	6/13/23
Subtotal		3	

Maintenance (on an LEA-wide basis)

Preventive Maintenance Work Orders

Preventive Maintenance (PM) includes tasks that are routine, planned, scheduled, controlled programs of periodic inspection, adjustments, cleaning, lubrication, selective parts replacement of components, and minor repair, as well as performance testing and analyses intended to maximize the reliability, performance, and life cycle of building systems and equipment. PM consists of many checkpoint activities, often recommended by the manufacturer, which if disabled, may interfere with an essential installation operation, endanger life or property, or involve high cost or long lead time for replacement. The intent is to avert the incipient failures before they become actual or major failures, which would require corrective maintenance. Work order activity is shown in the summaries below.

AACPS Preventive Maintenance Work Order Summary

Item	FY 2023 Goal	FY 2023 Actual	FY 2024 Goal
Total Number of PM WOs Opened	N/A	11,575	18,500
% of PM WOs Closed Within 30 days	N/A	85%	80%
Total Number of Staff Hours Spent on PM WOs	N/A	30,615	48,900
Total Number of Contractor Hours Spent on PM WOs	N/A	Not all captured in CMMS	
Total Dollars Spent on PM Work Completed by Staff	N/A	\$1,479,000	\$2,364,000
Total Dollars Spent on PM Work Completed by Contractors	N/A	\$2,298,000	\$3,653,000
The Percentage of All Maintenance Work Hours Spent on Preventive Maintenance.	N/A	23% not all labor captured	28%

Unplanned Maintenance (Reactive, Corrective, and Emergency) WOs

Unscheduled/ unplanned maintenance includes any maintenance task that is unanticipated. Reactive, corrective, and emergency maintenance falls into this category of work.

AACPS Corrective Maintenance Work Order (WO) Summary

Item	FY 2023 Goal	FY 2023 Actual	FY 2024 Goal
Total Number of CM & RxM WOs Opened	N/A	22,130	18,500
% of CM WOs Closed Within 30 Days	N/A	90%	90%
% of CM WOs Marked as Emergency or High Priority WOs	N/A	2%	2%
Total Number of Staff Hours Spent on CM Work	N/A	103,119	86,210
Total Number of Contractor Hours Spent on CM Work	N/A	Not recorded in CMMS	
Total Dollars Spent on CM Work Completed by Staff	N/A	\$13,617,000	\$11,383,000
Total Dollars Spent on CM Work Completed by Contractors	N/A	\$772,000	\$647,500
The Mean Time to Repair the Items for Which a CM WO Was Opened	N/A	Cannot accurately assess	
% of CM WOs Entered by Central-Administrative or Non-building Level Staff	N/A	44%	50%
% of CM WOs Entered by Building-level Staff	N/A	56%	50%

The above data was taken from the Executive Summary KPIs provided in Maintenance Direct in the July 6, 2023, report as well as a search report generated of maintenance craft related work orders completed in FY 2023.

Planned vs. Unplanned Maintenance Manhours

The goal of planned maintenance is to prevent/ solve problems before they occur. The need for building systems to perform at optimal levels keeps increasing and pressure to extend the life of equipment and increase reliability is one of AACPS' highest priorities. To that end, APPA recommends examining the percentage of WO manhours spent on planned maintenance. A higher percentage is a characteristic of a higher performance service level. To achieve the target maintenance performance level, 75-100% of WO manhours should be spent on planned maintenance tasks.

Currently, the CMMS data does not adequately capture the difference between scheduled corrective maintenance and true reactive maintenance work orders. Planned and scheduled maintenance tasks do include PM work orders, which currently make up 34% of the work orders recorded. However, repair items addressed during PM tasks are coded incorrectly as

reactive maintenance. SOPs for the proper coding of data in the CMMS will be implemented so that corrective planned maintenance vs. reactive maintenance situations are properly identified and equipment related to work orders is captured. Once this new coding process is implemented, our reports should more accurately reflect the targeted goal of 75% planned maintenance activities.

Custodial

A total of 193 new custodial employees were hired in FY 2023. Of these, 172 or 89% have been trained in our custodial scope of work upon hire.

96% of custodial duties were completed adequately as assessed through annual performance ratings.

Resources and Inputs

Maintenance Organizational Chart and Position Details

The AACPS Facilities Division organizational charts are found in [Attachment 5](#) along with a list of position details for custodial and maintenance staff and Operations Area Assignments for 2023-2024 with maps showing school locations in each area.

Staffing Summary

A summary of district custodial and maintenance staffing level recommendations for FY 2023-2025 for each APPA level can be found in [Attachment 6](#), and a summary of FY 2023 and FY 2024 staffing levels are noted below. Industry Performance Standards were calculated using the following APPA Methods:

Maintenance Staff- APPA's aggregate Full Time Equivalent (FTE) Method found in APPA's Maintenance and Operational Guidelines for Educational Facilities, Third Edition (Published 2022).

One of the challenges with staffing determination for maintenance and operations is the complexity of determining staffing needs based on measurable service times for building components. While it is possible to determine staffing based on detailed information, it is not quick and requires significant detail about every component in the building. To provide a less detailed review, APPA provides an aggregate FTE Method to staffing level requirements at various service levels. The aggregate FTE Method considers the following items:

- building space and type
- physical attributes of buildings, such as age, mechanical systems, electrical components, architectural elements, and unique building features
- the district's Carnegie classification, student population, and operating schedule, etc. and

- specific maintenance performance data from present operational processes and available work management databases.

Custodial Staff- Space Summary Method found in APPA's Custodial Operational Guidelines for Educational Facilities, Fourth Edition (Published 2023).

In this method, calculations are based on the breakdown of standard spaces within a building. The room types and sizes used were developed to create a system to collect data so an engineered set of times could be calculated and then equated to a set area (square feet) and develop a base time. The different levels of cleaning, 1 to 5, highest to lowest, were created to organize general cleaning expectations for each space. AACPS modeled percentages of the different space types in our prototype designs to provide an aggregate staffing level at each of our facilities.

Included in the calculations are general expectations about cleaning organization/ staff responsibilities:

- Cleaning services are delivered five days per week when the institution is operating.
- Cleaning staff are considered available to work when they are not using benefit time such as holidays, vacation, sick days, and other paid time away from work.
- During an eight-hour day, there are seven hours (420 minutes) for productive cleaning, reduced by 30-minutes of paid break and 15 minutes each for start-up and clean-up at the end of the workday.
- Productive cleaning time is only considered; work away from cleaning duties to perform small tasks for customers (light maintenance, lunch duty, set-up for meetings, etc.) are not considered. Some allowance for "valet services" are not accounted for in the calculated staff ratios.

This method helps institutions quantify staffing using the following basis assumptions:

- If cleaning activities are performed at decreasing frequencies, the facilities will appear dirtier.
- Different types of space require different cleaning activities and different amounts of time to provide a given level of appearance.

While maintenance and operations employees are paid for an entire year, the actual time available to perform maintenance or operations work (wrench time) is less than the total paid hours. APPA assumes wrench time to 1760 manhours.

Category	Pay Category	Manhours
Paid Hours	40mhrs/ Week, 52 Weeks Per Year	2080
Benefit Time:	Vacation (2 Weeks)	<80>
	Holidays (12 Days)	<96>
	Sick Days (2 Days)	<16>
	Work Breaks (0.5mhr/Day)	<118>
Net Wrench Time		1760

A high-level review of AACPS wrench time indicates that we are below the APPA wrench time manhours. This is primarily associated with additional leave time allocated to each employee annually, as well as necessary travel time to and from our facilities.

Category	Pay Category	Low	High
		Manhours	
Paid Hours	40mhrs/ Week, 52 Weeks Per Year	2080	2080
Benefit Time:	Vacation (12 to 26 Days)	<96>	<208>
	Holidays (24 Days)	<192>	<192>
	Sick Days (13 to 15 Days)	<104>	<120>
	Work Breaks (0.5mhr/Day)	<118>	N/A
Net Wrench Time		1688	1560
Midpoint Wrench Time		1624	

When comparing AACPS midpoint wrench time to the APPA wrench time, APPA staffing recommendations at the various services levels are required to increase by 8.4%. An AACPS Wrench Factor Adjustment of 1.084 was applied to all APPA staffing level numbers.

Item	FY25 IAC Target AAPA Performance Standard Level	FY23 FTEs Budgeted	FY23 FTE's Actual (6/30/23)	FY23 Industry Standard Performance Standard Level	FY24 FTE's (Budget/ Actual)	FY24 Industry Performance Standard Level
Maintenance Staffing FTEs	APPA Level 2- Comprehensive Stewardship	174	93	* 3	93	* 3
Maintenance Load (GSF/ FTE)		96,954	152,663		157,751	
Custodial Staffing	APPA Level 2- Ordinary Tidiness	1212	579.5	* 3/4	579.5	* 3/4
Cleanable GSF/ FTE		12,807	24,500		26,243	

* Note: APPA staffing level recommendations included internal and contracted service employees. The budget FTE numbers presented in the chart only reflect internal employees.

AACPS partners with several outside firms to increase our staffing and performance metrics.

Funding, Budgets, and Spending

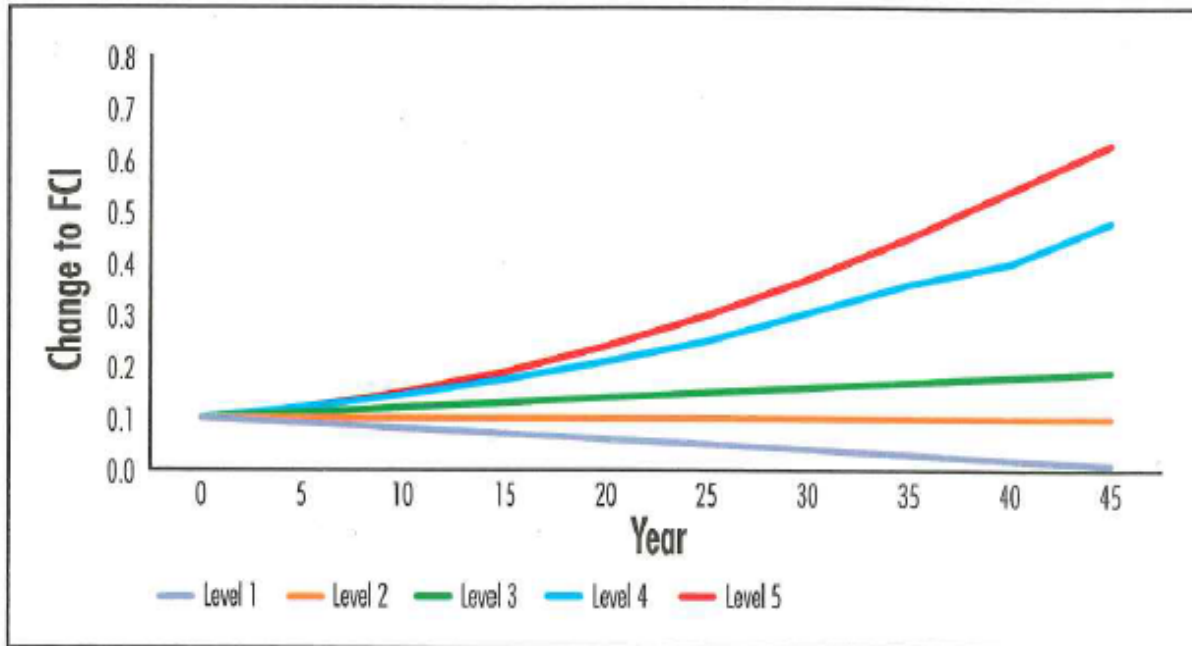
Budget Narrative

In FY 2024 AACPS has budgeted approximately \$106.6 million for facilities operations, including maintenance, energy, and utilities, and \$214.3 million for construction of new facilities and renovation of existing buildings. AACPS provides more than 14.3 million square feet of floor space, with a current replacement value of more than \$7.4 billion. The backlog of capital renewal needs over the next 10 years is estimated to cost more than \$679 million, or about 9% of the Current Replacement Value (CRV.)

To achieve APPA Level 2 service levels, it is recommended that the annual facility maintenance/ operating/ capital renewal budgets be between 3.5-4.0% of CRV. In FY 2025, the recommended funding commitment for AACPS would be between \$279 to \$319 million and would require an increase in annual funding of approximately \$21 to \$61 million above FY 2024 levels. AACPS's current facility funding level is equivalent to approximately 3.50% which equates to APPA Level 2- Comprehensive Stewardship. To maintain the same performance service level in FY 2025 it is estimated that an 8% increase in funding would be required.

Reference [Attachment 7](#) for additional information regarding individual school current replacement values, [Attachment 8](#) for average and modified age of AACPS facilities, and [Attachment 9](#) for AACPS annual facility maintenance/ operating/ capital renewal budgets.

Data collected through the CMP and capital planning processes helps determine the balance between funds required for annual maintenance and funds required for capital renewal to maintain a balance in facility conditions. The graph below shows how various funding level approaches affect facility conditions over a 10-year period using data provided from APPA's annual FPI survey.



Source: APPA, *Maintenance Operational Guidelines for Educational Facilities, Third Edition*, Alexandria, Virginia, APPA, 2022.

Maintenance Level 1 is the best maintenance service and it drives the FCI down (makes it better) over time while Level 5 is the worst maintenance service and FCI is expected to be higher (worse) over time. Operating at a Level 2 provides the greatest level of facility condition stability and allows an organization to address specific needs as they develop. The ongoing level of maintenance of a portfolio will have long-term effects on accumulated capital renewal. The long-term strategic focus of the AACPS Facilities Division will be to perform a division wide review to determine the measures required to achieve a sustainable APPA Level 2 level of maintenance.

In FY 2024, AACPS met the lower level of APPA Level 2 funding guidance, but on staffing and performance characteristics the AACPS Facilities Division is currently performing below that level. Continued funding at APPA Level 2 will be required to see a measurable difference in performance. AACPS will need to clear a backlog of capital renewal projects and put additional focus on increasing the manhours dedicated to planned maintenance.

District funding recommendations for APPA Level 2 can be found in [Attachment 10](#) and a summary of FY 2023 and FY 2024 funding levels are noted below. Industry Performance Standards for funding were calculated using APPA percentages of CRV found in APPA’s Maintenance- Operational Guidelines for Educational Facilities, Third Edition. The budget breakdown is represented by our Division/ Department organizational structure.

Spending Category	FY 2023		FY 2024	
	Budget	\$ per GSF	Budget	\$ per GSF
Capital Renewal Funds	\$102.9M	\$7.24	\$165.4M	\$11.57
Operating Funds	\$67.6M	\$4.76	\$78.4M	\$5.48
Special Funds	\$5.1M	\$0.36	\$13.7M	\$0.96
Total	\$175.6	\$12.37	\$257.5M	\$18.01
Low APPA Level 2 Target (3.5% CRV)	\$239.0M	\$16.83	\$258.0M	\$18.04
High APPA Level 2 Target (4.0% CRV)	\$273.0M	\$19.09	\$295.0M	\$20.63

Planned Actions

Changes

AACPS is working to ensure the continued effectiveness of our facilities in supporting the delivery of programs and services, to achieve the full expected lifespans of each facility and its components, and to ensure that each facility remains fiscally sustainable. To that end, AACPS recently joined APPA as an Organizational Member. APPA has helped guide K-12 education institutions in achieving quality leadership and professional management through education, research, and recognition. APPA’s community represents the broadest coalition of educational facilities professionals, ensuring a diversity of experiences and situations, and availability of best practices. We are in the process of aligning APPA operational guidelines with our standard operating procedures. Our efforts over the past fiscal year as well as our plans for improvement are reflected in this document and will refer to these standards and various other metrics.

Planned Improvements to Maintenance Structures/ Systems and Maintenance Processes

Specific near-term goals for the next three fiscal years are listed below. Each goal is aligned with an APPA performance standard.

Planning, Design, and Construction:

Strategic Capital Renewal/ Development- The near-term goals is for AACPS to update the current MGT long range plan for use in the FY 2027 CIP, validate the current deferred capital renewal needs, and standardize predictive building subsystem component life cycles. The Strategic Capital renewal/ development plan will include sustainability as a component of the priority process. Facilities that have high energy use intensities (EUI) will be weighted higher than lower energy use buildings. New construction/ renewal work will contain the majority, but not all, of LEED certification elements. (APPA Level 3)

Maintenance:

Preventive/ Predictive Maintenance

The near-term goal is to spend 50-75% of maintenance manhours on preventive and predictive maintenance. (APPA Level 3)

Safety and Compliance

AACPS will be reviewing current training and safety programs to enhance the current skills and knowledge base of employees. Specific training includes an expansion of safety, equipment, maintenance, and operational training specific to the work tasks assigned.

The near-term goal is to provide employees with a general awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. (APPA Level 3)

Service Efficiency

The near-term goal is to respond to calls in a timely manner and close out 75% of our work orders within 30 working days.

Facility Maintenance, Operating, and Capital Renewal Budget as % of CRV

Elementary and Secondary School Emergency Relief (ESSER) III funding will expire by October 2024 and will need to be budgeted for in FY 2025. This money includes preventive maintenance, contracted services, and additional capital renewal money for HVAC projects. In addition, interior and exterior paint projects, which have historically been funded through 4th quarter funds, will be added as a budget item.

The near-term goal is to maintain APPA Level 2 levels in maintenance, operating, and capital renewal funding.

LEA Average of Facility Condition Index (FCI)

The near-term goal is to establish building component life cycles and update system/ component installation dates through the long-range plan and confirm current predictive model FCI numbers for each building within the system. The Deferred Maintenance published in this CMP indicates an LEA average FCI of approximately 0.07. (APPA Level 2)

Custodial:

Staffing Analysis

At the start of FY 2023, AACPS had over 90 vacant custodial positions. Using more streamlined and aggressive recruitment AACPS has been able to reduce the vacancy position number to approximately 40. AACPS will continue these recruitment efforts over the next three

fiscal years with a target of zero vacancies. In addition, AACPS will be reviewing current staffing levels to those recommended by APPA to achieve the desired performance level.

The near-term goal is to reduce the district average cleanable square footage per custodian from 28,000 GSF to 22,000 GSF. (APPA level 3)

Review of Equipment and Supplies

In FY 2023, AACPS started a review of custodial equipment and supplies to examine its inventory and condition. This effort has resulted in the deployment of industry-leading supplies and equipment. New equipment being introduced to schools includes [Brain Corp](#) robotic cleaning equipment and [Kaivac](#) machines.

The near-term goal is to introduce robotic cleaning equipment in buildings that have multiple single floor plates of 30,000 GSF or more and introduce [Kaivac](#) machines in all buildings.

Performance Standards and Cleaning Frequency

AACPS will be reviewing the current cleaning standards and frequencies to better align with APPA performance standards.

The near-term goal is to align our performance and cleaning standards to APPA Level 3.

Safety and Compliance

AACPS will be reviewing current training and safety programs to enhance the current skills and knowledge base of employees. Specific training includes an expansion of safety, equipment, maintenance, and operational training specific to work tasks assigned.

The near-term goal is for employees to have a general awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. (APPA Level 3)

Cleaning Validation

AACPS will expand the use of digital cleaning inspection applications. This will allow for enhanced work control and documentation. In addition, AACPS will align the cleaning inspections with APPA service levels.

The near-term goal is to have cleaning operations validated through routine scheduled inspections and ongoing shift supervision follow-up. Reporting will be completed through a mobile application. (APPA Level 3)

Project Cleaning

The near-term goal is to have project cleaning tasks prioritized and scheduled throughout the school year. (APPA Level 3)

Cleaning Space Inventory

The near-term goal is to have gross square foot inventories and room finish types cataloged in a digital library for use in determining maintenance and cleaning needs. (APPA Level 2)

Grounds:

Stormwater Management Ponds

Over the past 15 years, any new construction that occurred required AACPS to meet the requirements established by Maryland's Stormwater Management Act of 2007. The FY 2024 budget includes additional contracted service money to maintain stormwater management ponds on a more routine basis.

The near-term goal is to maintain stormwater management ponds at moderate level maintenance. (APPA Level 3)

Hard Surface Pavement and Parking Lots

AACPS will work to inventory the age of existing pavement.

The near-term goal is to maintain surfaces at moderate level maintenance. (APPA Level 3)

Turf Care

By FY 2025 all high schools will have two artificial turf fields. These fields dramatically decrease maintenance and operating costs but increase capital renewal costs. Depending on the frequency of use these surfaces require replacement every 10-12 years. Each surface costs approximately \$800,000 to replace. This equates to an annual cost of approximately \$1.7M to \$2.5M.

The near-term goal is to maintain campus greens at moderate level maintenance and high school athletic fields at a 2.5 level of maintenance. (APPA Level 2.5/3)

Planned Capital Renewal Projects

A summary and a list of planned capital renewal projects by facility for the next five years is provided in [Attachment 11](#).

Professional Development (PD)

One of the key strategies in addressing our need to draw and retain qualified trades people is to focus on enrichment for our current employees. With over 80% of our maintenance staff having served at least 20 years, there is a great need for extra effort in recruitment as well as training of new employees in the next few years. In the past year, we have created a

committee dedicated to providing opportunities for our employees to foster growth. Classes in interview skills and resume writing have been provided, along with an opportunity to practice those skills in “mock” interviews. In the Fall of 2023, training in basic computer skills such as Microsoft Word, Outlook and Excel will be provided. These classes are in addition to training already provided in our CMMS software. For the future, additional trade specific growth opportunities will be included for new employees in need of specialized certifications and in cases where new technologies create the need for training in systems such as lighting and fire alarms.

Professional development for our Operations staff consists of hands-on, as well as virtual training in HVAC, Plumbing, Preventive Maintenance, Electrical, and Environmental Health and Safety. During this training, the employee is involved with developing the training as well as participating interactively with instructors and peers. This training takes place in a classroom setting and is augmented by one-on-one training as needed with our maintenance mechanics. A library of video recordings has been created and is available for the employees’ reference as well. This training reinforces the individual training that a new leader receives from an Operations Engineer. Upon completion of the Professional Development course, the employee is encouraged to implement this training immediately at their work location as well as share the information with their school-based team. Validation of data and inspection training will be given to maintenance managers as we prepare for our tri-annual in-house evaluation of our facilities in FY 2024. APPA training for maintenance managers will be an integral part of the coming year as well. A listing of FY 2024 Professional Development Plans is included in [Attachment 12](#).

Obstacles and Missing Resources

Ongoing operations and maintenance challenges are impacting the expected longevity of our building portfolio. These include:

- Funding falling below target levels for operations, maintenance, and capital renewal programs.
- Inability to hire/ recruit/ maintain qualified personnel.
- Additional code-related site requirements for grounds care which will require increased funding.
- The end of ESSER funding in FY 2024 and Build to Learn (BTL) funding by FY 2025.
- Supply chain issues continue to affect our ability to service our building equipment and systems effectively and efficiently.

This report estimates the deferred capital renewal backlog for the next 10 years at \$679,540,000. Continuing to fund our facilities at the current level will increase the Facility Condition Index for the district and increase the costs of maintaining an aging facility portfolio. AACPS will continue to make budget requests to maintain the long-term funding goal of 3.5 to

4.0% CRV. (APPA Level 2)

Hiring and maintaining qualified maintenance and operations staff has been an issue for over a decade. This is particularly true with our more technical trades. In FY 2023, the maintenance department lost 7,328 maintenance manhours due to employee turnover. This is the equivalent of 4.5 full-time positions. Over half of these were in key trades in our Mechanical Systems Office. To capture qualified candidates, we have been advertising open positions in trade journals, with ASBO, on the internet, at job fairs, with local establishments, etc. Despite these efforts, we continually have extended postings for HVAC mechanics, electricians, plumbers, and custodial staff. And when we do make an employment offer, our pay scale is not competitive with the prevailing wage and candidates do not always accept the job offers made. As a result, we have been contracting qualified labor to supplement our forces. Key challenges in the coming year will be to balance PM and corrective maintenance work performed with the proper combination of contracted services and in-house staff. This will both maximize our available resources and help with recruitment/ retention of staff.

Current ESSER funding designated for HVAC contractual PM and capital renewal projects is expected to run out in the fall of 2024. To sustain the PM services needed on an annual basis, an ongoing program enhancement of approximately \$1.5M will be requested in the FY 2025 budget and additional capital funding will be requested in FY 2025 to address capital renewal needs. The ESSER funding cliff is coupled with the ending of BTL funding in FY 2025. Starting in FY 2022, AACPS was allocated an additional \$212.5M for school construction projects. Over that period, \$165.7M of that money has been allocated to the construction and replacement of several facilities. AACPS anticipates being allocated the remaining BTL funds over the next two fiscal years. With state and federal programs for school construction/ maintenance ending and no clear replacement financing source being established, locating funds to supplant those lost will become an increasing concern.

A high level of maintenance is required for our athletic fields. The use of contracted services for our grass cutting, bio-retention features, and courtyards has allowed us to maintain the grounds of our facilities at the most basic level. Newly constructed schools have added environmental site requirements which will become an ever-increasing maintenance demand. Gardens, courtyards, and specialty outside areas are also an increasing maintenance burden as they become utilized as instructional spaces and their use is woven into parts of the curriculum under the Blueprint for Maryland's Future Plan.

Since 2020, supply chains disruptions have been identified in almost every industry. In the world of facilities operations and maintenance, this problem materializes when a critical building component/ system breaks down and the unique spare part required to repair the unit is unavailable or requires an extensive lead time to manufacture/ deliver. Although some of the supply chain issues have dissipated over the last 12 months, we continue to experience disruptions in the supply of HVAC and electrical components. As a result, we continue to monitor the availability of parts and our local warehouse inventory to maintain sufficient supplies.

Attachment 1

APPA Facility Characteristics for Evaluating and Describing Levels of Maintenance Service

APPA Facility Characteristics for Evaluating and Describing Levels of Custodial Service

APPA Facility Characteristics for Evaluating and Describing Levels of Grounds Service

APPA Facility Characteristics for Evaluating and Describing Levels of Maintenance Service

Source: APPA-Maintenance Operational Guidelines for Educational Facilities- Third Edition (published 2022)

Service Item/ Category	Target				
	Level 1- Comprehensive Stewardship	Level 2- Comprehensive Stewardship	Level 3- Managed Care	Level 4- Reactive Management	Level 5- Crisis Response
Customer Service and Response Time	Able to respond to virtually any type of service, immediate response.	Response to most service needs, including limited nonmaintenance activities, is typically in a week or less.	Services available only by reducing maintenance, with response times of one month or less.	Services available only by reducing maintenance, with response times of one year or less.	Inoperable windows, leaky windows, unpainted, cracked panes, significant air and water penetration, poor appearance overall.
Customer Satisfaction	Proud of facilities, have a high level of trust for the facilities organization.	Satisfied with facilities-related services, usually complimentary of facilities staff.	Accustomed to basic level of facilities care. Generally able to perform mission duties. Lack of pride in physical environment.	Generally critical of cost, responsiveness, and quality of facilities services.	Dark, lots of shadows, lamps and diffusers missing, cave-like, damaged, hardware missing.
Preventative/ Predictive Maintenance	100%	75-100%	50-75%	25-50%	25-50%
Maintenance Mix	All recommended preventative maintenance (PM) is scheduled and performed on time. Reactive maintenance (e.g. spot relamping and adjusting door closers) is minimized to the unavoidable or economical. Emergencies (e.g., power outages) are infrequent and handled efficiently.	A well-developed PM program. PM is done at frequency slightly less than defined schedule. Much reactive maintenance required from premature failures, high number of lamps burned out. Occasional emergencies caused by pump failures.	Reactive maintenance predominates from systems failure, especially during harsh seasonal peaks. PM effort made based on available time and labor. The high number of emergencies (e.g. pump failures, heating and cooling system failures) causes reports to upper administration.	Labor is used to react to systems that are performing poorly or not at all. Significant time spent procuring parts and services due to high number of emergencies. PM work consists of simple tasks and is done inconsistently (e.g. Filter changing, greasing, and fan belt replacement).	Labor is used to react to systems that are performing poorly or not at all. Significant time spent procuring parts and services due to high number of emergencies. PM work consists of simple tasks and is done inconsistently (e.g. Filter changing, greasing, and fan belt replacement).
Regulatory Compliance	Highly trained staff or contracted services provide for full compliance for required and recommended OSHA, EPA, and life safety requirements at the best business practices level. Independent department/ group with funding to support and develop campus programs with authority to make and implement changes. All required and recommended OSHA, EPA, and life safety programs training in place. Records are well organized and more than adequate to satisfactorily meet regularly scheduled third-party audits. Overarching management system in place or under development, tracking goals and achievements, including campus communication.	Full awareness of OSHA, EPA, and life safety requirements, including outreach to campus at large. Trained staff or contracted services provide for full compliance for required and recommended OSHA, EPA, and life safety requirements. Independent funding specifically provided to support and develop campus OSHA, EPA, and life safety programs. All required and recommended OSHA, EPA, and life safety programs training in place. Records are well organized and more than adequate to satisfactorily meet regularly scheduled third-party audits.	General awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. Adequate staff time or contracted services provide compliance of routine OSHA, EPA, and life safety requirements.	Some awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. Part-time staff or contracted services used to address OSHA, EPA, and life safety issues as they arise. Funding not specifically identified but assumed to be part of responsible department's budget. Partial OSHA, EPA, and life safety programs developed with minimal training.	Some awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. Part-time staff or contracted services used to address OSHA, EPA, and life safety issues as they arise. Funding not specifically identified but assumed to be part of responsible department's budget. Partial OSHA, EPA, and life safety programs developed with minimal training.
Aesthetics, Interior	Like-new finishes	Clean/ Crisp finishes	Average finishes	Dingy finishes.	Dingy finishes.
Aesthetics, Exterior	Windows, doors, trim, exterior walls are like new.	Watertight, good appearance of exterior surfaces.	Minor leaks and blemishes, average exterior appearance.	Somewhat drafty and leaky, rough-looking exterior, extra painting necessary.	Inoperable windows, leaky windows, unpainted, cracked panes, significant air and water penetration, poor appearance overall.
Aesthetics, Lighting	Bright and clean, attractive lighting. All fixtures operational.	Bright and clean, attractive lighting. Limited operational problems.	Small percentage of lights out, generally well-lit and clean.	Numerous lights out, some missing diffusers, secondary areas dark.	Dark, lots of shadows, lamps and diffusers missing, cave-like, damaged, hardware missing.
Service Efficiency	Maintenance work is highly organized and focused. Calls are responded to immediately. Buildings and equipment are routinely and regularly upgraded, keeping them current with modern standards and usage.	Maintenance work is organized with direction. Calls are responded to in a timely manner. Buildings and equipment are regularly upgraded, keeping them current with modern standards and usage.	Maintenance work is somewhat organized but remains people dependent. Call response is variable and sporadic, without apparent cause. Buildings and equipment are periodically upgraded to current standards and use, but not enough to control the effects of normal usage deterioration.	Maintenance work is somewhat chaotic and is people dependent. Calls are typically not responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present use needs.	Maintenance work is chaotic and without direction. Calls are never responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present use needs.
Building System Reliability	Breakdown maintenance is rare and limited to vandalism and abuse reports.	Breakdown maintenance is limited to system components short of mean time between failures.	Building and systems components periodically or often fail.	Many systems unreliable. Constant need for repair. Backlog of repair needs exceeds resources.	Many systems nonfunctional. Repair instituted only for life safety issues.
Sustainability	Established staff with funding specifically provided to support, develop, and document campus sustainability programs with authority to make changes and implement recommendations. Program focuses on academic and administrative operations identifying alternate "sustainable" products or methods, and continued recycling of common materials such as paper, cardboard, plastics, metals, and purchasing of "green" and renewable products/ materials. Multiple existing buildings certified to be operating at LEED operations and maintenance (O&M) level. New construction/ renewal work meets one of the four LEED certification levels. Greenhouse gas inventory aggressively managed with annual CO2 reduction goals routinely met. Energy conservation/ reduction provided through routine use of buildings heating/ cooling systems' controls, and planned projects replacing inefficient equipment or installing renewable energy.	Sustainability programs with responsibility assigned to a specific department and staff with additional funding for program development, implementation, and initial campus outreach. Program focuses on larger institutionally controlled operations identifying alternate "sustainable" products and continued recycling of common materials such as paper, cardboard, plastics, and metals and purchasing "green" and renewable products/ materials. Some existing buildings operating at LEED O&M level. New construction/ renewal work contains majority, but not all, of LEED certification elements. Greenhouse gas inventory data collected and reviewed to project likely next year start and identify projects planned to continue reduction results. Energy conservation/ reduction provided through routine use of building heating/ cooling systems' controls, curtailing programs during low use, and planned projects replacing inefficient equipment.	General awareness of sustainability programs with responsibility assigned to specific department for funding, development, and implementation. Program focuses on larger department-controlled operations for recycling of common materials such as paper, cardboard, plastics, metals, and purchasing of "green" and renewable products/ materials. No existing buildings operating at LEED O&M level. New construction/ renewal work contains some, but not all, of LEED certification elements. Greenhouse gas inventory data collected and reviewed with general reduction goal but without specific CO2 targets. Energy Conservation/ reduction provided through routine use of building/ heating/ cooling systems' controls, and periodic projects replacing inefficient equipment.	Some awareness of sustainability programs with responsibility assigned to a specific department, without any expectations other than responding to issues that may develop. Program focuses on larger department-controlled operations for recycling of common materials such as paper, cardboard, plastics, metals, and purchasing of "green" and renewable products/ materials. No existing buildings operating at LEED O&M level. No requirement for LEED certification elements to be considered for new construction/ renewal work. Greenhouse gas inventory data collected with general reduction as a goal but without specific targets. Energy conservation/ reduction provided through sporadic use of building heating/ cooling systems' controls and occasional projects replacing inefficient equipment. Renewable energy systems not considered or in place.	Vague awareness of sustainability programs. Campus sustainability effort reflected through the use of "green" products. No existing buildings operating at LEED O&M level. No requirement for LEED certification elements to be considered for new construction/ renewal work. No greenhouse gas inventory data collected. Energy conservation/ reduction program consists of sporadic projects installing replacement, higher efficiency equipment. Renewable energy systems not considered or in place. Solid-waste reduction provided through recycling of easily captured items such as paper and cardboard.
Facility Maintenance Operating Budget as % of CRV	>4.0	3.5-4.0	3.0-3.5	2.5-3.0	<2.5
Campus Average FCI	<0.05	0.05-0.15	0.15-0.29	0.30-0.49	>0.50

