State of Maryland

Interagency Commission on School Construction

Maintenance of Maryland's Public School Buildings Fiscal Year 2023 Annual Report

IAC

351 W. Camden Street, Suite 701
Baltimore, MD 21201
(410) 767-0617
iac.pscp@maryland.gov

INTERAGENCY COMMISSION ON SCHOOL CONSTRUCTION

Edward Kasemeyer, Chair, Appointee of the President of the Senate, Member of the Public
Linda Eberhart, Vice-Chair, Appointee of the Speaker of the House, Member of the Public
Atif Chaudhry, Secretary, Maryland Department of General Services
Mohammed Choudhury, Superintendent, Maryland State Department of Education
Michael Darenberg, Appointee of the Governor, Member of the Public
Rebecca Flora, Secretary, Maryland Department of Planning
Brian Gibbons, Appointee of the Speaker of the House, Member of the Public
Gloria Lawlah, Appointee of the President of the Senate, Member of the Public

Alex Donahue, Executive Director
Cassandra Viscarra, Deputy Director for Administration

The following individuals within the staff of the Interagency Commission on School Construction's Assessment & Maintenance Group have made dedicated contributions of time and effort to the Maintenance Assessment Program and the development of this annual report:

Michael Bitz, Maintenance Assessor
Kyle Connolly, Maintenance Assessor
Nathan Ledl, Maintenance Assessor
Josh Faby, Lead Maintenance Assessor
Brooke Finneran, Administrative Officer
Scott Snyder, Manager

Table of Contents

The LEA Maintenance-Effectiveness Assessment Results reports provide an overview of maintenance assessments conducted at selected school facilities in each Maryland public school system. Each report provides general information about the school system, a listing of the facilities that were assessed, and a brief narrative highlighting important aspects of the school system's maintenance program.

Data regarding LEAs' facilities inventories as provided in the Key Facts sections of this report are drawn from the IAC's Facility Inventory database but are provided by the LEAs and are accurate to the extent that they have been updated by the LEAs.

Note:

The definition of "**Adjusted Age**" of a school facility, found in the fourth column of the Summary of School Ratings charts in the LEA Maintenance-Effectiveness Assessment Results section starting on page 25, is the average age of the total square footage. For the purposes of calculating the Adjusted Age, renovated square footage is generally treated as new.

A **"major deficiency"** is assigned to a category when a facility assessor determines there is an issue or multiple issues that pose an immediate threat to life, safety, or health of occupants, delivery of educational programs or services, or the expected life span of the facility. The score of any category assigned a major deficiency will be reduced by 100%.

A **"minor deficiency"** is assigned to a category when a facility assessor determines there is an issue or multiple issues that pose a potential threat to life, safety, or health of occupants, delivery of educational programs or services, or the expected life span of the facility. The score of any category assigned a minor deficiency will be reduced by 34%.

The number of reported major and minor deficiencies refers only to the number of categories containing one or more deficiencies when the MEA reports are finalized at the end of the 45-day remediation period. Taking this into account, it is possible that the number of individual major and minor deficiencies are greater than the number of deficiencies reported if categories contain more than one deficiency each. Any category which contains both major and minor deficiencies will be reported as a category with a major deficiency.

"**Original existing square footage**" as used in the narratives on the following pages refers to the construction dates of the existing square footage in a facility, regardless of if they were renovated at a later date. For example, if a school first built in 1954 received additions in 1960, 1975 and 2003, and the 1954 portion was also demolished in 2003, the original existing square footage would then date from 1960 to 2003. If one other school in the same county is assessed in the same year, and it was built in 1962 and received a complete renovation and addition in 2010, then the original existing square footage for that school would date from 1962 to 2010; combined, the original existing square footage at these schools dates from 1960 to 2010.

Acronyms and other abbreviations used in this report:

Acronym	Meaning
A&M	Assessment & Maintenance
APPA	Association of Physical Plant Administrators
BPW	Board of Public Works
CDAC	Capital Debt Affordability Committee
CIP	Capital Improvement Program
CMMS	computerized maintenance management system
CMP	Comprehensive Maintenance Plan
CRV	current replacement value
DGS	Department of General Services
DLLR	Department of Labor, Licensing and Regulation
EFMP	Educational Facilities Master Plan
FCI	Facility Condition Index
FTE	full-time equivalent
FY	fiscal year
GSF	gross square footage
HVAC	heating, ventilation, and air conditioning
IAC	Interagency Committee on School Construction (1971-2017) Interagency Commission on School Construction (2018-present)
IFMA	International Facilities Management Association
IPM	integrated pest management
LEA	Local Education Agency
MD	Maryland
MDCI	Maryland Condition Index
MEA	maintenance-effectiveness assessment
MSB	Maryland School for the Blind
PM	preventive maintenance
SF	square feet/square footage
SoW	scope of work
TCO	total cost of ownership

In June of 1971, the BPW established the Interagency Committee on School Construction, which in 2018 became the Interagency Commission on School Construction. Since the initial creation of the IAC, it has been understood that maintenance plays a significant role in facility condition and the educational sufficiency of each of Maryland's public schools, and the IAC has prioritized maintenance information accordingly. In 1973, the BPW directed the IAC to conduct a one-time comprehensive maintenance review of all operating public schools. The results revealed that about 21% of the State's 1,259 then-operative schools were in poor or fair condition. To improve upon those findings, comprehensive maintenance guidelines were developed by the IAC and approved by the BPW in 1974.

In 1980, the BPW directed the IAC to conduct a full maintenance survey of selected public schools that had received state funding assistance. The survey was performed by the DGS. Its initial purpose was to assess the quality of local maintenance programs in 100 school facilities that had benefited from State school construction funding. Subsequently, annual assessments of approximately 100 schools representing a range of approximately 7-16% of each LEA's schools were authorized.

In 1981, a section covering maintenance was included in the IAC's Administrative Procedures Guide and, in 1994, a requirement was added that each LEA submit a Board-approved CMP no later than October 15 of each year. A well-conceived CMP:

- provides an overview of the policies of the local board and a compendium of good maintenance practices;
- uses comparable metrics to determine if maintenance is being performed as required;
- addresses the planning, funding, reporting, and compliance monitoring of school maintenance; and
- lists the highest priority capital and repair projects, with the anticipated funding source for each project.

In July 2005, the CDAC, consisting of the State Treasurer, the Comptroller, the Secretary of the Department of Budget and Management, the Secretary of Transportation, and a public member, requested that the IAC develop recommendations to ensure that Maryland's large investment in school facilities will be well protected through good maintenance practices. As a result, the IAC:

- Transferred the school maintenance survey function from DGS to the IAC beginning in FY 2007 and hired two full-time maintenance inspectors with experience in the fields of building maintenance, operations, and construction to conduct approximately 220 to 230 school assessments in the 24 school systems per year, as well as reassessments of schools assessed in a prior fiscal year that received ratings of Not Adequate or Poor.[1]

- Included maintenance-assessment information as a component of the IAC Facilities Inventory database. This allows for longitudinal comparison of survey scores providing some value for analysis of statewide maintenance practices but it is not a CMMS that would allow robust maintenance management and reporting.

- Issued, in response to a requirement of the General Assembly, guidelines for maintenance of public school facilities in Maryland in May 2008.

1 Assessments are not conducted for facilities on the campus of MSB, which is eligible for State school construction funding.

- Continued to strengthen the alignment between the maintenance-assessment program and the annual CIP:
  - ◊ Beginning with the FY 2010 CIP, the IAC has required that LEAs submit the three most recent roof assessment reports as a threshold condition for approval of roof replacement projects.
  - ◊ The IAC continues to encourage LEAs to review TCO. The need for capital maintenance projects will increase as the average age of facilities portfolios also continues to grow. Major renewal projects that reduce the FCI score for a facility and address multiple deficiencies may provide the biggest "bang-for-the-buck" and extend the expected life of a facility.
  - ◊ The staff of the IAC has discussed maintenance budgets, staffing, and maintenance capital planning with LEAs in the annual October meetings regarding the CIP.

In 2019, following the General Assembly's passage of the 21st Century School Facilities Act (2018 Md. Laws, Ch. 14), the IAC began developing and testing with LEA input a new MEA that was implemented for FY 2021 to replace the maintenance inspections. The post-FY 2020 MEA is based upon a more stringent rubric that greatly reduces the subjectivity of the assessments. For FY 2023, the MEA has been refined to better identify the effectiveness of LEAs' practices with regard to the management of both in-house and contracted maintenance. See page 11 for a description of the post-FY 2020 MEA. Starting in FY 2023, two categories within the Maintenance Management group, *Custodial Scope of Work (SoW)* and *Pest Management*, were merged into other categories and no longer received a separate rating. All items assessed in *Custodial Scope of Work (SoW)* were incorporated into the rating for *Interior Cleanliness & Appearance (incl. of Equip. Rooms)*. Pest management pertaining to interior pests were incorporated into the rating for *Interior Cleanliness & Appearance (incl. of Equip. Rooms)*. Pest management items pertaining to exterior pests were incorporated into the rating for *Grounds*. The weights from *Custodial Scope of Work (SoW)* and *Pest Management* were redistributed to *Preventive Maintenance (PM) Plan* and *Computerized Maint. Mgmt. System (incl. Equip. Data)* to better emphasize the importance of these two categories. *Preventive Maintenance (PM) Plan* increased from a weight of 10 points to 15 points and the category was renamed to *Preventive Maintenance (PM)* as this category not only assesses an LEA's PM plan but also the implementation of that plan. *Computerized Maint. Mgmt. System (incl. Equip. Data)* increased from a weight of 10 points to 14 points.

The 21st Century School Facilities Act also mandated that the IAC require the annual submission of PM plans. The IAC updated its instructions for the submission of the CMP to make it possible for the IAC to compare LEAs' maintenance planning 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.

Starting in August 2023, MEA results were compiled into a filterable map and made available on the IAC's website. The map includes the average overall LEA rating each FY as well as the latest overall rating for each facility that has received an MEA since the assessment's implementation in FY 2020. To access the MEA results map, please see the IAC's website.

Every facility requires maintenance on an ongoing basis in order 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 the facility remains fiscally sustainable. An LEA must implement highly effective preventive and reactive maintenance on a continual basis, and must also implement appropriate capital maintenance (i.e., periodic renewal or replacement of building systems) when it is needed. To do this, an LEA must have the tools, knowledge-equipped staffing, materials, and contracted support that are required to manage and implement the needed operations and maintenance activities. Paying for these inputs requires consistently having sufficient funds in the LEA's operations, maintenance, and capital budgets.

The question of how many resources are required for proper and sufficient operations and maintenance of a given facility — much less a portfolio of facilities — is a complex one. This is because, for each facility, the costs vary significantly 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. At the level appropriate for fiscally sustainable school facilities—Level 2: Comprehensive Stewardship—APPA recommends the following staffing in FTEs:

Maintenance (APPA Level 2: Comprehensive Stewardship)	1.0 per 67,456 GSF
Custodial (APPA Level 2: Ordinary Tidiness)	1.0 per 16,700 GSF
Upkeep of Grounds (APPA Level 2: High Level)	1.0 per 10 acres

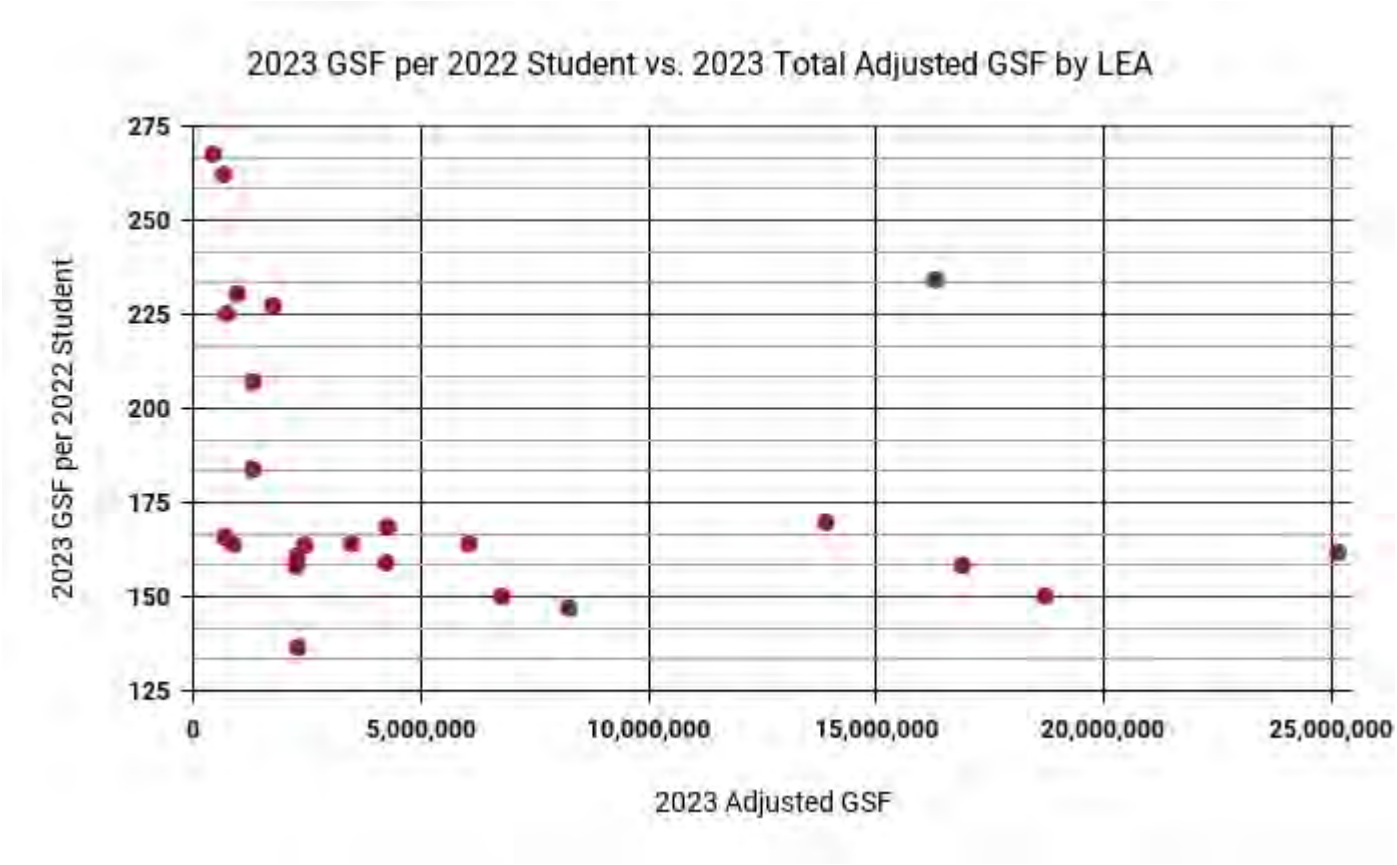
In addition to general staffing, however, there are many preventive and reactive maintenance activities that must be performed to keep building systems in good condition, and these often involve significant staffing, parts, materials, and/or contracted labor. For this reason, operations, maintenance, and capital maintenance budgets must accommodate far more than only the costs of general staffing. Industry standards supported by APPA, the IFMA, the U.S. Department of Defense, and other experts suggest that a good rule of thumb for facilities funding is to spend, on average, the following amounts per year:

Operations & Routine Maintenance (preventive and reactive)	2% of facility CRV
Capital Maintenance (system renewal)	2% of facility CRV

These figures have been found to be effective in estimating facilities costs for the purposes of planning and budgeting, but are still only a very rough estimate. This is because they do not take into account the specific conditions that may be faced by a given facility, and do not address any backlog of deferred maintenance from past years that may exist. Nevertheless, it's likely that, if an LEA fails to spend an annual average of at least 4% of CRV per year on operations and maintenance of its facilities, it will have difficulty maintaining the functionality and the fiscal sustainability of the facilities and obtaining the full expected lifespans of the facilities.

The collection of statewide comparable data on the condition and educational sufficiency of PK-12 school facilities in Maryland is ongoing. A baseline Statewide Facilities Assessment was completed in the fall of 2021, and data is to be updated annually, with 25% of school facilities in Maryland re-assessed through site visits each year. Weighting based on the IAC's Educational Sufficiency Standards is to be finalized in the coming years to create an overall MDCI score for each facility that will allow for apples-to-apples comparison between school facilities. This score will provide valuable insight into the physical needs of Maryland school facilities and support prioritization of construction projects in order to provide environments that support the effective delivery of educational programs that meet Maryland's education standards and that can be effectively and efficiently maintained. The results of this assessment are outside of the scope of this maintenance report and will be published separately.

The total cost of ownership (TCO) of school facilities continues to increase, in significant part due to increasing square footage per student. Typically, LEAs' budgets have not been sufficient to support the increased cost. In 2023, Maryland's LEAs operated more than 142 million GSF of educational space to serve about 852,800 PK-12 students[2], for a statewide average of about 167 GSF per student. However, as shown in the chart below, the average GSF per student figure for many of Maryland's LEAs is significantly higher than 167.