APPA Facility Characteristics for Evaluating and Describing Levels of Custodial Service

Source: APPA's Maintenance Operational Guidelines for Educational Facilities- fourth Edition (published 2023)

Service Item/ Category	Target		Actual		Level 5- Unkempt Neglect Crisis
	Level 1- Orderly Spotlessness Showpiece Facility	Level 2- Ordinary Tidiness Comprehensive Care	Level 3- Casual Inattention Managed Care	Level 4- Moderate Dinginess Reactive	
Additional Description					
Floors	Floors and base moldings shine and/ or are bright and clean; colors are fresh. No dirt buildup in corners or along walls.	Floors and base moldings shine and/ or are bright and clean. There is no buildup in the corners along walls, but there can be up to two days' worth of dust, dirt, stains or streaks.	Floors are swept or vacuumed clean, but upon close observation there can be stains. A buildup of dirt and/or floor finish in corners and along walls can be seen. There are dull spots and/or matted carpet in walking lanes. Base molding is dull and dingy with streaks or splashes.	Floors are swept or vacuumed clean, but are dull, dingy, and stained. There is an obvious buildup of dirt and/ or floor finish in corners along walls. There is a dull path and/ or obvious matted carpet in the walking lanes. Base molding is dull and dingy with streaks or splashes.	Floors and carpet are dull, dirty, dingy, scuffed, and/ or matted. There is a conspicuous buildup of old dirt and/ or floor finish in corners and along walls. Base molding is dirty stained, and streaked. Gum, stains, dirt, dust balls, and trash are broadcast.
Vertical and Horizontal Surfaces	All vertical and horizontal surfaces have freshly cleaned or polished appearance and have no accumulation of dust, dirt, marks, streaks, smudges, or fingerprints.	All vertical and horizontal surfaces are clean, but marks, dust, smudges, and fingerprints are noticeable upon close observation.	All vertical and horizontal surfaces have obvious dust, dirt, smudges, and fingerprints.	All vertical and horizontal surfaces have conspicuous dust, dirt, smudges, fingerprints, and marks.	All vertical and horizontal surfaces have major accumulations of dust, smudges, and fingerprints, all of which will be difficult to remove. Lack of attention is obvious.
Ceiling and Lighting	Bright and clean, attractive lighting. No missing tiles. No deficiencies.	Bright and clean, attractive lighting. No missing tiles.	Small percentage of lights are out, generally well lit and clean. No missing tiles.	Numerous lights out, some missing diffusers, secondary areas dark, bugs in lenses, some tiles stained.	Dark, lots of shadows, bulbs and diffusers missing, cave-like, damaged, bugs in lenses. Missing and damaged tiles.
Restrooms	Restrooms are electronically monitored for use and are well stocked, well lit, in repair, spotless, and verified for cleanliness.	Restrooms are monitored by weekly inspections and are normally stocked, well lit, in repair, and verified for cleanliness.	Restrooms are monitored by monthly inspections and are normally stocked, lighting is sufficient, and appearance is relatively clean.	Restrooms are monitored by inspections from time to time. Supplies run out from time to time. Some complaints about cleanliness that are addressed within a day.	Restroom conditions appear dirty. Supplies are uncertain, wear and tear is obvious. Lighting insufficient. Complaints are routine.
Overall Room Appearance and Sets	Room sets are always completed in advance of events or scheduled use and are verified by custodial leads or supervisors. Schedules are electronic and coordinated with the registrar or applicable department. There is room set mapping available for the custodian. Department is lauded for their attentiveness.	Room sets are normally completed in advance of events or scheduled use, but mishaps happen from time to time. Department is generally appreciated. Improvements are planned.	Room sets are mostly completed in advance of events or scheduled use, but mishaps happen from time to time. Scheduling software is not in use. Department is sometimes criticized.	Room sets do not happen in advance of events or scheduled use on a routine basis. There is little communication/ coordination between departments or users. Scheduling software is not in use. Department is frequently criticized.	Custodians are responsible for room sets, but there is little to no coordination.
Customer Request and Response Times	Able to respond to virtually any type of service, immediate response.	Response to most service needs, including limited noncustodial services, usually complimentary of custodial staff.	Services available only by reducing service in other areas, with response times more than a day.	Services available only by reducing service in other areas with response times a week or more.	Services not available unless directed from top administration, none provided except emergencies.
Customer Satisfaction and Coordination	Proud of facilities, have a high level of trust for the custodial organization.	Satisfied with custodial-related services, usually complimentary of custodial staff.	Accustomed to basic level of custodial care. Generally able to perform mission duties. Lack of pride in physical environment.	Generally critical of cost, responsiveness, and quality of custodial services.	Consistent customer ridicule, mistrust of custodial services.
Sustainability and Trash	Sustainability is comprehensive from products to methodology. Cradle-to-grave philosophy in place. Statistics are tracked and have ongoing goals. Custodians are trained and believe in the mission. Trash containers hold only daily waste and are clean and odor-free.	Recycling in place. Some green cleaning in place. Sustainability effectiveness is cyclical. Trash containers hold only daily waste and are clean and odor-free.	Basic recycling is normal and maintained. Some sustainability initiatives in place. Trash containers hold only daily waste and are clean and odor-free.	Custodial service programs related to sustainability waiver in effectiveness depending upon campus pressures. Trash containers smell, are stained and are frequently at capacity with old trash.	Sustainability is not part of the culture. Trash containers smell, are stained, and are overflowing with old trash.
Cleaning Validation	Cleaning validation is verified by routinely scheduled walk-throughs and inspections as well as ongoing shift supervision or lead-person follow-up. Reporting is digital to allow timely correction. This is accompanied by technology verification such as blacklight inspection for cleaning activity validation as well as TPS for sanitation verification.	Cleaning validation is verified by routinely scheduled walk-throughs and inspections as well as ongoing shift supervision or lead-person follow-up. This is accompanied by technology verification such as blacklight inspection for cleaning activity validation. Reporting could be digital or scribed, but includes inspection checklists.	Cleaning validation is verified by routinely scheduled walk-throughs and inspections as well as ongoing shift supervision or lead-person follow-up. Reporting could be digital or scribed, but includes inspection checklists.	Cleaning validation is limited to occasional walk-throughs and inspections.	There is no cleaning validation in place.
Cleaning Space Inventory Program Utilization	GSF is inventoried and finish types are recognized. Space is tabulated by cleanable square feet and cleaning task repetition.	GSF is inventoried and finish types are recognized.	GSF is verified and floorplates exist.	Basic GSF by building is estimated	Space is not verified.
Work Control	There is a documented schedule that is coordinated with the department's CMMS system and aligned with APPA service levels. Staff tablets that allow for real-time updates and instruction including completion status and staff location. Dispatch happens daily near arrival time and staff can be reached remotely during the shift.	There is a documented schedule that is coordinated with the departments CMMS system, and aligned with APPA service levels. Dispatch happens daily near arrival time and staff can be reached remotely during the shift.	There is a documented schedule. Dispatch happens daily near arrival time and staff can be reached remotely during the shift.	There is not a documented schedule. Dispatch happens daily near arrival time.	There is no documented schedule or dispatch system in place.
Project Cleaning	Project cleaning is budgeted, including window cleaning.	Project cleaning is budgeted, including window cleaning, and takes place at least annually in areas as determined by the facilities department.	Project cleaning is prioritized and scheduled as can be afforded in the operating budget.	Project cleaning takes place based on request or complaint feedback	There are insufficient funds and staffing for project cleaning.
Activity Support	Activity support happens, and is planned along with the weekly routine. Staffing and costs are accounted for. There are predetermined setups for all areas and the user can select those options through the synchronized scheduling software. Custom setups can be accommodated 1:1. Most comments are complimentary.	Activity support happens, and is planned along with the weekly routine. Staffing and costs are accounted for. There are predetermined setups for most rooms and areas and the user can select those options through the work order system. Activity scheduling however is not synchronized through all electronic software. Most comments are complimentary.	Activity support happens, and is planned along the weekly routine. Setups are not standard and at times do not meet customer expectations. Comments are generally complimentary.	Activity support happens, but staffing is not allocated. Support is done by redirecting staff away from normal custodial duties on a routine basis. At times setups are later than requested and are not as requested by user.	Activity support happens ad hoc and often is not completed.
Safety and Compliance	Highly trained staff or contracted services provide for full compliance for required and recommended OSHA, EPA, and life safety requirements at the best business practice level. Independent department/ group with funding to support and develop campus programs with authority to make and implement changes. All required and recommended OSHA, EPA, and life safety program trainings are in place. Records are well organized and more than adequate to satisfactorily meet regularly scheduled third-party audits. Overarching management system in place or under development, tracking goals, and achievements, including campus communication.	Full awareness of OSHA, EPA, and life safety requirements, including outreach to campus at large. Trained staff or contracted services provide for full compliance for required and recommended OSHA, EPA, and life safety requirements. Independent funding specifically provided to support and develop campus OSHA, EPA, and life safety programs. All required and recommended OSHA, EPA, and life safety programs training in place. Records are well organized and more than adequate to satisfactorily meet regularly scheduled third-party audits.	General awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. Adequate staff time or contracted services provide compliance for routine OSHA, EPA, and life safety requirements. Funding specifically identified as a portion of the responsible department's budget. OSHA, EPA, and life safety programs, training, and records adequate to pass audit/ inspection action.	Some awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. Part-time staff or contracted services used to address OSHA, EPA, and life safety issues as they arise. Funding not specifically identified but assumed to be part of responsible department's budget. Partial OSHA, EPA, and life safety programs developed with minimal training.	Little to no awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. OSHA, EPA, and life safety programs management is unassigned or assigned as a collateral duty without pertinent training. Funding provided only to avoid potential fines for non-compliance.
Training and Employee Turnover	Turnover is aligned with normal K-12 statistics. There is a comprehensive onboarding and training program in place that reflects the service level expected of the department, and develops the staff for additional responsibility and succession.	Turnover is aligned with normal K-12 statistics. There is a comprehensive onboarding and training program in place that reflects the service level expected of the department.	Turnover is aligned with normal K-12 statistics. There is a basic onboarding and training program.	Turnover as a position ration is 50% annually and training happens ad hoc.	Turnover as position ration is over 100% annually and training happens ad hoc.
Capital Investment in Equipment and Technology	There is sufficient equipment, located within reasonable proximity to the responsible area. Equipment is kept in good repair and is replaced as needed. Equipment is evaluated and optimized for the tasks at hand. An annual budget is established. In addition, facilities finishes are optimized for cleanability and are refreshed timely.	There is sufficient equipment, located within reasonable proximity to the responsible areas. Equipment is kept in good repair and is replaced as needed. Equipment is evaluated and optimized for the tasks at hand. An annual budget is established.	There is sufficient equipment, located within reasonable proximity to the responsible areas. Equipment is replaced as needed, but may not be the optimal equipment for the tasks at hand.	Equipment is frequently shared and transported and occasionally in disrepair, but there is a basic inventory of equipment on hand.	There is no or minimal capital investment for custodial operations. Equipment is limited and in disrepair.

APPA Facility Characteristics for Evaluating and Describing Levels of Custodial Service

Source: APPA's Maintenance Operational Guidelines for Educational Facilities- fourth Edition (published 2023)

Service Item/ Category	Target		Actual		Level 5- Unkempt Neglect Crisis
	Level 1- Orderly Spotlessness Showpiece Facility	Level 2- Ordinary Tidiness Comprehensive Care	Level 3- Casual Inattention Managed Care	Level 4- Moderate Dinginess Reactive	
Additional Description					
Cost Performance	Budgets are established and monitored and are sufficient to deliver the agreed upon service level. Overruns are infrequent and the variances are predictable and explainable. Cost performance is benchmarked with peers, and cost performance improvement opportunities are pursued.	Budgets are established and monitored and are sufficient to deliver the agreed upon service level. Occasional overruns happen but the variances are explainable.	Budgets are established and are monitored and are met most of the time. Budget variances are explainable.	Budgets are established and monitored but are overrun. Reasoning could be insufficient allocation or department inefficiency.	Costs are tracked and annual budgets if established are overrun.
Performance Efficiency	There is a system in place that monitors performance and cleanliness on a more frequent basis, some in real-time (tablet check-off), aligned with APPA appearance levels, with feedback provided by the user departments.	There is a system in place that monitors performance and cleanliness on a monthly basis, aligned with APPA appearance levels, with feedback provided by the user departments.	There is a system in place that monitors performance and cleanliness on a monthly basis, generally aligned with APPA appearance levels.	There is a basic system of performance monitoring, generally done sometime annually.	There is not a system for completion tracking or KPI statistics.

APPA Facility Characteristics for Evaluating and Describing Levels of Grounds Service

Source: APPA- Grounds Operational Guidelines for Educational Facilities- Third Edition (published 2020)

Service Item/ Category	Target		Actual		Level 4- Moderately Low-Level Maintenance	Level 5- Minimum-Level Maintenance
	Level 1- State-of-the-Art Maintenance	Level 2- High Level of Maintenance	Level 3- Moderate-Level Maintenance	Level 4- Moderately Low-Level Maintenance		
Description and Application	Applied at a high-quality diverse landscape. Associated with high-traffic urban areas, such as public squares, government grounds, or college, university, or school campuses.	Associated with well-developed public areas, malls, government grounds, or college, university, or school campuses. Recommended level for most organizations.	Associated with locations that have moderate to low levels of development or visitation, or with operations that (because of budget restrictions) cannot afford a high level of maintenance.	Associated with locations affected by budget restrictions, and thereby cannot afford a high level of maintenance.	Associated with locations suffering from severe budget restrictions.	
Turf Care	Grass height maintained according to the species and variety of grass. Mowed at least once every five working days but may be as often as once every three working days. Aeration as required but not less than four times per year. Reseeding or sodding as needed. Weed control to be practiced so that no more than 1 percent of the surface has weeds present.	Grass should be cut once every five working days. Aeration is carried out as required but not less than two times per year. Reseeding or sodding must be done when bare spots are present. Weed control is practiced when weeds present a visible problem or when weeds represent 5 percent of the surface. Some pre-emergent herbicide products may be used at this level.	Grass cut once every ten working days. Normally not aerated unless turf quality indicates a need or in anticipation of application of fertilizer. Reseeding or sodding only when major bare spots appear. Weed control measure normally applied when 50 percent of small areas - or 15 percent of the general turf - is infested with weeds.	Low-frequency mowing scheduled based on species. Low-growing grass may not be mowed. High grasses may receive periodic mowing. Weed control limited to legal requirements for noxious weeds.	Low-frequency mowing scheduled based on species. Low-growing grasses may not be mowed; high grasses may receive periodic mowing. Weed control limited to legal requirements for noxious weeds.	
Fertilizer	Adequate fertilization applied to plant species according to their optimum requirements. Application rates and times should ensure an even supply of nutrients for the entire year. Nitrogen, phosphorus, and potassium percentages should follow location recommendations. Trees, shrubs, and flowers should be fertilized according to their individual requirements for optimum growth. Unusually long or short growing seasons may modify the chart slightly.	Adequate fertilizer level to ensure that all plant materials are healthy and growing vigorously. Amounts depend on species, length of growing season, soils, and rainfall. Rate should correspond to at least the lowest recommended rate. Distribution should ensure an even supply of nutrients for the entire year. Nitrogen, phosphorus, and potassium percentage should follow local recommendations. Trees, shrubs, and flowers should receive fertilizer level to ensure optimum growth.	Applied only when turf vigor seems to be low. Low-level application once per year. Suggested application rate is one-half the level recommended.	Not fertilized.	Not fertilized.	
Irrigation	Sprinkler irrigated-electronic automatic commonly used. Some manual systems could be considered adequate under plentiful rainfall circumstances and with adequate staffing. Frequency of use follows rainfall, temperature, season length, and demand of plant material.	Sprinkler irrigated- electric automatic commonly used. Some manual systems could be considered adequate under plentiful rainfall circumstances and with adequate staffing. Frequent use follows rainfall, temperature, season length, and demand of plant material.	Dependent on climate. Locations that receive more than 25 inches of rainfall a year usually rely on natural rainfall with the possible addition of portable irrigation during periods of drought. Dry climates that receive less than 25 inches of rainfall usually have some form of supplemental irrigation. When irrigation is automatic, a demand schedule is programmed. When manual servicing is required, the normal schedule would be two to three times per week.	No irrigation.	No irrigation.	
Litter Control	Minimum of once per day, seven days per week. Extremely high visitation may increase frequency. Receptacles should be plentiful enough to hold all trash usually generated between servicing without overflowing.	Minimum of once per day, five days per week. Offsite movement of trash depends on size of containers and use by the public. High use may dictate more frequent cleaning.	Minimum service of two to three times per week. High use may dictate higher levels during the warm season.	Once per week or less.	On demand or complaint basis.	
Pruning	Frequency dictated primarily by species and variety of trees and shrubs. Length of growing season and design concept also a controlling factor, i.e., clipped vs. natural-style hedges. Timing scheduled to coincide with low demand periods or to take advantage of special growing characteristics	Usually done at least once per season unless species planted dictate more frequent attention. Sculpted hedges or high growth species may dictate a more frequent requirement than most trees and shrubs in natural-growth plantings.	When required for health or reasonable appearance. With most tree and shrub species, pruning would be performed once every two to three years.	No regular trimming. Safety or damage from weather may dictate actual work schedule.	No pruning unless safety is involved.	
Disease and Insect Control	At this maintenance level, the controlling object is to avoid public awareness of any problems. It is anticipated at Level 1 that problems with either be prevented or observed at an early state and corrected immediately.	Usually carried out when disease or insects are inflicting noticeable damage, reducing vigor of plant material, or whenever the situation could be considered a bother to the public. Some preventative measures may be used, such as systemic chemical treatments. Cultural prevention of disease problems can reduce time spent in this category. Some problems may be tolerated at this level.	Done to address epidemics or serious complaints. Control measures may be put into effect when the health or survival of the plant material is threatened or when public comfort is an issue.	None except when the problem is epidemic and the conditions threaten resources or the public.	No control except in epidemic or safety situations.	
Snow Removal	Snow removal starts the same day that accumulations reach 0.5 inches. At no time will snow be permitted to cover transportation or parking surfaces longer than noon of the day after the snow stops. Application of snow melting compound and/or gravel is appropriate to reduce the danger of injury due to falls.	Snow removed by noon of the day after the snowfall. Gravel or snowmelt may be used to reduce ice accumulation.	Snow removal is generally based on local law requirements and is usually accomplished by the day following snowfall. Some crosswalks or surfaces may not be cleared at all.	Snow removal based on local law requirements and generally accomplished by the day following snowfall. Some crosswalks or surfaces may not be cleared at all.	Snow removal done based on local law requirements, but generally accomplished by the day following snowfall. Some crosswalks or surfaces may not be cleared.	
Surfaces	Sweeping, cleaning, and washing of surfaces should be done so that at no time does an acculation of sand, dirt, or leaves distract the looks or safety of the area.	Should be cleaned, repaired, repainted, or replaced when their appearances have noticeably deteriorated.	Cleaned on a complaint basis. Repaired or replaced as budget allows.	Replaced or repaired when safety is a concern and when budget is available.	Serviced only when safety is a consideration.	
Repairs	All repairs to all elements of the design should be done immediately when problems are discovered, providing that replacement parts and technicians are available to accomplish the job. When disruption of the public might be major or the repair is not critical, repairs may be postponed to a time period that is least disruptive.	Should be done whenever safety, function, or appearance is in question.	Should be done whenever safety, function, or appearance is in question.	Should be done whenever safety, function, or appearance is in question.	Should be done whenever safety or function is in question.	
Inspections	A staff member should conduct inspection daily.	Inspections should be conducted by a staff member at least once a day whenever regular staff is scheduled.	Inspections are conducted once per week.	Inspections are conducted once a month.	Inspections are conducted once a month.	
Floral Plantings & Mulch Applications	Normally, extensive or unusual floral plantings are part of the design. These may include ground-level beds, planters, or hanging baskets. Often, multiple plantings are scheduled, usually for at least two blooming cycles per year. Some designs may call for a more frequent rotation of bloom. Maximum care, including watering, fertilizing, disease control, disbudding, and weeding, is necessary. Weeding flowers and shrubs is done on a minimum of once per week. The desired standard is essentially weed free.	Normally no more complex than two rotations of blooming plants per year. Care cycle is a minimum of once per week but watering may be more frequent. Health and vigor dictate cycle of fertilization and disease control. Beds are essentially kept free of weeds.	Only perennials or flowering trees or shrubs.	None. May have wildflowers, perennials, flowering trees, or shrubs in places.	None. May have wildflowers, perennials, flowering trees, or shrubs in place.	

Attachment 2

Preventive Maintenance Activities Entered into CMMS Manually vs. Automatically

Preventive Maintenance Activities

Department	PM work	Frequency	Automatically Generated or Manually Entered in CMMS
HVAC	HVAC Rooftop Units	Annual	Manual entry
HVAC	HVAC – Package Units	Triennial	Manual entry
HVAC	HVAC – Exhaust Fans	Annual	Manual entry
Plumbing	Chillers – Contracted	Annual	Manual entry
Electric	Fire System Testing	Annual	Manual entry
Grounds	Crack Sealing (specific lots)	Triennial	Manual entry
Plumbing	Boilers – Inspect and Test Fire	Annual	Automatic
Plumbing	Boilers – Contracted Cleaning	Annual	Automatic
Plumbing	Water Heaters	Annual	Automatic
Plumbing	Building Flushing	Annual	Automatic
Plumbing	Hydrant Flushing	Annual	Automatic
Plumbing	Winterize/DeWinterize Chillers	Annual	Automatic
Plumbing	Winterize/DeWinterize Irrigation	Annual	Automatic
Plumbing	Winterize/DeWinterize Stadiums	Annual	Automatic
Plumbing	Backflow Prevention	Annual	Automatic
Garage	Generator PM	Annual	Automatic
General Maintenance	Building Seal	Triennial	Automatic
General Maintenance	Exterior Windows	Annual	Automatic
General Maintenance	Exterior Doors	Annual	Automatic
General Maintenance	Roofing Inspections	Annual	Automatic
General Maintenance	Bleachers Indoors and Outdoors	Annual	Automatic
General Maintenance	Gym Equipment and Dividing Curtains	Annual	Automatic
General Maintenance	Fire Extinguisher Servicing - Contracted	Annual	Automatic
Environmental	Kitchen IPM Inspections	Monthly	Automatic
Environmental	Health and Safety Inspections	Annual	Automatic
Operations	Winterize/DeWinterize Cooling Towers	Annual	Automatic
Operations	Mechanical Inspections	Annual	Automatic
Operations	Portable Inspections	Annual	Automatic
Work Management	Elevator Heat and Smoke Test	Annual	Automatic
Work Management	Elevator Inspections	Annual	Automatic
Grounds	Grounds Site Cleanup	Annual	Automatic
Grounds	Parking Lots and Drives	Annual	Automatic
Grounds	Athletic Field IPMs	Monthly for 9 Months	Automatic
Grounds	Turf Field Inspections	Monthly for 9 Months	Automatic

Attachment 3

Percentage of Building Systems and Components Which Are Tagged and Entered Into CMMS

Equipment in CMMS

Equipment/Building and Grounds Systems	Uniformat II Classification	% of Buildings with Equipment in CMMS as of June 30, 2023
Boilers	D3020 Heat Generating Systems	100%
Chillers	D3030 Cooling Generating Systems	100%
HVAC–Rooftop Units	D3040 Distribution Systems	100%
HVAC– Interior Units	D3050 Terminal and Package Units	32%
HVAC–Exhaust Fans	D3090 Other HVAC Systems and Equipment	67%
Roofing Systems	B Shell/B30 Roofing	100%
Water Heaters	D2020 Domestic Water Distribution	100%
Generators	E5090 Other Electrical Systems	100%
Playgrounds	G2040 Site Development	100%
Elevators and Lifts	D10 Conveying/D1010 Elevators and Lifts	100%
Fire Alarm Systems	D5030 Communication and Security	100%
Building Exteriors		100%
Exterior Windows	B20 Exterior Enclosure/B2020 Windows	100%
Exterior Doors	B20 Exterior Enclosure/B2030 Exterior Doors	100%
Bleachers	E2010 Fixed Furnishings	100%
Parking Lots/Walks	G2020 Parking Lots	100%
Gym Dividing Curtains	E2010 Fixed Furnishings	100%
ASTs	D2090 Other Plumbing Systems	100%
Sprinkler Systems	D40 Fire Protection/D4010 Sprinklers	100%

Attachment 4

2021 AACPS Building Conditions Survey

2021 AACPS Building Conditions Survey

ELEMENTARY SCHOOL	2015 Building	2018 Building	2021 Building	2015 Grounds	2018 Grounds	2021 Grounds
Annapolis ES	93.69	90.00%	88.43%	100.00	90.00%	90.00%
Arnold ES	100.00	100.00%	98.66%	100.00	100.00%	99.78%
Belle Grove ES	93.20	90.00%	90.00%	91.48	90.00%	89.35%
Belvedere ES	81.69	87.74%	87.68%	90.00	90.00%	89.35%
Benfield ES	99.58	100.00%	92.30%	100.00	90.00%	90.00%
Bodkin ES	84.17	76.42%	87.45%	86.02	76.63%	76.63%
Broadneck ES	82.55	82.97%	82.42%	86.97	85.46%	84.15%
Brock Bridge ES	76.26	67.30%	67.00%	#N/A	89.35%	88.04%
Brooklyn Park ES	79.62	78.56%	77.98%	88.69	89.35%	88.69%
Cape St Claire ES	90.31	86.65%	86.65%	85.27	85.27%	77.69%
Carrie Weedon EEC	63.95		82.45%	63.91	93.86%	88.28%
Central ES	78.32	78.13%	79.50%	92.48	88.28%	82.89%
Crofton ES	100.00	90.48%	89.07%	100.00	90.00%	90.00%
Crofton Meadows ES	84.61	82.76%	83.10%	92.14	90.00%	89.35%
Crofton Woods ES	74.36	70.94%	66.66%	#N/A	82.58%	86.69%
Davidsonville ES	85.85	80.03%	78.57%	89.53	88.28%	87.62%
Deale ES	88.08	85.46%	84.93%	90.00	90.00%	90.60%
Eastport ES	84.54	87.08%	87.40%	90.00	90.00%	90.71%
Edgewater ES	58.97	54.44%	89.04%	#N/A	77.97%	92.95%
Ferndale EEC	87.82	87.41%	88.65%	90.00	86.24%	86.24%
Folger McKinsey ES	99.77	90.00%	90.00%	99.51	90.00%	90.00%
Fort Smallwood ES	79.15	78.73%	78.19%	83.61	83.61%	84.45%
Four Seasons ES	83.52	83.22%	83.76%	80.49	78.35%	78.35%
Hebron Harman ES	88.15	89.48%	89.74%	90.00	90.00%	89.35%
Freetown ES	88.15	90.00%	90.00%	90.00	90.00%	89.35%
George Cromwell ES	100.00	53.00%	97.90%	#N/A	94.91%	100.00%
Georgetown East ES	83.88	83.40%	85.39%	79.88	74.27%	88.69%
Germantown ES	97.94	90.00%	90.00%	98.31	90.00%	90.00%
Glen Burnie Park ES	85.80	77.10%	79.43%	90.00	90.00%	90.60%
Glendale ES	85.18	81.79%	83.02%	90.00	90.00%	89.35%
High Point ES	100.00	97.52%	96.18%	99.16	100.00%	100.00%
Hillsmere ES	66.20	65.36%	51.87%	#N/A	74.05%	62.52%
Hilltop ES	78.37	75.95%	73.10%	89.34	89.35%	88.69%
Jacobsville ES	88.24	85.46%	83.01%	90.00	86.24%	86.53%
Jessup ES	99.64	79.77%	98.72%	#N/A	100.00%	100.00%
Jones ES	85.06	85.46%	84.53%	90.00	79.66%	79.00%
Lake Shore ES	90.00	90.00%	90.00%	90.00	90.00%	89.35%
Linthicum ES	83.88	81.57%	84.94%	89.92	90.60%	88.69%
Lothian ES	100.00	90.00%	90.00%	100.00	90.00%	90.57%
Manor View ES	100.00	95.63%	91.67%	100.00	90.00%	96.17%