School facility size and TCO therefore must be at the forefront in planning decisions and the management and operation of school facilities must continuously improve in efficiency and effectiveness. Robust and data-driven facilities management is necessary for the effective management of the TCO and to sustain our schools.

2 Maryland State Department of Education. (2023). *FY24_StateAid_MASTER_FINAL_6-16-2023* [Microsoft Excel spreadsheet]. Retrieved from https://marylandpublicschools.org/about/Pages/OFPOS/StateAid/index.aspx

Because funding for capital maintenance is limited, it is important that the local board's EFMP, CMP, and annual 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. LEAs are improving their efficiency through the use of best practices, including better training of staff, the expanded use of CMMS, and increased knowledge of how to manage and reduce the TCO of facilities.

It should be noted that budgets for maintenance often compete directly with educational program budgets and, 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. The IAC has described a number of the key principles in facilities-portfolio management in a series of webinars published on the IAC's website. The IAC continues to support LEAs by informing best practices and looks in the future to provide adequate facilities ownership cost accounting, provision of post-occupancy evaluations, and performance benchmarks.

Brooklyn Park Elementary, Anne Arundel County

Galena Elementary, Kent County

Following the General Assembly's passage of the 21st Century School Facilities Act, the IAC in 2019 began developing and testing with LEA input a new MEA and implemented it for FY 2021. The post-FY 2020 MEA differs significantly from the old maintenance surveys in that it:

- Covers more aspects of facilities maintenance, including the category of Maintenance Management, which includes maintaining and following PM plans and the use of a CMMS in certain ways;
- Is based upon clearer and more objective standards that are keyed to outcomes;

Superior and Good	Maintenance is likely to extend the life of systems within the facility beyond their expected lifespans.
Adequate	Maintenance is sufficient to achieve the life of each system within the facility and, with appropriate capital spending and renewal, the total expected lifespan.
Not Adequate and Poor	Maintenance is insufficient to achieve the expected lifespans of systems within the facility.

- Utilizes a published rubric that describes criteria for each rating level (Superior, Good, Adequate, Not Adequate, and Poor) for each major building-component category, which facilitates greater consistency across assessments and supports increased reviewability;
- Weights the various building-component categories to better reflect their impact on the utility of the facility;

Type	Definition	Category Rating Reduction
Minor Deficiency	Poses a potential threat to life, safety, or health of occupants; delivery of educational programs or services; or the expected lifespan of the facility.	-34%
Major Deficiency	Poses an immediate threat to life, safety, or health of occupants; delivery of educational programs or services; or the expected lifespan of the facility.	-100%

- Recognizes deficiencies in maintenance that pose a potential or immediate threat to occupants or the expected lifespan of the facility;
- Allows LEAs to request the elimination of a given score penalty resulting from an assessed major or minor deficiency when the LEA has timely provided sufficient evidence that the deficiency has been remediated or is in the process of being remediated; and
- Is more transparent because the rating standards, criteria, and scoring formula are all publicly available on the IAC's website.

It should be noted that any maintenance assessment results prior to FY 2021 are not comparable to results in FY 2021 or thereafter. For example, the assessment rating categories have been recalibrated so that a result of Adequate demonstrates an appropriate level of maintenance support for a school facility. Facilities that would have received a level of Good prior to FY 2021 may often receive an Adequate overall rating in FY 2021 or subsequent years.

In the course of the FY 2021 implementation of the post-FY 2020 MEA, LEAs provided valuable feedback to the IAC based upon those LEAs' experiences in the assessments of their facilities. That feedback included suggestions for improvements and the IAC implemented changes in response to some of the suggestions. The feedback also included statements from LEAs that found the post-FY 2020 MEA delivers much greater value than the IAC's previous maintenance surveys. The IAC looks forward to a continuing feedback loop that will carry additional LEA ideas and suggestions back to the IAC for evaluation and consideration as part of the IAC's adherence to the principle of continuous improvement.

The Assessment Rubric

The assessment rubric as implemented in FY 2021 groups the building-system components into 21 categories within four groups. In order to focus the assessment's scoring on those categories that are likely to have the greatest potential impact on teaching and learning, each category receives a value of between three and ten points.

Group	Category	Weight
Site	1. Roadways, Parking Lots, & Walkways	5
	2. Grounds	3
	3. Positive Site Drainage Away from Structure(s)	8
	4. Playgrounds, Equipment, & Fields	4
	5. Relocatables & Additional Structures	6
Building Exterior	6. Exterior Structure & Finishes	6
	7. Roof Drains, Gutters, & Downspouts	7
	8. Windows, Caulking, & Skylights	3
	9. Entryways & Exterior Doors	7
	10. Roofs, Flashing, and Gravel Stops	7
Building Interior	11. Interior Doors, Walls, Partitions, & Finishes	3
	12. Floors	3
	13. Interior Cleanliness & Appearance (incl. of Equip. Rooms)	6
	14. Ceilings	3
	15. Interior Lighting	5
Building Equipment & Systems	16. HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	10
	17. Electrical Distribution & Service Equipment	3
	18. Boilers, Water Heaters, Steam, & Hot-water Distribution	8
	19. Plumbing Fixtures and Equipment	5
	20. Fire and Safety Systems & Utility Controls	10
	21. Conveyances	5

The rubric also includes the following two categories[3] under the heading of Maintenance Management:

Group	Category	Weight
Maintenance Management	22. Preventive Maintenance (PM)	15
	23. Computerized Maintenance Management System (incl. Equip. Data)	14

For each category, the rubric specifies criteria for each of the five rating levels. The complete rubric can be read in its entirety on the IAC website. As an example, the following are the criteria for the rating levels within the category of Plumbing Fixtures and Equipment:

Category Rating	Rating Criteria
Superior	• No problems or issues visible; and • Evidence that only normal preventive maintenance is required.
Good	• Evidence of systems functioning normally with no signs of deterioration, corrosion, leaks, or delivery issues; • Evidence of issues that may require minor repairs or cleanup but do not affect structural integrity or intended uses; and • Evidence of routinely above-standard custodial and maintenance practices.
Adequate	• Evidence of systems functioning normally with few signs of deterioration, corrosion, leaks, or delivery issues; • Evidence of issues that may require repairs or cleanup but do not significantly affect structural integrity or intended uses; and • Evidence of regular competent custodial and maintenance practices.
Not Adequate	• Systems are not functioning as intended; • Evidence of significant deterioration, corrosion, leaks, or delivery issues; • Evidence of issues requiring significant repairs or replacement; or • Evidence of inconsistent custodial or maintenance practices.
Poor	• System is nonfunctional or unsafe to operate; • Evidence of extensive deterioration, corrosion, leaks, or delivery issues; • Evidence of issues requiring extensive repairs or replacement; or • Evidence of consistently sub-standard custodial or maintenance practices.

3 The Maintenance Management group originally had four total categories. *Pest Management* and *Custodial Scope of Work (SoW)* were both removed from this group and incorporated into other categories starting with FY 2023's assessments. See page 7 for additional details.

After the assessor walks the facility and examines the grounds, the structure, and the spaces and building components within them, the rubric along with the assessor's trained professional judgment are used to assign a rating to each category.[4] Each rating has a factor as follows:

Rating	Factor
Superior	100%
Good	85%
Adequate	75%
Not Adequate	65%
Poor	55%

The IAC's software[5] then multiplies the weight for each category by the rating factor of the rating that the assessor assigns, and adjusts for any major or minor deficiencies that were assessed in that category. The resulting points are then scaled to a 100-point scale to generate an overall score for the facility, which translates into an overall facility rating as follows:

Scaled Score Range	Overall Rating
90% to 100%	Superior
80% to 89%	Good
70% to 79%	Adequate
60% to 69%	Not Adequate
0% to 59%	Poor

At the end of the fiscal year assessment cycle, the IAC averages the overall ratings conferred upon the facilities assessed during the fiscal year to derive an average overall facility rating for the LEA. Each year, the IAC selects a sample set of facilities to assess in each LEA based upon a number of factors including the number of years elapsed since each facility was last assessed.[6]

For more information about the MEA's rubric, deficiency removal guidelines, or scoring calculator, please see the IAC's website.

4 Where a school does not include assets in a given category, or the assessor could not evaluate the assets due to ongoing major construction projects, weather conditions, or other circumstances, the assessor assigns a rating of Not Applicable and the category is omitted from the scoring calculation. As a result, not every school may have a rating in every category.

5 The formulas used in the IAC's software are shown in the MEA scoring calculator provided on the IAC's website.

6 For more detail about the school selection process, see Overview of FY 2023 Assessment Results on page 17.

In conducting a total of 172 MEAs between July 2022 and May 2023, the team implemented the following process:

Prior to the Site Visit

In June 2022, the IAC provided each LEA a list of the school facilities to be assessed and coordinated with the LEAs with regard to scheduling. LEAs were required to submit key school facility information including maintenance records to the IAC prior to each assessment. In order to improve their efficiency and accountability, all 24 LEAs have to varying degrees implemented CMMS tools. CMMS tools help LEAs manage and track maintenance activities through the use of work orders. A key function of a CMMS is to automatically generate work orders for PM tasks based upon equipment needs and PM schedules published by the manufacturers of each facility's building systems. When fully implemented, the CMMS can provide valuable and transparent data for improving facilities maintenance processes, including work order aging reports and the costs of performing maintenance. Prior to the site visit for each facility, the assessor reviewed work order reports to obtain an advance view on the levels of maintenance being performed on various parts of the facility.

During the Site Visit

Upon arrival, the IAC's assessor walked the facility in the presence of a facilities maintenance representative or designee. The assessor examined the components and systems of the buildings, listed on page 12. Based upon the assessor's observations of the building systems and the documentation of the LEA's maintenance activities in the facility as compared against the criteria in the MEA rubric, the assessor assigned a rating for each category. The assessor recorded any comments and assigned ratings on the IAC's web-based assessment form and attached photos taken during the assessment.

The IAC's assessor took care during the assessment to measure the effectiveness of the LEA's maintenance by evaluating the conditions observed and to avoid allowing the age of the facility or its systems to affect any category's rating. If a school facility is well maintained and has older equipment and components that are serviceable and are not causing harm to other equipment and building components, the facility is likely to receive a score that reflects the high level of effectiveness of maintenance that was performed.

After the Site Visit

Upon completion of the assessment, the assessor reviewed any notes and documentation as needed, completed the preliminary MEA report, and submitted it to the A&M group manager or lead assessor for review. The A&M group manager or lead assessor reviewed the report, coordinated with the assessor as needed to refine or adjust the report contents, and approved the report. The A&M group manager dispatched the report to the LEA's maintenance director and other appropriate personnel, generally within 72 business hours.

Once the LEA received the preliminary MEA report, the LEA had 15 calendar days in which to provide responses on any issues that the assessor marked for a required response. Such issues could include building-system categories that received a rating of Poor or Not Adequate as well as any major or minor deficiencies. The LEA had the option of requesting the removal of score penalties for any major or minor deficiencies assessed in the report. If the A&M group manager found that the LEA had timely provided sufficient evidence under the IAC's guidelines that the deficiency had been remediated or was in the process of being remediated, the IAC could reduce or remove the negative score impact of that deficiency.

As described in the following section on the results of the FY 2023 MEAs, the LEAs accrued a total of 336 minor deficiencies — an average of 1.8 per assessed school facility — and 2 major deficiencies that were not remediated. Anecdotal feedback from LEAs suggests that the primary reason why many or most of the deficiencies were not remediated is that the LEAs lack sufficient fiscal and/or staffing resources to remediate the deficiencies while still meeting other pressing facility needs.

Atholton High, Howard County

Snow Hill High, Worcester County

The IAC is reporting on 172 MEAs performed in FY 2023 representing 13% of Maryland's PK-12 public school facilities.[7] These MEAs constitute the third batch of assessments using the post-FY 2020 approach, which provides for greater consistency and comparability across facilities and LEAs and is calibrated to reflect whether the LEA's maintenance effectiveness is sufficient to maintain the expected functionality of its facilities for educational purposes and to achieve the expected lifespans for the major building systems and the facilities overall.

In selecting facilities to assess during FY 2023, the IAC first prioritized the school facilities that had not been assessed within the last six fiscal years or were at least three years old and had never received an assessment. The IAC assessed approximately 13% of facilities in each LEA. To ensure each LEA's final results were a reflection of each LEA's overall average maintenance effectiveness, a minimum of three facilities were assessed in each LEA. For the LEAs that implement multiple maintenance service centers to manage designated areas, care was taken to conduct MEAs distributed as proportionally as possible in each service area.

ADEQUATE IS ADEQUATE

A rating of Adequate suggests that the LEA's maintenance is such that, on average, the LEA should obtain the expected lifespans from its building systems and facilities.

Table 1 provides a summary of the maintenance-effectiveness results for each LEA from FY 2023. Specifically, the table shows the average overall rating from the facilities assessed along with the corresponding rating level and the total number of major and minor deficiencies.

The FY 2023 data shows the following:

- The statewide average maintenance-effectiveness rating by facility was 70.57%, which falls within the Adequate range under the IAC's rating system.
- 16 of 24 — or 67% — of LEAs earned an average overall maintenance-effectiveness rating of Adequate.
- 23 of 24 — or 96% — of LEAs accrued no major deficiencies, which are items that pose an immediate threat to life, safety, or health of occupants; delivery of educational programs or services; or the expected lifespan of the facility. The only two unremediated major deficiencies remaining were found in the same facility.
- 12 of 24 — or 50% — of LEAs averaged one unremediated minor deficiency per facility or fewer. These same 12 LEAs all earned an average overall maintenance-effectiveness rating of Adequate. Talbot County and Wicomico County were the only two LEAs that had no unremediated deficiencies.

As compared with results from FY 2022, the average overall rating for a facility in FY 2023 decreased by 2.49%. It is likely that multiple factors caused the decrease in facility ratings, such as merging the *Custodial Scope of Work (SoW)* and *Pest Management* categories and increasing the weight of the *Preventive Maintenance (PM)* and *Computerized Maint. Mgmt. System (incl. Equip. Data)* categories as mentioned on page 7.

7 Individual school reports are available upon request.

Table 1: Summary of Maintenance-Effectiveness Assessment Results

	LEA Characteristics in FY23			FY23 Maintenance Assessment Results				
LEA	Total # of School Facilities	Total Square Footage	Average Adjusted Age of Schools	# of Schools Assessed	LEA Average Rating		# of Deficiencies	
							Major	Minor
TOTALS	1370	142,108,765	31	172	70.57%	Adequate	2	336
Allegany	22	1,749,398	36.3	3	70.30%	Adequate	0	6
Anne Arundel	121	13,902,130	30.1	14	75.51%	Adequate	0	3
Baltimore City	140	16,304,883	37.8	17	69.57%	Adequate	2	40
Baltimore Co	166	16,900,318	33.5	17	74.03%	Adequate	0	4
Calvert	25	2,456,795	25.2	3	72.22%	Adequate	0	1
Caroline	10	877,773	23.5	3	67.68%	Not Adequate	0	6
Carroll	40	4,266,203	31.7	5	67.13%	Not Adequate	0	13
Cecil	29	2,267,203	29.4	4	73.91%	Adequate	0	2
Charles	39	4,235,048	29.6	5	71.35%	Adequate	0	5
Dorchester	14	970,840	31.3	3	71.90%	Adequate	0	3
Frederick	67	6,784,025	28.1	8	76.93%	Adequate	0	7
Garrett	13	741,671	35.0	3	70.40%	Adequate	0	7
Harford	52	6,054,298	31.9	6	67.42%	Not Adequate	0	17
Howard	76	8,250,880	21.6	10	72.20%	Adequate	0	15
Kent	5	441,409	44.7	3	68.74%	Not Adequate	0	7
Montgomery	210	25,147,251	25.9	22	72.42%	Adequate	0	13
Prince George's	198	18,712,667	39.7	21	63.70%	Not Adequate	0	130
Queen Anne's	14	1,302,658	22.0	3	70.49%	Adequate	0	3
St. Mary's	27	2,300,101	26.6	4	63.91%	Not Adequate	0	26
Somerset	10	671,356	22.3	3	62.87%	Not Adequate	0	13
Talbot	8	700,971	18.1	3	71.96%	Adequate	0	0
Washington	46	3,476,622	35.8	6	68.03%	Not Adequate	0	13
Wicomico	24	2,283,618	28.7	3	73.76%	Adequate	0	0
Worcester	14	1,310,647	27.0	3	71.28%	Adequate	0	2

SUPERIOR	90% - 100%
GOOD	80% - 89%
ADEQUATE	70% - 79%
NOT ADEQUATE	60% - 69%
POOR	0% - 59%

Updated 7/5/2023

Table 2 summarizes the MEAs' overall rating results each fiscal year since the MEA was implemented in fiscal year 2021. More detailed information about the MEA results prior to fiscal year 2023 are available in previous annual reports provided on the IAC's website.