2021 AACPS Building Conditions Survey

ELEMENTARY SCHOOL	2015 Building	2018 Building	2021 Building	2015 Grounds	2018 Grounds	2021 Grounds
Marley ES	86.30	86.04%	86.04%	90.00	90.00%	89.35%
Maryland City ES	69.05	85.32%	84.74%	90.00	90.00%	90.60%
Mayo ES	87.57	87.31%	87.31%	90.00	87.18%	86.53%
Meade Heights ES	84.76	85.72%	85.72%	84.39	79.66%	78.35%
Millersville ES	75.41	89.64%	88.90%	90.00	79.66%	90.60%
Mills-Parole ES	99.82	90.00%	90.00%	100.00	90.00%	90.00%
Nantucket ES	88.21	90.31%	90.31%	90.00	90.00%	89.35%
North Glen ES	85.57	87.95%	87.95%	69.31	69.32%	68.66%
Oak Hill ES	82.98	82.15%	80.51%	88.69	90.00%	88.69%
Oakwood ES	84.19	79.58%	81.44%	90.00	90.00%	89.35%
Odenton ES	87.05	86.94%	84.63%	71.16	79.66%	88.69%
Overlook ES	91.45	90.00%	90.00%	90.00	90.00%	89.35%
Park ES	84.32	79.07%	81.21%	86.24	85.27%	89.35%
Pasadena ES	89.08	88.82%	90.05%	90.00	90.00%	89.35%
Pershing Hill ES	91.23	90.00%	90.00%	90.00	90.00%	88.40%
Piney Orchard ES	88.36	84.19%	83.60%	84.39	84.39%	83.74%
Point Pleasant ES	97.51	88.61%	88.61%	98.31	90.00%	90.00%
Quarterfield ES	64.37	65.63%	61.31%	#N/A	79.66%	78.35%
Richard Henry Lee ES	67.16	69.48%	100.44%	#N/A	99.16%	100.00%
Ridgeway ES	83.41	84.16%	79.20%	90.00	90.00%	89.35%
Rippling Woods ES	68.34	78.57%	68.59%	83.95	83.96%	74.59%
Riviera Beach ES	82.15	76.10%	74.71%	88.69	78.35%	88.69%
Rolling Knolls ES	100.00	87.35%	90.00%	100.00	90.00%	90.00%
Seven Oaks ES	88.15	89.74%	89.74%	90.00	90.00%	89.35%
Severn ES	80.26	74.04%	69.88%	90.00	90.00%	89.35%
Severna Park ES	77.91	83.26%	82.09%	90.78	88.69%	88.69%
Shady Side ES	75.84	76.29%	79.29%	63.04	63.04%	83.73%
Shipley's Choice ES	83.68	86.13%	84.73%	79.66	75.89%	94.05%
Solley ES	84.52	83.22%	81.36%	92.14	90.00%	87.97%
South Shore ES	84.59	83.29%	81.34%	89.10	88.53%	87.87%
Southgate ES	90.00	90.00%	90.00%	90.00	90.00%	89.35%
Sunset ES	80.74	79.18%	77.95%	84.93	88.69%	76.09%
Tracey's ES	88.91	88.14%	90.31%	90.00	90.00%	90.00%
Tyler Heights ES	66.77	60.65%	100.00%	#N/A	74.92%	100.00%
Van Bokkelen ES	82.20	80.08%	76.81%	88.69	88.69%	88.69%
Waugh Chapel ES	86.56	84.08%	82.23%	88.69	88.69%	88.04%
West Annapolis ES	100.00	90.00%	90.00%	100.00	87.24%	88.92%
West Meade EEC	67.89	90.95%	89.51%	88.28	83.54%	77.28%
Windsor Farm ES	86.17	83.51%	83.51%	88.28	88.28%	87.62%
Woodside ES	70.91	79.50%	83.35%	90.00	90.00%	89.35%

2021 AACPS Building Conditions Survey

MIDDLE SCHOOLS	2015 Building	2018 Building	2021 Building	2015 Grounds	2018 Grounds	2021 Grounds
Annapolis MS	70.66	70.69%	86.44%	89.14	89.18%	86.11%
Arundel MS	83.87	85.62%	84.58%	67.18	61.14%	92.24%
Bates MS	68.18	69.46%	70.50%	75.09	68.13%	74.53%
Brooklyn Park MS	84.80	81.62%	79.77%	90.00	87.02%	86.00%
Central MS	79.52	80.12%	77.72%	88.16	80.93%	66.96%
Chesapeake Bay MS	79.24	73.66%	81.40%	71.43	78.65%	87.19%
Corkran MS	80.90	79.51%	77.66%	88.98	88.98%	86.93%
Crofton MS	81.36	82.08%	78.55%	87.19	87.19%	87.19%
George Fox MS – Now Northeast MS	83.44	84.89%	81.98%	62.81	62.95%	68.38%
Lindale MS	78.76	74.72%	80.01%	87.25	88.31%	88.31%
MacArthur MS	87.90	89.66%	89.11%	92.70	87.95%	86.93%
Magothy River MS	78.48	79.82%	79.82%	88.98	90.00%	88.98%
Marley MS	88.06	90.31%	90.31%	90.00	90.00%	88.98%
Meade MS	84.77	80.63%	78.12%	76.03	75.55%	67.78%
Old Mill MS North	64.02	68.52%	65.66%	75.01	75.00%	73.98%
Old Mill MS South	64.02	67.87%	65.70%	61.03	61.03%	60.01%
Severn River MS	80.84	82.76%	82.76%	88.98	86.82%	88.98%
Severna Park MS	96.58	89.08%	87.23%	90.34	90.00%	90.00%
Southern MS	84.20	82.26%	81.13%	69.89	68.97%	70.33%

HIGH SCHOOL	2015 Building	2018 Building	2021 Building	2015 Grounds	2018 Grounds	2021 Grounds
Annapolis HS	86.03	86.77%	86.90%	69.23	77.01%	69.40%
Arundel HS	84.34	78.32%	82.20%	77.27	68.99%	72.69%
Broadneck HS	85.28	83.58%	83.58%	69.96	79.19%	63.07%
Chesapeake HS	83.62	83.30%	83.44%	89.19	82.92%	71.72%
Glen Burnie HS	77.69	73.38%	73.38%	72.45	60.13%	69.64%
Meade HS - in design approval	#N/A	83.54%	80.13%	#N/A	67.62%	48.50%
North County HS	83.45	81.44%	87.60%	89.55	87.00%	71.10%
Northeast HS	92.95	90.00%	88.61%	100.00	88.32%	71.30%
Old Mill HS	60.07	68.08%	66.80%	74.13	62.40%	56.44%
Severna Park HS	100.00	90.00%	90.00%	100.00	100.00%	73.21%
South River HS	76.18	79.03%	78.50%	89.48	87.22%	55.30%
Southern HS	79.45	78.76%	78.03%	89.40	83.13%	71.64%

2021 AACPS Building Conditions Survey

OTHER EDUCATIONAL BUILDINGS	2015 Building	2018 Building	2021 Building	2015 Grounds	2018 Grounds	2021 Grounds
CAT-North	83.71	82.43%	81.50%	89.58	82.72%	67.86%
CAT-South	82.99	82.70%	81.90%	89.58	82.72%	82.72%
Phoenix Academy	92.52	90.00%	89.07%	99.67	90.00%	90.00%
Ruth Parker Eason	84.42	83.24%	79.09%	89.39	86.85%	84.94%
Central Special	78.87	80.77%	80.01%	84.07	84.61%	83.14%
J Albert Adams Academy	73.75	79.70%	82.85%	65.44	69.01%	69.01%
Marley Glen SP	80.47	84.21%	86.02%	52.77	88.63%	88.63%
Arlington Echo	85.34			86.27	41.41%	46.95%
Studio 39	75.38			80.39		

Attachment 5

The AACPS Facility Division Organizational Charts

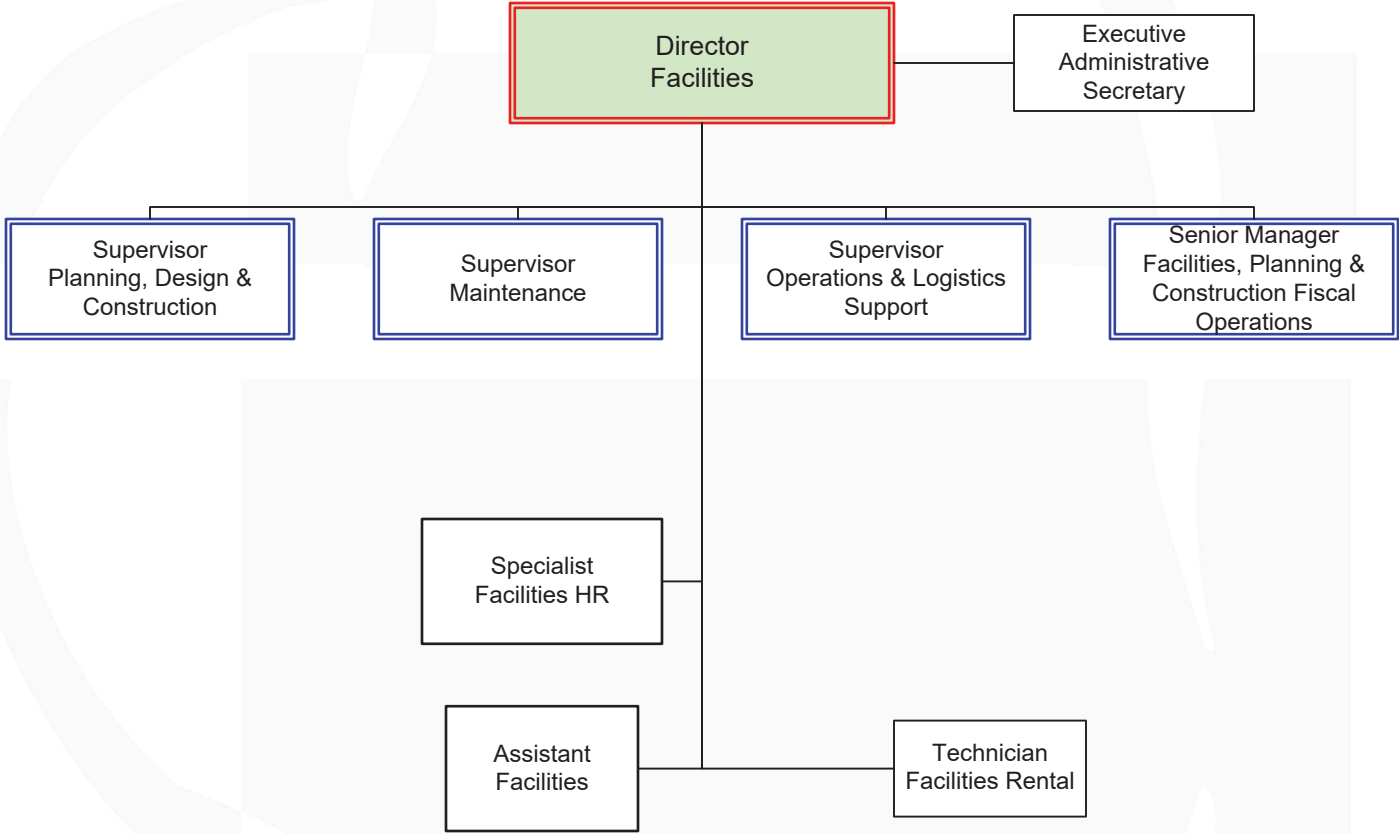
FY 23 AACPS Maintenance Position Summary

FY 23 AACPS Custodial Position Summary

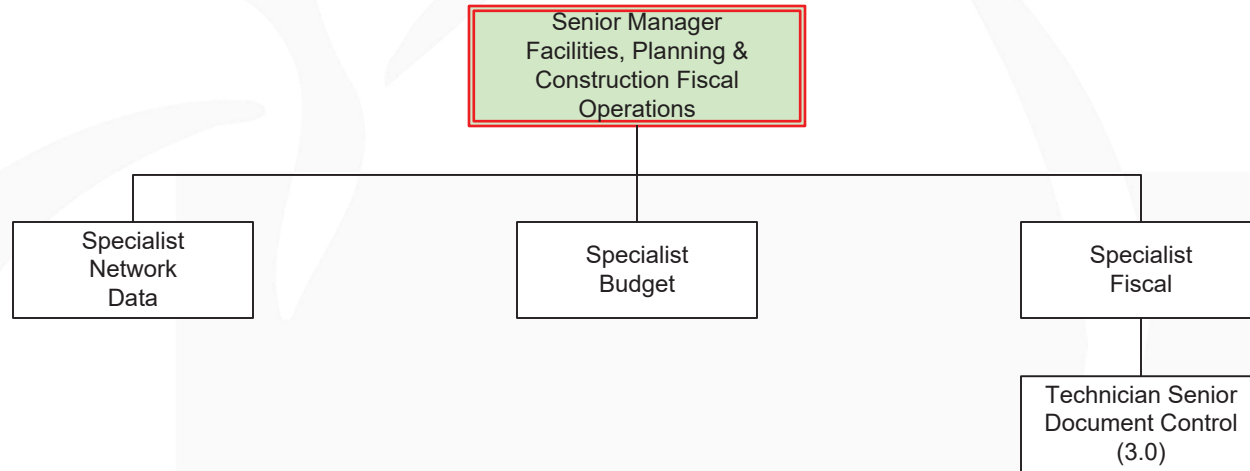
Operations Area Assignments 2023-2024

Anne Arundel County Public Schools

Facilities

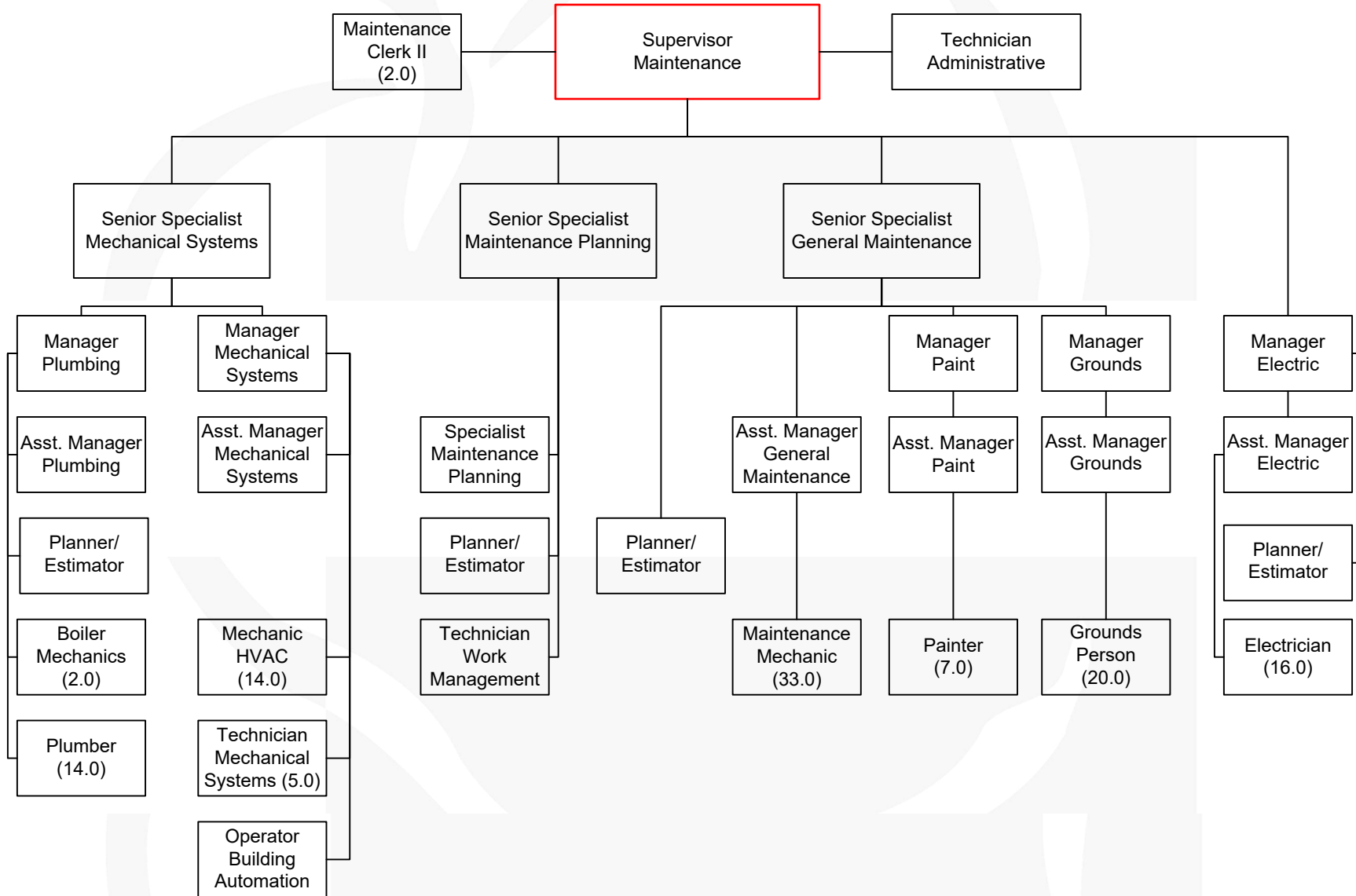


Facilities, Planning & Construction Fiscal Operations



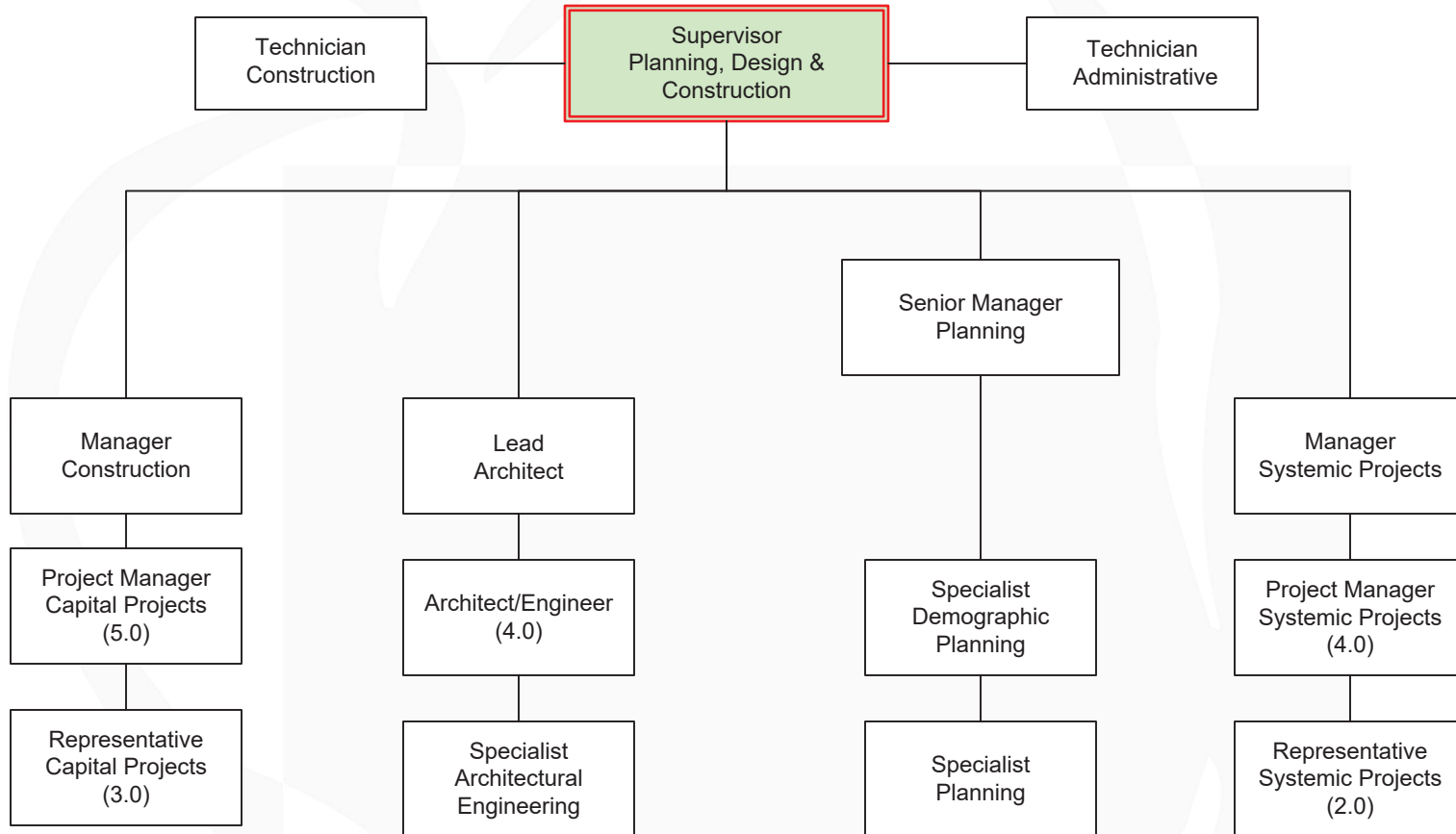
Anne Arundel County Public Schools

Maintenance



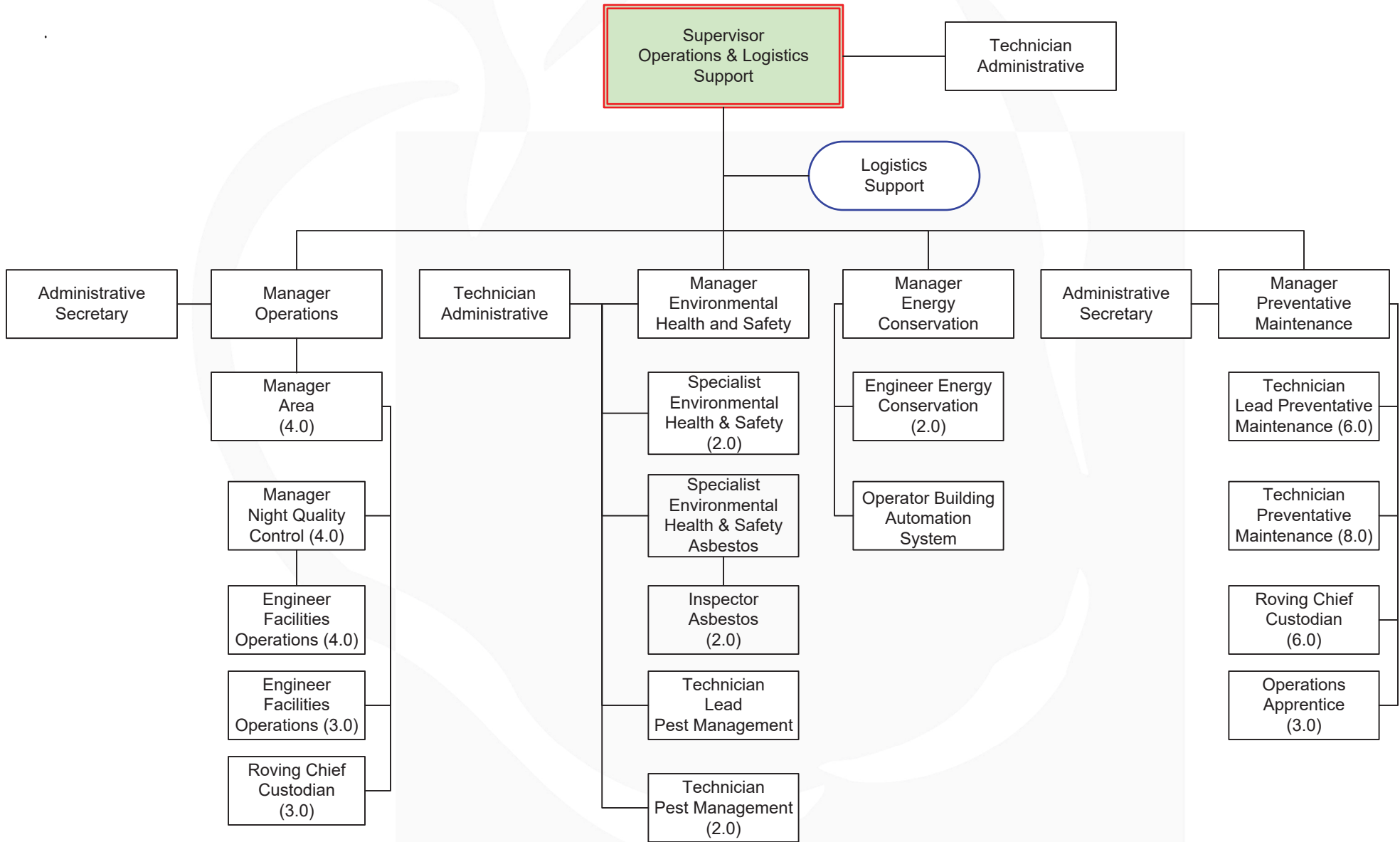
Anne Arundel County Public Schools

Planning, Design & Construction



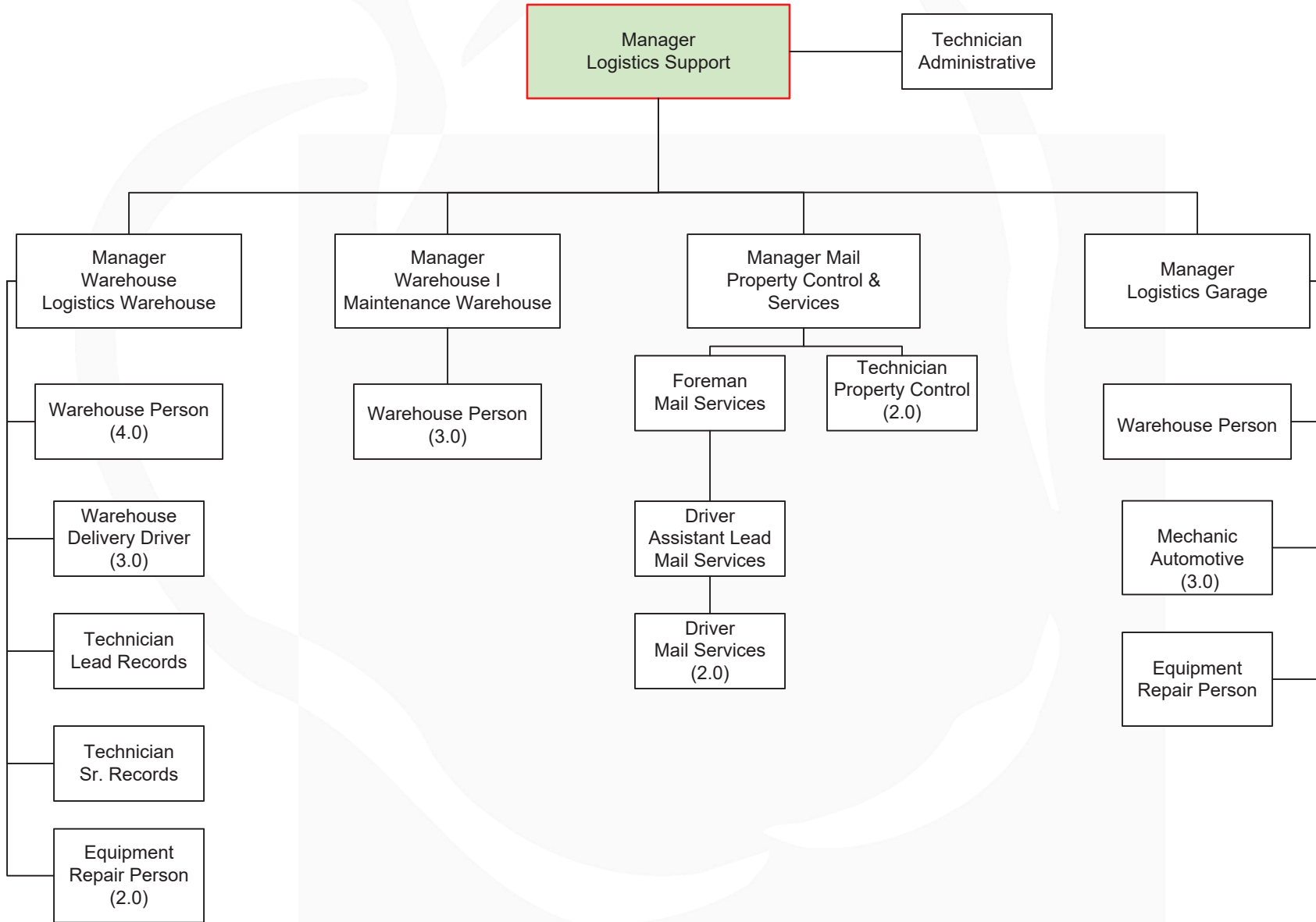
Anne Arundel County Public Schools

Operations & Logistics



Anne Arundel County Public Schools

Logistics Support



FY23 AACPS Maintenance Position Summary

Position and Type	Job Summary	Authorized FTE	Filled	Vacant	% Filled
Supervisor: Maintenance	Directs the planning, development, implementation, administration, and evaluation of the school system's Maintenance of Plant programs. Performs those duties which are necessary to maintain the grounds, buildings, and equipment at their original condition of completeness and efficiency. This involves the management of general maintenance; electrical; general grounds; athletic grounds; paint; asbestos; plumbing; heating, ventilation and air conditioning; work management; job scheduling; engineer plans and services; and direction of contracted services.	1	1	0.0	100%
Specialist Senior: Maintenance Planning	Develops and manages project controls system database for tracking of all State and Local regulatory agencies requirements for maintenance of plant and requisite maintenance related information to be reported to the State of Maryland. Manages the daily operations of the Work Management office including but not limited to coordinating with State agencies to schedule inspections, tracking warranty items resulting from Capital improvements, monitoring service contracts, handling elevator repairs, coordinating third party projects and preparing documentation related to the Comprehensive Maintenance Plan. This position is considered essential personnel.	1	1	0.0	100%
Specialist Senior: Mechanical Systems	Manages the mechanical systems requirements for school facilities by supervising Heating, Ventilation, and Air-Conditioning (HVAC), Automatic Temperature Controls (ATC), and plumbing department mechanics in the effective servicing, adjustment, replacement, repair and maintenance of (HVAC) equipment, components, (ATC) systems, plumbing systems, and related parts. Visits schools frequently to assess projects in various stages of completion. Supervises the scheduling of in-house mechanics. Visits schools to assess existing conditions related to overall mechanical systems. Prioritizes deferred maintenance projects and provides costing information required for the annual preparation of the Comprehensive Maintenance Plan. This position is considered essential personnel for emergency situations, including inclement weather conditions.	1	1	0.0	100%
Specialist Senior: General Maintenance	Manages the general maintenance requirements for school facilities, supervises general maintenance, grounds, asbestos, and paint mechanics. Performs school site visits frequently to assess projects in various stages of completion and assesses existing conditions at schools as they relate to overall general maintenance. Prioritizes projects, and provides costing information required for the annual preparation of the Comprehensive Maintenance Plan. Some assignments may involve exposure to disagreeable elements or injury hazards.	1	1	0.0	100%
Manager: Mechanical Systems	Serves as Manager of Mechanical Systems in supervising the Heating, Ventilating, Air Conditioning, Refrigeration (HVAC) and Automatic Temperature Controls (ATC) systems maintenance and care of school facilities. Work involves responsibility for directing either a major ATC and/or HVAC project in the field or aiding the Senior Specialist of Mechanical Systems in the overall direction of the Mechanical Systems maintenance program. Nature of work requires frequent visits to schools to inspect completed work/or projects. Some assignments may involve exposure to disagreeable elements or injury hazards. This position is considered essential personnel which requires the employee to report to work on days designated as code red or code blue.	1	1	0.0	100%
Specialist: Maintenance Planning	Develops and manages project controls system database for tracking of all State and Local regulatory agencies requirements for maintenance of plant and requisite maintenance related information to be reported to the State of Maryland. Assists Senior Specialist in managing the daily operations of the Work Management office including but not limited to coordinating with State agencies to schedule inspections, tracking warranty items resulting from Capital improvements, monitoring service contracts, handling elevator repairs, coordinating third party projects and preparing documentation related to the Comprehensive Maintenance Plan. This position is considered essential personnel.	1	1	0.0	100%
Manager Assistant: Mechanical Systems	Assists in managing the repair and maintenance of the Heating, Ventilating, Air Conditioning, Refrigeration (HVAC) and Automatic Temperature Controls (ATC) systems throughout all school facilities. Responsible for directing either a major HVAC or ATC project in the field or aiding the manager in the overall direction of the Mechanical Systems Department. Nature of work requires frequent visits to schools to inspect completed work/or projects. This position is considered essential personnel for emergency situations, including inclement weather conditions.	1	1	0.0	100%
Program Manager Assistant: Paint	Supervises the work of painters for the effective completion of in-house and contracted interior and exterior painting projects; develops plans and specifications for contracts; inspects and approves on-going projects at various stages of completion. May involve occasional exposure to disagreeable elements and to minor accidents and injury hazards; performs related duties as required.	1	1	0.0	100%
Program Manager Assistant: Electrical	Serves as an assistant to the Electrical Program Manager in supervising the electrical maintenance work and care of school facilities. Work involves responsibility for either directing a major electrical maintenance project in the field or aiding the electrical Program Manager in the overall direction of the electrical maintenance program. Some assignments involve exposure to disagreeable elements and injury hazards.	1	1	0.0	100%