Table 2: Maintenance-Effectiveness Assessment Results by Fiscal Year

TABLE 2: MEA RESULTS FISCAL YEARS 2021-2023

NUMBER OF MEAS PERFORMED WITH RATINGS AND PERCENTAGES

Fiscal Year	Superior/Good	Adequate	Not Adequate	Poor	Total
2021	63	131	72	2	268
2022	22	189	52	2	265
2023	**4**	**106**	**57**	**5**	172
Total Ratings	89	426	181	9	705
Total Percentages	**12.62%**	**60.43%**	**25.67%**	**1.28%**	**100%**

Bester Elementary, Washington County

North Dorchester Middle, Dorchester County

- Following the 45-day remediation period after an MEA, two major deficiencies were still remaining, both pertaining to categories in the same facility. One deficiency was in the exterior structure and finishes category for posing a threat to the longevity of the building, and one concerned the fire and safety systems related to life/safety issues.
- Of the minor deficiencies assessed, 36.6% pertained to Site; 33.3% pertained to Building Equipment & Systems; 19.9% pertained to Building Interior; and 10.1% pertained to Building Exterior.

Table 3: Major and Minor Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	54
	Grounds	0	24
	Positive Site Drainage Away from Structure(s)	0	3
	Playgrounds, Equipment, & Fields	0	31
	Relocatables & Additional Structures	0	11
	Site Subtotals	***0***	***123***
Building Exterior	Exterior Structure & Finishes	1	13
	Roof Drains, Gutters, & Downspouts	0	3
	Windows, Caulking, & Skylights	0	5
	Entryways & Exterior Doors	0	9
	Roofs, Flashing, and Gravel Stops	0	4
	Building Exterior Subtotals	***1***	***34***
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	16
	Floors	0	6
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	14
	Ceilings	0	13
	Interior Lighting	0	18
	Building Interior Subtotals	***0***	***67***
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	13
	Electrical Distribution & Service Equipment	0	18
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	14
	Plumbing Fixtures and Equipment	0	17
	Fire and Safety Systems & Utility Controls	1	36
	Conveyances	0	14
	Building Equipment & Systems Subtotals	***1***	***112***
	Total	**2**	**336**

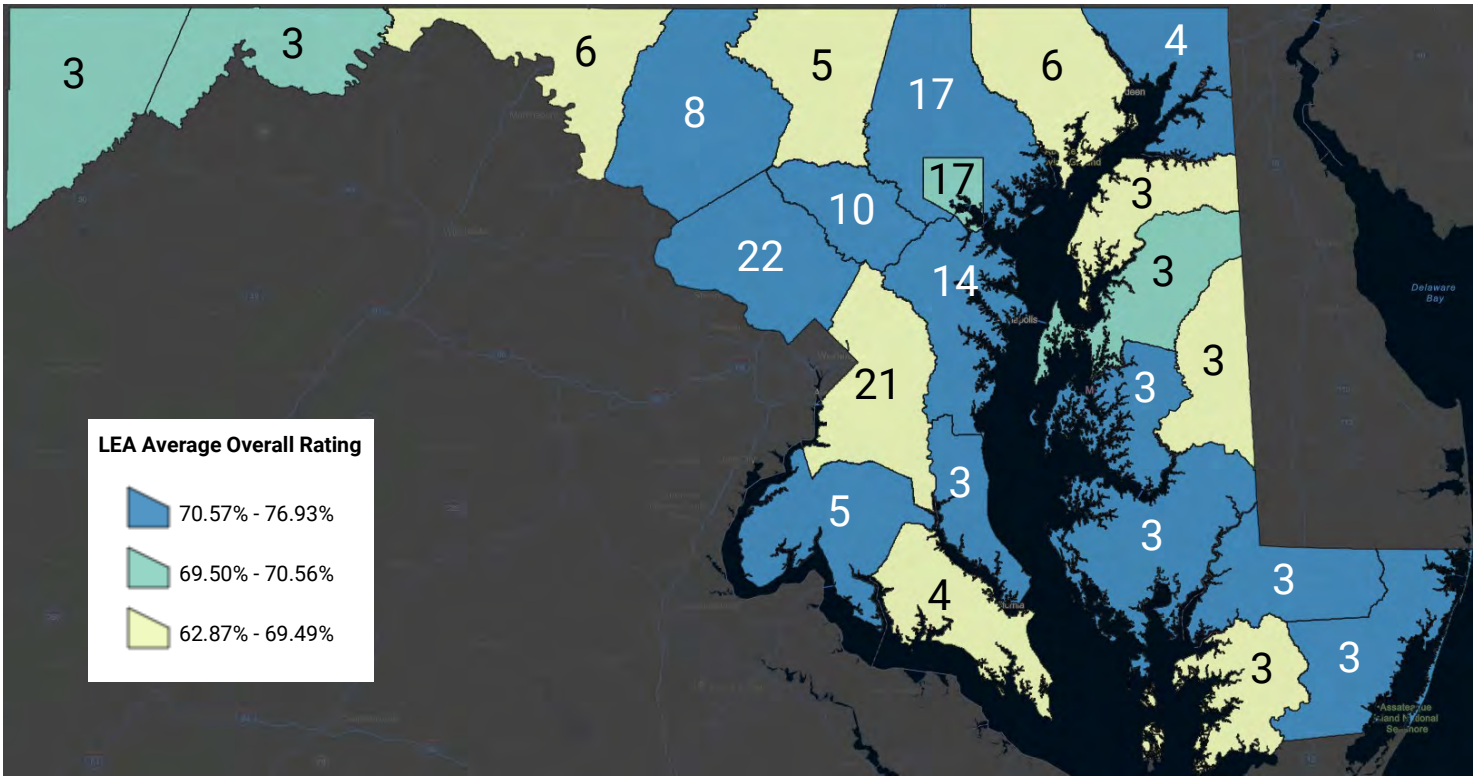
The specific ratings of facilities assessed in each school district are shown on the FY 2023 Results: Summary of School Ratings pages in the district-by-district overview section starting on page 25. Of the 172 school facilities rated in FY 2023:

- 0 facilities (0%) were rated Superior
- 4 facilities (2.3%) were rated Good
- 106 facilities (61.6%) were rated Adequate
- 57 facilities (33.1%) were rated Not Adequate
- 5 facilities (2.9%) were rated Poor

The MEA is calibrated to indicate a rating of Adequate when the maintenance effectiveness supports achieving the full expected lifespan of the facility. A rating of Not Adequate or Poor indicates that, if the level of maintenance being provided at these facilities in FY 2023 is continued over a longer period of time, the facility will not achieve the full expected lifespans of the building systems and will begin to incur increased maintenance costs as the systems' conditions decline prematurely.

A rating of Not Adequate or Poor does not necessarily reflect an LEA's level of effort to perform maintenance but could mean that LEA lacks the funding, staffing, and/or resources to effectively maintain their school facilities. The purpose of these ratings is to identify the areas or school facilities that are receiving substandard maintenance so LEAs and their local boards can determine how best to prioritize funding or improve processes.

Figure 1. Number of Assessments and Average Overall Rating by LEA
As a result of these facility-level scores, sixteen LEAs received overall ratings of Adequate, twelve of which (in blue) are above the Statewide average and four of which (in green) are below. Eight LEAs (in pale yellow) received overall ratings of Not Adequate.



Fiscal Year 2023: Statewide Summary

1,370 facilities

In FY 2023, the State of Maryland had 1,370 active school facilities.

No change since FY 2022.

~ 142 M GSF

Maryland maintains 142,108,765 square feet throughout its 24 LEAs.

+ 394,427 SF since FY 2022.

31 years old

The average adjusted age of all 1,370 school facilities is 31 years old.

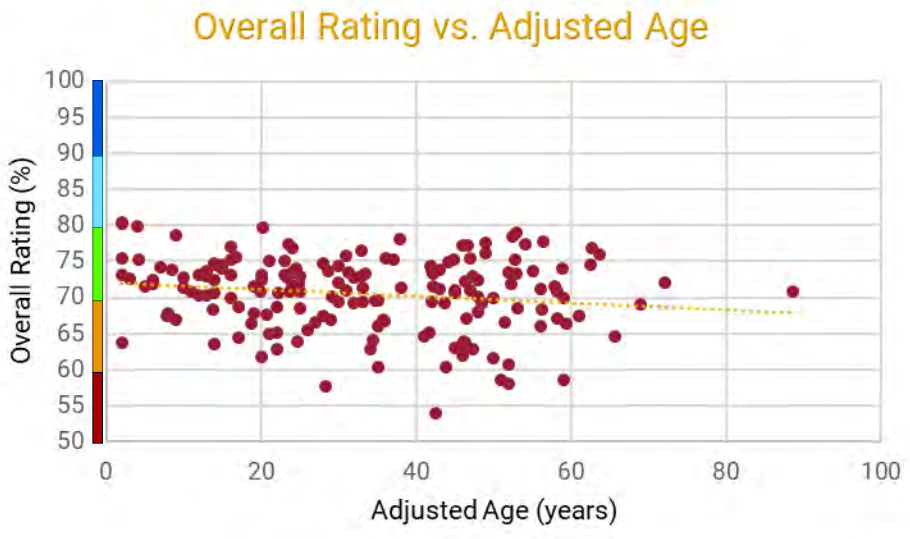
No change since FY 2022.

~ $65 B

The current replacement value for all of Maryland's GSF, at the IAC's current replacement cost/SF, is approximately $65 B.

Figure 2: Overall Rating vs. Adjusted Age

The scatterplot below shows that, in general, the overall rating for a facility decreases as the adjusted age of the square footage increases. However, there is significant variation (as much as 20 to 30 percentage points) within each adjusted age range. As facilities and assets age, problems are more likely to arise. This requires LEAs to invest more time, money and staff resources to continue to keep their buildings running effectively and efficiently. As shown in the data, on average, aging facilities are less effectively maintained, which suggests that LEAs are under-resourcing their older facilities. Despite these challenges, it is the LEAs' responsibility to ensure all students and staff have an adequately maintained learning environment no matter the age of the facility. Creating and implementing a comprehensive PM plan and using a CMMS effectively will help with the TCO as the facility and its assets age. This approach will also guide the LEAs in properly maintaining all of their facilities, ensuring that the critical components reach or exceed their expected useful life, and allocate resources appropriately while remaining fiscally responsible.



The following chart shows by building-system category the percentage of assessed school facilities that achieved passing ratings of Adequate or better and the percentage that achieved failing ratings of Not Adequate or Poor. Facilities are also counted as failing in a given category when the LEA achieved a rating of Adequate or higher but failed to remediate a minor or major deficiency that had been assessed in that category.

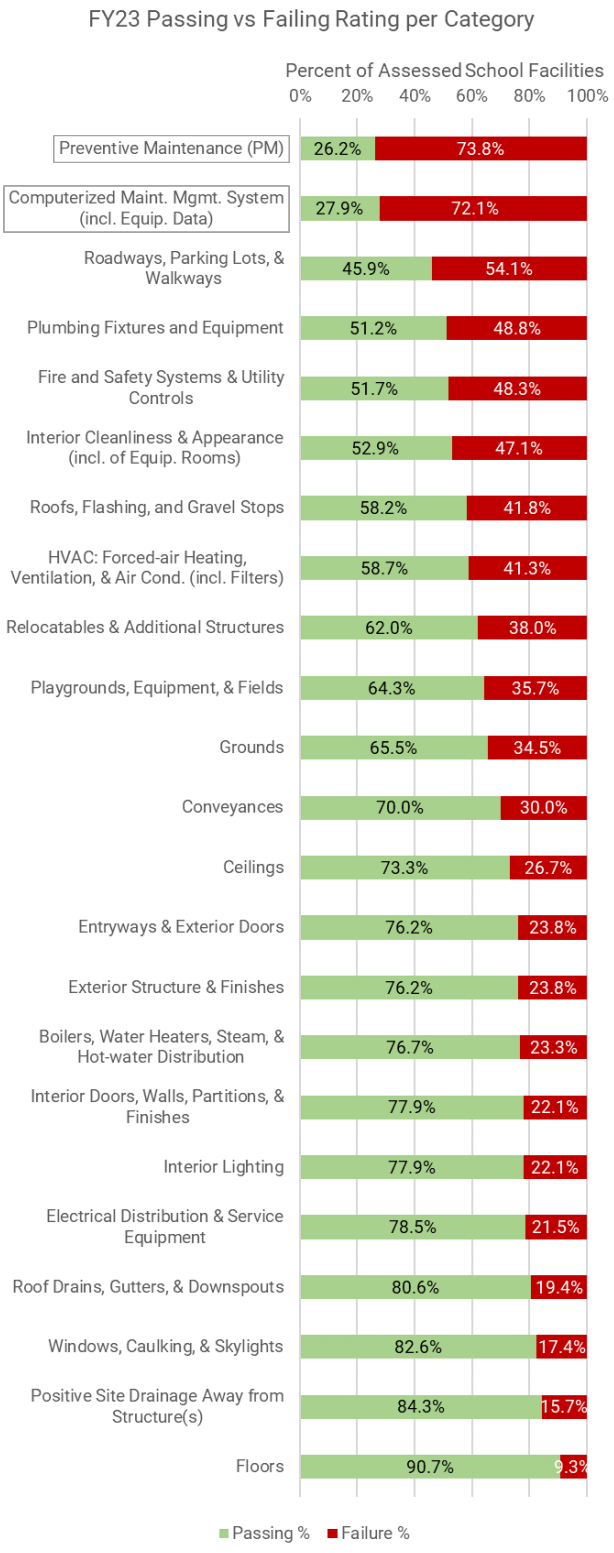


Figure 3: FY 2023 Passing vs. Failing Rating per Category

As not every facility contains the applicable assets to receive a rating for every building-system category, across the body of 172 school facilities assessed, only 3,438 ratings were assigned to the 21 building-system categories, of which 30.5% were a failing rating. This result shows that, within the facilities assessed during FY 2023, nearly a third of all building systems were not being maintained at a level likely to support achieving their full expected lifespans. In addition, there was an average of 1.97 categories with unremediated deficiencies per facility assessed.

Strengths

- The *Floors* category has the highest passing rating rate of any building-system category, as it has since the MEA was implemented in FY 2021. This category has the most Adequate ratings of any other category, but only two facilities earned a Superior rating, and two facilities earned a Good rating. This is likely because many LEAs do not include flooring in their PM schedules and therefore, are unable to earn higher than an Adequate rating regardless of the effectiveness of their PM efforts.
- The *Conveyances* and *Roof Drains, Gutters, & Downspouts* categories each earned the most Superior ratings of any other category. Both categories accrued 24 Superior ratings and 14 Good ratings. However, as many facilities do not have a conveyance to be rated, compared to the 170 facilities which received a rating in the *Roof Drains, Gutters, & Downspouts* category, only 100 facilities were rated in the *Conveyances* category. At a minimum, a Superior rating indicates that applicable assets are included in a facility's PM schedule, that those PM work orders are documented in the CMMS with evidence they are being performed effectively, and that no issues or concerns were noted during the day of assessment. In the case of conveyances, all DLLR certifications must also be up to date.

Weaknesses

- Both the *Fire and Safety Systems & Utility Controls* category and the *HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)* category are the two most important and heavily weighted building-system categories assessed during the MEA. Each of these two categories includes an array of complex assets, many of which differ at each facility and have unique PM frequencies or require outsourced resources to perform maintenance.

  While the *HVAC* category improved by 8.9% since last FY (the most of any category), of the 172 facilities assessed, 71 (approximately 41.3%) still received a failing rating. Five facilities also earned a Poor rating for their HVAC systems' maintenance, the most of any other category except for the *Playgrounds, Equipment, & Fields* category which tied for most Poor ratings. Only four LEAs — Cecil County, Charles County, Frederick County, and Wicomico County — earned a passing rating in this category for all of their assessed facilities.

  The *Fire and Safety Systems & Utility Controls* category had the most facilities which received a rating above Adequate, with 44 facilities earning either a Superior or Good rating. However, following the *Roadways, Parking Lots, & Walkways* category, the *Fire and Safety Systems & Utility Controls* category had the most facilities with one or more deficiencies remaining after the 45-day remediation period ended. Of the 172 facilities assessed, 37 (approximately 21.5%) still had unremediated deficiencies, one of which was a major deficiency. Only Talbot County earned a passing rating in this category for all of their assessed facilities.

- The *Interior Cleanliness & Appearance (incl. of Equip. Rooms)* category had the most facilities that received a rating below Adequate in a building-system category, with 77 facilities earning either a Not Adequate or Poor rating. 47.1% of facilities received a failing rating this FY in this category, an increase of 16.4% from last FY. This increase is likely due to the consolidation of the two maintenance management categories, *Pest Management* and *Custodial Scope of Work (SoW)*. Interior pest management and custodial management activities are now included in *Interior Cleanliness*. Based on the IAC's observations of the LEAs' CMMS usage and PM schedules, many LEAs do not track custodial activities via CMMS, or one PM work order is created that encompasses multiple, diverse assets and activities which is not conducive to tracking the PM performed on individual assets and equipment. While pest management activities are included in a facility's PM schedule more often than custodial activities, the frequency that needed pest management takes place can vary from facility to facility and change depending on the time of year, as some pests can be more problematic due to location, surrounding landscapes, or weather conditions. While each LEA should have an IPM plan, most implementation is not a one-size-fits-all situation which can make pest management more difficult than other PM activities.
- The *Plumbing Fixtures and Equipment* category had the second highest number of facilities that received a rating below Adequate in a building-system category, with 74 facilities earning either a Not Adequate or Poor rating. 48.8% of facilities earned a failing rating this FY in this category, an increase of 15.6%. Many LEAs do not appear to incorporate PM activities for plumbing fixtures into their PM schedules, and some LEAs do not include their required backflow preventer inspections.
- Every LEA uses a CMMS to some degree, with a few LEAs still in the beginning stages of development and implementation, and a few LEAs with robust systems fully incorporated into their operations and culture. With shortages in money, resources, and time, it is imperative for all LEAs to implement an effective and fully functioning CMMS to auto-populate PM work orders, and track the maintenance and repair history as well as performance of individual assets over time, including fields for tracking labor hours, costs, and days each work order has aged to help identify causes of possible bottlenecks, streamline workflow processes, and establish predictable cost trends to support more efficient resource management.

ALLEGANY COUNTY


Westmar Middle

Total School Facilities Assessed in FY 2023: 3

Fiscal Year 2023: Key Facts

22 facilities

Allegany County has 22 active school facilities.

No change since FY 2022.

36.3 years old

The average adjusted age of all 22 school facilities is 36.3 years old.

+ 1 year since FY 2022.

> 1.7 M GSF

Allegany County maintains 1,749,398 SF throughout its 22 school facilities. It has the 16th greatest amount of SF of LEAs in MD.

No change since FY 2022.

~ $0.8 B

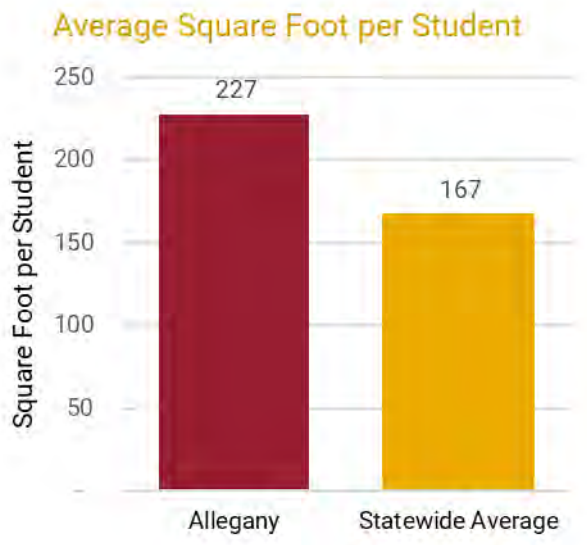
The current replacement value for Allegany County's GSF, at the IAC's current replacement cost/SF, is approximately $0.8 B.

70.30% (Adequate) = Average Overall Rating for FY 2023

+ 4.55% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	2			2
Not Adequate		1		1
Poor				
Totals	2	1		**3**

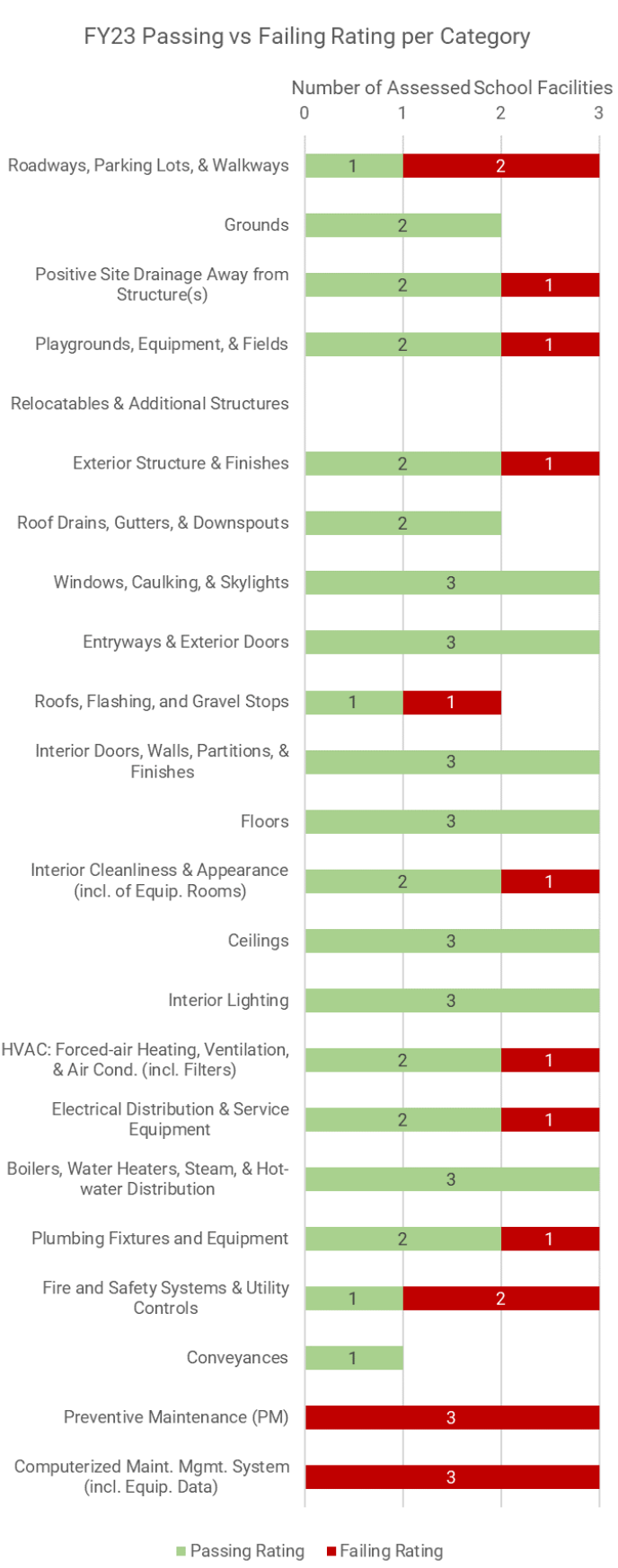


ALLEGANY COUNTY

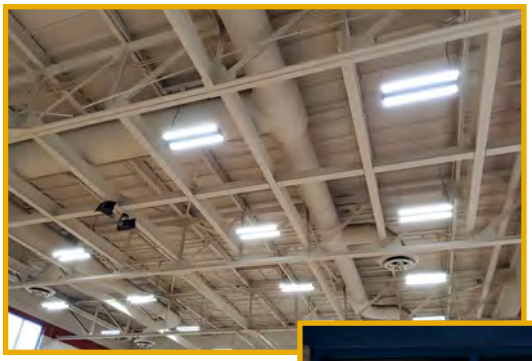
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Westmar Middle (01.014)	Middle	125,649	28	Not Adequate	1	0	12	9	0	0	3
2. West Side Elementary (01.017)	Elementary	49,300	46	Adequate	1	2	15	3	0	0	2
3. Frost Elementary (01.029)	Elementary	36,864	56	Adequate	0	0	15	3	0	0	1
Totals					2	2	42	15	0	0	6
Percentage of Total Ratings for System					3%	3%	69%	25%	0%		

FY 2023 Results: Assessment Findings by Category



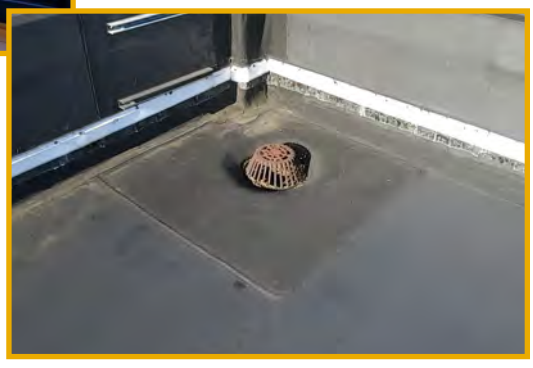
Strengths



Most lighting fixtures were observed functioning properly, and two facilities had no issues or concerns with lighting fixtures in student-occupied areas.

No operational issues or concerns were observed with the exterior doors at two facilities, and no issues were noted with any interior fire doors at any of the assessed facilities.

The windows at all three facilities appeared to be maintained and functioned as intended. All three facilities received an Adequate rating in the Windows, Caulking, & Skylights category.



The roof drains were observed free of debris and functioning as intended. Roof drains are evaluated annually during the routine roof inspection.

Weaknesses

No corrective action work orders were created in the CMMS to address and track remediation of any issues or deficiencies noted in the fire alarm inspection reports at two facilities. Fire and safety systems were not identified in the PM schedules for the assessed facilities. Multiple emergency exit signs and emergency lights did not operate properly at one facility.

Many essential assets were not identified in the PM schedules for the assessed facilities, such as fire and safety systems, plumbing, and DLLR-regulated equipment. All or most of the HVAC equipment was missing from the PM schedules for two facilities, and all three facilities were noted with dirty filters. The asset list for each facility included few, if any, essential assets; most of items identified in the asset lists were rooms or places.

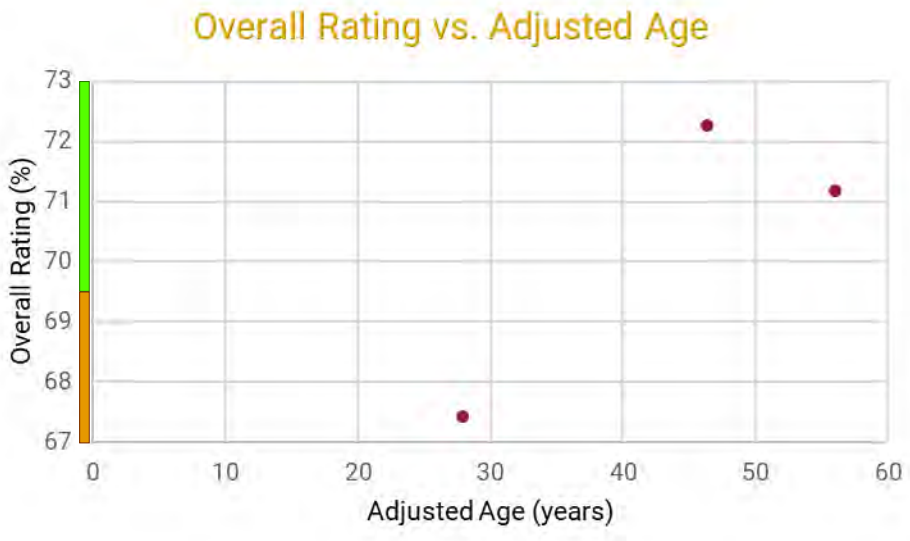
Roadways, parking lots, and walkways were not identified in the PM schedules for the assessed facilities. Cracked and deteriorated roadways and parking lots were observed at two facilities as well as trip hazards due to uneven walkway surfaces. Ponding water was noted in the parking lot at one facility.

Multiple sinks at two facilities were noted with operational issues as well as leaks at multiple toilets and/or urinals. Plumbing fixtures and equipment were not identified in the PM schedules for the assessed facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	2
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	1
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	2
	Conveyances	0	0
	Total	**0**	**6**

Overall Rating vs Adjusted Building Age



- Expand the asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

- A field should be created in the CMMS to track the days each work order has aged to help identify causes of possible bottlenecks and streamline workflow processes. Fields should also be set up to track labor hours and costs to assist in establishing predictable cost trends and support more efficient resource management.

- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively and the actions taken to complete the work are recorded accurately.

- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.

- PM activities for fire and safety systems, HVAC equipment, plumbing fixtures and equipment, and DLLR-regulated equipment should be added to each facility's PM schedule to help extend the useful life of the existing surfaces and assets, prevent hazardous conditions, and avoid premature capital replacement projects.

- All fire and safety systems and components should have PM activities scheduled at the appropriate frequencies and tracked using the CMMS. Depending on what is installed at each facility, the PM schedule may include PM activities for fire extinguishers, battery-operated emergency lights and exit features, fire doors, kitchen hood suppression, smoke evacuation dampers, and stairwell pressurization fans.

ANNE ARUNDEL COUNTY

Total School Facilities Assessed in FY 2023: 14


Ferndale EEC

Fiscal Year 2023: Key Facts

121 facilities

Anne Arundel County has 121 active school facilities.

No change since FY 2022.

30.1 years old

The average adjusted age of all 121 school facilities is 30.1 years old.

+ 1 year since FY 2022.

~ 13.9 M GSF

Anne Arundel County maintains 13,902,130 SF throughout its 121 school facilities. It has the 5th greatest amount of SF of LEAs in MD.

+ 18,406 SF since FY 2022.

> $6.3 B

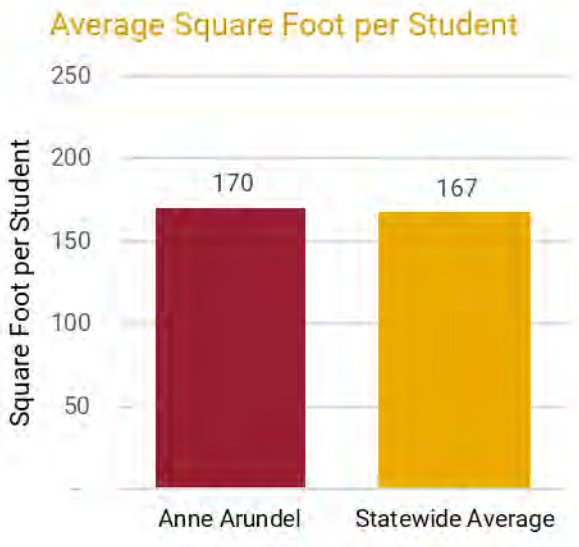
The current replacement value for Anne Arundel County's GSF, at the IAC's current replacement cost/SF, is greater than $6.3 B.

75.51% (Adequate) = Average Overall Rating for FY 2023

+ 0.18% since FY 22

FY 2023 Overall Rating Results by School Type

	Alternate	Environmental Ed.	Elementary	Middle	High	
Superior						
Good						
Adequate	1	1	8	3	1	14
Not Adequate						
Poor						
Totals	1	1	8	3	1	**14**

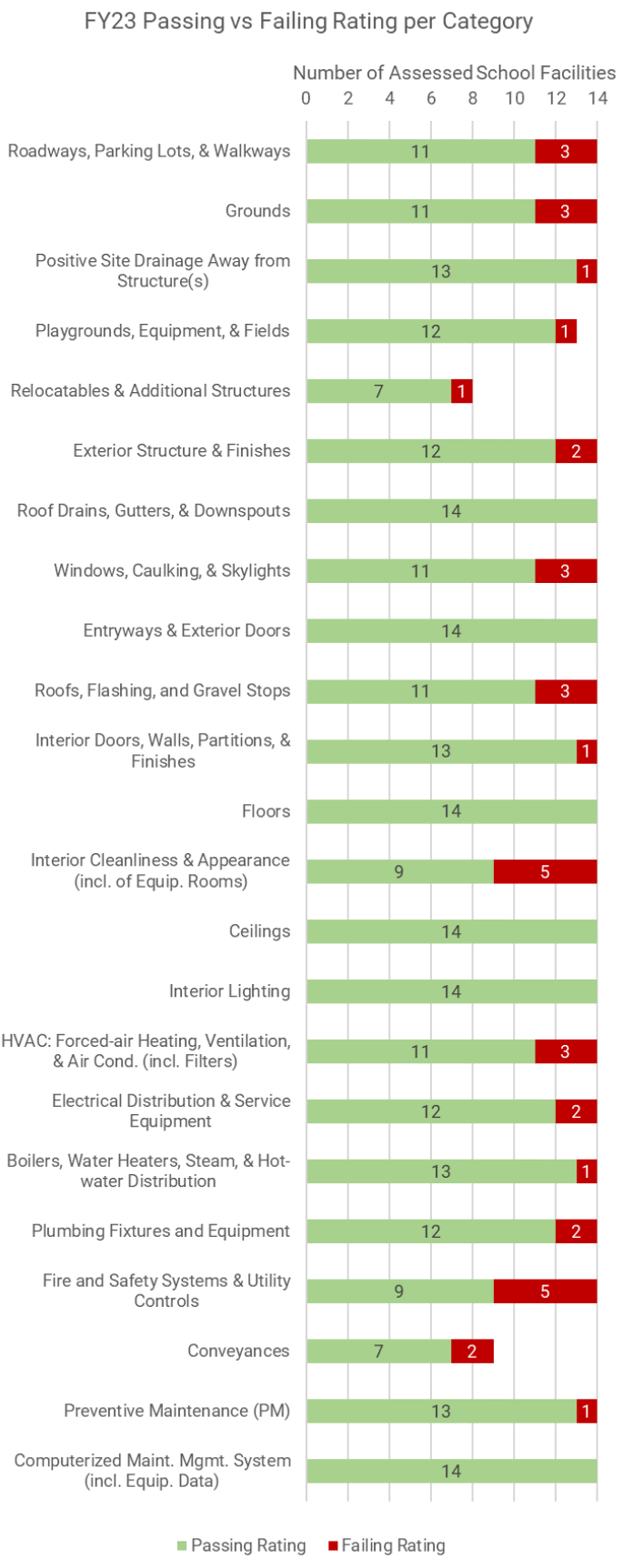


ANNE ARUNDEL COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Fort Smallwood Elementary (02.031)	Elementary	64,907	36	Adequate	1	2	17	2	0	0	0
2. Belvedere Elementary (02.056)	Elementary	68,476	24	Adequate	1	3	18	1	0	0	1
3. Arundel Middle (02.057)	Middle	162,322	53	Adequate	2	3	18	0	0	0	0
4. Marley Middle (02.059)	Middle	154,293	16	Adequate	1	0	17	4	0	0	0
5. Southern High (02.068)	High	226,206	52	Adequate	1	7	14	1	0	0	0
6. Pasadena Elementary (02.070)	Elementary	68,023	14	Adequate	0	2	16	4	0	0	0
7. Marley Elementary (02.079)	Elementary	81,934	16	Adequate	1	0	20	2	0	0	0
8. Phoenix Academy (02.083)	Alternate	71,110	10	Adequate	1	1	14	6	0	0	1
9. Hillsmere Elementary (02.084)	Elementary	45,885	55	Adequate	1	0	12	9	0	0	0
10. Brooklyn Park Elementary (02.085)	Elementary	74,540	30	Adequate	0	2	18	2	0	0	0
11. Severna Park Middle (02.089)	Middle	205,905	12	Adequate	1	1	18	3	0	0	1
12. Jacobsville Elementary (02.091)	Elementary	73,193	24	Adequate	0	6	14	1	0	0	0
13. Arlington Echo Education Center (02.122)	Environmental Ed.	10,509	54	Adequate	1	3	16	1	0	0	0
14. Ferndale EEC (02.124)	Elementary	24,076	17	Adequate	1	1	18	1	0	0	0
Totals					12	31	230	37	0	0	3
Percentage of Total Ratings for System					4%	10%	74%	12%	0%		