FY23 AACPS Maintenance Position Summary

Position and Type	Job Summary	Authorized FTE	Filled	Vacant	% Filled
Program Manager Assistant: General Maintenance	Assists the General Maintenance Senior Specialist in performing supervisory and administrative work to maintain school buildings district-wide ensuring necessary projects are completed in an efficient, safe, and timely manner. Responsible for operational success by assisting in defining strategy and direction for department in accordance with Maintenance and AACPS policies and procedures. Visits schools frequently to inspect projects at various stages of completion.	1	1	0.0	100%
Program Manager: Plumbing	Supervises the work of plumbers, mechanics, trainees and helpers in the installation, maintenance and repair of plumbing and heating systems, visits schools frequently to diagnose major plumbing problems and to inspect existing projects in various stages of completion; may involve exposure to disagreeable elements and injury hazards; performs related duties as required.	1	1	0.0	100%
Program Manager: Paint	Supervises the work of painters for the effective completion of in-house and contracted interior and exterior painting projects; develops plans and specifications for contracts; inspects and approves on-going projects at various stages of completion. May involve occasional exposure to disagreeable elements and to minor accidents and injury hazards; performs related duties as required.	1	1	0.0	100%
Program Manager: Electrical	Supervises the work of electricians, trainees and helpers in the installation, maintenance and repair of electrical equipment and systems. Assigns, prioritizes, and manages the workload of in-house mechanics. Visits schools frequently to diagnose major electrical problems and to inspect existing projects in various stages of completion. Daily activities may involve exposure to disagreeable elements and injury hazards.	1	1	0.0	100%
Technician: Work Management	Performs a variety of highly specialized business management and advanced technical tasks related to the efficient operations of the Work Management Office. Work involves the daily management of the Facilities Management System (FMS) and information required for a variety of state and local regulatory agencies. Trains new school staff on the use of FMS and Facilities staff on FMS applications and reporting functions. Provides technical support to professionals within the Facilities Division and school-based staff and troubleshoots internal issues to maximize the full potential of the FMS. Prioritizes and manages the work flow including identifying priorities in the Work Management Office. Assists in drafting the Comprehensive Maintenance Plan (CMP) utilizing FMS.	1	1	0.0	100%
Technician: Administrative	Performs responsible and complex secretarial duties for the Supervisor and coordinates the administrative support functions for the entire Division and professional staff. Answers and screens telephone calls, greets visitors, sorts mail, prepares correspondence, and keeps the Supervisor's calendar. Maintains accurate subject-matter files, confidential records, lists, etc. Undertakes follow-up actions needed to complete work assignments. Ensures that the payroll is submitted on time and that all personnel actions are processed according to procedure. Prepares and reviews all correspondence coming in and going out from the division and retrieves information using standard software packages. As a lead worker, this position may assign, distribute and coordinate the work of other clerical/secretarial staff in the Department office.	1	1	0.0	100%
Mecahnics III: Water Treatment Plant*	Operates, services, and maintains water treatment plants at schools supplied with well water in accordance with Board of Education, State, and County Health Department regulations and requirements. This advanced journeyman level of work involves responsibility for visiting schools supplied with well water to conduct water tests; to determine correct quantity and rate of chemicals to be administered; to record test results and chemical usage; to backwash filters and cleanse detention and hydro-pneumatic tanks; plus servicing and maintaining the operating equipment, motors, compressors, feeders, and auxiliary parts. Work is performed following planned maintenance schedules. Additionally, the employee provides regular technical assistance and instructions to school-based employees responsible for sewage treatment operations.	1	1	0.0	100%
Technician: Electronic*	Performs skilled work ensuring public address systems (PA systems) and electronic equipment are operational for school buildings allowing school administration to broadcast daily announcements and most importantly function as an emergency warning system.	2	2	0.0	100%
Technician: Mechanical System Controls*	Under general supervision, performs complex work involving troubleshooting and repair of sophisticated heating and air-conditioning controls. Primary duties include installation, maintenance, diagnostics and/or repair of mechanical systems controls and control components. Also performs controls related work in collaboration with vendors working on school property. Works with school administration in regards to mechanical control systems issues and the effect on health and safety within Anne Arundel County Public Schools. Highly skilled manual and technical work is performed at an experienced level. This position is considered essential and is required to follow essential employee guidelines.	5	5	0.0	100%

FY23 AACPS Maintenance Position Summary

Position and Type	Job Summary	Authorized FTE	Filled	Vacant	% Filled
Painter Lead: Maintenance*	Performs skilled work at the advanced level in the painting of interiors and exteriors of school facilities. Duties require assisting the Manager/Assistant Manager in scheduling and assigning daily work. Acts as Manager/Assistant Manager during his/her absence or when assigned. Serves as primary inspector of contracted work and in-house projects through various stages to completion. Responsibilities require performing emergency and more difficult service/maintenance work. Lays out designs and estimates in-house painting projects. When assigned, serves as a lead person for a crew or crews engaged in the painting of interiors and exteriors of school facilities. Some assignments involve exposure to disagreeable elements and injury hazards. Shift work may be required. This position is considered essential personnel.	1	1	0.0	100%
Painter III: Maintenance*	Serves as a lead person and performs skilled work at the advanced level in the painting of interiors and exteriors of school facilities. Makes minor repairs to related equipment. This position is considered essential personnel. Management reserves the right to limit the use of annual leave during mission essential timeframes.	4	4	0.0	100%
Painter II: Maintenance*	Performs semi-skilled and skilled painting tasks within school facilities. The position entails responsibility for performing a variety of repairs and installations that include, but are not limited to, painting, staining, varnishing, asphalt striping, graffiti removal, plaster and drywall repair, floor finishing, and sign installation. The position is considered essential personnel for emergency situations, including inclement weather conditions. Management reserves the right to limit the use of annual leave during mission essential timeframes.	2	2	0.0	100%
Operator: Building Automation Systems*	Operates the Graphic User Interface for the Building Monitoring and Control System located at the Operations Division Office. Provides telephone support to AACPS staff in schools for the operation of HVAC equipment. Working out of the Operations Administrative Office, travels to schools on a need basis to provide manpower during emergency situations. Work involves the responsibility for maintaining sanitary standards and heating, ventilating and/or air-conditioning apparatus at a school facility. Nature of work requires extensive walking, stooping, pushing, carrying, climbing, bending and lifting of up to 50 pounds independently and the ability to exert force required to twist/turn equipment/tools required to perform assigned tasks. Employee must be capable of performing any and all of the listed duties individually or independently which may vary based upon their work location/assignment and available staffing. Employee may be required to complete tasks normally assigned to employees of a lower job classification. Assignments involve sustained physical effort and some exposure to dust, dirt, noise, chemical solutions/solvents/odors, adverse weather conditions and minor injury hazards. Employee may be assigned to any shift.	1	1	0.0	100%
Operator II: Equipment*	Performs skilled work that involves operating a variety of light and heavy equipment and heavy manual work when serving as crew leader for grounds employees engaged in the care and maintenance of school facilities.	1	1	0.0	100%
Mechanic IV: HVAC*	Performs maintenance repairs to equipment maintained by the HVAC department. Assists the Mechanical Systems Specialist and Assistant Manager in scheduling, assigning work, and completing the more complex work assignments. Assignments include but are not limited to estimating, ordering and expediting parts, material, coordination of projects with other maintenance departments, inspecting and documenting in-house and contract work. Nature of work includes attending meetings, inspections, reviewing plans and specifications of capital and systemic projects. Leads crews of mechanics as necessary.	3	3	0.0	100%
Mechanic III: HVAC*	Lead worker for a small maintenance crew engaged in the more complex servicing, adjustment, replacement, repair, and maintenance of HVAC units, refrigeration equipment, components, and related parts.	6	6	0.0	100%
Mechanic II: HVAC*	To perform HVAC service (repair, replacement, maintenance, etc.) to ensure a healthy learning environment for students and staff.	5	4	1.0	80%
Insulator II*	Performs the application, removal, and repair of all types of insulation on industrial equipment, pipes, ductwork, or other mechanical systems to aid in controlling noise and maintains system temperatures throughout AACPS school buildings.	1	1	0.0	100%
Plumber IV: Maintenance*	Installs, maintains and repairs plumbing and heating systems. Works independently to handle emergency and/or special projects and serves as a leader for a small group of plumbing personnel engaged in maintenance of school facilities. The position is considered essential personnel for emergency situations, including inclement weather conditions.	2	2	0.0	100%
Mechanic Senior: General Maintenance*	Oversees the accurate documentation of work assignments, instructs Lead and General Mechanics and assures compliance with safety and security policies/procedures. As required performs skilled duties of a General Maintenance Mechanic and serves as a Lead Mechanic for a small group of personnel engaged in the general maintenance of school facilities. In addition to completing daily work order assignments, school inspections may be required to determine facility deficiencies. Some assignments may involve exposure to disagreeable elements and potential injury hazards. The position is considered essential personnel for emergency situations, including inclement weather conditions. Required to work various shifts, scheduled overtime and respond to emergencies to effect repairs outside of normal working hours and holidays, as necessary.	8	8	0.0	100%

FY23 AACPS Maintenance Position Summary

Position and Type	Job Summary	Authorized FTE	Filled	Vacant	% Filled
Estimator: Maintenance Planner	Determines the cost of construction projects, plans, and schedules the work. Works closely with contractors and in house staff to evaluate projected time frame needed to complete a project and additional factors like labor needs, materials, budgets, and potential setbacks. By gathering first-hand information from a site, an Estimator understands the project and is a subject matter expert in appropriate trade for assigned department.	4	4	0.0	100%
Mechanic Lead: General Maintenance*	Performs skilled general maintenance tasks and leads a small group of employees engaged in the general maintenance of school facilities. Performs a variety of repairs and installations related to building structure, roofing, and interior/exterior components/finishes.	16	16	0.0	100%
Mechanic: General Maintenance*	Performs semi-skilled and skilled general maintenance tasks within school facilities. Performs a variety of repairs and installations related to building structure, roofing, and interior/exterior components/finishes.	7	7	0.0	100%
Plumber II: Maintenance*	Performs skilled work at the entry apprentice level in the installation, maintenance and repair of plumbing, heating, boiler, and fire suppression systems and may be asked to perform emergency or special jobs independently as necessary.	5	5	0.0	100%
Insulator: Plumber Helper*	Based on the needs of the Plumbing Department and the time of year, assists Mechanics with new installation, repairs on all types of insulation, plumbing, and mechanical systems to aid in controlling noise and maintaining systems for domestic water, fire suppression, and cooling and heating systems.	1	1	0.0	100%
Plumber III: Maintenance*	Works independently to install, maintain, and repair plumbing and heating systems and to handle emergency and/or special projects. Serves as a leader for a small group of plumbing personnel engaged in maintenance of school facilities.	4	2	2.0	50%
Electrician III: Maintenance*	Performs skilled work at the advanced journeyman electrical level in the installation, maintenance and repair of electrical equipment and systems. Work includes serving as a work leader of a small crew. Responsible for performing emergency and the more complex electrical repair tasks.	6	6	0.0	100%
Electrician II: Maintenance*	Performs skilled work at the journeyman level in the installation, maintenance, and repair of electrical equipment and systems. Serves as lead worker of a small crew. Responsible for performing emergency and the more complex electrical repair tasks.	4	4	0.0	100%
Electrician I: Maintenance*	Performs skilled work at the Journeyman level in the installation, maintenance, testing, and repair of electrical equipment and systems. Responsible for the prompt performance of assigned electrical and related duties.	2	2	0.0	100%
Electrician IV: Maintenance*	Performs skilled work at the advanced Journeyman Electrical level in the installation, maintenance and repair of electrical equipment and systems. Assists in scheduling and assigning daily work. Serves as primary inspector of contracted work and in-house projects through various stages to completion. Performs emergency and more difficult service/maintenance work. Lays out designs and estimates in-house electrical projects. Employee(s) must be capable of performing any and all of the listed duties individually or independently which may vary based upon their work location/assignment and available staffing. Employees in this position are considered essential personnel.	2	2	0.0	100%
Locksmith Senior*	Performs a variety of skilled duties including installation, repair and replacement of locks and related hardware related to the security and safety of school facilities. This position is considered essential personnel for emergency situations, including inclement weather conditions. Management reserves the right to limit the use of annual leave during mission critical timeframes.	2	2	0.0	100%
Technician: Maintenance Boiler*	Performs all necessary detailed work servicing, adjusting, replacing, repairing, and maintaining heating plants, boilers, and water heaters and inspection services. The nature of work will require employees to wear personal protective equipment (PPE) in the performance of assigned tasks.	1	1	0.0	100%
Mechanic IV: HVAC Boiler*	Serves as a work leader for a small maintenance crew engaged in the more complex servicing, adjustment, replacement, repair, cleaning, and maintenance of steam and hot water boilers with the addition of auxiliary boiler room equipment. Work involves responsibility for both performing detail boiler cleaning tasks and supervising the on-site work of other team members performing boiler cleaning work. This position at the advanced journeyman level frequently requires assisting the manager in scheduling and assigning of work, inspecting and testing completed work and/or plant equipment. This level is responsible for performing emergency and more difficult service/maintenance work. Some assignments involve exposure to unfavorable working conditions and potential health and safety hazards. Nature of work may require employees to wear appropriate filtering face pieces (dust mask), personal protective equipment and clothing in the performance of assigned tasks.	1	1	0.0	100%
Clerk II: Maintenance	Performs a wide variety of advanced administrative and clerical duties in support of tracking systems such as work orders (WO), preventative maintenance (PM), contracted services, procurements, and office reporting utilizing the Computerized Maintenance Management System (CMMS), and other Microsoft Office programs.	2	2	0.0	100%
Total		114	111	3	97%
Total Custodial FTE for APPA Staffing Review		93	90	3	97%
% of Building Maintenance Staff primarily Performing Maintenance Tasks			82%		

* Position and Type that spend >75% of their time devoted to Maintenance duties.

FY23 AACPS Custodial Position Summary

Position and Type	Job Summary	Authorized FTE	Filled	Vacant	% Filled
Custodian: 1*	Under general supervision, maintains clean and healthy facilities for students and staff by performing routine cleaning and grounds maintenance.	544.5	507	37.5	93%
Custodian: Lead*	Serves as a working leader who plans the general cleaning of a secondary school facility for the night custodial staff and maintains proper sanitary and operating standards.	35	34	1.0	97%
Custodian: Chief	Primary duties include planning and supervising the general cleaning and operation of a school or satellite office. Work involves responsibility for maintaining proper sanitary and operating standards at a school facility or satellite office. Work is repetitive and is performed according to schedules and instructions. Employee(s) must be capable of performing any and all listed duties independently which may vary based upon the work location/assignment and available staffing. Management reserves the right to limit the use of annual leave during mission essential timeframes.	94	94	0.0	100%
Custodian: Chief Roving	This Operations-based position provides coverage during periods of absenteeism of school-based staff and/or support during emergency situations. Work involves responsibility for maintaining proper sanitary and operating standards for each school facility or satellite office. Work is repetitive and is performed according to schedules and instructions. This position is considered essential personnel for emergency situations, including inclement weather conditions.	9	10	(1.0)	111%
Engineer: Complex	Serves where needed in any of the AACPS system facilities, both with or without central air conditioning, planning, overseeing and performing work related to the physical operation of assigned facilities. Work involves responsibility for, but is not limited to: operating heating, ventilating and air conditioning equipment, performing preventive maintenance, maintaining sanitary and safety standards, and completing minor repairs. Nature of work requires extensive walking, stooping, pushing, carrying, climbing, bending and lifting of up to 50 pounds independently and the ability to exert force required to twist/turn equipment/tools required to perform assigned tasks. Assignments involve sustained physical effort and some exposure to dust, dirt, noise, chemical solutions/solvents/odors, adverse weather conditions and to minor injury hazards.	3	3	0.0	100%
Engineer: Facilities	Operates boiler and maintains a variety of mechanical equipment (heating, ventilating and/or air-conditioning) at assigned secondary school facilities in collaboration with the Complex Engineer. Responsible for maintaining sanitary, security, and safety standards through planning and supervising the general cleaning and operation of the facility. Ability to perform any and all of the listed duties individually or independently which may vary based upon work location/assignment and available staffing. This position is considered essential personnel for emergency situations, including inclement weather conditions.	3	3	0.0	100%
Engineer: Facilities Operations	This is an Operations-based position that works where assigned to plan, oversee, and perform work related to the efficient operations and maintenance of AACPS facilities. Work involves responsibility for, but is not limited to operating heating, ventilating and air conditioning equipment, performing preventive maintenance, maintaining sanitary and safety standards, and completing minor repairs. Provides training and support to school-based Operations staff. Provides leadership to school-based Operations staff supervision, development, training, and handling emergencies. Based on the needs of Operations, the work hours for this position can be either first shift or second shift. Must be flexible to work all shifts as needed. The position is considered essential personnel for emergency situations, including inclement weather conditions.	7	7	0.0	100%
Engineer Senior: Facilities	Operates the boiler(s) and maintains a variety of mechanical equipment such as heating, ventilating and/or air-conditioning apparatus at an assigned secondary school facility. Responsible for maintaining sanitary, security, and safety standards through planning and overseeing the general cleaning and operation of the facility. This position is considered essential personnel for emergency situations, including inclement weather conditions.	28	27	1.0	96%
Manager: Operations Area	Plans and coordinates plant operations and general maintenance, ensuring standardized custodial services in school buildings in an assigned area. Works closely with School Administration, Chiefs, Lead Custodians, and Custodians to resolve problems concerning plant operations and maintenance and ensure that custodial teams receive technical support, training, equipment and supplies.	4	4	0.0	100%
Manager: Night Quality Control	Under general supervision, the Manager works during non-school hours to ensure cleaning standards are met for all AACPS buildings in assigned area.	4	4	0.0	100%
Manager: Operations	Supports all matters pertaining to the planning, development, implementation, administration and evaluation of the school systems' physical plant operations and regulatory compliance. Primary duties of responsibility involve direct supervision and management of Operations Area Managers, Night Quality Control Managers, Operations Services Engineer, Operations Facility Engineers, all custodial services, school mechanical systems operation, school based green cleaning training, sustainability program initiatives, personnel management of custodial work force, and related building services. Ensures the effectiveness and efficiency of Operations services at all schools and facilities.	1	1	0.0	100%

FY23 AACPS Custodial Position Summary

Position and Type	Job Summary	Authorized FTE	Filled	Vacant	% Filled
Supervisor: Operations & Logistics	Directs the planning, development, implementation, administration, and evaluation of the school system's physical plant operations and preventive maintenance programs, including energy management and environmental systems, controls, and regulatory compliance. Areas of management responsibility include, all custodial services, school mechanical systems operation, provision and conservation of all utilities, logistics, garage, warehouse, trash recycling and removal, integrated pest management, school-based preventive maintenance (PM) program, and personnel management of staff, to include school-based personnel and related building services.	1	1	0.0	100%
Technician: Administrative	Performs responsible and complex secretarial duties for the Supervisor and coordinates the administrative support functions for the entire Division and professional staff. Answers and screens telephone calls, greets visitors, sorts mail, prepares correspondence, and keeps the Supervisor's calendar. Maintains accurate subject-matter files, confidential records, lists, etc. Undertakes follow-up actions needed to complete work assignments. Ensures that the payroll is submitted on time and that all personnel actions are processed according to procedure. Prepares and reviews all correspondence coming in and going out from the division and retrieves information using standard software packages. As a lead worker, this position may assign, distribute and coordinate the work of other clerical/secretarial staff in the Department office.	2	2	0.0	100%
Total		735.5	697	38.5	95%
Total Custodial FTE for APPA Staffing Review		579.5	541	38.5	93%
% of Building Operations Staff primarily performing custodial tasks			79%		

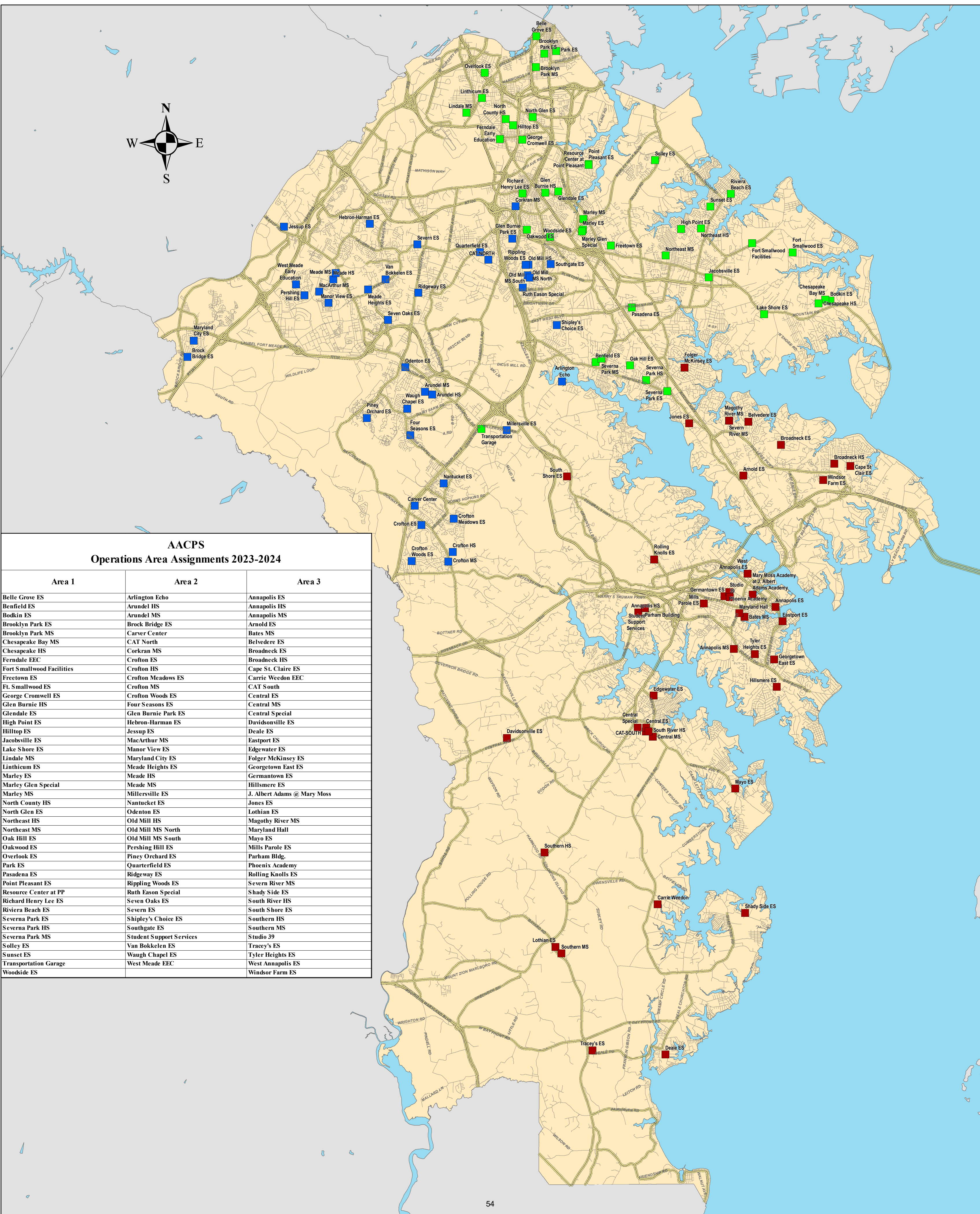
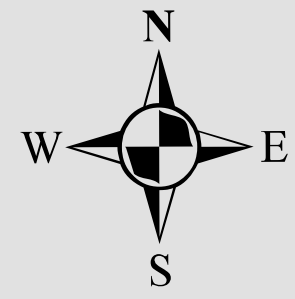
* Position and Type that spend >75% of their time devoted to custodial duties.