FY 2023 Results: Assessment Findings by Category



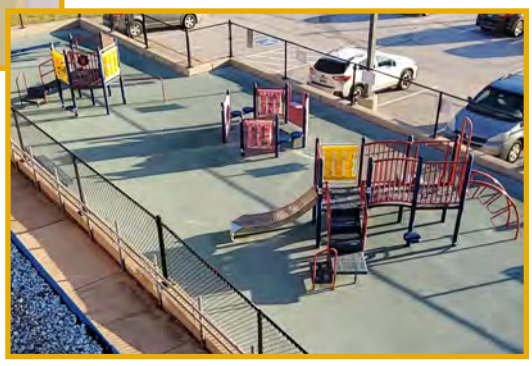
Strengths

Roof drains, gutters, and downspouts are evaluated annually during the routine roof inspection. Roof inspections were identified in the PM schedules for the assessed facilities.

All exterior doors operated properly at 10 of the assessed facilities. Emergency exit doors and pathways are included in an annual environmental services inspection listed in the PM schedules at 12 of the assessed facilities.

Conveyances were identified in the PM schedules at the applicable facilities. No issues or concerns were observed with the chairlifts or elevators at four facilities. These same four facilities all earned a Superior rating in the Conveyances category.

Several different play areas and equipment were identified in the PM schedules for the applicable facilities, such as tennis courts, athletic and turf fields, indoor and outdoor bleachers, playgrounds, and gymnasium curtains.



Weaknesses

The kitchen walk-in equipment was not identified in the PM schedules for the assessed facilities. This equipment was noted with dirty coils at four facilities. Three facilities received a Not Adequate rating in the HVAC category.

Improper or unsafe storage practices were identified at 10 facilities, which in some instances were blocking egress routes or equipment. Five facilities received a Not Adequate rating in the Interior Cleanliness & Appearance (incl. of Equip. Rooms) category. The custodial scope of work identifies area-specific custodial tasks and frequencies but these activities are not tracked using the CMMS.

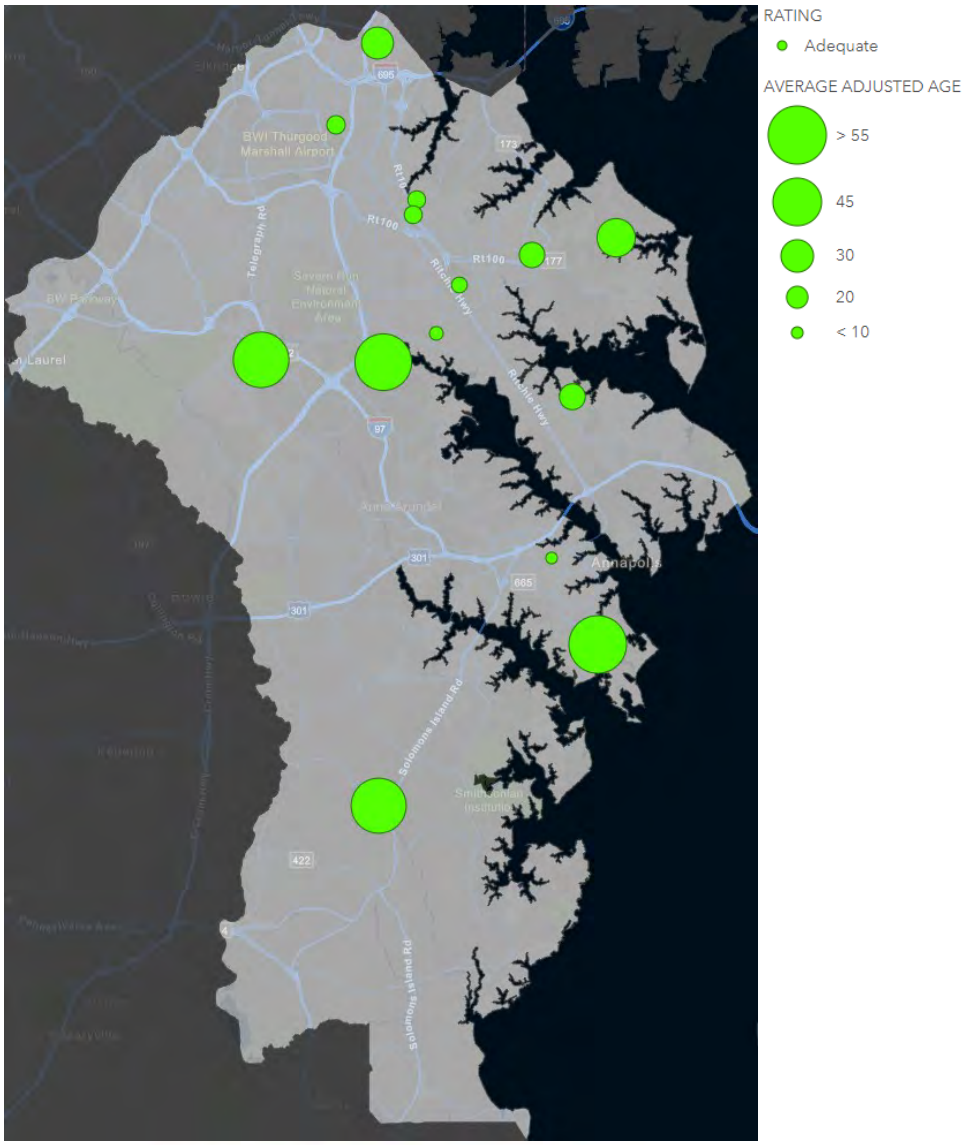
Roadways, parking lots, and walkways were not identified in the PM schedules for 13 of the assessed facilities. Uneven walkway surfaces were noted at five facilities as potential trip hazards. Five facilities were observed with cracked walkways.

Potential safety issues were noted at seven facilities due to inoperable emergency lights, emergency exit signs, and/or eyewash stations.

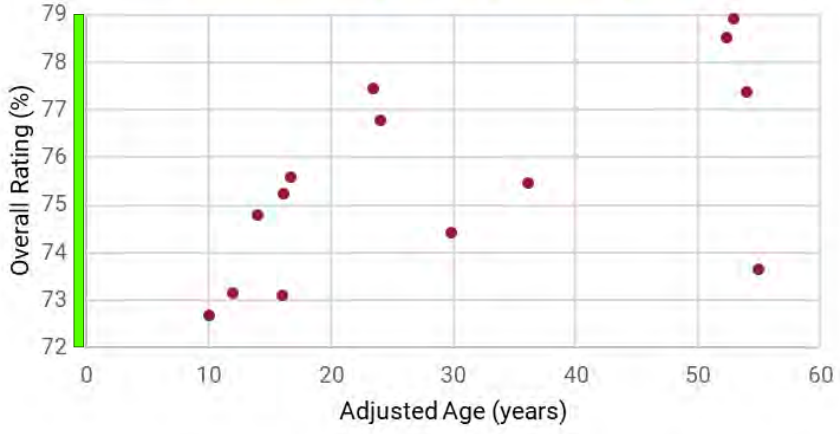
FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	1
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	1
	Total	**0**	**3**

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- The environmental service and operations assessments Anne Arundel County Public Schools (AACPS) conducts to perform PM work encompass multiple assets and PM work under one PM work order. PM work orders should generate automatically in the CMMS for each asset tag rather than for a group of asset tags so PM and follow-up corrective work orders can be more easily tracked for individual equipment.

- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.

- Additional PM checks and/or additional oversight are recommended to ensure the HVAC systems receive the necessary amount of PM work at the appropriate frequency to remain functional and efficient.

- Training for custodial staff should be enhanced or refreshed with an emphasis on safety requirements, including clearances around equipment and blockage of egress points. The CMMS could be used to track some or all custodial responsibilities in order to establish and ensure accountability.

- Safety issues, such as trip hazards and non-functional eyewash stations, should be reported and addressed immediately.

BALTIMORE CITY

Total School Facilities Assessed in FY 2023: 17

Francis Scott Key Elementary/Middle # 076

Fiscal Year 2023: Key Facts

140 facilities

Baltimore City has 140 active school facilities.

- 1 facility since FY 2022.

37.8 years old

The average adjusted age of all 140 school facilities is 37.8 years old.

+ 0.7 since FY 2022.

~ 16.3 M GSF

Baltimore City maintains 16,304,883 SF throughout its 140 school facilities. It has the 4th greatest amount of SF of LEAs in MD.

+ 53,297 SF since FY 2022.

> $7.4 B

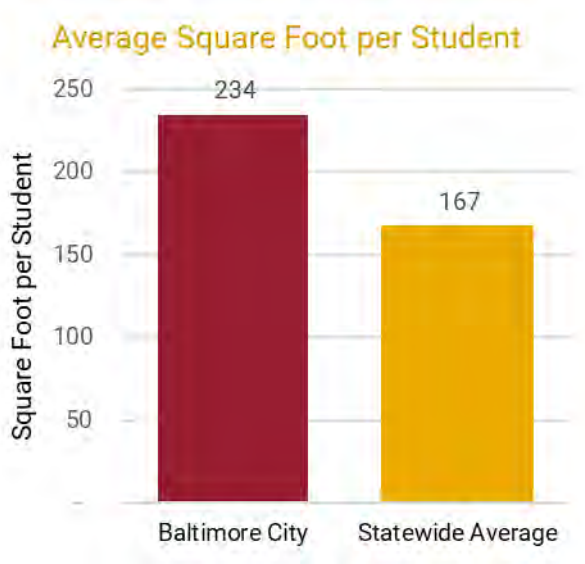
The current replacement value for Baltimore City's GSF, at the IAC's current replacement cost/SF, is greater than $7.4 B.

69.57% (Adequate) = Average Overall Rating for FY 2023

- 4.37% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Elementary/ Middle	PreK-8	Middle/ High	High	Science	
Superior							
Good	1						1
Adequate	3		2	1	1		7
Not Adequate	1	2	4		1	1	9
Poor							
Totals	5	2	6	1	2	1	**17**

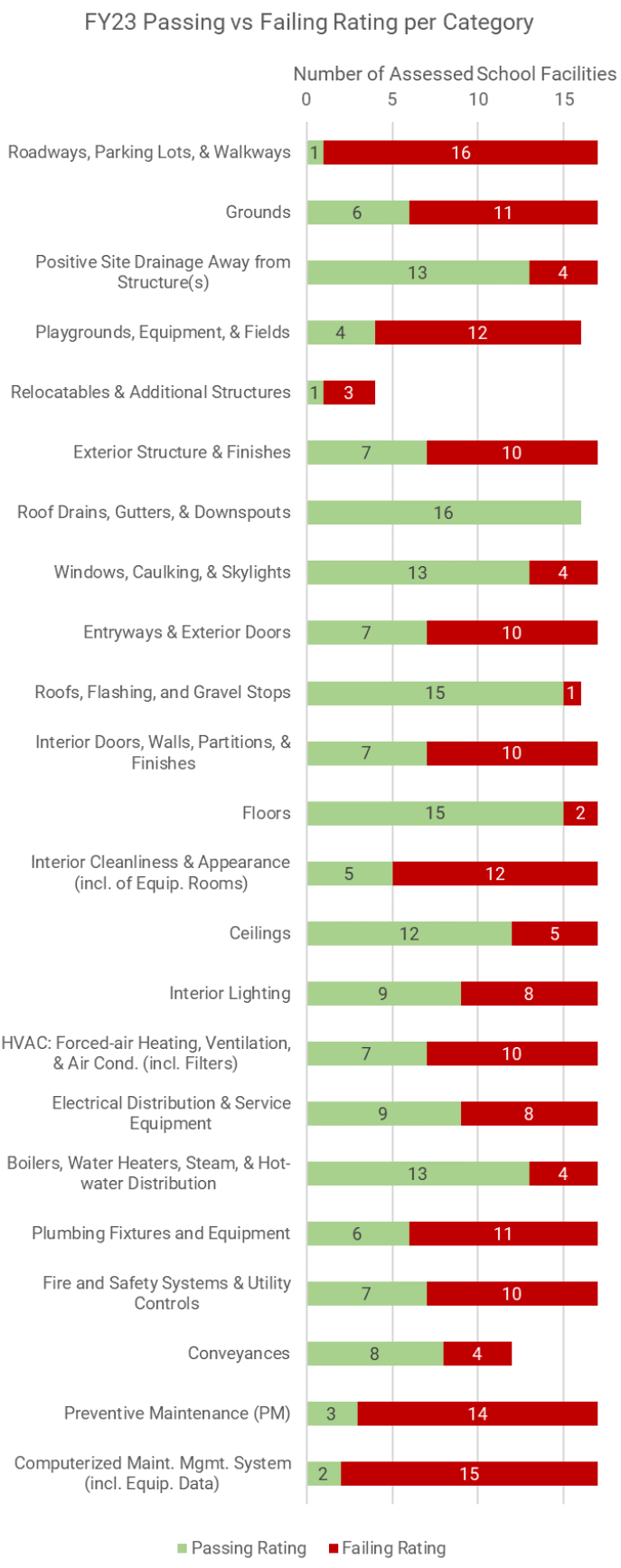


BALTIMORE CITY

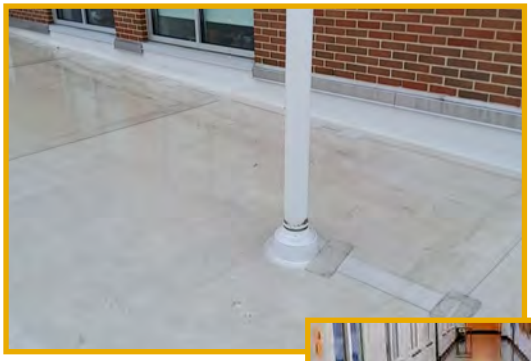
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Federal Hill Prep PK-5 # 045 (30.023)	Elementary	70,385	48	Adequate	3	0	11	8	0	0	2
2. William H. Lemmel Building #079 (30.040)	Middle/High	213,358	63	Adequate	1	3	16	3	0	0	0
3. Moravia Park Building #105A (30.057)	Elementary	89,000	50	Adequate	2	1	7	11	0	0	3
4. John Ruhrah PK-8 #228 (30.086)	PreK-8	143,613	2	Not Adequate	0	0	9	13	0	0	6
5. Roland Park Elementary/Middle # 233 (30.092)	PreK-8	180,600	35	Not Adequate	2	1	5	11	3	2	4
6. Baltimore City College # 480 (30.110)	High	296,380	89	Adequate	2	3	7	9	1	0	3
7. Tench Tilghman PK-8 # 013 (30.144)	PreK-8	56,875	44	Adequate	3	2	7	10	0	0	2
8. Francis Scott Key Elementary/Middle # 076 (30.181)	Elementary/ Middle	99,791	33	Not Adequate	1	2	4	15	0	0	1
9. Garrett Heights PK-8 # 212 (30.210)	PreK-8	67,653	34	Not Adequate	0	1	8	13	1	0	5
10. Harbor City Building - West #413 (30.213)	High	64,153	22	Not Adequate	1	2	11	8	0	0	4
11. Mary A. Winterling Elementary (formerly Bentalou Elementary) (30.225)	Elementary	86,483	58	Not Adequate	0	0	10	9	2	0	1
12. Franklin Square # 095 (30.243)	PreK-8	71,937	59	Adequate	1	1	10	10	0	0	2
13. Cecil Elementary # 007 (30.250)	Elementary	71,045	23	Adequate	1	5	9	7	0	0	1
14. Dickey Hill PK-8 # 201 (30.255)	PreK-8	80,734	56	Not Adequate	0	0	9	11	1	0	3
15. Medfield Heights Elementary # 249 (30.258)	Elementary	79,690	2	Good	5	5	11	1	0	0	1
16. Barclay PK-8 # 054 (30.260)	Elementary/ Middle	69,650	59	Not Adequate	1	1	5	13	0	0	2
17. Bragg Nature Study Center (30.276)	Science	22,659	69	Not Adequate	0	1	8	12	0	0	0
Totals					23	28	147	164	8	2	40
Percentage of Total Ratings for System					6%	8%	40%	44%	2%		

FY 2023 Results: Assessment Findings by Category

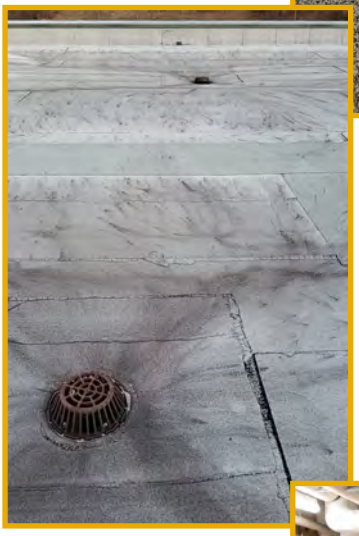


Strengths



Roof inspections were included in the PM work orders and PM schedule at every facility assessed. Roofs, Flashing, and Gravel Stops has been identified as a strength for 3 years in a row.