Operations Area Assignments 2023-2024

Area's 1, 2, 3



- 1 (43)
- 2 (42)
- 3 (43)



AACPS Operations Area Assignments 2023-2024		
Area 1	Area 2	Area 3
Belle Grove ES	Arlington Echo	Annapolis ES
Benfield ES	Arundel MS	Annapolis HS
Bodkin ES	Arundel MS	Annapolis MS
Brooklyn Park ES	Brock Bridge ES	Arnold ES
Brooklyn Park MS	Carver Center	Bates MS
Chesapeake Bay MS	CAT North	Belvedere ES
Chesapeake HS	Corkran MS	Broadneck ES
Ferndale EEC	Crofton ES	Broadneck HS
Fort Smallwood Facilities	Crofton HS	Cape St. Claire ES
Freetown ES	Crofton Meadows ES	Carrie Weedon EEC
Ft. Smallwood ES	Crofton MS	CAT South
George Cromwell ES	Crofton Woods ES	Central ES
Glen Burnie HS	Four Seasons ES	Central MS
Glendale ES	Glen Burnie Park ES	Central Special
High Point ES	Hebron-Harman ES	Davidsonville ES
Hilltop ES	Jessup ES	Deale ES
Jacobsville ES	MacArthur MS	Eastport ES
Lake Shore ES	Manor View ES	Edgewater ES
Lindale MS	Maryland City ES	Folger McKinsey ES
Linthicum ES	Meade Heights ES	Georgetown East ES
Marley ES	Meade HS	Germantown ES
Marley Glen Special	Meade MS	Hillsmere ES
Marley MS	Millersville ES	J. Albert Adams @ Mary Moss
North County HS	Nantucket ES	Jones ES
North Glen ES	Odenton ES	Lothian ES
Northeast HS	Old Mill HS	Magothy River MS
Northeast MS	Old Mill MS North	Maryland Hall
Oak Hill ES	Old Mill MS South	Mayo ES
Oakwood ES	Pershing Hill ES	Mjills Parole ES
Overlook ES	Piney Orchard ES	Parham Bldg.
Park ES	Quarterfield ES	Phoenix Academy
Pasadena ES	Ridgeway ES	Rolling Knolls ES
Point Pleasant ES	Rippling Woods ES	Severn River MS
Resource Center at PP	Ruth Eason Special	Shady Side ES
Richard Henry Lee ES	Seven Oaks ES	South River HS
Riviera Beach ES	Severn ES	South Shore ES
Severna Park ES	Shipley's Choice ES	Southern HS
Severna Park HS	Southgate ES	Southern MS
Severna Park MS	Student Support Services	Studio 39
Solley ES	Van Bokkelen ES	Tracey's ES
Sunset ES	Waugh Chapel ES	Tyler Heights ES
Transportation Garage	West Meade EEC	West Annapolis ES
Woodside ES		Windsor Farm ES

Attachment 6

FY 2023 - 2025 Custodial Staffing Recommendations per APPA

FY 2023 - 2025 Maintenance Staffing Recommendations per APPA

FY23 Custodial Staffing - APPA Recommendation

PSC No.	Location	GSF	APPA Level 1- Oderly Spotlessness	APPA Level 2- Ordinary Tidiness	APPA Level 3- Casual Inattention	APPA Level 4- Moderate Dinginess	APPA Level 5- Unkempt Neglect
Totals		14,197,633	2,055	1,107	654	412	324
AACPS Wrench Time Adjustment (x1.084)			2,228	1,200	709	446	351
Number of FTE over/(under) current Budget			(1,648)	(620)	(129)	133	229
GSF per custodian			6,908	12,826	21,718	34,499	43,848

** Assume all in house staff with no contractors

FY24 Custodial Staffing - APPA Recommendation

PSC No.	Location	GSF	APPA Level 1- Oderly Spotlessness	APPA Level 2- Ordinary Tidiness	APPA Level 3- Casual Inattention	APPA Level 4- Moderate Dinginess	APPA Level 5- Unkempt Neglect
Totals		14,302,385	2,072	1,116	659	415	327
AACPS Wrench Time Adjustment (x1.084)			2,246	1,210	715	450	354
Number of FTE over/(under) current Budget			(1,667)	(630)	(135)	130	226
GSF per custodian			6,902	12,816	21,697	34,468	43,797

** Assume all in house staff with no contractors

FY25 Custodial Staffing - APPA Recommendation

PSC No.	Location	GSF	APPA Level 1- Oderly Spotlessness	APPA Level 2- Ordinary Tidiness	APPA Level 3- Casual Inattention	APPA Level 4- Moderate Dinginess	APPA Level 5- Unkempt Neglect
Totals		14,709,876	2,132	1,149	678	427	335
AACPS Wrench Time Adjustment (x1.084)			2,311	1,245	735	462	363
Number of FTE over/(under) current Budget			(1,731)	(666)	(155)	117	216
GSF per custodian			6,900	12,806	21,702	34,483	43,882

** Assume all in house staff with no contractors and no FTE's are added above FY24 level

FY23 Maintenance Staffing - APPA Recommendation

PSC No.	Location	Type	Area	GSF	APPA Level 1- Showpiece Facility	APPA Level 2- Comprehensive Stewardship	APPA Level 3- Managed Care	APPA Level 4- Reactive Management	APPA Level 5- Crisis Response
Subtotal				14,197,633	179	146	115	84	29
APPA Adjustment Factors									
FCI			0						
Modified Age			0.02						
Varied Facilities			0						
Size			-0.01						
Carnegie Classification			0.05						
Factor Total			0.06						
Factor Subtotal					189	155	122	89	31
AACPS Wrench Time Adjustement (x 1.084)			0.084		205	168	132	96	33
Number of FTE fewer/(additional) FTE's					(112)	(75)	(39)	(3)	60
GSF per Maintenance FTE**					69,214	84,422	107,574	147,804	425,398

** Assume all in house staff with no contractors

FY24 Maintenance Staffing - APPA Recommendation

PSC No.	Location	Type	Area	GSF	APPA Level 1- Showpiece Facility	APPA Level 2- Comprehensive Stewardship	APPA Level 3- Managed Care	APPA Level 4- Reactive Management	APPA Level 5- Crisis Response
Subtotal				14,302,385	180	147	116	84	29
APPA Adjustment Factors									
	FCI		0						
	Modified Age		0.02						
	Varied Facilities		0						
	Size		-0.01						
	Carnegie Classification		0.05						
	Factor Total		0.06						
Factor Subtotal					191	156	123	89	31
AACPS Wrench Time Adjustment (x 1.084)				0.084	207	169	133	97	34
Number of FTE fewer/(additional) FTE's					(114)	(76)	(40)	(4)	59
GSF per Maintenance FTE**					69,192	84,395	107,542	147,752	425,304

** Assume all in house staff with no contractors

FY 25 Maintenance Staffing - APPA Recommendation

PSC No.	Location	Type	Area	GSF	APPA Level 1- Showpiece Facility	APPA Level 2- Comprehensive Stewardship	APPA Level 3- Managed Care	APPA Level 4- Reactive Management	APPA Level 5- Crisis Response
Subtotal				14,709,876	185	152	119	87	30
APPA Adjustment Factors									
	FCI		0						
	Modified Age		0.02						
	Varied Facilities		0						
	Size		-0.01						
	Carnegie Classification		0.05						
	Factor Total		0.06						
Factor Subtotal					196	161	126	92	32
AACPS Wrench Time Adjustement (x 1.084)				0.084	213	174	137	100	35
Number of FTE fewer/(additional) FTE's					(120)	(81)	(44)	(7)	58
GSF per Maintenance FTE**					69,171	84,378	107,530	147,767	425,210

** Assume all in house staff with no contractors and no additional FTE's above FY24 are added

Attachment 7

Historic IAC \$/GSF Current Replacement Value and Unit Cost

FY25 Current Replacement Value and Needs by Council District

District	Building GSF	FY25 CRV	Capital Renewal Needs	10 YR Needs/ CRV
1	1,626,988	\$ 882,000,000	\$ 64,415,000	0.07
2	2,986,443	\$ 1,615,000,000	\$ 133,313,000	0.08
3	1,894,371	\$ 1,024,000,000	\$ 103,857,000	0.10
4	1,902,330	\$ 1,030,000,000	\$ 54,138,000	0.05
5	2,313,571	\$ 1,253,000,000	\$ 109,214,000	0.09
6	2,062,989	\$ 1,118,000,000	\$ 89,404,000	0.08
7	1,956,866	\$ 1,060,000,000	\$ 124,399,000	0.12
Total	14,743,558	\$ 7,982,000,000	\$ 678,740,000	0.09

FY25 Current Replacement Value and Needs by School Type

School Type	Building GSF	FY25 CRV	Capital Renewal Needs	10 YR Needs/ CRV
ES	5,993,335	\$ 3,247,000,000	\$ 263,078,000	0.08
MS	3,502,858	\$ 1,897,000,000	\$ 178,530,000	0.09
HS	4,380,033	\$ 2,369,000,000	\$ 185,466,000	0.08
Other	867,332	\$ 469,000,000	\$ 51,666,000	0.11
Total	14,743,558	\$ 7,982,000,000	\$ 678,740,000	0.09

FY25 Current Replacement Value and Needs by Cluster

Cluster	Building GSF	FY25 CRV	Capital Renewal Needs	10 YR Needs/ CRV
Annapolis	1,307,068	\$ 709,000,000	\$ 27,832,000	0.04
Arundel	766,038	\$ 414,000,000	\$ 49,893,000	0.12
Broadneck	1,041,659	\$ 564,000,000	\$ 46,742,000	0.08
Chesapeake	1,013,860	\$ 549,000,000	\$ 69,605,000	0.13
Crofton	754,668	\$ 409,000,000	\$ 30,747,000	0.08
Glen Burnie	1,328,503	\$ 719,000,000	\$ 89,175,000	0.12
Meade	1,515,653	\$ 822,000,000	\$ 39,202,000	0.05
North County	1,366,441	\$ 740,000,000	\$ 57,323,000	0.08
Northeast	809,903	\$ 437,000,000	\$ 39,120,000	0.09
Old Mill	1,114,637	\$ 602,000,000	\$ 31,187,000	0.05
Severna Park	979,735	\$ 531,000,000	\$ 34,027,000	0.06
South River	705,765	\$ 383,000,000	\$ 50,945,000	0.13
Southern	772,696	\$ 418,000,000	\$ 61,276,000	0.15
Other	1,266,932	\$ 685,000,000	\$ 51,666,000	0.08
Total	14,743,558	\$ 7,982,000,000	\$ 678,740,000	0.09

Current Replacement Value and Needs by Operations Area

Operations Area	Building GSF	FY25 CRV	Capital Renewal Needs	10 YR Needs/ CRV
1	5,097,894	\$ 2,759,000,000	\$ 278,212,000	0.10
2	5,157,871	\$ 2,792,000,000	\$ 172,152,000	0.06
3	4,487,793	\$ 2,431,000,000	\$ 228,376,000	0.09
Total	14,743,558	\$ 7,982,000,000	\$ 678,740,000	0.09

FY25 AACPS Facility Condition Index by School

PSC No.	Location	Type	Area	Cluster	Councilmatic District	Gross Square Feet of Building (GSF)			Current Replacement Value (CRV)			Capital Renewal Needs	10 YR Needs/ CRV
						FY23	FY24	FY25	FY23	FY24	FY25	10 Years	
02.101	Traceys ES	ES	3	Southern	6	56,640	56,640	56,640	27,000,000	29,000,000	31,000,000	\$ 1,790,000.00	0.06
n/a	Transportation @ Millersville	Other	2	Other	6	17,500	17,500	17,500	8,000,000	9,000,000	9,000,000	\$ 1,050,000.00	0.12
02.101	Tyler Heights ES	ES	3	Annapolis	6	84,813	84,813	84,813	41,000,000	44,000,000	46,000,000	\$ -	0.00
02.004	Van Bokkelen ES	ES	2	Meade	1	76,833	76,833	76,833	37,000,000	40,000,000	42,000,000	\$ 2,475,000.00	0.06
02.102	Waugh Chapel ES	ES	2	Arundel	4	62,101	62,101	62,101	30,000,000	32,000,000	34,000,000	\$ 1,475,000.00	0.04
02.036	West Annapolis ES	ES	3	Annapolis	6	53,885	53,885	53,885	26,000,000	28,000,000	29,000,000	\$ 865,000.00	0.03
02.137	West County ES	ES	2	Other	4	0	0	87,090	-	-	47,000,000	\$ -	0.00
02.072	West Meade EEC	ES	2	Meade	4	45,680	45,680	45,680	22,000,000	24,000,000	25,000,000	\$ 1,125,000.00	0.05
02.047	Windsor Farm ES	ES	3	Broadneck	5	77,432	77,432	77,432	37,000,000	40,000,000	42,000,000	\$ 6,615,000.00	0.16
02.120	Woodside ES	ES	1	Glen Burnie	2	64,963	64,963	64,963	31,000,000	34,000,000	35,000,000	\$ 1,190,000.00	0.03
Total						14,197,633	14,302,385	14,743,558	6,817,000,000	7,380,000,000	7,982,000,000	678,740,000	0.09

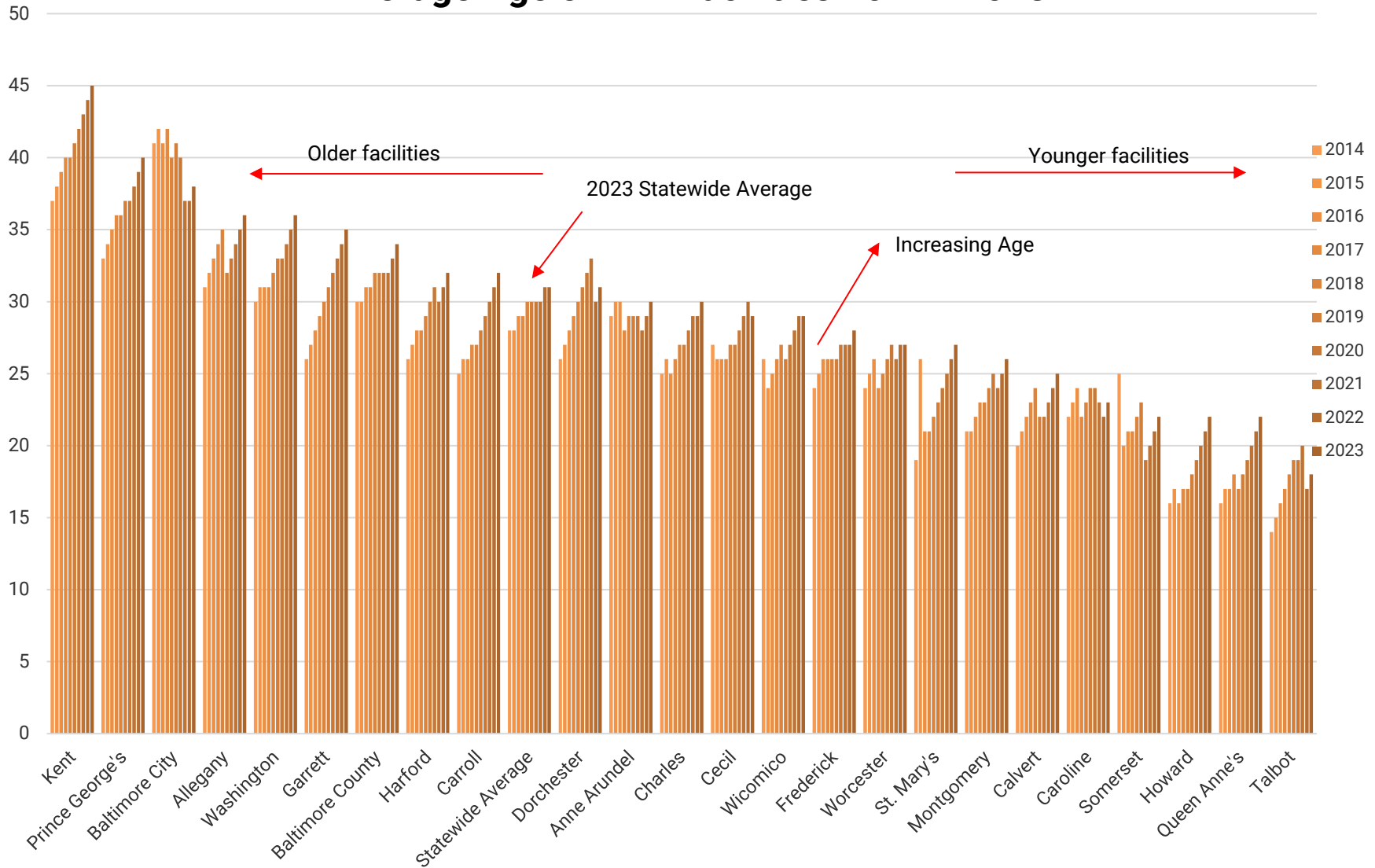
Attachment 8

Average Age of LEA Facilities 2014-2023

Summary of Average Modified Age

FY 2024 Average Modified Age of AACPS Facilities

Average Age of LEA Facilities 2014 - 2023



The "Average Age" of a facility takes into account the construction dates and size of the original facility as well as any additions. For example, if a 50,000 square foot facility built in 1980 had a 50,000 square foot addition in 2000, the average age of that facility would be based on the year 1990. If the original building was 75,000 square feet and the addition was 25,000 square feet, the year would be 1985.

Average Modified Age by Council District

District	Building GSF	Average Modified Age
1	1,626,988	25
2	2,561,927	33
3	1,936,515	27
4	1,781,558	33
5	2,313,571	23
6	1,778,241	34
7	2,303,585	30
Total	14,302,385	29

Average Modified Age by School Type

School Type	Building GSF	Average Modified Age
ES	5,906,245	21
MS	3,494,967	35
HS	4,033,841	31
Other	867,332	51
Total	14,302,385	29

Average Modified Age by Cluster

Cluster	Building GSF	Average Modified Age
Annapolis	1,307,068	28
Arundel	766,038	35
Broadneck	1,041,659	29
Chesapeake	1,013,860	33
Crofton	745,846	20
Glen Burnie	1,328,503	27
Meade	1,481,971	30
North County	1,366,441	25
Northeast	809,903	20
Old Mill	1,115,568	36
Severna Park	979,735	15
South River	705,765	32
Southern	772,696	34
Other	867,332	51
Total	14,302,385	29

Average Modified Age by Operations Area

Operations Area	Building GSF	Average Modified Age
1	5,137,151	26
2	4,716,698	31
3	4,448,536	31
Total	14,302,385	29

FY24 Average Modified Age of AACPS Facilities

PSC No.	Location	Type	Operations Area	Cluster	Councilmatic District	Year	Type	Building Size	Average Modified Age (Years)
02.034	Annapolis ES	ES	3	Annapolis	6			70,180	9
	Annapolis ES					2014	Renovation	59,402	
	Annapolis ES					2014	Addition	10,778	
02.030	Annapolis HS	HS	3	Annapolis	6			281,500	33
	Annapolis HS					1979	New	187,012	
	Annapolis HS					2004	Renovation	23,000	
	Annapolis HS					2014	Addition	21,500	
	Annapolis HS					2015	Renovation	49,988	
02.061	Annapolis MS	MS	3	Annapolis	6			216,000	59
	Annapolis MS					1964	New	216,000	
02.122	Arlington Echo	Other	2	Other	6			10,509	54
	Arlington Echo					1969	New	10,509	
02.106	Arnold ES	ES	3	Broadneck	5			89,253	4
	Arnold ES					2019	Replacement	89,253	
02.040	Arundel HS	HS	2	Arundel	5			292,177	33
	Arundel HS					1986	Renovation	121,000	
	Arundel HS					1987	Renovation	99,555	
	Arundel HS					1987	Addition	18,700	
	Arundel HS					2006	Addition	1,104	
	Arundel HS					2008	Addition	37,373	
	Arundel HS					2008	Renovation	14,445	
02.057	Arundel MS	MS	2	Arundel	4			162,322	53
	Arundel MS					1961	New	135,196	
	Arundel MS					1983	Renovation	4,836	
	Arundel MS					2022	Addition	22,290	
02.037	Bates MS	MS	3	Annapolis	6			145,520	44
	Bates MS					1962	New	11,940	
	Bates MS					1980	Addition	3,060	
	Bates MS					1980	Renovation	130,520	
02.121	Belle Grove ES	ES	1	North County	1			59,928	12
	Belle Grove ES					1952	New	1,359	
	Belle Grove ES					2012	Addition	28,078	
	Belle Grove ES					2012	Renovation	30,491	
02.056	Belvedere ES	ES	3	Broadneck	5			68,476	24
	Belvedere ES					1999	Renovation	19,764	
	Belvedere ES					1999	Addition	17,188	
	Belvedere ES					1999	Renovation	31,524	
02.029	Benfield ES	ES	1	Severna Park	5			82,775	6
	Benfield ES					2017	Renovation	36,649	
	Benfield ES					2017	Addition	46,126	
02.062	Bodkin ES	ES	1	Chesapeake	3			78,469	35
	Bodkin ES					1970	New	43,927	
	Bodkin ES					2010	Renovation	28,340	
	Bodkin ES					2013	Addition	6,202	
02.023	Broadneck ES	ES	3	Broadneck	5			84,111	27
	Broadneck ES					1975	New	36,650	
	Broadneck ES					2010	Addition	9,571	
	Broadneck ES					2012	Renovation	37,890	
02.032	Broadneck HS	HS	3	Broadneck	5			297,740	29
	Broadneck HS					1982	New	116,783	
	Broadneck HS					1988	Addition	12,000	
	Broadneck HS					1997	Addition	116,000	
	Broadneck HS					2010	Addition	9,740	
	Broadneck HS					2013	Renovation	19,100	
	Broadneck HS					2013	Renovation	24,117	
02.093	Brock Bridge ES	ES	2	Meade	4			78,748	21
	Brock Bridge ES					1970	New	26,927	
	Brock Bridge ES					2003	Addition	846	
	Brock Bridge ES					2019	Renovation	41,470	
	Brock Bridge ES					2022	Addition	9,505	
02.085	Brooklyn Park ES	ES	1	North County	1			74,540	30
	Brooklyn Park ES					1972	New	34,196	
	Brooklyn Park ES					2011	Renovation	40,344	
02.092	Brooklyn Park MS	MS	2	North County	1			248,809	26
	Brooklyn Park MS					1966	Addition	20,327	
	Brooklyn Park MS					2000	Renovation	179,078	
	Brooklyn Park MS					2000	Addition	49,404	
02.116	Cape St. Claire ES	ES	3	Broadneck	5			84,647	22
	Cape St. Claire ES					1970	Addition	3,645	
	Cape St. Claire ES					2000	Addition	17,595	
	Cape St. Claire ES					2000	Renovation	49,721	
	Cape St. Claire ES					2012	Addition	12,147	
	Cape St. Claire ES					2012	Renovation	1,539	
02.123	Carrie Weedon EEC	ES	3	Southern	7			11,100	62
	Carrie Weedon EEC					1961	New	11,100	
02.006	Center of Applied Technology- North	Other	2	Other	2			155,764	48
	Center of Applied Technology North					1974	New	148,634	
	Center of Applied Technology North					1992	Addition	630	
	Center of Applied Technology North					1996	Addition	6,500	
02.019	Center of Applied Technology- South	Other	3	Other	7			91,507	38

FY24 Average Modified Age of AACPS Facilities

PSC No.	Location	Type	Operations Area	Cluster	Councilmatic District	Year	Type	Building Size	Average Modified Age (Years)
	Center of Applied Technology South					1976	New	47,509	
	Center of Applied Technology South					1993	Addition	24,998	
	Center of Applied Technology South					1995	Addition	19,000	
02.177	Central ES	ES	3	South River	7			83,381	33
	Central ES					1972	New	43,927	
	Central ES					2003	Addition	846	
	Central ES					2010	Addition	10,268	
	Central ES					2010	Renovation	28,340	
02.018	Central MS	MS	3	South River	7			158,125	33
	Central MS					1977	New	98,909	
	Central MS					2013	Renovation	59,216	
N/A	Central Office	Other	3	Other	6			113,750	49
	Central Office					1974	New	113,750	
02.014	Central Special	Other	3	Other	7			53,333	47
	Central Special					1976	New	52,475	
	Central Special					2003	Addition	858	
02.009	Chesapeake Bay MS	MS	1	Chesapeake	3			343,446	37
	Chesapeake Bay MS					1976	New	263,066	
	Chesapeake Bay MS					2020	Renovation	80,380	
02.012	Chesapeake HS	HS	1	Chesapeake	3			322,400	39
	Chesapeake HS					1976	New	249,900	
	Chesapeake HS					2005	Renovation	29,482	
	Chesapeake HS					2018	Renovation	43,018	
02.051	Corkran MS	MS	1	Glen Burnie	2			151,790	5
	Corkran MS					1962	New	151,790	
02.041	Crofton ES	ES	2	Crofton	7			86,640	35
	Crofton ES					1969	New	45,805	
	Crofton ES					1999	Addition	6,211	
	Crofton ES					2004	Addition	9,264	
	Crofton ES					2015	Addition	25,360	
02.135	Crofton HS	HS	2	Crofton	7			275,768	3
	Crofton HS					2020	New	275,768	
02.045	Crofton Meadows ES	ES	2	Crofton	7			78,618	31
	Crofton Meadows ES					1989	New	68,338	
	Crofton Meadows ES					2014	Addition	10,280	
02.038	Crofton MS	MS	2	Crofton	7			131,789	35
	Crofton MS					1982	New	101,580	
	Crofton MS					2000	Addition	10,000	
	Crofton MS					2015	Renovation	1,420	
	Crofton MS					2015	Addition	18,789	
02.115	Crofton Woods ES	ES	2	Crofton	7			86,758	30
	Crofton Woods ES					1971	New	40,057	
	Crofton Woods ES					2002	Addition	846	
	Crofton Woods ES					2010	Addition	8,766	
	Crofton Woods ES					2010	Renovation	28,340	
	Crofton Woods ES					2020	Addition	8,749	
02.098	Davidsonville ES	ES	3	South River	7			78,725	19
	Davidsonville ES					2002	Replacement	66,375	
	Davidsonville ES					2012	Renovation	2,736	
	Davidsonville ES					2012	Addition	9,614	
02.075	Deale ES	ES	3	Southern	7			53,444	39
	Deale ES					1962	New	11,132	
	Deale ES					1974	Renovation	10,000	
	Deale ES					1994	Addition	32,312	
02.035	Eastport ES	ES	3	Annapolis	6			42,430	30
	Eastport ES					1963	Renovation	5,284	
	Eastport ES					1993	Addition	3,582	
	Eastport ES					1993	Renovation	9,742	
	Eastport ES					1993	Renovation	16,672	
	Eastport ES					2016	Addition	7,150	
02.033	Edgewater ES	ES	3	South River	7			89,634	2
	Edgewater ES					2021	Renovation	12,847	
	Edgewater ES					2021	Renovation	24,714	
	Edgewater ES					2021	Renovation	10,707	
	Edgewater ES					2021	Addition	41,366	
02.124	Ferndale EEC	ES	1	North County	1			24,076	18
	Ferndale EEC					2004	Renovation	13,917	
	Ferndale EEC					2007	Addition	10,159	
02.086	Folger McKinsey ES	ES	3	Severna Park	5			83,175	11
	Folger McKinsey ES					2012	Renovation	19,627	
	Folger McKinsey ES					2012	Addition	63,548	
02.031	Fort Smallwood ES	ES	1	Chesapeake	3			64,907	36
	Fort Smallwood ES					1977	New	35,640	
	Fort Smallwood ES					1999	Addition	29,267	
02.125	Fort Smallwood Facilities	Other	1	Other	3			30,292	56
	Fort Smallwood Facilities					1967	New	30,292	
02.010	Four Seasons ES	ES	2	Arundel	4			83,703	26
	Four Seasons ES					1974	New	34,190	
	Four Seasons ES					2003	Addition	714	
	Four Seasons ES					2012	Renovation	40,350	

FY24 Average Modified Age of AACPS Facilities

PSC No.	Location	Type	Operations Area	Cluster	Councilmatic District	Year	Type	Building Size	Average Modified Age (Years)
	Four Seasons ES					2014	Addition	8,449	
02.064	Frank Hebron-Harman ES	ES	2	Meade	1			84,835	16
	Frank Hebron-Harman ES					2007	Replacement	79,875	
	Frank Hebron-Harman ES					2015	Addition	4,960	
02.080	Freetown ES	ES	1	Glen Burnie	3			82,460	14
	Freetown ES					2009	Replacement	82,460	
02.063	George Cromwell ES	ES	1	North County	1			74,468	3
	George Cromwell ES					2020	Renovation	39,239	
	George Cromwell ES					2020	Addition	35,229	
02.017	Georgetown East ES	ES	3	Annapolis	6			80,399	45
	Georgetown East ES					1972	New	68,216	
	Georgetown East ES					2002	Addition	2,523	
	Georgetown East ES					2016	Addition	9,660	
02.132	Germantown ES	ES	3	Annapolis	6			89,998	12
	Germantown ES					2011	New	89,998	
02.020	Glen Burnie HS	HS	1	Glen Burnie	2			401,580	52
	Glen Burnie HS					1947	Addition	99,835	
	Glen Burnie HS					1955	Addition	62,751	
	Glen Burnie HS					1976	Addition	120,376	
	Glen Burnie HS					1978	Renovation	10,896	
	Glen Burnie HS					1980	Renovation	47,249	
	Glen Burnie HS					2001	Renovation	26,530	
	Glen Burnie HS					2017	Renovation	33,943	
02.073	Glen Burnie Park ES	ES	2	Old Mill	2			70,633	34
	Glen Burnie Park ES					1962	New	36,719	
	Glen Burnie Park ES					2007	Addition	634	
	Glen Burnie Park ES					2015	Addition	8,995	
	Glen Burnie Park ES					2019	Renovation	6,922	
	Glen Burnie Park ES					2020	Addition	17,363	
02.065	Glendale ES	ES	1	Glen Burnie	2			75,065	22
	Glendale ES					2001	Addition	75,065	
02.015	High Point ES	ES	1	Northeast	3			98,681	4
	High Point ES					2019	Renovation	35,006	
	High Point ES					2019	Addition	63,675	
02.084	Hillsmere ES	ES	3	Annapolis	6			67,988	0
	Hillsmere ES					2023	Replacement	67,988	
02.088	Hilltop ES	ES	1	North County	1			82,903	34
	Hilltop ES					1970	New	42,127	
	Hilltop ES					1996	Addition	1,415	
	Hilltop ES					2000	Addition	2,408	
	Hilltop ES					2010	Addition	8,613	
	Hilltop ES					2010	Renovation	28,340	
02.091	Jacobsville ES	ES	1	Chesapeake	3			73,193	24
	Jacobsville ES					1998	New	66,746	
	Jacobsville ES					2015	Addition	6,447	
02.016	Jessup ES	ES	2	Meade	1			98,879	4
	Jessup ES					2019	Replacement	98,879	
02.094	Jones ES	ES	3	Severna Park	5			48,772	24
	Jones ES					1998	Addition	27,393	
	Jones ES					1998	Renovation	18,000	
	Jones ES					2015	Addition	3,379	
02.103	Lake Shore ES	ES	1	Chesapeake	3			63,422	14
	Lake Shore ES					2009	Renovation	25,265	
	Lake Shore ES					2009	Renovation	10,869	
	Lake Shore ES					2009	Addition	27,288	
02.127	Lindale MS	MS	1	North County	1			191,583	27
	Lindale MS					1996	Renovation	184,000	
	Lindale MS					1996	Renovation	7,583	
02.008	Linthicum ES	ES	1	North County	1			81,718	28
	Linthicum ES					1971	New	34,038	
	Linthicum ES					2004	Addition	1,038	
	Linthicum ES					2011	Renovation	36,606	
	Linthicum ES					2020	Addition	10,036	
02.024	Lothian ES	ES	3	Southern	7			84,588	8
	Lothian ES					2015	Replacement	84,588	
02.087	MacArthur MS	MS	2	Meade	4			211,620	56
	MacArthur MS					1967	New	211,620	
02.007	Magothy River MS	MS	3	Broadneck	5			170,000	36
	Magothy River MS					1974	New	117,761	
	Magothy River MS					2015	Renovation	52,239	
02.074	Manor View ES	ES	2	Meade	4			71,576	4
	Manor View ES					2019	Renovation	62,894	
	Manor View ES					2019	Addition	8,682	
02.079	Marley ES	ES	1	Glen Burnie	2			81,934	16
	Marley ES					2005	Addition	67,111	
	Marley ES					2014	Addition	9,856	
	Marley ES					2018	Addition	4,967	
02.095	Marley Glen Special	Other	1	Other	2			50,318	52
	Marley Glen Special					1971	New	50,318	
02.059	Marley MS	MS	1	Glen Burnie	2			154,293	17