One facility earned a Superior rating in the Floors category, and two facilities received a Good rating. Floor inspections are included in the LEA's repair blitz assessment, and the Custodial Operations document identifies various floor cleaning activities.



No issues were noted in the Roof Drains, Gutters, & Downspouts category for 11 facilities which all earned a Superior rating. Roof drains, gutters, and downspouts are evaluated during the routine roof inspection.

12 facilities were noted with current DLLR certificates for their applicable boilers, storage tanks, and/or water heaters.

Weaknesses

Overgrown vegetation was observed at 15 facilities; at 11 of those facilities, the vegetation was in contact with or growing against building surfaces. Vegetation maintenance is included in the LEA's grounds assessment, which is identified as a weekly PM in the PM schedule at each facility.

Playground and play equipment inspections are included in the LEA's grounds assessment; damaged playgrounds and/or play equipment were identified at 10 facilities. No playground inspection reports were provided in the required pre-assessment documentation for the 13 applicable facilities.

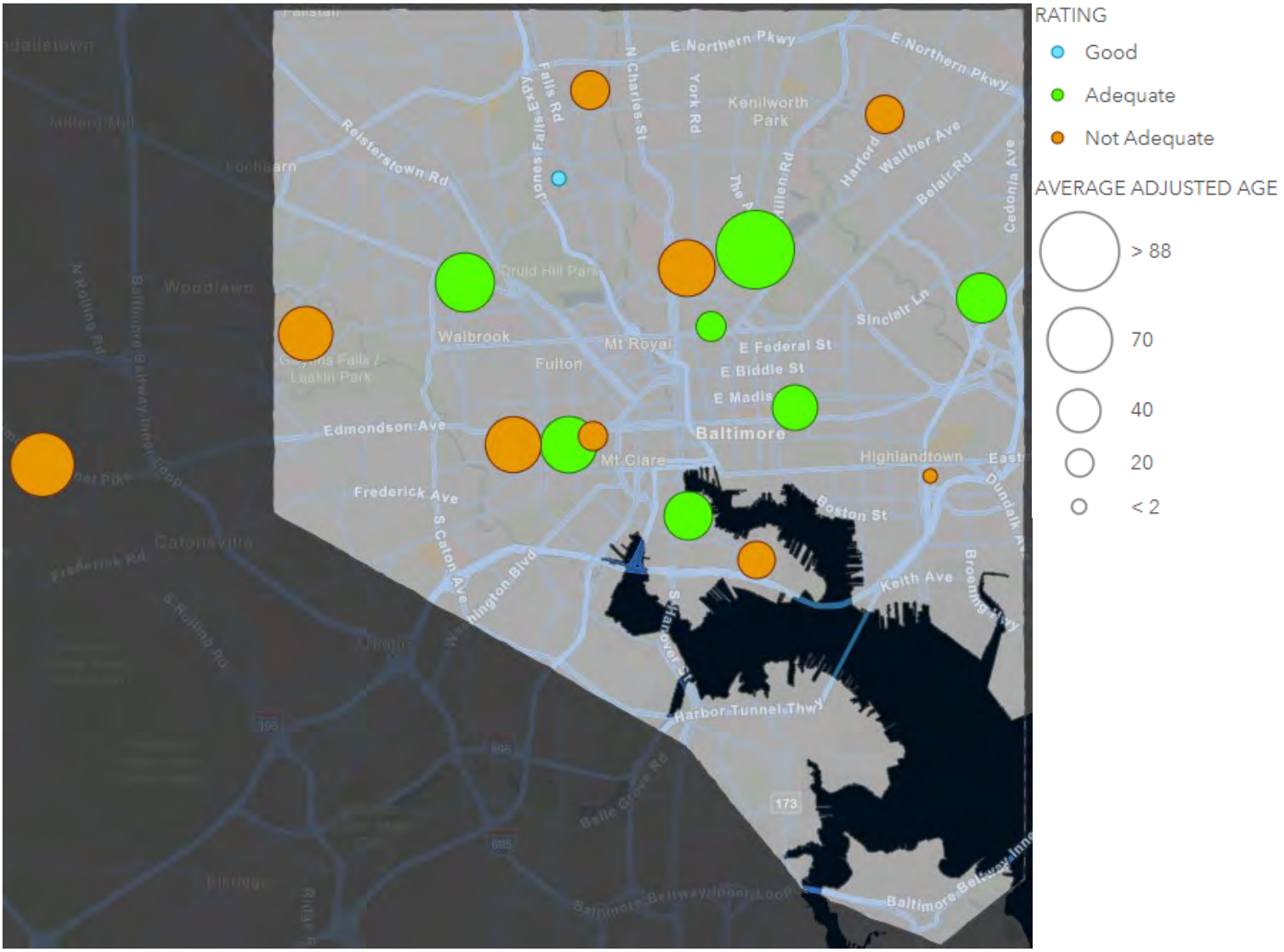
Damaged, deteriorated, and/or uneven walkways were observed at 15 facilities. Trip hazards were identified at 13 facilities due to uneven surfaces in walking areas. Sidewalk inspections are included in the LEA's repair blitz assessment, which is identified as a weekly PM in the PM schedule at each facility.

Various cleaning activities are identified in the Custodial Operations document, including weekly high dusting and monthly dusting of the ceiling areas and light fixtures; dirty ceilings, light lenses, and/or HVAC vent covers were noted at 13 facilities.

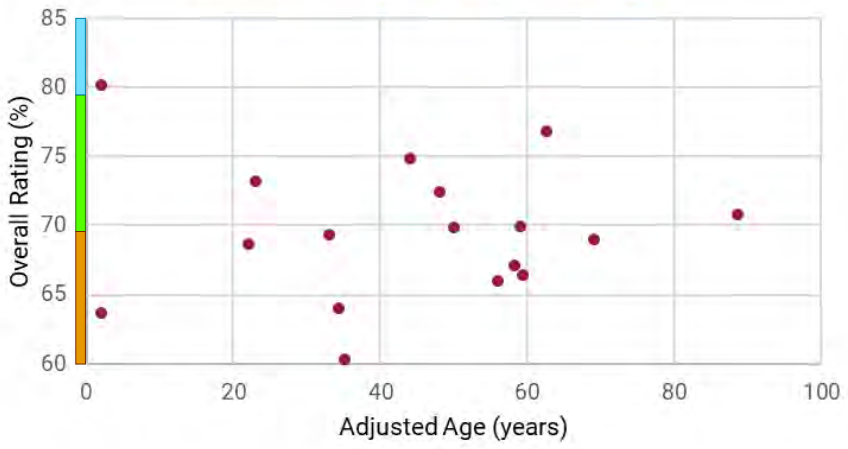
FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	12
	Grounds	0	2
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	4
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	1	3
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	2
	Roofs, Flashing, and Gravel Stops	0	1
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	4
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	1
	Interior Lighting	0	2
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	1
	Electrical Distribution & Service Equipment	0	2
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	3
	Fire and Safety Systems & Utility Controls	1	2
	Conveyances	0	1
	Total	**2**	**40**

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- The grounds and repair blitz assessments Baltimore City Public Schools conducts to perform PM work encompass multiple assets and PM work under one PM work order. PM work orders should generate automatically in the CMMS for each asset tag rather than for a group of asset tags so PM and follow-up corrective work orders can be more easily tracked for individual equipment.

- Regularly scheduled playground and bleacher inspections should be created and tracked using the CMMS. Additional training on playground and bleacher maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place. Safety issues should be reported and addressed immediately.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

- The CMMS could be used to track some or all custodial responsibilities in order to establish and ensure accountability.

BALTIMORE COUNTY

Total School Facilities Assessed in FY 2023: 17


Mays Chapel Elementary

Fiscal Year 2023: Key Facts

166 facilities

Baltimore County has 166 active school facilities.

+ 1 facility since FY 2022.

33.5 years old

The average adjusted age of all 166 school facilities is 33.5 years old.

+ 0.8 years since FY 2022.

~ 16.9 M GSF

Baltimore County maintains 16,900,318 SF throughout its 166 school facilities. It has the 3rd greatest amount of SF of LEAs in MD.

+ 108,627 SF since FY 2022.

> $7.7 B

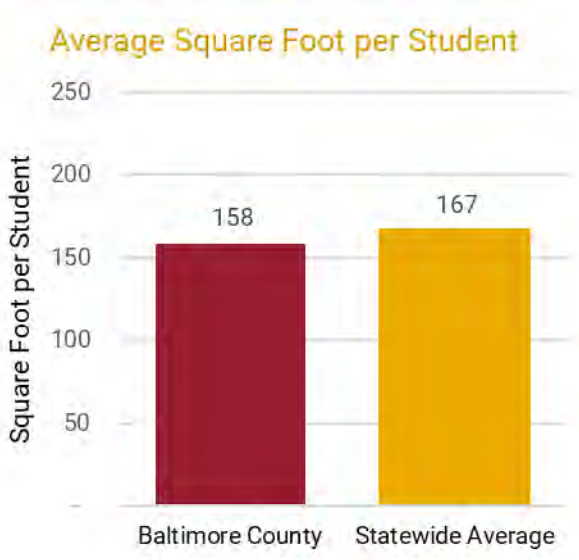
The current replacement value for Baltimore County's GSF, at the IAC's current replacement cost/SF, is greater than $7.7 B.

74.03% (Adequate) = Average Overall Rating for FY 2023

+ 0.85% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Elementary/ Middle	Middle	High	Career Tech	
Superior						
Good	1					1
Adequate	9	1	2		1	13
Not Adequate			1	2		3
Poor						
Totals	10	1	3	2	1	**17**

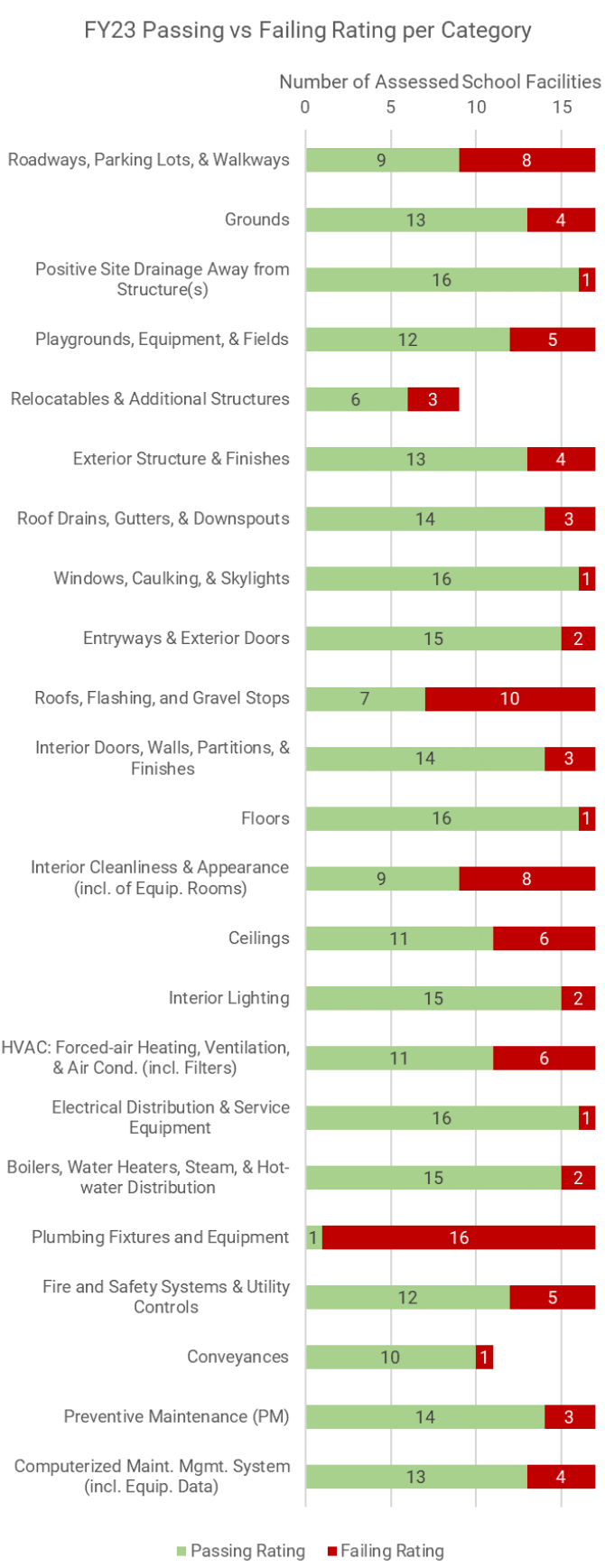


BALTIMORE COUNTY

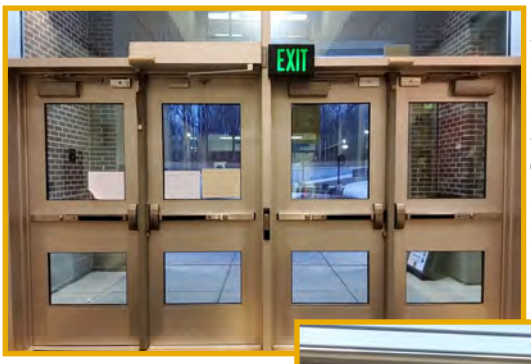
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Fullerton Elementary (03.004)	Elementary	62,910	47	Adequate	0	5	13	4	0	0	0
2. Halethorpe Elementary (03.005)	Elementary	50,355	33	Adequate	1	5	13	4	0	0	0
3. Western School of Technology/ Science (03.008)	Career Tech	160,349	45	Adequate	0	2	18	3	0	0	0
4. Holabird Middle (03.047)	Elementary/ Middle	124,525	15	Adequate	1	0	17	4	0	0	0
5. Dundalk Elementary (03.052)	Elementary	99,545	4	Good	4	4	12	2	0	0	1
6. Perry Hall Elementary (03.070)	Elementary	63,680	33	Adequate	1	0	15	6	0	0	0
7. Owings Mills High (03.073)	High	176,810	42	Not Adequate	0	1	8	14	0	0	0
8. Jacksonville Elementary (03.074)	Elementary	75,672	28	Adequate	1	2	15	3	0	0	0
9. Seventh District Elementary (03.086)	Elementary	56,908	48	Adequate	1	0	13	8	0	0	1
10. Catonsville Middle (03.088)	Middle	95,235	14	Not Adequate	1	0	10	12	0	0	1
11. Hebbville Elementary (03.104)	Elementary	64,340	56	Adequate	1	5	14	2	0	0	0
12. General John Stricker Middle (03.122)	Middle	169,555	33	Adequate	1	0	16	5	0	0	1
13. Sudbrook Magnet Middle (03.126)	Middle	150,042	13	Adequate	1	0	16	5	0	0	0
14. Dulaney High (03.133)	High	250,286	48	Not Adequate	0	0	8	14	0	0	0
15. Martin Boulevard Elementary (03.142)	Elementary	54,947	24	Adequate	1	2	13	5	1	0	0
16. Timonium Elementary (03.169)	Elementary	62,847	64	Adequate	0	4	16	2	0	0	0
17. Mays Chapel Elementary (03.200)	Elementary	90,173	9	Adequate	3	5	12	2	0	0	0
Totals					17	35	229	95	1	0	4
Percentage of Total Ratings for System					5%	9%	61%	25%	0%		

FY 2023 Results: Assessment Findings by Category



Strengths



Exterior doors and hardware were identified in the PM schedules for 15 of the assessed facilities. Three facilities earned a Superior rating in the Entryways & Exterior Doors category.