FY24 Average Modified Age of AACPS Facilities

PSC No.	Location	Type	Operations Area	Cluster	Councilmatic District	Year	Type	Building Size	Average Modified Age (Years)
	Marley MS					2006	Addition	154,293	
02.110	Mary Moss	Other	1	Other	6			39,257	65
	Mary Moss					1958	New	39,257	
02.082	Maryland City ES	ES	2	Meade	4			61,434	45
	Maryland City ES					1965	New	46,237	
	Maryland City ES					2014	Addition	6,224	
	Maryland City ES					2019	Addition	8,973	
n/a	Maryland Hall	Other	3	Other	6			71,198	84
	Maryland Hall					1932	New	65,792	
	Maryland Hall					2018	Addition	5,406	
02.105	Mayo ES	ES	3	Southern	7			60,648	18
	Mayo ES					2005	Addition	60,648	
02.066	Meade Heights ES	ES	2	Meade	4			82,855	26
	Meade Heights ES					1997	Addition	74,000	
	Meade Heights ES					2023	Addition	8,855	
02.013	Meade HS	HS	2	Meade	4			351,142	35
	Meade HS					1977	New	243,101	
	Meade HS					2008	Renovation	32,023	
	Meade HS					2015	Renovation	55,776	
	Meade HS					2016	Addition	20,242	
02.104	Meade MS	MS	2	Meade	4			150,000	25
	Meade MS					1998	New	150,000	
n/a	Millersville Administrative Facility	Other	2	Other	6			17,500	97
	Millersville Administrative Facility					1926	New	17,500	
02.053	Millersville ES	ES	2	Old Mill	6			59,346	46
	Millersville ES					1965	New	45,994	
	Millersville ES					2018	Addition	6,577	
	Millersville ES					2020	Addition	6,775	
02.058	Mills-Parole ES	ES	3	Annapolis	6			89,767	8
	Mills-Parole ES					2015	Renovation	23,956	
	Mills-Parole ES					2015	Renovation	11,255	
	Mills-Parole ES					2015	Renovation	9,212	
	Mills-Parole ES					2015	Renovation	8,243	
	Mills-Parole ES					2015	Addition	37,101	
02.131	Nantucket ES	ES	2	Crofton	4			86,273	14
	Nantucket ES					2008	New	79,875	
	Nantucket ES					2015	Addition	6,398	
02.054	North County HS	HS	1	North County	1			331,764	27
	North County HS					1993	Addition	31,205	
	North County HS					1993	Renovation	216,500	
	North County HS					2002	Addition	55,717	
	North County HS					2007	Addition	28,342	
02.118	North Glen ES	ES	1	North County	1			57,087	50
	North Glen ES					1959	New	43,565	
	North Glen ES					2015	Addition	6,184	
	North Glen ES					2017	Addition	7,338	
02.055	Northeast HS	HS	1	Northeast	3			320,308	10
	Northeast HS					1995	Renovation	11,000	
	Northeast HS					2014	Addition	144,234	
	Northeast HS					2014	Renovation	165,074	
02.044	Northeast MS	MS	1	Northeast	3			164,393	34
	Northeast MS					1961	Addition	2,805	
	Northeast MS					1989	Addition	15,800	
	Northeast MS					1989	Renovation	97,752	
	Northeast MS					1989	Renovation	48,036	
02.107	Oak Hill ES	ES	1	Severna Park	5			80,482	34
	Oak Hill ES					1971	New	43,927	
	Oak Hill ES					2003	Addition	846	
	Oak Hill ES					2010	Renovation	28,340	
	Oak Hill ES					2013	Addition	7,369	
02.109	Oakwood ES	ES	1	Glen Burnie	2			55,674	53
	Oakwood ES					1957	New	42,758	
	Oakwood ES					2011	Addition	6,552	
	Oakwood ES					2015	Addition	6,364	
02.048	Odenton ES	ES	2	Arundel	4			89,287	27
	Odenton ES					1991	Addition	26,200	
	Odenton ES					1991	Renovation	10,748	
	Odenton ES					1991	Renovation	34,354	
	Odenton ES					2017	Addition	17,985	
02.002	Old Mill HS	HS	2	Old Mill	2			283,194	48
	Old Mill HS					1975	New	283,194	
02.001	Old Mill MS North	MS	2	Old Mill	2			159,635	48
	Old Mill MS North					1975	New	159,635	
02.133	Old Mill MS South	MS	2	Old Mill	2			159,635	48
	Old Mill MS South					1975	New	159,635	
02.136	Old Mill West HS	HS	2	Other	2			0	0
	Old Mill West HS						New	0	
02.119	Overlook ES	ES	1	North County	1			62,129	12
	Overlook ES					2011	Addition	20,975	
	Overlook ES					2011	Renovation	10,154	

FY24 Average Modified Age of AACPS Facilities

PSC No.	Location	Type	Operations Area	Cluster	Councilmatic District	Year	Type	Building Size	Average Modified Age (Years)
	Overlook ES					2011	Renovation	31,000	
02.076	Park ES	ES	1	North County	1			77,436	24
	Park ES					1996	Addition	67,976	
	Park ES					2018	Addition	9,460	
02.070	Pasadena ES	ES	1	Chesapeake	3			68,023	15
	Pasadena ES					2008	Addition	68,023	
02.060	Pershing Hill ES	ES	2	Meade	4			87,160	12
	Pershing Hill ES					2011	Replacement	87,160	
02.083	Phoenix Academy	Other	3	Other	6			71,110	10
	Phoenix Academy					2013	Renovation	50,132	
	Phoenix Academy					2013	Addition	20,978	
02.100	Piney Orchard ES	ES	2	Arundel	4			76,448	21
	Piney Orchard ES					2000	New	66,790	
	Piney Orchard ES					2012	Addition	9,658	
02.134	Point Pleasant ES	ES	1	Glen Burnie	2			95,925	10
	Point Pleasant ES					2013	Addition	41,689	
	Point Pleasant ES					2013	Renovation	54,236	
02.078	Quarterfield ES	ES	2	Glen Burnie	2			83,840	0
	Quarterfield ES					2023	Replacement	83,840	
n/a	Resource Center at Glendale	Other	1	Other	2			5,184	53
	Resource Center at Glendale					1970	New	5,184	
02.112	Resource Center at Point Pleasant	Other	1	Other	2			46,373	64
	Resource Center at Point Pleasant					1958	New	30,642	
	Resource Center at Point Pleasant					1960	Addition	15,731	
02.022	Richard Henry Lee ES	ES	1	Glen Burnie	2			80,979	3
	Richard Henry Lee ES					2020	Renovation	28,802	
	Richard Henry Lee ES					2020	Addition	52,177	
02.090	Ridgeway ES	ES	2	Old Mill	2			77,659	23
	Ridgeway ES					1999	New	69,152	
	Ridgeway ES					2011	Addition	8,507	
02.033	Rippling Woods ES	ES	2	Old Mill	2			102,834	0
	Rippling Woods ES					2023	Replacement	102,834	
02.097	Riviera Beach ES	ES	1	Northeast	3			57,867	46
	Riviera Beach ES					1971	Addition	37,110	
	Riviera Beach ES					1971	Renovation	13,806	
	Riviera Beach ES					2019	Addition	6,951	
02.081	Rolling Knolls ES	ES	3	Annapolis	6			84,588	7
	Rolling Knolls ES					2016	Replacement	84,588	
02.039	Ruth Parker Eason	Other	2	Other	2			54,526	39
	Ruth Parker					1984	New	53,666	
	Ruth Parker					2002	Addition	860	
02.129	Seven Oaks ES	ES	2	Meade	4			81,209	16
	Seven Oaks ES					2007	New	81,209	
02.043	Severn ES	ES	2	Old Mill	2			62,964	27
	Severn ES					1985	Addition	4,514	
	Severn ES					1985	Renovation	15,654	
	Severn ES					1985	Renovation	17,652	
	Severn ES					2011	Addition	6,989	
	Severn ES					2011	Renovation	2,123	
	Severn ES					2012	Renovation	16,032	
02.096	Severn River MS	MS	3	Broadneck	5			170,000	36
	Severn River MS					1974	New	117,783	
	Severn River MS					2015	Renovation	52,217	
02.052	Severna Park ES	ES	1	Severna Park	5			56,345	33
	Severna Park ES					1964	Addition	10,625	
	Severna Park ES					1992	Addition	12,005	
	Severna Park ES					1992	Renovation	9,794	
	Severna Park ES					1992	Renovation	16,238	
	Severna Park ES					2013	Addition	7,683	
02.005	Severna Park HS	HS	1	Severna Park	5			354,162	6
	Severna Park HS					2017	Replacement	354,162	
02.089	Severna Park MS	MS	1	Severna Park	5			205,905	13
	Severna Park MS					2010	Addition	60,790	
	Severna Park MS					2010	Renovation	145,115	
02.113	Shady Side ES	ES	3	Southern	7			79,968	24
	Shady Side ES					1971	New	32,687	
	Shady Side ES					2003	Addition	846	
	Shady Side ES					2018	Addition	6,855	
	Shady Side ES					2019	Renovation	39,580	
02.049	Shipleys Choice ES	ES	2	Severna Park	5			68,119	35
	Shipleys Choice ES					1988	New	68,119	
02.067	Solley ES	ES	1	Northeast	3			90,510	24
	Solley ES					1995	Addition	72,882	
	Solley ES					2012	Renovation	1,200	
	Solley ES					2012	Addition	9,254	
	Solley ES					2019	Addition	7,174	
02.099	South River HS	HS	3	South River	7			295,900	43
	South River HS					1978	new	271,900	
	South River HS					2001	Renovation	24,000	
02.077	South Shore ES	ES	3	Old Mill	6			52,503	25

FY24 Average Modified Age of AACPS Facilities

PSC No.	Location	Type	Operations Area	Cluster	Councilmatic District	Year	Type	Building Size	Average Modified Age (Years)
	South Shore ES					1997	Addition	49,508	
	South Shore ES					2013	Addition	2,995	
02.068	Southern HS	HS	3	Southern	7			226,206	53
	Southern HS					1968	New	213,906	
	Southern HS					1995	Renovation	10,635	
	Southern HS					2013	Renovation	1,665	
02.042	Southern MS	MS	3	Southern	7			200,102	34
	Southern MS					1933	New	23,100	
	Southern MS					1986	Renovation	44,390	
	Southern MS					1986	Renovation	23,840	
	Southern MS					2002	Addition	108,772	
02.114	Southgate ES	ES	2	Old Mill	2			87,165	12
	Southgate ES					2011	Renovation	45,747	
	Southgate ES					2011	Addition	41,418	
n/a	Staff Development	Other	2	Other	7			20,711	67
	Staff Development					1949	New	9,001	
	Staff Development					1962	Addition	11,710	
02.111	Studio 39	Other	3	Other	6			36,000	83
	Studio 39					1940	New	36,000	
02.108	Sunset ES	ES	1	Northeast	3			78,144	27
	Sunset ES					1971	New	32,097	
	Sunset ES					2003	Addition	846	
	Sunset ES					2011	Renovation	36,300	
	Sunset ES					2022	Addition	8,901	
02.101	Traceys ES	ES	3	Southern	7			56,640	16
	Traceys ES					2007	Renovation	11,460	
	Traceys ES					2007	Renovation	26,089	
	Traceys ES					2007	Addition	19,091	
02.069	Tyler Heights ES	ES	3	Annapolis	6			84,813	2
	Tyler Heights ES					2021	Renovation	40,629	
	Tyler Heights ES					2021	Addition	44,184	
02.004	Van Bokkelen ES	ES	2	Meade	1			76,833	44
	Van Bokkelen ES					1973	New	66,572	
	Van Bokkelen ES					1996	Addition	1,400	
	Van Bokkelen ES					2002	Addition	909	
	Van Bokkelen ES					2021	Renovation	1,644	
	Van Bokkelen ES					2021	Addition	6,308	
02.102	Waugh Chapel ES	ES	2	Arundel	4			62,101	44
	Waugh Chapel ES					1967	New	46,266	
	Waugh Chapel ES					2011	Addition	8,096	
	Waugh Chapel ES					2011	Renovation	1,650	
	Waugh Chapel ES					2014	Addition	6,089	
02.036	West Annapolis ES	ES	3	Annapolis	6			53,885	7
	West Annapolis ES					2016	Renovation	11,122	
	West Annapolis ES					2016	Addition	42,763	
02.137	West County ES	ES	2	Other	4			0	0
	West County ES					2024	New	0	
02.072	West Meade EEC	ES	2	Meade	4			45,680	50
	West Meade EEC					1964	New	38,093	
	West Meade EEC					2017	Addition	7,587	
02.047	Windsor Farm ES	ES	3	Broadneck	5			77,432	32
	Windsor Farm ES					1989	New	68,310	
	Windsor Farm ES					2010	Addition	9,122	
02.120	Woodside ES	ES	1	Glen Burnie	2			64,963	47
	Woodside ES					1965	New	51,946	
	Woodside ES					2018	Addition	5,990	
	Woodside ES					2018	Addition	7,027	
	Total							14,302,385	29

Attachment 9

AACPS Annual Facility Maintenance / Operating / Capital Renewal Budgets

Capital Improvement Plan

FY23 Budget Summary

Capital Funds				
Program	County Council Approved	O&M/ Capital Renewal Contribution*	O&M/ Capital Renewal % Contribution	\$/GSF
Health & Safety	\$ 1,200,000.00	\$ 1,200,000.00	100%	
Security Related Upgrades	\$ 3,000,000.00	\$ -	0%	
Building Systemics Renovation	\$ 30,000,000.00	\$ 30,000,000.00	100%	
Maintence Backlog Reduction	\$ 7,000,000.00	\$ 7,000,000.00	100%	
Roof Replacement	\$ 3,000,000.00	\$ 3,000,000.00	100%	
Relocatable Classrooms	\$ 1,200,000.00	\$ -	0%	
Asbestos Abatement	\$ 600,000.00	\$ 600,000.00	100%	
Barrier Free Access	\$ 350,000.00	\$ -	0%	
School Bus Replacement	\$ 900,000.00	\$ -	0%	
Additions	\$ 10,000,000.00	\$ -	0%	
Quarterfield ES	\$ 5,031,000.00	\$ 2,753,428.38	55%	
Hillsmere ES	\$ 5,704,000.00	\$ 3,849,621.11	67%	
Rippling Woods ES	\$ 5,962,000.00	\$ 4,435,235.43	74%	
Old Mill West HS	\$ 44,004,000.00	\$ -	0%	
West County ES	\$ 21,564,000.00	\$ -	0%	
Old Mill South	\$ 40,633,000.00	\$ 40,633,000.00	100%	
CAT North	\$ 5,336,000.00	\$ 4,660,439.18	87%	
Health Room Modifications	\$ 350,000.00	\$ -	0%	
School Furniture	\$ 600,000.00	\$ -	0%	
Upgrade Various Schools	\$ 4,049,906.00	\$ -	0%	
Vehicle Replacement	\$ 400,000.00	\$ -	0%	
Aging Schools	\$ 575,000.00	\$ 575,000.00	100%	
Playground Equipment Improvements	\$ 300,000.00	\$ 300,000.00	100%	
Athletic Stadium Improvements	\$ 6,450,000.00	\$ 3,850,000.00	60%	
Driveway and Parking Lot Improvements	\$ 1,000,000.00	\$ -	0%	
Capital Funds Subtotal	\$ 199,208,906.00	\$ 102,856,724.09	52%	\$ 7.24

Operating Funds				
Department	County Council Approved	O&M/ Capital Renewal Contribution*	O&M/ Capital Renewal % Contribution	\$/GSF
Facilities	\$ 1,263,789.00	\$ 1,263,789.00	100%	
Planning, Design, and Construction	\$ 3,168,852.00	\$ 3,168,852.00	100%	
Maintenance	\$ 22,219,969.00	\$ 22,219,969.00	100%	
Operations	\$ 65,754,933.00	\$ 37,518,457.00	57%	
Logistics	\$ 3,472,477.00	\$ 3,472,477.00	100%	
Operating Funds Subtotal	\$ 95,880,020.00	\$ 67,643,544.00	71%	\$ 4.76

Special Funding				
Program	Approved	O&M/ Capital Renewal Contribution*	O&M/ Capital Renewal % Contribution	\$/GSF
ESSER III Funds	\$ 5,055,795.00	\$ 5,055,795.00	100%	
Special Funds Subtotal	\$ 5,055,795.00	\$ 5,055,795.00	100%	\$ 0.36

Total FY24 Funding	\$ 300,144,721.00	\$ 175,556,063.09	58%	\$ 12.37
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* indicates items have been prorated to only reflect O&M/capital renewal components (e.g., a replacement school project will only account for the funds associated with the existing building square footage and not the complete replacement building).

FY24 Budget Summary

Capital Funds				
Program	County Council Approved	O&M/ Capital Renewal Contribution*	O&M/ Capital Renewal % Contribution	\$/GSF
Health & Safety	\$ 1,234,000.00	\$ 1,234,000.00	100%	
Security Related Upgrades	\$ 2,000,000.00	-	0%	
Building Systemics Renovation	\$ 37,161,000.00	\$ 37,161,000.00	100%	
Maintenance Backlog Reduction	\$ 8,022,947.00	\$ 8,022,947.00	100%	
Roof Replacement	\$ 3,401,000.00	\$ 3,401,000.00	100%	
Relocatable Classrooms	\$ 600,000.00	-	0%	
Asbestos Abatement	\$ 600,000.00	\$ 600,000.00	100%	
Barrier Free Access	\$ 350,000.00	-	0%	
School Bus Replacement	\$ 800,000.00	-	0%	
Additions	\$ 4,000,000.00	-	0%	
West County ES	\$ 12,614,000.00	-	0%	
Old Mill MS South	\$ 37,337,000.00	\$ 37,337,000.00	100%	
CAT North	\$ 58,418,000.00	\$ 51,022,026.95	87%	
Old Mill MS North	\$ 11,357,000.00	\$ 10,788,690.43	95%	
Old Mill HS	\$ 12,703,000.00	\$ 11,404,321.48	90%	
Health Room Modifications	\$ 350,000.00	-	0%	
School Furniture	\$ 500,000.00	-	0%	
Upgrade Various Schools	\$ 850,000.00	-	0%	
Vehicle Replacement	\$ 400,000.00	-	0%	
Aging Schools	\$ 575,000.00	\$ 575,000.00	100%	
Playground Equipment Improvements	\$ 400,000.00	\$ 400,000.00	100%	
Athletic Stadium Improvements	\$ 5,900,000.00	\$ 3,500,000.00	59%	
Driveway and Parking Lot Improvements	\$ 1,000,000.00	-	0%	
Capital Funds Subtotal	\$ 200,572,947.00	\$ 165,445,985.86	82%	\$ 11.57

Operating Funds				
Department	County Council Approved	O&M/ Capital Renewal Contribution*	O&M/ Capital Renewal % Contribution	\$/GSF
Facilities	\$ 1,337,092.00	\$ 1,337,092.00	100%	
Planning, Design, and Construction	\$ 4,705,432.00	\$ 4,705,432.00	100%	
Maintenance	\$ 24,461,480.00	\$ 24,461,480.00	100%	
Operations	\$ 72,121,970.00	\$ 43,885,494.00	61%	
Logistics	\$ 3,968,315.00	\$ 3,968,315.00	100%	
Operating Funds Subtotal	\$ 106,594,289.00	\$ 78,357,813.00	74%	\$ 5.48

Special Funding				
Program	Approved	O&M/ Capital Renewal Contribution*	O&M/ Capital Renewal % Contribution	\$/GSF
ESSER III Funds	\$ 13,722,240.00	\$ 13,722,240.00	100%	
Special Funds Subtotal	\$ 13,722,240.00	\$ 13,722,240.00	100%	\$ 0.96

Total FY24 Funding	\$ 320,889,476.00	\$ 257,526,038.86	80%	\$ 18.01
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* indicates items have been prorated to only reflect O&M/capital renewal components (e.g., a replacement school project will only account for the funds associated with the existing building square footage and not the complete replacement building).

County Council Approved, June 14, 2023

FY 2024 Capital Budget

BoE Priority	Requirement	BoE Request	County Council Approved
1	Health & Safety '24	\$1,200,000	\$1,234,000
2	Security Related Upgrades '24	2,000,000	
3	Building Systems Ren. '25 (Systemics)	35,515,000	37,161,000
4	Maintenance Backlog Reduction '24	7,000,000	8,022,947
5	Roof Replacement '24	3,000,000	3,401,000
6	Relocatable Classrooms '24	1,200,000	600,000
7	Asbestos Abatement '24	600,000	
8	Barrier Free Access '24	350,000	
9	School Bus Replacement '24	2,000,000	800,000
10	Additions '24	4,000,000	
11	West County ES - Construction	12,614,000	
12	Old Mill MS South - Construction	37,337,000	
13	CAT North - Construction	58,418,000	
14	Old Mill MS North - Design/Construction	11,357,000	
15	Old Mill HS - Design/Construction	12,703,000	
16	Health Room Modifications '24	350,000	
17	School Furniture '24	600,000	500,000
18	Upgrade Various Schools '24	800,000	850,000
19	Vehicle Replacement '24	500,000	400,000
20	Aging Schools '24	575,000	
21	Playground Equipment Improvements '24	400,000	
22	Athletic Stadium Improvements '24	3,500,000	5,900,000
23	Driveway and Parking Lot Improvements '24	1,000,000	
Total Project - Board of Education		\$197,019,000	200,572,947

Projects with Modified Funding in County Council Approved Budget

Projects Not Funded within County Council Approved Budget

Total Recommendation

BoE \$197M

County Council \$200.6M

Anne Arundel County Public Schools
Board of Education Requested/County Council Approved
FY 2024 Capital Budget Six Year Plan
June 14, 2023

Recurring Projects	Project Total	Prior Years	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Health & Safety	7,200,000		1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
<i>County Council Approved</i>			<i>1,234,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>
Security Related Upgrades	12,000,000		2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
<i>County Council Approved</i>			<i>2,000,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>
Building Systems Ren. (Systemics)	135,515,000		35,515,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000
<i>County Council Approved</i>			<i>37,161,000</i>	<i>12,500,000</i>	<i>12,500,000</i>	<i>12,500,000</i>	<i>12,500,000</i>	<i>12,500,000</i>
Maintenance Backlog Reduction	42,000,000		7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000
<i>County Council Approved</i>			<i>8,022,947</i>	<i>3,650,000</i>	<i>3,650,000</i>	<i>3,650,000</i>	<i>3,650,000</i>	<i>3,650,000</i>
Roof Replacement	18,000,000		3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
<i>County Council Approved</i>			<i>3,401,000</i>	<i>2,000,000</i>	<i>2,000,000</i>	<i>2,000,000</i>	<i>2,000,000</i>	<i>2,000,000</i>
Relocatable Classrooms	7,200,000		1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
<i>County Council Approved</i>			<i>600,000</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Asbestos Abatement	3,600,000		600,000	600,000	600,000	600,000	600,000	600,000
<i>County Council Approved</i>			<i>600,000</i>	<i>600,000</i>	<i>600,000</i>	<i>600,000</i>	<i>600,000</i>	<i>600,000</i>
Barrier Free Access	2,100,000		350,000	350,000	350,000	350,000	350,000	350,000
<i>County Council Approved</i>			<i>350,000</i>	<i>350,000</i>	<i>350,000</i>	<i>350,000</i>	<i>350,000</i>	<i>350,000</i>
School Bus Replacement	17,000,000		2,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
<i>County Council Approved</i>			<i>800,000</i>	<i>800,000</i>	<i>800,000</i>	<i>800,000</i>	<i>800,000</i>	<i>800,000</i>
Health Room Modifications	2,100,000		350,000	350,000	350,000	350,000	350,000	350,000
<i>County Council Approved</i>			<i>350,000</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
School Furniture	3,600,000		600,000	600,000	600,000	600,000	600,000	600,000
<i>County Council Approved</i>			<i>500,000</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Upgrade Various Schools	4,800,000		800,000	800,000	800,000	800,000	800,000	800,000
<i>County Council Approved</i>			<i>850,000</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Vehicle Replacement	3,000,000		500,000	500,000	500,000	500,000	500,000	500,000
<i>County Council Approved</i>			<i>400,000</i>	<i>400,000</i>	<i>400,000</i>	<i>400,000</i>	<i>400,000</i>	<i>400,000</i>
Aging Schools	3,450,000		575,000	575,000	575,000	575,000	575,000	575,000
<i>County Council Approved</i>			<i>575,000</i>	<i>575,000</i>	<i>575,000</i>	<i>575,000</i>	<i>575,000</i>	<i>575,000</i>
Playground Equipment Improvements	2,400,000		400,000	400,000	400,000	400,000	400,000	400,000
<i>County Council Approved</i>			<i>400,000</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Athletic Stadium Improvements	21,000,000		3,500,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
<i>County Council Approved</i>			<i>5,900,000</i>	<i>1,200,000</i>	<i>1,200,000</i>	<i>1,200,000</i>	<i>1,200,000</i>	<i>1,200,000</i>
Driveway and Parking Lot Improvements	6,000,000		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
<i>County Council Approved</i>			<i>1,000,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>	<i>500,000</i>
Subtotal	290,965,000		60,590,000	46,075,000	46,075,000	46,075,000	46,075,000	46,075,000
<i>County Council Approved</i>			<i>64,143,947</i>	<i>23,575,000</i>	<i>23,575,000</i>	<i>23,575,000</i>	<i>23,575,000</i>	<i>23,575,000</i>

Anne Arundel County Public Schools
Board of Education Requested/County Council Approved
FY 2024 Capital Budget Six Year Plan
June 14, 2023

Major Capital Projects	Project Total	Prior Years	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Additions	24,000,000		4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
<i>County Council Approved</i>			<i>4,000,000</i>	<i>3,000,000</i>	<i>3,000,000</i>	<i>3,000,000</i>	<i>3,000,000</i>	<i>3,000,000</i>
West County ES - Construction	50,266,000	37,652,000	12,614,000					
<i>County Council Approved</i>			<i>12,614,000</i>					
Old Mill MS South - Construction	85,766,000	48,429,000	37,337,000					
<i>County Council Approved</i>			<i>37,337,000</i>					
CAT North -Construction	120,833,000	5,336,000	58,418,000	57,079,000				
<i>County Council Approved</i>			<i>58,418,000</i>	<i>52,079,000</i>				
Old Mill MS North - Design/Construction	101,448,000		11,357,000	46,693,000	43,398,000			
<i>County Council Approved</i>			<i>11,357,000</i>	<i>46,693,000</i>	<i>33,398,000</i>			
Old Mill HS - Design/Construction	193,876,000		12,703,000	73,850,000	85,766,000	21,557,000		
<i>County Council Approved</i>			<i>12,703,000</i>	<i>73,850,000</i>	<i>85,766,000</i>	<i>21,557,000</i>		
Ruth Parker Eason - Design	52,169,000				4,059,000	22,296,000	19,906,000	5,908,000
<i>County Council Approved</i>					<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Northeast Area ES - Design	49,558,000					3,928,000	21,255,000	18,833,000
<i>County Council Approved</i>						<i>0</i>	<i>0</i>	<i>3,928,000</i>
West County HS - Design	195,828,000					13,288,000	85,251,000	75,322,000
<i>County Council Approved</i>						<i>0</i>	<i>0</i>	<i>0</i>
Subtotal	873,744,000		136,429,000	181,622,000	137,223,000	65,069,000	130,412,000	104,063,000
<i>County Council Approved</i>			<i>136,429,000</i>	<i>175,622,000</i>	<i>122,164,000</i>	<i>24,557,000</i>	<i>3,000,000</i>	<i>6,928,000</i>
Total - Board of Education	1,164,709,000		197,019,000	227,697,000	183,298,000	111,144,000	176,487,000	150,138,000
<i>County Council Approved</i>			<i>200,572,947</i>	<i>199,197,000</i>	<i>145,739,000</i>	<i>48,132,000</i>	<i>26,575,000</i>	<i>30,503,000</i>

Attachment 10

Target Funding Level Comparison

Target Funding Level Comparison

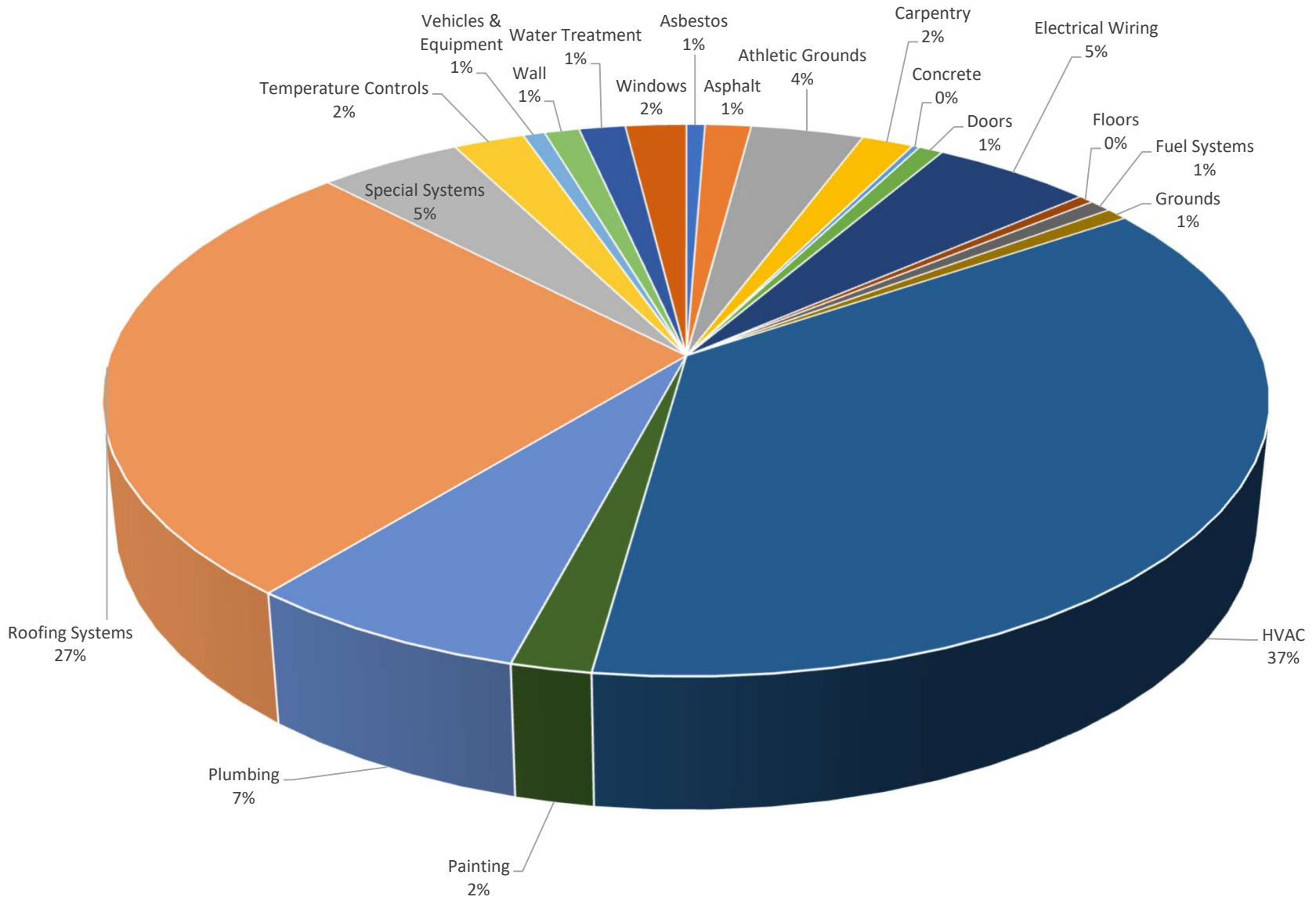
Fiscal Year	Approved O&M/ Captial Renewal Funding	% CRV	Recommended for APPA Level 2				Delta	
			Low (3.5% CRV)	Low \$/GSF	High (4.0% CRV)	High \$/GSF	Low (3.5% CRV)	High (4.0% CRV)
FY23	\$ 175,556,063.09	2.58%	\$ 239,000,000.00	\$ 16.83	\$ 273,000,000.00	\$ 19.09	\$ (63,443,936.91)	\$ (97,443,936.91)
FY24	\$ 258,000,000.00	3.50%	\$ 258,000,000.00	\$ 18.04	\$ 295,000,000.00	\$ 20.63	\$ -	\$ (37,000,000.00)