Windows, caulking, hardware, and glazing inspections were identified in the PM schedules for 15 of the assessed facilities. All windows appeared to function as designed at 16 facilities.

All active conveyances had current DLLR certificates or passing Qualified Elevator Inspector reports at 10 of the 11 applicable facilities. Conveyances were identified in the PM schedules for 10 of the 11 applicable facilities. Five facilities earned a Superior rating in the Conveyances category.

The DLLR certificates were current for all active and applicable boilers and water heaters. Two facilities earned a Superior rating in the Boilers, Water Heaters, Steam, & Hot-water Distribution category.

Weaknesses

Cracking and/or deterioration, from minor to severe, was noted in the roadways and/or parking lots at 16 facilities. Other than a general site care PM which includes checking and cleaning curbs, gutters, roadways, parking lots, and walkways are not identified in the PM schedules for the assessed facilities.

The backflow preventers in 13 facilities had either expired inspection tags or were missing tags. One facility appeared to have a backflow preventer with an inspection tag, but it was inaccessible and the tag's date could not be verified. Backflow preventers, plumbing fixtures, and related equipment were not identified in the PM schedules for the assessed facilities. Of the 17 facilities assessed, 16 received a Not Adequate rating in the Plumbing Fixtures and Equipment category.

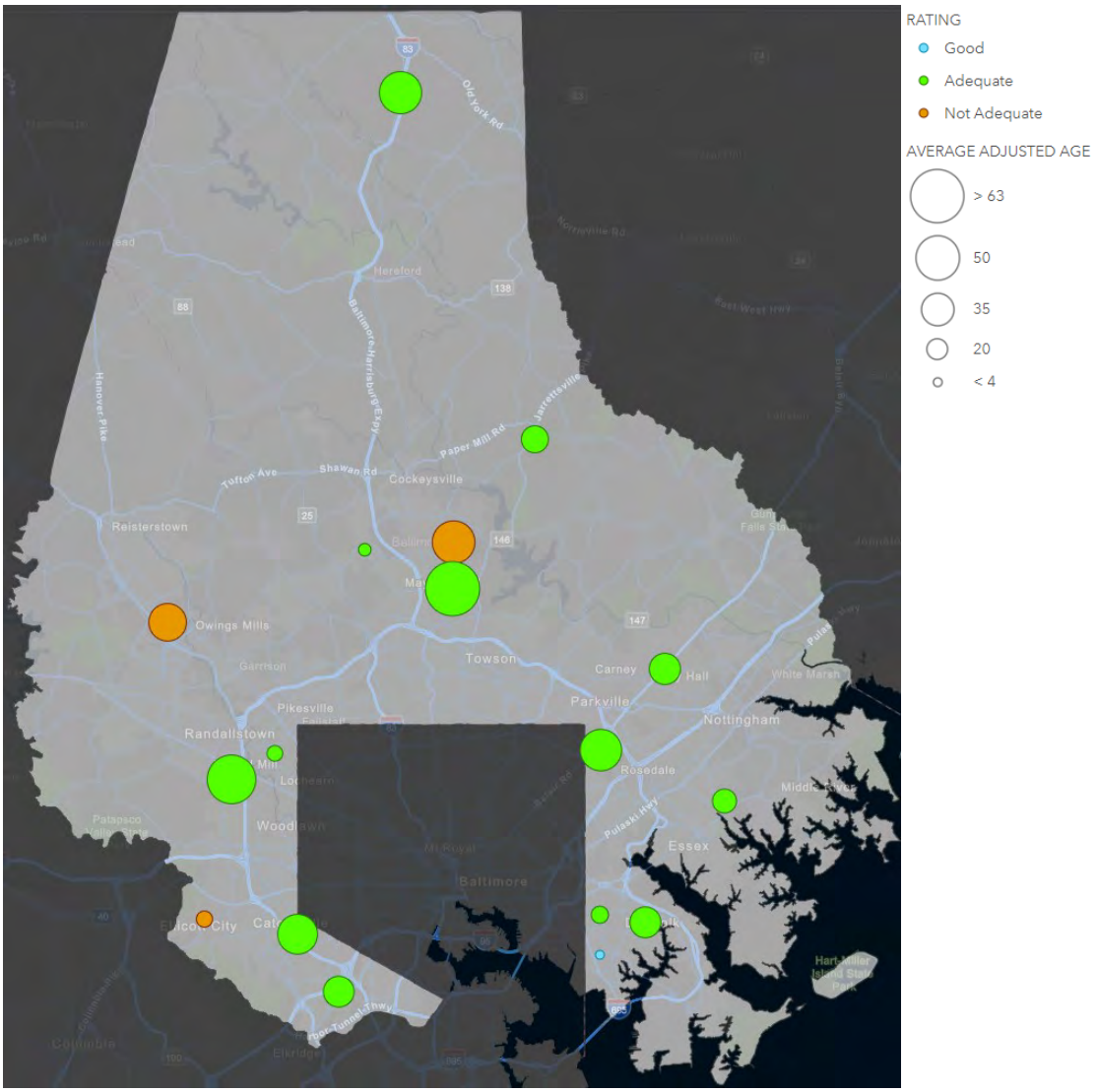
Unsafe storage practices, such as cluttered storage rooms, items stored too close to the ceiling, and items blocking egress or access to equipment, were observed at 15 facilities. Evidence of pest activity was noted in food prep and/or eating areas at six facilities. Eight facilities received a Not Adequate rating in the Interior Cleanliness & Appearance (incl. of Equip. Rooms) category.

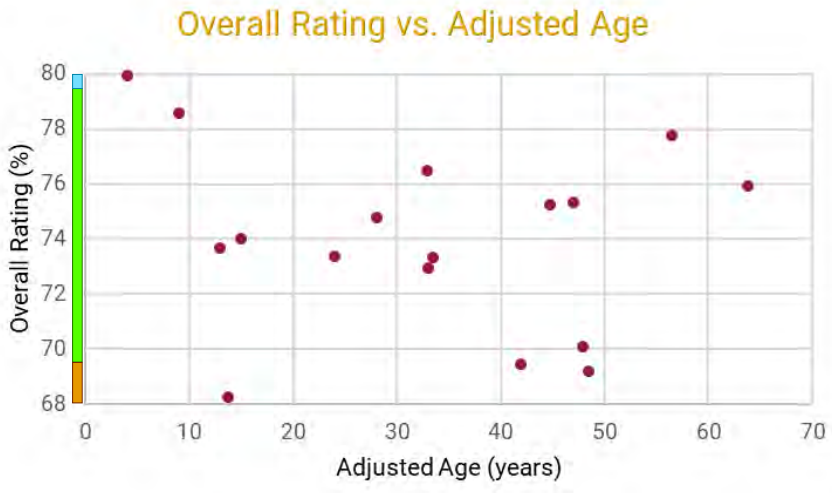
Vegetative growth was observed on the roofs at eight facilities. Eight facilities received a Not Adequate rating and one facility earned a Poor rating in the Roofs, Flashing, and Gravel Stops category.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	1
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	1
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
	Total	**0**	**4**

Overall Rating vs Adjusted Building Age





- Training for custodial staff should be enhanced or refreshed with an emphasis on safety requirements, including clearances around equipment and blockage of egress points.
- The operations PM tasks Baltimore County Public Schools (BCPS) conducts to perform PM work encompass multiple assets and PM work under one PM work order. PM work orders should generate automatically in the CMMS for each asset tag rather than for a group of asset tags so PM and follow-up corrective work orders can be more easily tracked for individual equipment.
- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.
- Backflow preventer inspections are a requirement in most jurisdictions and should be scheduled and completed at the appropriate frequency. Inspections should be tracked and documented using the CMMS, and the inspection documentation should be available on site.
- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

CALVERT COUNTY

Total School Facilities Assessed in FY 2023: 3

Appeal Elementary

Fiscal Year 2023: Key Facts

25 facilities

Calvert County has 25 active school facilities.

No change since FY 2022.

25.2 years old

The average adjusted age of all 25 school facilities is 25.2 years old.

+ 1 year since FY 2022.

> 2.4 M GSF

Calvert County maintains 2,456,795 SF throughout its 25 school facilities. It has the 12th greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $1.1 B

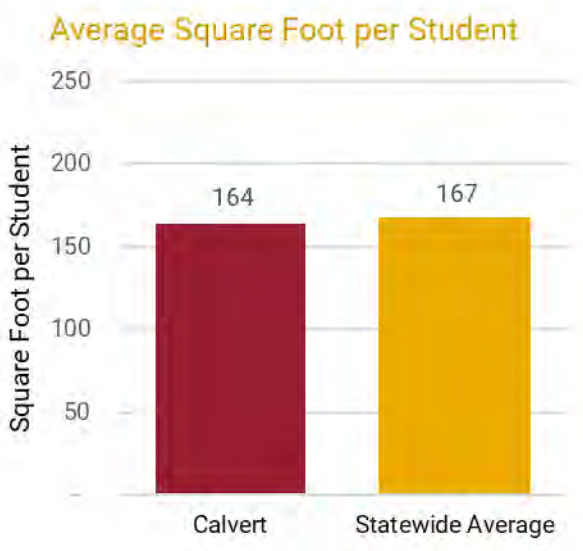
The current replacement value for Calvert County's GSF, at the IAC's current replacement cost/SF, is greater than $1.1 B.

72.22% (Adequate) = Average Overall Rating for FY 2023

- 4.5% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	1	1	1	3
Not Adequate				
Poor				
Totals	1	1	1	**3**

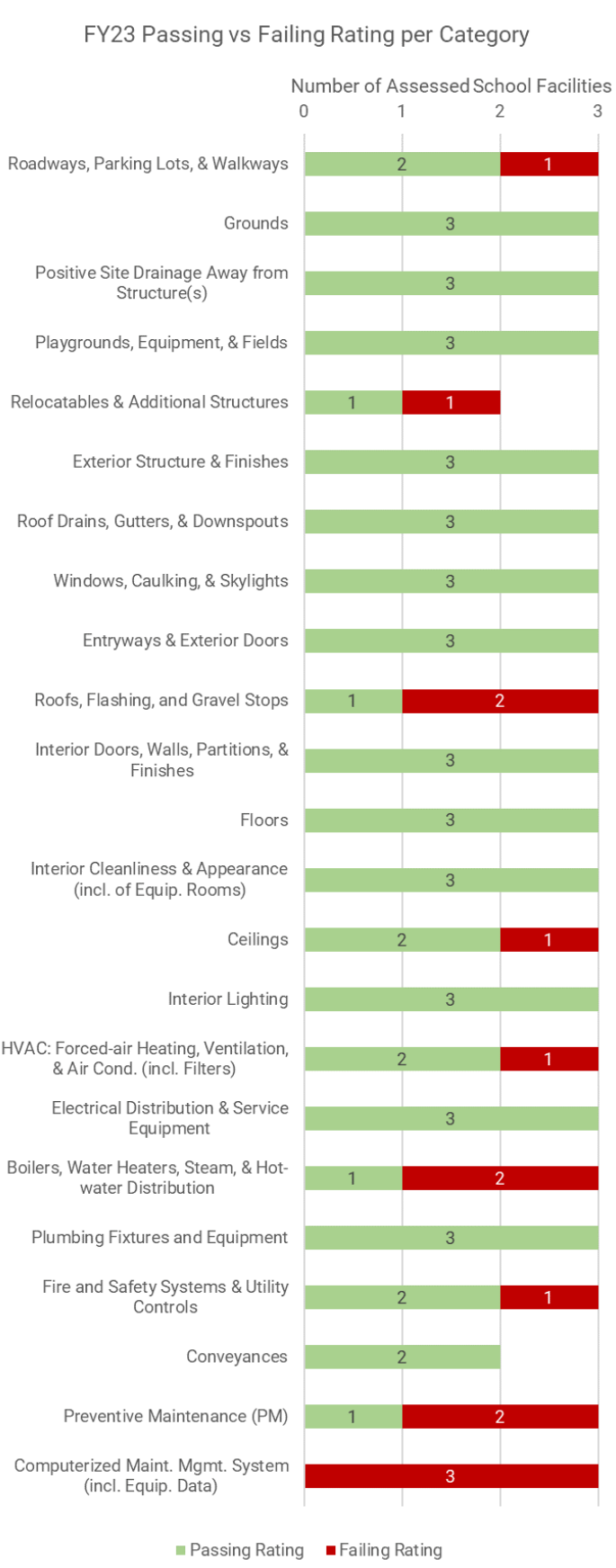


CALVERT COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Calvert High (4.003)	High	236,300	10	Adequate	1	0	15	7	0	0	0
2. Appeal Elementary (4.013)	Elementary	59,275	42	Adequate	0	2	17	3	0	0	0
3. Plum Point Middle (4.017)	Middle	101,300	31	Adequate	0	0	19	3	0	0	1
Totals					1	2	51	13	0	0	1
Percentage of Total Ratings for System					1%	3%	76%	19%	0%		

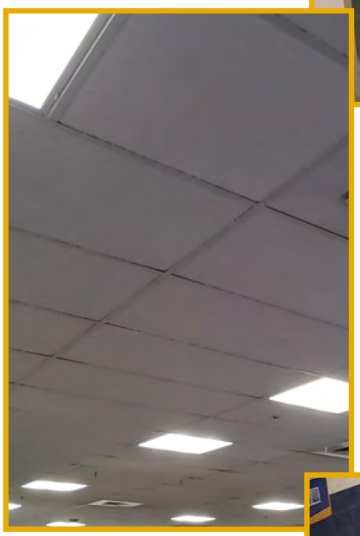
FY 2023 Results: Assessment Findings by Category



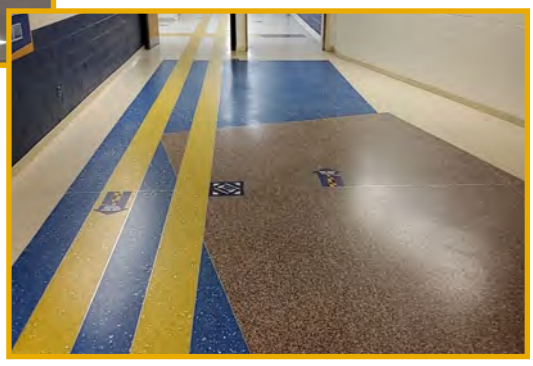
Strengths

Roof drain, gutters, and downspouts are evaluated during the routine roof inspection. One facility received a Good rating in the Roof Drains, Gutters, and Downspouts category.

The DLLR certificates were current and on display for the elevators in service. Elevator inspections were included in the PM work orders for the applicable facilities. The one elevator out of service was properly locked out at the disconnect.



No issues or concerns were identified with the interior lighting at one facility, and no lighting issues were noted in classrooms at the other two facilities. Replacing lamps and cleaning light fixtures are identified in the building service worker's scope of work.



No issues or concerns were observed with the flooring at two facilities. Floor cleaning activities for various floor surface types are identified in the building service worker's scope of work.

Weaknesses

Some essential assets were not identified in the PM schedules for the assessed facilities, such as backflow preventers and generators. Many essential assets were missing from the asset list for each facility, such as roofs, fire alarm systems, generators, and backflow preventers. The action taken field is not used consistently for completed work orders or lack descriptive notes.

Two facilities were observed with cracked and deteriorated lap seam sealants on their roofs. One facility's roof inspection report indicated two sections of the roof are in poor condition, leak, and need replacing; at the time of the MEA, there were no open work orders for the roof, and CCPS did not indicate any plans for a roof replacement project.