FY25 Budget Scenarios									
Options	O&M/ Captial Renewal Funding	% CRV	Recommended for APPA Level 2				Delta		% Increase from FY24
			Low (3.5% CRV)	Low \$/GSF	High (4.0% CRV)	Low \$/GSF	Low (3.5% CRV)	High (4.0% CRV)	
FY25- Net-Zero Budget	\$ 258,000,000.00	3.23%					\$ (21,000,000.00)	\$ (61,000,000.00)	0%
FY25- Maintain % CRV	\$ 279,000,000.00	3.50%					\$ -	\$ (40,000,000.00)	8%
FY25- Low-Point Target % CRV	\$ 279,000,000.00	3.50%	\$ 279,000,000.00	\$ 19.51	\$ 319,000,000.00	\$ 22.30	\$ -	\$ (40,000,000.00)	8%
FY25- Mid-Point Target % CRV	\$ 299,000,000.00	3.75%					\$ 20,000,000.00	\$ (20,000,000.00)	16%
FY25- High-Point Target % CRV	\$ 319,000,000.00	4.00%					\$ 40,000,000.00	\$ -	24%

Attachment 11

Planned Capital Renewal Projects

Projected 10 Year Capital Renewal Needs by Classification



Projected 10 Year Capital Renewal Needs by Classification (FY25 Dollars)

Classification	FY25	FY26-29	FY30-34	Total
Asbestos	\$ 625,000.00	\$ 1,725,000.00	\$ 1,700,000.00	\$ 4,050,000.00
Asphalt	\$ 1,175,000.00	\$ 5,000,000.00	\$ 3,925,000.00	\$ 10,100,000.00
Athletic Grounds	\$ 3,525,000.00	\$ 9,750,000.00	\$ 11,450,000.00	\$ 24,725,000.00
Carpentry	\$ 2,825,000.00	\$ 4,515,000.00	\$ 4,030,000.00	\$ 11,370,000.00
Concrete	\$ 85,000.00	\$ 660,000.00	\$ 850,000.00	\$ 1,595,000.00
Doors	\$ 970,000.00	\$ 2,150,000.00	\$ 2,245,000.00	\$ 5,365,000.00
Electrical Wiring	\$ 14,525,000.00	\$ 18,550,000.00	\$ 2,300,000.00	\$ 35,375,000.00
Floors	\$ 210,000.00	\$ 1,388,000.00	\$ 1,776,000.00	\$ 3,374,000.00
Fuel Systems	\$ 780,000.00	\$ 2,865,000.00	\$ 1,275,000.00	\$ 4,920,000.00
Grounds	\$ 900,000.00	\$ 1,865,000.00	\$ 2,095,000.00	\$ 4,860,000.00
HVAC	\$ 29,770,000.00	\$ 98,541,000.00	\$ 120,300,000.00	\$ 248,611,000.00
Painting	\$ 1,530,000.00	\$ 5,980,000.00	\$ 5,605,000.00	\$ 13,115,000.00
Plumbing	\$ 2,965,000.00	\$ 13,375,000.00	\$ 29,790,000.00	\$ 46,130,000.00
Roofing Systems	\$ 15,819,000.00	\$ 64,879,000.00	\$ 101,499,000.00	\$ 182,197,000.00
Special Systems	\$ 9,125,000.00	\$ 10,450,000.00	\$ 11,860,000.00	\$ 31,435,000.00
Temperature Controls	\$ 1,705,000.00	\$ 7,640,000.00	\$ 6,270,000.00	\$ 15,615,000.00
Vehicles & Equipment	\$ 1,800,000.00	\$ 2,450,000.00	\$ 500,000.00	\$ 4,750,000.00
Wall	\$ 1,103,000.00	\$ 3,500,000.00	\$ 3,060,000.00	\$ 7,663,000.00
Water Treatment	\$ 2,000,000.00	\$ 3,250,000.00	\$ 4,875,000.00	\$ 10,125,000.00
Windows	\$ 2,500,000.00	\$ 7,115,000.00	\$ 3,750,000.00	\$ 13,365,000.00
Total	\$ 93,937,000.00	\$ 265,648,000.00	\$ 319,155,000.00	\$ 678,740,000.00

FY25 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Annapolis MS	\$ 300,000
Replace Exterior Doors and Frames	\$ 300,000
Arlington Echo Outdoor Education Center	\$ 2,000,000
Replace Water Treatment Plant	\$ 2,000,000
Arundel HS	\$ 595,000
Elevator Mod Upgrade	\$ 325,000
Replace Oil Tank	\$ 270,000
Belle Grove ES	\$ 75,000
Paint Interior/Exterior	\$ 75,000
Belvedere ES	\$ 85,000
Replace Sidewalk, Curb and Gutters	\$ 85,000
Bodkin ES	\$ 910,000
Remove and Replace Asbestos Floor Tile - Phase 1 and 2	\$ 250,000
Replace Playground Equipment 5-12	\$ 160,000
Replace Windows	\$ 500,000
Broadneck ES	\$ 975,000
Remove and Replace Asbestos Floor Tiles - Phase 1	\$ 125,000
Replace Casework & Counter Tops	\$ 250,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Broadneck HS	\$ 950,000
Replace Boiler #3 and Associated Equipment	\$ 450,000
Replace Outdoor Bleachers (home side only)	\$ 500,000
Brooklyn Park ES	\$ 600,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Carrie Weedon EEC	\$ 1,500,000
HVAC Upgrade - Perimeter Heat	\$ 1,500,000
Center of Applied Tech. South	\$ 400,000
Paint Interior/Exterior	\$ 400,000
Central MS	\$ 5,050,000
Install New Chiller With Enclosure, 3 HVAC Units, Pumps, Exhaust Fans and Cont	\$ 3,250,000
Replace Generator (Diesel)	\$ 400,000
Replace Main Distribution Center and Motor Control Center	\$ 1,400,000
Central Office @ Parham Building	\$ 1,325,000
Replace Main Distribution Center and Motor Control Center	\$ 1,325,000
Central Special	\$ 65,000
Paint Interior/Exterior	\$ 65,000
Chesapeake Bay MS	\$ 2,728,000
Replace Main Distribution Center and Motor Control Center	\$ 2,700,000
Sand and Refinish Gym Floor	\$ 28,000
Chesapeake HS	\$ 2,775,000
Refurbish Running Track	\$ 200,000
Replace Main Distribution Center and Motor Control Center	\$ 1,800,000
Replace PA System	\$ 775,000

FY25 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Corkran MS	\$ 2,700,000
Replace Ceiling Tile and Lights	\$ 2,000,000
Upgrade Building Automation System / Controls	\$ 700,000
Crofton Meadows ES	\$ 3,200,000
Air Handling Units	\$ 2,700,000
Replace 1 Chiller	\$ 500,000
Crofton MS	\$ 1,725,000
Paint Interior/Exterior	\$ 325,000
Phase 1 - Replace Front Driveway and Bus lot	\$ 250,000
Replace Exterior Doors and Frames	\$ 350,000
Replace Main Distribution Center and Motor Control Center	\$ 800,000
Crofton Woods ES	\$ 7,089,000
Replace All Air Handling Units, UVs	\$ 2,900,000
Replace Fire Alarm System	\$ 500,000
Replace Roof	\$ 3,689,000
Deale ES	\$ 525,000
Replace Oil Tank	\$ 255,000
Upgrade Building Automation System/Controls	\$ 270,000
Facilities Division	\$ 255,000
Replace Warehouse Septic System	\$ 255,000
Fort Smallwood ES	\$ 3,698,000
Replace Fire Alarm System	\$ 500,000
Replace PA System	\$ 500,000
Replace Playground Equipment ALL	\$ 260,000
Replace Roof	\$ 2,438,000
Four Seasons ES	\$ 1,125,000
Replace 225 Ton Chiller	\$ 350,000
Replace Exterior Doors and Frames	\$ 175,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Freetown ES	\$ 22,000
Sand and Refinish Gym Floor	\$ 22,000
Georgetown East ES	\$ 645,000
Replace Exterior Doors and Frames	\$ 145,000
Replace Fire Alarm System	\$ 500,000
Glen Burnie HS	\$ 2,375,000
Replace Artificial Turf	\$ 625,000
Replace Casework & Counter Tops - Building C/D	\$ 450,000
Replace Main Distribution Center and Motor Control Center Buildings B & F	\$ 800,000
Re-point Brick - E Bldg	\$ 500,000
Glen Burnie Park ES	\$ 750,000
Replace 2 Boilers	\$ 750,000
Hilltop ES	\$ 1,500,000
Replace All Air Handling Units	\$ 1,000,000
Replace Fire Alarm System	\$ 500,000

FY25 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
J Albert Adams Academy	\$ 75,000
Phase 1 - Replace Delivery Access Road to Front Drive	\$ 75,000
Jones ES	\$ 750,000
Replace 2 Boilers	\$ 750,000
Linthicum ES	\$ 820,000
Replace 200 Ton Chiller	\$ 320,000
Replace Fire Alarm System	\$ 500,000
Magothy/Severn River MS	\$ 3,100,000
Replace 240 Ton and 600 Ton Air Cooled Chillers, Add Glycol Heat Exchanger	\$ 3,100,000
Marley ES	\$ 160,000
Replace Playground Equipment	\$ 160,000
Marley Glen Special	\$ 60,000
Replace Carpet With Tile	\$ 60,000
Marley MS	\$ 400,000
Replace Generator (Nat/Gas)	\$ 400,000
Maryland Hall for the Creative Arts	\$ 500,000
Replace Fire Alarm System	\$ 500,000
Mayo ES	\$ 325,000
Upgrade Building Automation System / Controls	\$ 325,000
Meade Heights ES	\$ 2,820,000
Change Classroom UVs, AHUs, and Controls	\$ 2,600,000
Replace Carpet With Tile	\$ 60,000
Replace Playground Equipment All	\$ 160,000
Meade MS	\$ 300,000
Phase 2 - Replace Bus Lot	\$ 300,000
Millersville ES	\$ 335,000
Paint Interior/Exterior	\$ 80,000
Replace Oil Tank - Gas Conversion	\$ 255,000
North County HS	\$ 2,500,000
Replace Artificial Turf	\$ 700,000
Replace Generator (Nat/Gas)	\$ 500,000
Replace Outdoor Bleachers (home side only)	\$ 1,300,000
Northeast MS	\$ 890,000
Paint Interior/Exterior	\$ 350,000
Replace Carpet With Tile	\$ 40,000
Re-point Brick Phase 1	\$ 500,000
Oak Hill ES	\$ 125,000
R+R Asbestos Floor Tiles	\$ 125,000
Oakwood ES	\$ 125,000
Replace Casework and Counter Tops - Phase 2	\$ 125,000
Park ES	\$ 3,500,000
HVAC/Controls/Pumps/Exhaust Fans/FCU/UV	\$ 3,500,000
Pershing Hill ES	\$ 80,000
Paint Interior/Exterior	\$ 80,000

FY25 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Piney Orchard ES	\$ 1,000,000
Replace Fire Alarm System	\$ 500,000
Replace PA System	\$ 500,000
Resource Center @ Point Pleasant	\$ 3,375,000
HVAC/Controls/Exhaust Fans/FCU/UV	\$ 3,250,000
R&R Asbestos Floor Tile - Phase 1	\$ 125,000
Riviera Beach ES	\$ 3,255,000
Replace All Air Handling Units	\$ 2,700,000
Replace Bathroom Partitions	\$ 55,000
Replace PA System	\$ 500,000
Severn ES	\$ 760,000
Replace 2 Boilers	\$ 760,000
Severna Park ES	\$ 75,000
Paint Interior/Exterior	\$ 75,000
Severna Park HS	\$ 200,000
Resurface Running Track	\$ 200,000
South River HS	\$ 2,550,000
Phase 4 - Replace Bus Lot	\$ 250,000
Replace Main Distribution Center and Motor Control Center	\$ 2,300,000
South Shore ES	\$ 1,000,000
Air Handling Unit # 5	\$ 500,000
Replace PA System	\$ 500,000
Southern HS	\$ 6,175,000
Elevator Mod Upgrade	\$ 325,000
Replace 2 400 To Water Cooled Chillers	\$ 1,600,000
Replace Fire Alarm System	\$ 750,000
Replace Generator (Nat/Gas)	\$ 500,000
Replace Main Distribution Center and Motor Control Center	\$ 1,000,000
Replace Windows	\$ 2,000,000
Southern MS	\$ 5,580,000
Replace Fire Alarm System	\$ 750,000
Replace Roof	\$ 4,830,000
Southgate ES	\$ 80,000
Paint Interior/Exterior	\$ 80,000
Student Services Center @ Millersville	\$ 200,000
Replace Fire Alarm System	\$ 200,000
Sunset ES	\$ 3,960,000
Replace Bathroom Partitions	\$ 48,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace Roof	\$ 3,312,000
Van Bokkelen ES	\$ 960,000
Replace Fire Alarm System	\$ 500,000
Replace Playground Equipment 5-12	\$ 160,000
Replacement Of Driveway and Parking Lot	\$ 300,000

FY25 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Windsor Farm ES	\$ 1,960,000
Replace Roof	\$ 1,550,000
Upgrade Building Automation System / Controls	\$ 410,000
Grand Total	\$ 93,937,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Annapolis ES	\$ 830,000
Paint Interior/Exterior	\$ 80,000
Replace 2 Boilers and Associated Equipment	\$ 750,000
Annapolis HS	\$ 2,845,000
Paint Interior/Exterior	\$ 450,000
Replace 2 370 Ton Chillers	\$ 1,700,000
Replace Exterior Doors and Frames	\$ 425,000
Replace Oil Tank - Gas Conversion	\$ 270,000
Arundel HS	\$ 13,765,000
Replace 2 360 Ton Chiller	\$ 1,700,000
Replace Boiler #2 and Associated Equipment	\$ 500,000
Replace Casework & Counter Tops	\$ 850,000
Replace Exterior Doors and Frames	\$ 400,000
Replace Main Distribution Center and Motor Control Center	\$ 700,000
Replace PA System	\$ 775,000
Replace Roof	\$ 8,800,000
Sand and Refinish Gym Floor	\$ 40,000
Arundel MS	\$ 2,470,000
Elevator Mod Upgrade	\$ 325,000
Replace 2 360 Ton Chillers	\$ 840,000
Replace Main Distribution Center and Motor Control Center	\$ 450,000
Replace Oil Tank	\$ 255,000
Replace PA System	\$ 600,000
Bates MS	\$ 1,653,000
Paint Interior/Exterior	\$ 350,000
Phase 1 - Replace Main Drive and Bus Lot	\$ 250,000
Remove and Replace Asbestos Floor Tile - Phase 1	\$ 125,000
Remove and Replace Asbestos Floor Tile - Phase 2	\$ 125,000
Remove and Replace Asbestos Floor Tile - Phase 3	\$ 125,000
Replace Exterior Doors and Frames	\$ 400,000
Replace Hall Lockers	\$ 250,000
Sand and Refinish Gym Floor	\$ 28,000
Belvedere ES	\$ 325,000
Elevator Mod Upgrade	\$ 325,000
Benfield ES	\$ 75,000
Paint Interior/Exterior	\$ 75,000
Bodkin ES	\$ 3,500,000
Replace Roof	\$ 3,500,000
Broadneck ES	\$ 3,945,000
Phase 1 - Replace Main Drive and Bus Lot	\$ 250,000
Phase 2 - Replace Parking Lot	\$ 250,000
Remove and Replace Asbestos Floor Tiles - Phase 2	\$ 125,000
Replace Air Handling Units	\$ 2,900,000
Upgrade Building Automation System/Controls	\$ 420,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Broadneck HS	\$ 11,075,000
Elevator Mod Upgrade	\$ 325,000
Replace Main Distribution Center and Motor Control Center	\$ 1,550,000
Replace Roof	\$ 8,500,000
Replace Turf Field #2	\$ 700,000
Brock Bridge ES	\$ 4,000,000
Remove and Replace Asbestos Floor Tiles Phase 1	\$ 125,000
Remove and Replace Asbestos Floor Tiles Phase 2	\$ 75,000
Replace All Air Handling Units	\$ 2,950,000
Replace Casework & Counter Tops	\$ 250,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Brooklyn Park ES	\$ 2,780,000
Paint Interior/Exterior	\$ 80,000
Replace Roof	\$ 2,700,000
Brooklyn Park MS	\$ 6,768,000
Elevator Mod Upgrade - Elevator B	\$ 325,000
Replace All Air Handling Units, UVs	\$ 5,593,000
Replace Sidewalk, Curb and Gutters	\$ 50,000
Upgrade Building Automation System/Controls	\$ 800,000
Cape St. Claire ES	\$ 330,000
Elevator Chairlift Replacement	\$ 50,000
Remove and Replace Sports Court	\$ 75,000
Replace Playground Equipment	\$ 160,000
Replace Sidewalk, Curb and Gutters	\$ 45,000
Center of Applied Tech. South	\$ 4,075,000
Replace 350 Ton Air Cooled Chiller	\$ 550,000
Replace Bathroom Partitions	\$ 125,000
Replace Exterior Doors and Frames	\$ 400,000
Replace Main Distribution Center and Motor Control Center	\$ 300,000
Replace Roof	\$ 2,200,000
Upgrade Building Automation System / Controls	\$ 500,000
Central ES	\$ 3,155,000
Paint Interior/Exterior	\$ 80,000
Repair and Replace Asbestos Floor Tiles Phase 1	\$ 100,000
Replace All Air Handling Units & UVs	\$ 2,900,000
Replace Carpet With Tile	\$ 75,000
Central MS	\$ 1,830,000
Remove and Replace Asbestos Floor Tiles Phase 1	\$ 125,000
Remove and Replace Asbestos Floor Tiles Phase 2	\$ 125,000
Remove and Replace Asbestos Floor Tiles Phase 3	\$ 125,000
Replace 350 Ton Chiller	\$ 950,000
Replace Oil Tank - Gas Conversion	\$ 255,000
Replace Stage Lighting To Include Dimmer Boards	\$ 250,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Central Office @ Parham Building	\$ 3,855,000
Replace 2 260 Ton Water Cooled Chillers	\$ 3,200,000
Replace Generator (Diesel)	\$ 400,000
Replace Oil Tank	\$ 255,000
Central Special	\$ 5,384,000
Replace All Air Handling Units	\$ 2,400,000
Replace PA System	\$ 500,000
Replace Roof	\$ 2,484,000
Chesapeake Bay MS	\$ 2,170,000
Paint Interior/Exterior	\$ 400,000
Replace 2 Boilers	\$ 1,100,000
Replace Oil Tank	\$ 270,000
Re-point Brick Phase 1	\$ 400,000
Chesapeake HS	\$ 8,000,000
Replace 2 400 Ton Air Cooled Chillers, Add Glycol Heat Exchanger	\$ 3,400,000
Replace 2 Boilers and Associated Equipment	\$ 1,680,000
Replace Artificial Turf (Stadium)	\$ 700,000
Replace Oil Tank	\$ 270,000
Replace Turf Field #2	\$ 700,000
Water Tower Renovation	\$ 1,250,000
Corkran MS	\$ 2,828,000
Elevator Mod Upgrade	\$ 200,000
Replace Bathroom Partitions	\$ 100,000
Replace Windows	\$ 2,500,000
Sand and Refinish Gym Floor	\$ 28,000
Crofton ES	\$ 3,390,000
Elevator Chairlift Replacement	\$ 50,000
Paint Interior/Exterior	\$ 80,000
Replace All Air Handling Units	\$ 2,860,000
Upgrade Building Automation System/Controls	\$ 400,000
Crofton HS	\$ 900,000
Refurbish Running Track	\$ 200,000
Replace Turf Field #2	\$ 700,000
Crofton Meadows ES	\$ 1,275,000
Elevator Chairlift Replacement	\$ 50,000
Elevator Mod Upgrade - Main Bldg	\$ 325,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace Parking Lot, Driveway, and Curbs	\$ 300,000
Crofton MS	\$ 278,000
Phase 2 - Replace Parking Lot	\$ 250,000
Sand and Refinish Gym Floor	\$ 28,000
Crofton Woods ES	\$ 1,380,000
Paint Interior/Exterior	\$ 80,000
Replace Windows	\$ 1,000,000
Replacement of Parking Lot and Main Driveway	\$ 300,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Davidsonville ES	\$ 3,370,000
Paint Interior / Exterior	\$ 80,000
Replace All Side Equipment	\$ 2,750,000
Replace Carpet With Tile	\$ 40,000
Replace PA System	\$ 500,000
Deale ES	\$ 2,351,000
Paint Interior/Exterior	\$ 75,000
Replace 250 Ton Air Cooled Chiller	\$ 321,000
Replace 2 Boilers and Associated Equipment	\$ 810,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace PA System	\$ 500,000
Replace Sidewalk, Curb and Gutters	\$ 45,000
Eastport ES	\$ 400,000
Elevator Mod Upgrade	\$ 325,000
Paint Interior/Exterior	\$ 75,000
Facilities Division	\$ 225,000
Replace Garage Septic System	\$ 225,000
Ferndale EEC	\$ 180,000
Replace Playground Equipment	\$ 125,000
Replace Sidewalk and Steps	\$ 55,000
Folger McKinsey ES	\$ 80,000
Paint Interior/Exterior	\$ 80,000
Fort Smallwood ES	\$ 4,785,000
Elevator Chairlift Replacement	\$ 50,000
Paint Interior/Exterior	\$ 75,000
Remove and Replace Sports Court	\$ 75,000
Replace 2 Boilers and Associated Equipment	\$ 830,000
Replace Oil Tank	\$ 255,000
Replace UVs, CUHs, Air Handling Units and Controls	\$ 3,500,000
Four Seasons ES	\$ 305,000
Paint Interior/Exterior	\$ 80,000
Remove and Replace Asbestos Floor Tiles - Phase 2	\$ 100,000
Replace Bathroom Partitions	\$ 50,000
Replace Carpet With Tile	\$ 75,000
Frank Hebron-Harmon ES	\$ 532,000
Replace 180 Ton Chiller	\$ 510,000
Sand and Refinish Gym Floor	\$ 22,000
Georgetown East ES	\$ 5,780,000
Paint Interior/Exterior	\$ 80,000
Replace All Air Handling Units	\$ 2,700,000
Replace Roof	\$ 3,000,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Glen Burnie HS	\$ 12,141,000
Elevator Chairlift Replacement - C Building Auditorium	\$ 50,000
Paint Interior/Exterior - Bldg C, D & E	\$ 275,000
Paint Interior/Exterior Bldg A, B & F	\$ 275,000
Refurbish Running Track	\$ 200,000
Replace 240 Ton Chiller - B Bldg	\$ 500,000
Replace 484 Ton Chiller - A Bldg	\$ 1,000,000
Replace Carpet With Tile Classrooms	\$ 250,000
Replace Casework & Counter Tops - Building A	\$ 550,000
Replace Casework & Counter Tops - Building F	\$ 450,000
Replace Greenhouse	\$ 145,000
Replace Playground Equipment	\$ 70,000
Replace Roof 'A' Building	\$ 3,128,000
Replace Roof 'F' Building	\$ 1,748,000
Replace Turf Field #2	\$ 700,000
Replace Windows - Building F	\$ 800,000
Replaced PA System	\$ 1,200,000
Re-point Brick - F Bldg	\$ 800,000
Glen Burnie Park ES	\$ 680,000
Paint Interior/Exterior	\$ 80,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Glendale ES	\$ 2,855,000
Paint Interior/Exterior	\$ 80,000
Replace All Air Handling Units	\$ 2,600,000
Replace Exterior Doors and Frames	\$ 175,000
Hilltop ES	\$ 500,000
R&R - Asbestos Floor Tiles Phase 1	\$ 100,000
Replacement and Resurface Of Asphalt Around School, Replace Asphalt Curbs W	\$ 400,000
J Albert Adams Academy	\$ 200,000
Paint Interior/Exterior	\$ 75,000
R&R - Asbestos Floor Tiles Phase 2	\$ 125,000
Jacobsville ES	\$ 5,310,000
Complete All HVAC/Controls/Exhaust Fans/FCU/UV	\$ 4,500,000
Replace 2 Boilers and Associated Equipment	\$ 810,000
Jones ES	\$ 1,990,000
Replace All Air Handling Units	\$ 1,700,000
Replace Sidewalk, Curb and Gutters	\$ 50,000
Upgrade Building Automation System/Controls	\$ 240,000
Lake Shore ES	\$ 380,000
Replace 125 Ton Air cooled Chiller	\$ 380,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Lindale MS	\$ 2,155,000
Elevator Mod Upgrade	\$ 325,000
Paint Interior/Exterior	\$ 450,000
Replace Bathroom Partitions	\$ 100,000
Replace Main Distribution Center and Motor Control Center	\$ 750,000
Replace Stage Lighting To Include Dimmer Boards	\$ 350,000
Replace Wood Gym Floors - Main Gym	\$ 180,000
Linthicum ES	\$ 6,460,000
R&R Asbestos Floor Tile	\$ 100,000
Replace Air Side Equipment	\$ 2,700,000
Replace Roof	\$ 3,300,000
Upgrade Building Automation System/Controls	\$ 360,000
MacArthur MS	\$ 425,000
Elevator Mod Upgrade	\$ 325,000
Replace Ceiling Tile	\$ 100,000
Magothy/Severn River MS	\$ 7,652,000
Replace 2 Boilers and Associated Equipment	\$ 1,140,000
Replace Bathroom Partitions	\$ 200,000
Replace Generator (Nat/Gas)	\$ 500,000
Replace Roof	\$ 5,612,000
Replace Wood Gym Floors -Main Gym	\$ 200,000
Marley ES	\$ 482,000
Replace 240 Ton Chiller	\$ 460,000
Sand and Refinish Gym Floor	\$ 22,000
Marley Glen Special	\$ 3,200,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace Playground Equipment	\$ 250,000
Replace Roof	\$ 2,000,000
Upgrade Building Automation System/Controls	\$ 350,000
Marley MS	\$ 1,250,000
Paint Interior/Exterior	\$ 325,000
Replace 2 200 Ton Air Cooled Chillers	\$ 925,000
Maryland City ES	\$ 330,000
Paint Interior/Exterior	\$ 80,000
Replace Casework & Counter Tops	\$ 250,000
Maryland Hall for the Creative Arts	\$ 795,000
Replace Roof - Auditorium Only	\$ 645,000
Replace Sidewalk, Curb and Gutter	\$ 150,000
Mayo ES	\$ 520,000
Replace 240 Ton Chiller	\$ 360,000
Replace Playground Equipment	\$ 160,000
Meade Heights ES	\$ 1,100,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace PA System	\$ 500,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Meade MS	\$ 8,118,000
Phase 3 - Replace Parking Lot	\$ 250,000
Replace 3 Boilers	\$ 1,140,000
Replace All Air Handling Units	\$ 5,250,000
Replace Main Distribution Center and Motor Control Center	\$ 700,000
Sand and Refinish Gym Floor	\$ 28,000
Upgrade Building Automation System/Controls	\$ 750,000
Millersville ES	\$ 250,000
Replace Casework & Counter Tops	\$ 250,000
Nantucket ES	\$ 260,000
Replace Playground Equipment	\$ 260,000
North County HS	\$ 500,000
Elevator Chairlift Replacement	\$ 50,000
Paint Interior/Exterior	\$ 450,000
North Glen ES	\$ 380,000
Paint Interior/Exterior	\$ 80,000
Replace Parking Lot, Driveway, and Curbs	\$ 300,000
Northeast HS	\$ 2,700,000
Paint Interior/Exterior	\$ 450,000
Refurbish Running Track	\$ 200,000
Replace Artificial Turf (Stadium)	\$ 700,000
Replace Turf Field #2	\$ 700,000
Replace Turf Field #3	\$ 650,000
Northeast MS	\$ 14,310,000
Replace 2 Boilers and Associated Equipment	\$ 1,120,000
Replace All Air Handling Units	\$ 5,750,000
Replace Bathroom Partitions	\$ 125,000
Replace Ceiling Tile	\$ 840,000
Replace Generator (Diesel)	\$ 400,000
Replace Oil Tank	\$ 255,000
Replace Roof	\$ 3,500,000
Re-point Phase 2	\$ 500,000
Re-point Brick Phase 3	\$ 500,000
Re-point Brick Phase 4	\$ 500,000
Upgrade Building Automation System/Controls	\$ 820,000
Oak Hill ES	\$ 6,062,000
Replace All Air Side Equipment	\$ 2,700,000
Replace Bathroom Partitions	\$ 50,000
Replace Roof	\$ 3,312,000
Oakwood ES	\$ 335,000
Replace Ceiling Tile	\$ 335,000
Odenton ES	\$ 925,000
Elevator Mod Upgrade	\$ 325,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Park ES	\$ 1,420,000
Replace 2 Boilers and Associated Equipment	\$ 820,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Pasadena ES	\$ 1,010,000
Replace 160 Ton Air Cooled Chiller	\$ 410,000
Replace Playground Equipment	\$ 260,000
Upgrade Building Automation System/Controls	\$ 340,000
Phoenix Academy	\$ 506,000
Paint Interior/Exterior	\$ 80,000
Replace 175 Ton Chiller	\$ 426,000
Piney Orchard ES	\$ 2,860,000
Replace All Air Handling Units	\$ 2,680,000
Replace Carpet With Tile	\$ 100,000
Replace Sidewalk, Curb and Gutter	\$ 80,000
Point Pleasant ES	\$ 656,000
Paint Interior/Exterior	\$ 80,000
Replace 2 155 Ton Chillers	\$ 576,000
Resource Center @ Point Pleasant	\$ 1,225,000
R&R Asbestos Floor Tile - Phase 2	\$ 125,000
Replace 2 Boilers	\$ 850,000
Replacement of Main Driveway and Parking Lots	\$ 250,000
Ridgeway ES	\$ 2,700,000
Replace All Air Handling Units	\$ 2,700,000
Riviera Beach ES	\$ 3,000,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace Roof	\$ 2,400,000
Ruth Parker Eason	\$ 3,375,000
Air Handling Units - 9	\$ 2,700,000
Paint Interior/Exterior	\$ 75,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Seven Oaks ES	\$ 522,000
Replace 240 Ton Chiller	\$ 500,000
Sand and Refinish Gym Floor	\$ 22,000
Severn ES	\$ 1,165,000
Elevator Mod Upgrade	\$ 325,000
Replace Ceiling Tile	\$ 140,000
Replace Exterior Doors and Frames	\$ 175,000
Replace Playground Equipment 5-12	\$ 160,000
Replace Sidewalk, Curb and Gutters	\$ 65,000
Upgrade Building Automation System/Controls	\$ 300,000
Severna Park ES	\$ 735,000
Paint Interior/Exterior	\$ 75,000
Replace Flooring	\$ 60,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Severna Park HS	\$ 2,250,000
Paint Interior/Exterior	\$ 450,000
Refurbish Running Track	\$ 200,000
Replace Artificial Turf (Stadium)	\$ 700,000
Replace Turf Field #2	\$ 700,000
Resurface Running Track	\$ 200,000
Severna Park MS	\$ 1,400,000
Phase 1 - Replace Main Drive and Bus Lot	\$ 250,000
Phase 2 - Replace Main Drive and Bus Lot	\$ 250,000
Replace Generator (Diesel)	\$ 400,000
Upgrade Building Automation System/Controls	\$ 500,000
Shady Side ES	\$ 2,780,000
Paint Interior/Exterior	\$ 80,000
Replace All Air Side Equipment	\$ 2,700,000
Shipley's Choice ES	\$ 600,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Solley ES	\$ 1,480,000
Paint Interior/Exterior	\$ 80,000
Replace 2 Boilers	\$ 800,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
South River HS	\$ 17,055,000
Phase 4 - Replace Bus Lot	\$ 250,000
Phase 5 - Replace Bay 1 Parking Lot	\$ 250,000
Phase 6 - Replace Bay 2 Parking Lot	\$ 250,000
Phase 7- Replace Bay 3 parking lot	\$ 250,000
Phase 8 - Replace Main Driveway From 214 to Stadium	\$ 250,000
Refurbish Running Track	\$ 200,000
Replace 2 400 Ton Chillers	\$ 1,800,000
Replace Artificial Turf Stadium	\$ 700,000
Replace Main Distribution Center and Motor Control Center	\$ 2,300,000
Replace Oil Tank - Gas Conversion	\$ 255,000
Replace Roof	\$ 8,050,000
Replace Windows	\$ 2,500,000
South Shore ES	\$ 3,705,000
Air Handling Unit # 5	\$ 500,000
Replace All Air Handling Units	\$ 1,800,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace PA System	\$ 500,000
Replace Sidewalk, Curb and Gutters	\$ 45,000
Upgrade Building Automation System/Controls	\$ 260,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Southern HS	\$ 7,095,000
Refurbish Running Track	\$ 200,000
Replace 2 400 To Water Cooled Chillers	\$ 1,600,000
Replace Artificial Turf	\$ 700,000
Replace Fire Alarm System	\$ 750,000
Replace Generator (Nat/Gas)	\$ 500,000
Replace Main Distribution Center and Motor Control Center	\$ 1,000,000
Replace Oil Tank	\$ 270,000
Replace Sidewalk, Curb and Gutters	\$ 75,000
Water Tower Renovation	\$ 2,000,000
Southern MS	\$ 8,000,000
Replace All Air Handling Units	\$ 7,000,000
Upgrade Building Automation System / Controls	\$ 1,000,000
Southgate ES	\$ 250,000
Replace Generator (Nat/Gas)	\$ 250,000
Staff Development Training Center @ Carver	\$ 1,335,000
Paint Interior/Exterior	\$ 60,000
Replace 2 Boilers	\$ 800,000
Replace Exterior Doors and Frames	\$ 175,000
Replace Main Distribution Center and Motor Control Center	\$ 300,000
Student Services Center @ Millersville	\$ 725,000
Replace Main Distribution Center and Motor Control Center	\$ 300,000
Replace Oil Tank - Gas Conversion	\$ 255,000
Replace Widows	\$ 170,000
Sunset ES	\$ 3,050,000
Paint Interior/Exterior	\$ 80,000
Replace All Air Handling Units	\$ 2,600,000
Upgrade Building Automation System/Controls	\$ 370,000
Tracey's ES	\$ 300,000
Replace Carpet With Tile	\$ 40,000
Replace Playground Equipment	\$ 260,000
Van Bokkelen ES	\$ 250,000
Replace Casework & Counter Tops	\$ 250,000
Waugh Chapel ES	\$ 850,000
Replace Bathroom Partitions	\$ 50,000
Replace Fire Alarm System	\$ 500,000
Replacement Of Parking Lot and Driveway, Resurface Play Area	\$ 300,000
West Meade EEC	\$ 380,000
Replace Parking Lot, Driveway, and Curbs	\$ 150,000
Upgrade Building Automation System/Controls	\$ 230,000
Windsor Farm ES	\$ 1,135,000
Elevator Chairlift Replacement	\$ 50,000
Elevator Mod Upgrade	\$ 325,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Replace Playground Equipment	\$ 160,000

FY26-29 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Woodside ES	\$ 680,000
Paint Interior/Exterior	\$ 80,000
Replace Main Distribution Center and Motor Control Center	\$ 600,000
Grand Total	\$ 265,648,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Annapolis ES	420,000
Replace 180 Ton Air Cooled Chiller	420,000
Annapolis HS	11,240,000
Elevator Chairlift Replacement	50,000
Refurbish Running Track	200,000
Replace Artificial Turf (Stadium)	700,000
Replace Roof	8,740,000
Replace Turf Field #2	850,000
Replace Turf Field #3	700,000
Annapolis MS	1,095,000
Paint Interior/Exterior	350,000
Replace Bathroom Partitions	125,000
Replace Fire Alarm System	600,000
Sand and Refinish Gym Floor	20,000
Arlington Echo Outdoor Education Center	695,000
Replace Fire Alarm System	500,000
Replace Sewage Lift Station	175,000
Replace Sidewalks	20,000
Arundel HS	14,085,000
Elevator Chairlift Replacement	50,000
Elevator Chairlift Replacement - Stage	50,000
Paint Interior/Exterior	450,000
Refurbish Running Track	200,000
Replace All Air Handling Units	10,000,000
Replace Artificial Turf Stadium	700,000
Replace Hall Lockers	350,000
Replace Sidewalk, Curb and Gutter	85,000
Replace Turf Field #2	700,000
Re-point Brick Phase 1	500,000
Re-point Brick Phase 2	500,000
Re-point Brick Phase 3	500,000
Arundel MS	6,653,000
Paint Interior/Exterior	325,000
Replace 2 Boilers	1,200,000
Replace All Air Handling Units	5,000,000
Replace Bathroom Partitions	100,000
Sand and Refinish Gym Floor	28,000
Bates MS	350,000
Phase 2 - Replace Parking Lot	250,000
Replace Bathroom Partitions	100,000
Belle Grove ES	360,000
Replace 190 Ton Air Cooled Chiller	360,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Belvedere ES	3,755,000
Replace 2 Boilers and Associated Equipment	840,000
Replace All Air Handling Units	2,400,000
Replace Exterior Doors and Frames	175,000
Upgrade Building Automation System/Controls	340,000
Benfield ES	770,000
Replace 2 Boilers	770,000
Bodkin ES	860,000
Mill and Overlay Driveways, Parking Lots and Hard Courts	175,000
Replace Bathroom Partitions	50,000
Replace Exterior Doors and Frames	135,000
Replace Fire Alarm System	500,000
Broadneck HS	1,750,000
Paint Interior/Exterior	450,000
Refurbish Running Track	200,000
Replace Artificial Turf (Stadium)	700,000
Replace VCT in Corridors	175,000
Replace Wood Gym - Main Gym	225,000
Brock Bridge ES	1,075,000
Replace 2 Boilers	850,000
Replace Bathroom Partitions	50,000
Replace Exterior Doors and Frames	175,000
Brooklyn Park ES	975,000
Mill and Overlay Driveways, Parking Lots and Hard Courts	150,000
Replace Fire Alarm System	500,000
Replace Sidewalk, Curb and Gutter	25,000
Replace Windows	300,000
Brooklyn Park MS	7,385,000
Elevator Chairlift Replacement	50,000
Elevator Mod Upgrade AA1959	325,000
Elevator Mod Upgrade AA1960	325,000
Elevator Mod Upgrade AA1961	325,000
Replace 3 Boilers	1,160,000
Replace Roof	5,200,000
Cape St. Claire ES	4,920,000
Replace All Air Handling Units	3,000,000
Replace Roof -B, C and D	1,500,000
Upgrade Building Automation System/Controls	420,000
Center of Applied Tech. South	3,200,000
Replace All Air Handling Units	3,200,000
Central ES	1,025,000
Replace 2 Boilers	890,000
Replace Playground Equipment 5-12	135,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Central MS	1,520,000
Paint Interior/Exterior	350,000
Remove and Replace Asbestos Floor Tiles Phase 4	125,000
Replace 2 Boilers	870,000
Replace Lockers	150,000
Replace Sidewalk, Curb and Gutter	25,000
Central Office @ Parham Building	4,151,000
Back Parking Lot	75,000
Replace 2 Boilers	1,500,000
Replace Roof (Entire Building)	2,576,000
Central Special	1,550,000
Phase 10- Replace Main Drive to Stepney Lane	400,000
Phase 9 - Replace Parking Lots, Receiving and Bus Loops	300,000
Replace 2 Boilers	850,000
Chesapeake Bay MS	23,649,000
Replace All Air Handling Units	12,000,000
Replace Hall Lockers	200,000
Replace Roof	10,649,000
Re-point Brick Phase 2	400,000
Re-point Brick Phase 3	400,000
Chesapeake HS	1,400,000
Elevator Mod Upgrade	325,000
Paint Interior/Exterior	450,000
Refurbish Running Track	200,000
Replace Hall Lockers	350,000
Replace Sidewalk, Curb and Gutter	75,000
Corkran MS	13,480,000
Replace 2 Boilers	870,000
Replace All Air Handling Units	5,400,000
Replace Roof	6,300,000
Replace 2 275 Ton Air Cooled Chillers	910,000
Crofton HS	3,190,000
Paint Interior/Exterior	450,000
Refurbish Running Track	200,000
Replace 5 Boilers	1,840,000
Replace Artificial Turf (Stadium)	700,000
Crofton Meadows ES	645,000
Paint Interior/Exterior	80,000
Replace Folding Doors In F01 and A02	65,000
Replace PA System	500,000
Crofton MS	6,750,000
Replace Casework and Counter Tops	350,000
Replace Roof	6,400,000
Crofton Woods ES	345,000
Replace Casework and Counter Tops	250,000
Replace Folding Doors	95,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Davidsonville ES	1,910,000
Elevator Mod Upgrade	325,000
Replace 2 Boilers	870,000
Replace Oil Tank	255,000
Replace Sidewalk, Curb and Gutter	35,000
Upgrade Building Automation System / Controls	425,000
Deale ES	2,000,000
Replace Water Treatment Plant	2,000,000
Eastport ES	365,000
Mill and Overlay Driveways, Parking Lots and Hard Courts	75,000
Replace Sidewalk, Curb and Gutter	30,000
Replace 120 Ton Air Cooled Chiller	260,000
Edgewater ES	75,000
Paint Interior/Exterior	75,000
Facilities Division	635,000
R&R Asbestos Floor Tiles	125,000
Replace Diesel Tank	255,000
Replace Gas Storage Tank	255,000
Ferndale EEC	850,000
Replace All Air Handling Units	850,000
Folger McKinsey ES	500,000
Replace 170 Ton Air Cooled Chiller	500,000
Fort Smallwood ES	250,000
Replacement of Main Driveways and Parking Lots	250,000
Four Seasons ES	990,000
Remove and Replace Asbestos Floor Tiles - Phase 3	100,000
Replace 2 Boilers	890,000
Frank Hebron-Harmon ES	4,005,000
Elevator Mod Upgrade	325,000
Replace All Air Handling Units	3,000,000
Replace Playground Equipment	260,000
Upgrade Building Automation System/Controls	420,000
Freetown ES	1,330,000
Elevator Mod Upgrade	325,000
Replace 225 Ton Air Cooled Chiller	495,000
Replace Generator (Nat/Gas)	250,000
Replace Playground Equipment	260,000
Georgetown East ES	300,000
R&R Asbestos Floor Tiles - Phase 1	125,000
R&R Asbestos Floor Tiles - Phase 2	125,000
Replace Bathroom Partitions	50,000
Germantown ES	562,000
Replace 200 Ton Air Cooled Chiller	540,000
Sand and Refinish Gym Floor	22,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Glen Burnie HS	20,135,000
Elevator Chairlift Replacement - Front Side Gym	50,000
Refurbish Running Track	200,000
Replace All Air Handling Units	14,000,000
Replace Carpet With Tile All Offices	125,000
Replace Electrical Panels and Feeders - B	750,000
Replace Electrical Panels and Feeders - F	750,000
Replace Folding Doors In the "C" Building Auditorium	60,000
Replace Lockers In B & C Buildings	400,000
Replace Roof 'B' Building	1,400,000
Upgrade Building Automation System/Controls	2,000,000
Replace Electrical Panels and Feeders - C	400,000
Glen Burnie Park ES	2,795,000
Elevator Mod Upgrade	325,000
Replace All Air Handling Units	1,800,000
Replace Carpet With Tile	70,000
Replace Sidewalk, Curb and Gutter	30,000
Upgrade Building Automation System/Controls	260,000
Replace 185 Ton Air Cooled Chiller	310,000
Glendale ES	3,536,000
Replace PA System	500,000
Replace Roof	3,036,000
Hilltop ES	4,135,000
Replace Playground Equipment 5-12	135,000
Replace Roof	4,000,000
J Albert Adams Academy	1,390,000
R&R Asbestos Floor Tile - Phase 3	125,000
R&R Asbestos Floor Tile - Phase 4	125,000
Replace Bathroom Partitions	60,000
Replace Exterior Doors and Frames	180,000
Replace Roof	900,000
Jacobsville ES	500,000
Phase 1 - Replace Main Drive and Bus Lot	250,000
Phase 2 - Replace Main Drive and Bus Lot	250,000
Jessup ES	80,000
Paint Interior/Exterior	80,000
Jones ES	175,000
Replace Exterior Doors and Frames	175,000
Lake Shore ES	2,880,000
Replace All Air Handling Units	2,300,000
Replace Playground Equipment	260,000
Upgrade Building Automation System/Controls	320,000
Lindale MS	25,000
Sand and Refinish Gym Floor	25,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Linthicum ES	1,180,000
Paint Interior/Exterior	80,000
Replace 2 Boilers	850,000
Replace Exterior Doors and Frames	175,000
Replace Sidewalk, Curb and Gutter	75,000
Lothian ES	80,000
Paint Interior/Exterior	80,000
MacArthur MS	6,808,000
Replace Roof	6,808,000
Magothy/Severn River MS	1,265,000
Paint Interior/Exterior	400,000
R&R Asbestos Floor Tiles - Phase 1	125,000
R&R Asbestos Floor Tiles - Phase 2	125,000
R&R Asbestos Floor Tiles - Phase 3	125,000
R&R Asbestos Floor Tiles - Phase 4	125,000
Replace Sidewalk, Curb and Gutter	150,000
Replace VCT in Corridors	175,000
Sand and Refinish Gym Floor	40,000
Marley ES	5,985,000
Elevator Mod Upgrade	325,000
Paint Interior/Exterior	80,000
Replace All Air Handling Units	2,700,000
Replace Roof	2,500,000
Upgrade Building Automation System/Controls	380,000
Marley Glen Special	925,000
Paint Interior/Exterior	75,000
Replace Windows	850,000
Marley MS	9,545,000
Elevator Mod Upgrade	325,000
Replace All Air Handling Units	5,400,000
Replace PA System	600,000
Replace Roof	3,220,000
Maryland City ES	892,000
Replace 2 Boilers	870,000
Sand and Refinish Gym Floor	22,000
Maryland Hall for the Creative Arts	1,250,000
Phase 1 - Partial Replacement and Overlay Driveways and Parking Lots	250,000
Phase 2 - Partial Replace and Overlay Driveways and Parking Lots	250,000
Replace Slate Roof	750,000
Mayo ES	5,405,000
Elevator Mod Upgrade	325,000
Replace All Air Handling Units	2,700,000
Replace Carpet With Tile	80,000
Replace Roof	2,300,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Meade Heights ES	1,480,000
Paint Interior/Exterior	80,000
Replace 2 Boilers and Associated Equipment	840,000
Replace Fire Alarm System	500,000
Replace Sidewalk, Curb and Gutter	60,000
Meade HS	1,600,000
Refurbish Running Track	200,000
Replace Artificial Turf - Stadium	700,000
Replace Turf Field #2	700,000
Meade MS	325,000
Paint Interior/Exterior	325,000
Millersville ES	4,215,000
Replace 2 Boilers	870,000
Replace Roof	2,500,000
Replace Sidewalk, Curb and Gutter	45,000
Replace Windows	800,000
Mills-Parole ES	80,000
Paint Interior/Exterior	80,000
Nantucket ES	320,000
Replace 190 Ton Air Cooled Chiller	320,000
North County HS	9,555,000
Refurbish Running Track	200,000
Replace Bathroom Partitions	125,000
Replace Playground Equipment All	130,000
Replace Roof	8,400,000
Replace Turf Field #2	700,000
North Glen ES	1,175,000
Replace 2 Boilers	790,000
Replace Casework	250,000
Replace Playground Equipment 5-12	135,000
Northeast HS	1,610,000
Elevator Chairlift Replacement #1	50,000
Elevator Chairlift Replacement #2 Aud	60,000
Replace 2 Boilers	1,500,000
Northeast MS	1,165,000
Replace 240 Ton Air Cooled Chiller	990,000
Replace VCT in Classrooms	175,000
Oak Hill ES	1,175,000
Replace Casework and Counter Tops	250,000
Replace PA System	500,000
Upgrade Building Automation	425,000
Oakwood ES	3,435,000
Replace 200 Ton Air Cooled Chiller	335,000
Replace Fire Alarm System	500,000
Replace Roof	2,100,000
Replace Windows	500,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Odenton ES	480,000
Elevator Chairlift Replacement	50,000
Replace 250 Ton Air Cooled Chiller	430,000
Overlook ES	1,245,000
Replace 170 Ton Air Cooled Chiller	375,000
Replace 2 Boilers	850,000
Sand and Refinish Gym Floor	20,000
Park ES	300,000
Paint Interior/Exterior	80,000
Replace Exterior Doors and Frames	175,000
Replace Sidewalk, Curb and Gutter	45,000
Pasadena ES	4,800,000
Replace All Air Handling Units	2,400,000
Replace Roof (Entire Building)	2,400,000
Pershing Hill ES	525,000
Replace 210 Ton Air Cooled Chiller	525,000
Phoenix Academy	2,845,000
Replace All Air Handling Units	2,485,000
Upgrade Building Automation System/Controls	360,000
Piney Orchard ES	3,165,000
Replace Exterior Doors and Frames	175,000
Replace Roof	2,990,000
Point Pleasant ES	4,130,000
Replace All Air Handling Units	3,400,000
Replace Exterior Doors and Frames	175,000
Replace Sidewalk, Curb and Gutter	75,000
Upgrade Building Automation System/Controls	480,000
Resource Center @ Point Pleasant	375,000
Elevator Mod Upgrade	325,000
Replace Bathroom Partitions	50,000
Richard Henry Lee ES	80,000
Paint Interior/Exterior	80,000
Ridgeway ES	1,000,000
Paint Interior/Exterior	80,000
Replace 2 Boilers and Associated Equipment	840,000
Replace Carpet With Tile	80,000
Riviera Beach ES	2,125,000
R&R Asbestos Floor Tiles	125,000
Replace Boilers and Associated Equipment	850,000
Replace Casework & Counter Tops	350,000
Replace Windows	800,000
Rolling Knolls ES	102,000
Paint Interior/Exterior	80,000
Sand and Refinish Gym Floor	22,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
Ruth Parker Eason	1,370,000
Replace 2 Boilers	870,000
Replace PA System	500,000
Seven Oaks ES	585,000
Elevator Mod Upgrade	325,000
Replace Playground Equipment	260,000
Severn ES	4,655,000
Paint Interior/Exterior	75,000
Replace All Air Handling Units	2,300,000
Replace Roof	1,900,000
Replace 160 Ton Air Cooled Chiller	380,000
Severna Park ES	1,015,000
Replace 225 Ton Air Cooled Chiller	340,000
Replace Exterior Doors and Frames	175,000
Replace Windows	500,000
Severna Park HS	2,050,000
Elevator Chairlift Replacement	50,000
Refurbish Running Track	200,000
Replace 5 Condensing Boilers	1,800,000
Severna Park MS	10,935,000
Paint Interior/Exterior	325,000
Replace 2, 397 Ton Air Cooled Chillers	1,235,000
Replace Roof	9,200,000
Replace VCT in Classrooms	175,000
Shady Side ES	4,650,000
R&R Asbestos Floor Tiles	100,000
Replace 2 Boilers	870,000
Replace Bathroom Partitions	50,000
Replace Exterior Doors and Frames	175,000
Replace Oil Tank	255,000
Replace Roof	3,200,000
Shipley's Choice ES	3,065,000
Elevator Chairlift Replacement	50,000
Replace 165 Ton Air Cooled Chiller	410,000
Replace Carpet With Tile	75,000
Replace Roof	2,530,000
Solley ES	1,250,000
Phase 1 - Replace Main Drive and Bus Lot	250,000
Phase 2 - Replace Parking Lot	250,000
Phase 3 - Replace Parking Lot	250,000
Replace 200 Ton Air Cooled Chiller	500,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
South River HS	13,405,000
Replace All Air Handling Units	10,400,000
Replace Fire Alarm System	750,000
Replace Gym Lockers - Team Rooms	30,000
Replace Home Bleachers	1,100,000
Replace Lockers	350,000
Replace Sidewalk, Curb and Gutter	75,000
Replace Turf Field #2	700,000
South Shore ES	1,815,000
Paint Interior/Exterior	75,000
Replace 2 Boilers and Associated Equipment	840,000
Replace Water Treatment Plant	900,000
Southern HS	9,000,000
Replace All Air Side Equipment	7,900,000
Replace Electrical Panels and Feeders	400,000
Replace Turf Field #2	700,000
Southern MS	3,500,000
Elevator Mod Upgrade	325,000
Paint Interior/Exterior	400,000
Phase 1 - Partial Replacement and Overlay Driveways and Parking Lots	250,000
Phase 2 - Partial Replace and Overlay Driveways and Parking Lots	250,000
Replace 3 Boilers	1,250,000
Replace Carpet With Tile	125,000
Replace Water Treatment Plant	900,000
Southgate ES	5,032,000
Paint Interior/Exterior	75,000
Replace 225 Ton Air Cooled Chiller	525,000
Replace 2 Boilers	870,000
Replace All Air Handling Units	3,100,000
Sand and Refinish Gym Floor	22,000
Upgrade Building Automation System/Controls	440,000
Student Services Center @ Millersville	125,000
R&R Asbestos Floor Tiles - Phase 1	125,000
Sunset ES	325,000
Replace Casework & Counter Tops	250,000
Replace Flooring	75,000
Tracey's ES	1,490,000
Replace 300 Ton Air Cooled Chiller	340,000
Replace Generator (Diesel)	250,000
Replace Water Treatment Plant	900,000
Van Bokkelen ES	1,265,000
Replace 240 Ton Air Cooled Chiller	425,000
Replace 2 Boilers	840,000
Waugh Chapel ES	625,000
Replace 290 Ton Air Cooled Chiller	375,000
Replace Casework & Counter Tops	250,000

FY30-34 Capital Renewal Needs

Location/ Project Description	Sum of Estimated Cost
West Annapolis ES	865,000
Paint Interior/Exterior	75,000
Replace 2 Boilers	790,000
West Meade EEC	745,000
Replace Exterior Doors and Frames	135,000
Replace PA System	350,000
Replace Playground Equipment	260,000
Windsor Farm ES	3,520,000
Replace 225 Ton Air Cooled Chiller	465,000
Replace All Air Handling Units	2,800,000
Replace Oil Tank	255,000
Woodside ES	510,000
Replace Casework and Counter Tops	250,000
Replace Playground Equipment All	260,000
Grand Total	319,155,000

Attachment 12

FY 2024 Maintenance Professional Development Plans

FY 2024 Maintenance Professional Development Plans

Continued enrichment program opportunities for employees:

- Interviewing skills
- Resume writing skills
- Computer skills / EXCEL and Outlook

General training for all mechanics to include:

- Monthly documented toolbox talks on safety

Manager/ Supervisor Training

- APPA standards and targeted trade specific webinars
- OSHA 30
- IAC Webinar on Maintenance Effectiveness and Total Cost of Ownership

Department Specific Training:

Electrical

- Training on the Silent Knight (Honeywell) alarm system
- Training on updated NFPA Codes

Plumbing

- Training on Backflow Prevention
- Training on basic electrical

HVAC

- Training on refrigerant replacement options for R22

General Maintenance

- Training on Kaba locks
- Training on basic electrical

Grounds

- Playground Safety Standards and Inspections

Attachment 13

Glossary

Glossary - Definition of terms and acronyms used in this document:

Acronym or Term	Definition
Capital Renewal (CR)	The planned replacement of building subsystems such as roofs, electrical systems, HVAC systems and plumbing systems that have reached the end of their useful life.
Deferred Capital Renewal	The total dollar amount of existing maintenance repairs and required replacements (capital renewal) that were not accomplished when they should have been, not funded in the current fiscal year, or otherwise deferred.
Computerized Maintenance Management System (CMMS)	A computer database for an organization's maintenance operations and human resources functions. This data is intended to help the effectiveness of maintenance workers, the quality of management decisions and the verification of regulatory compliance.
Corrective Maintenance	Planned maintenance, usually moderate to major in nature, to repair or replace building components or systems that have failed or been damaged. Corrective maintenance is often undertaken after a problem is identified by repeated calls for reactive maintenance.
Current Replacement Value (CRV)	The total expenditure in current dollars required to replace any facility at the institution, inclusive of construction costs, design costs, project management costs, and project administrative costs. Construction costs are calculated as replacement in function vs. in-kind. The value of property/land, however, is excluded, and insurance replacement values or book values should not be used to define the current replacement value. In this report, the IAC's cost per square foot for new construction is used as the basis of CRV calculations.
Emergency Maintenance	Unscheduled reactive/corrective activities that require immediate attention to restore a critical facility or piece of equipment whose failure could threaten the safety of personnel or cause damage to other equipment or building systems.
Facility Condition Index (FCI)	A benchmark to compare the relative condition of a group of facilities. It is computed by dividing the planned maintenance needs by the current replacement value.
Full Time Equivalent (FTE)	Used in facilities and human resource accounting to provide a standard measure of numbers of employees, faculty, or students.

Gross square feet (GSF)	The floor areas on all levels of a building that are totally enclosed within the building, representing the cumulative total of an organization's building(s) inclusive of all floors to the outside faces of exterior walls. This measurement indicates total constructed space and is useful for building efficiency and construction cost comparisons. Found by measuring exterior building gross area to the outside face of exterior walls, disregarding canopies, cornices, pilasters, balconies, and buttresses that extend beyond the wall face and courtyards that are enclosed by walls but have no roof. The building exterior gross area of basement space includes the area measured to the outside face of basement or foundation walls, as well as exterior bridges and tunnels that are totally enclosed and constructed areas connecting two or more buildings.
Integrated Work Management System (IWMS)	A computer database that performs CMMS and additional business functions to aid in the care of facilities. IWMS primarily track the portfolio of facilities assets (technicians, space, equipment, tools, accounts) and actions taken upon those assets (work order, projects).
Maintenance	Combination of all technical and associated administrative actions during the service life to retain a building, or its parts, in a state in which it can perform its required functions. [SOURCE: ISO 6707-1:2014 modified to also apply in the broad context of the service life of a whole building]
Planned Maintenance	Any maintenance activity for which a pre-determined job procedure has been documented, for which all labor, materials, tools, and equipment required to carry out the task have been estimated, and their availability assured before commencement of the task. In contrast to unplanned or breakdown maintenance, or preventive maintenance which is predicted and scheduled to prolong the useful service life of equipment.

Preventive maintenance	Routine planned, scheduled, controlled program of periodic inspection, adjustment, cleaning, lubrication, and selective parts replacement of components, and minor repair, as well as performance testing and analyses intended to maximize the reliability, performance, and life cycle of building systems and equipment. Consists of many checkpoint activities, often recommended by the manufacturer, which is disabled, may interfere with an essential installation operation, endanger life or property, or involve high cost or long lead time for replacement. The intent is to avert the incipient failures before they become actual or major failures, which would require corrective maintenance.
Reactive Maintenance	Repairs that are done when a failure has occurred in order to restore basic operating conditions.
Work Order (WO)	A written order, authorizing and directing a certain task to be performed, that is, issued to the person who will direct the work.

Bibliography

Kaiser, Harvey H. and Klein, Eva. (2010) *Strategic Capital Development – The New Model for Campus Investment*. Alexandria, VA: APPA

Rose, Rodney. (2007) *Buildings...The Gifts that Keep on Taking*. Alexandria, VA: APPA

Operational Guidelines for Educational Facilities Custodial Fourth Edition. (2023). Alexandria, VA: APPA.

Operational Guidelines for Educational Facilities Grounds Third Edition. (2020). Alexandria, VA: APPA

Operational Guidelines for Educational Facilities Maintenance Third Edition. (2022). Alexandria, VA: APPA



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