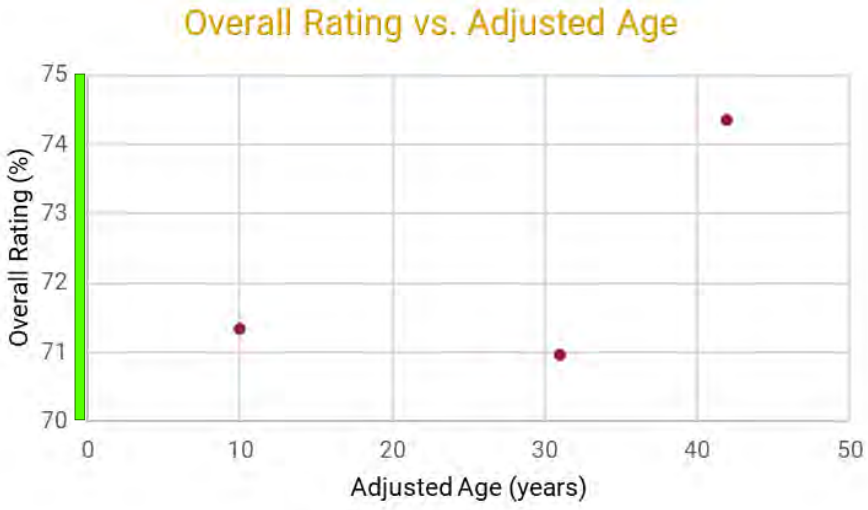
One facility was observed with corrosion on two boilers, a water heater, and two pumps, some of which was severe. Another facility was noted with minor corrosion on three pumps and a water heater and boiler locked out of service with no associated work orders identified in the CMMS.

Stained and damaged ceiling tiles were observed at two facilities. Ceiling maintenance was not identified in the PM schedules for the assessed facilities. One facility received a Not Adequate rating in the Ceilings category.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	1
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
	Total	**0**	**1**

Overall Rating vs Adjusted Building Age



- Expand the asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- Regularly scheduled ceiling inspections should be created and tracked using the CMMS to identify any ceiling tiles missing, stained, or damaged. Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted. Stained ceiling tiles should be replaced once the cause is identified and repaired.

- Abandoned equipment should be permanently disconnected from the power source and the supply terminated. Best practice is to remove abandoned equipment.

- Corrosion on equipment should be evaluated and addressed before additional damage or operational damage occurs.

- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively and the actions taken to complete the work are recorded accurately.

- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

CAROLINE COUNTY

Total School Facilities Assessed in FY 2023: 3


Col. Richardson High

Fiscal Year 2023: Key Facts

10 facilities

Caroline County has 10 active school facilities.

No change since FY 2022.

23.5 years old

The average adjusted age of all 10 school facilities is 23.5 years old.

+ 1 year since FY 2022.

> 0.8 M GSF

Caroline County maintains 877,773 SF throughout its 10 school facilities. It has the 20th greatest amount of SF of LEAs in MD.

No change since FY 2022.

~ $0.4 B

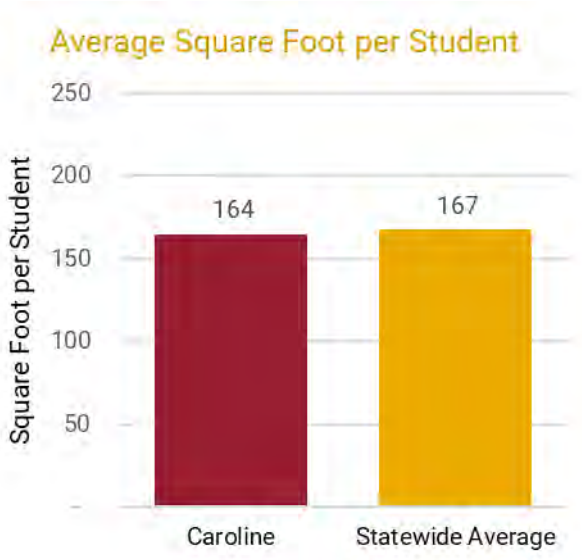
The current replacement value for Caroline County's GSF, at the IAC's current replacement cost/SF, is approximately $0.4 B.

67.68% (Not Adequate) = Average Overall Rating for FY 2023

- 3.98% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate			1	1
Not Adequate	1		1	2
Poor				
Totals	1		2	**3**

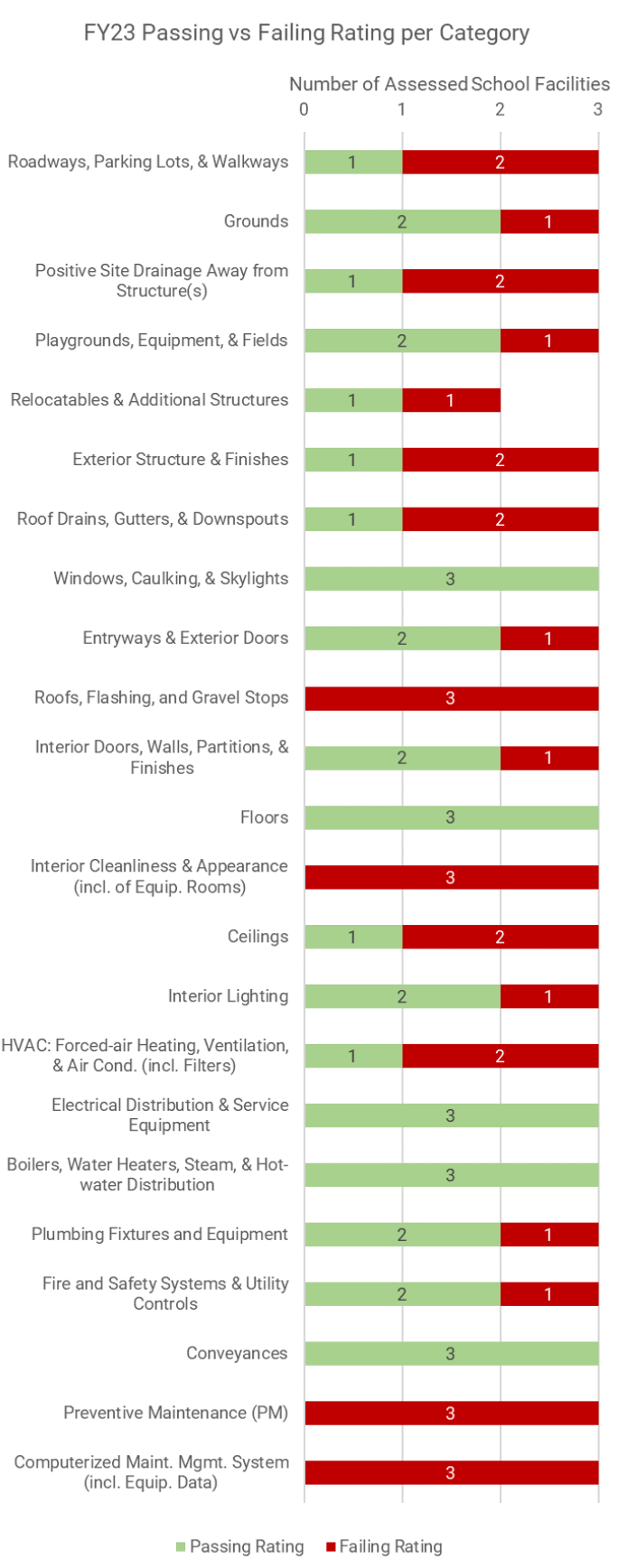


CAROLINE COUNTY

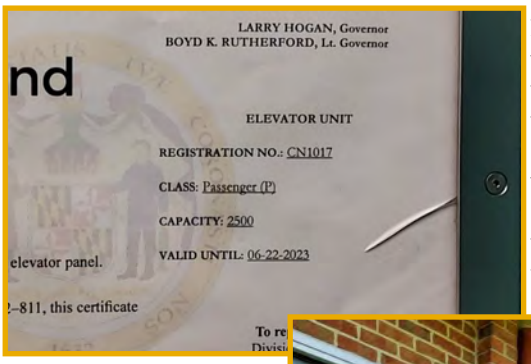
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. North Caroline High (05.002)	High	179,023	21	Not Adequate	0	0	12	11	0	0	2
2. Col. Richardson High (05.004)	High	121,085	12	Adequate	0	0	17	6	0	0	1
3. Federalsburg Elementary (05.007)	Elementary	70,187	22	Not Adequate	0	0	10	12	0	0	3
Totals					0	0	39	29	0	0	6
Percentage of Total Ratings for System					0%	0%	57%	43%	0%		

FY 2023 Results: Assessment Findings by Category



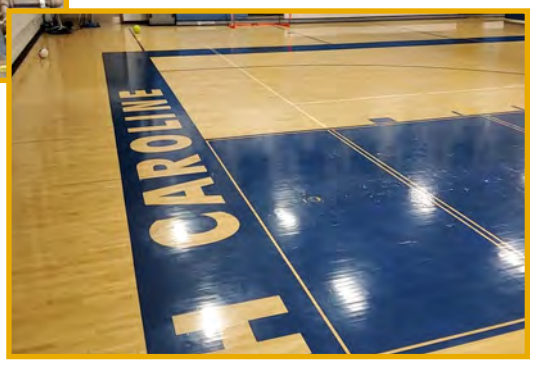
Strengths



No issues or concerns were identified with the conveyances at two facilities. The DLLR certificates were current for all conveyances in the three assessed facilities.

No issues or concerns were identified with the windows at two facilities, and all windows appeared to operate properly at all three facilities.

The DLLR certificates were current for the applicable boilers and water heaters at the two facilities with regulated equipment. No issues or concerns were identified with the boilers or pumps at one facility, and no issues or concerns were identified with the water heaters at any of the three assessed facilities.



The restroom and classroom cleaning checklists identify floor cleaning activities, and most of the flooring appeared to be well maintained at all three facilities.

Weaknesses

All three facilities received a Not Adequate rating in the Interior Cleanliness & Appearance (incl. of Equip. Rooms) category, and all three facilities were observed with rodent droppings in kitchen areas. Pest management activities are identified in the LEA's integrated pest management policy, but were not tracked using the CMMS and did not appear in the PM work order history for any of the assessed facilities.

Routine operations checks and standard maintenance for various HVAC equipment are identified in the CMP, but were not tracked using the CMMS and did not appear in the PM work order history for any of the assessed facilities. Inoperable exhaust fans were observed at two facilities. Various HVAC equipment was noted with dirty filters at all three facilities. Two facilities received a Not Adequate rating in the HVAC category.

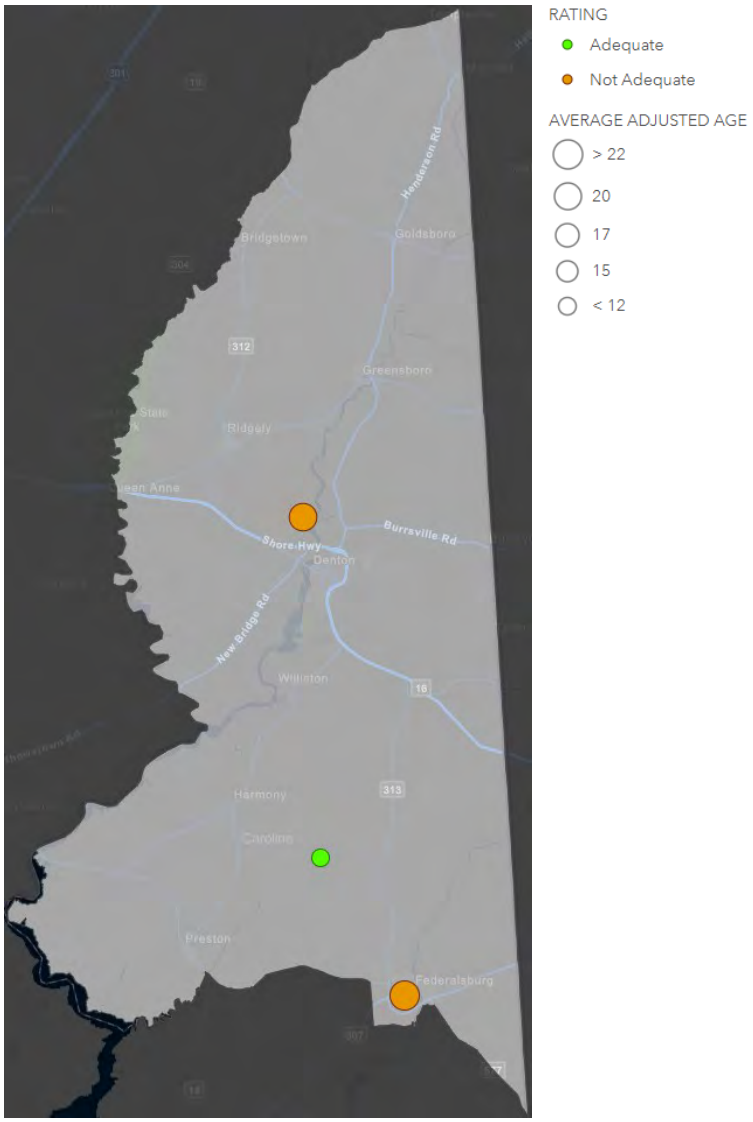
Annual and monthly roof inspections are identified in the CMP, but were not tracked using the CMMS and did not appear in the PM work order history for any of the assessed facilities. Vegetative growth was identified in multiple areas on the roofs at two facilities, which was also identified as a weakness for CCPS in FY22.

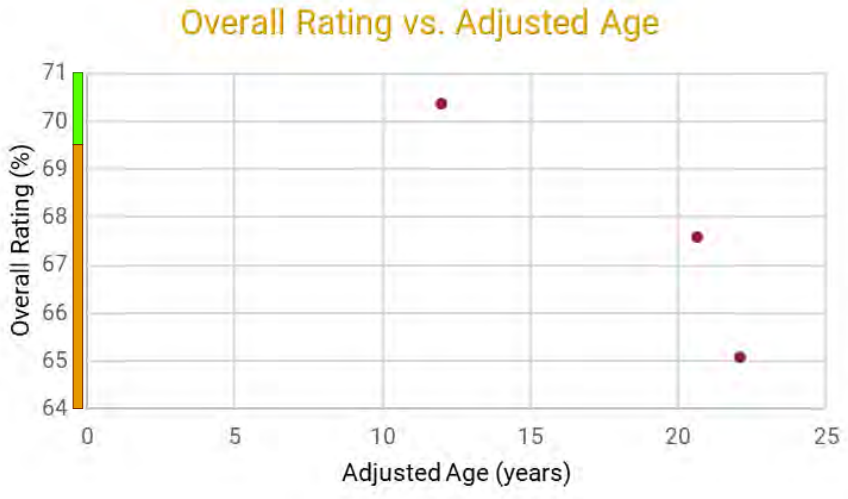
No site-specific PM plan was provided for any of the assessed facilities, and it did not appear that PM activities were tracked using the CMMS.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	2
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	1
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	1
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
	Total	**0**	**6**

Overall Rating vs Adjusted Building Age





- Expand the asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

- Pest management PM activities should have auto-populating PM work orders created in the CMMS and scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion. The custodial duties outlined in the IPM policy should also be reflected in the custodial scope of work.

- PM activities for roofs and HVAC equipment should be added to each facility's PM schedule to help extend the useful life of the existing surfaces and assets, prevent hazardous conditions, and avoid premature capital replacement projects. Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted.

- A field should be created in the CMMS to track the days each work order has aged to help identify causes of possible bottlenecks and streamline workflow processes. Fields should also be set up to track labor hours and costs to assist in establishing predictable cost trends and support more efficient resource management.

- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively and the actions taken to complete the work are recorded accurately.

CARROLL COUNTY

Total Schools Assessed in FY 2023: 5

Sandymount Elementary

FISCAL YEAR 2023: KEY FACTS

40 schools

Carroll County has 40 active school facilities.

No change since FY 2022.

31.7 years old

The average adjusted age of all 40 school facilities is 31.7 years old.

+ 0.3 years since FY 2022.

> 4.2 M GSF

Carroll County maintains 4,266,203 SF throughout its 40 school facilities. It has the 9th greatest amount of SF of LEAs in MD.

+ 89,462 SF since FY 2022.

> $1.9 B

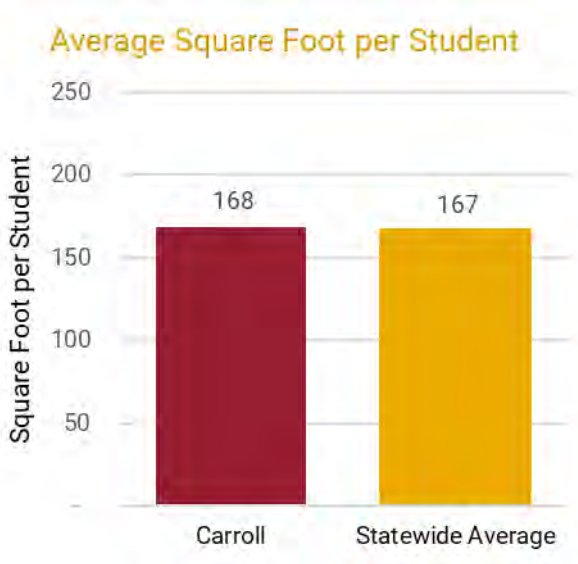
The current replacement value for Carroll County's GSF, at the IAC's current replacement cost/SF, is greater than $1.9 B.

67.13% (Not Adequate) = Average Overall Rating for FY 2023

- 4.97% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate				
Not Adequate	2	2	1	5
Poor				
Totals	2	2	1	**5**

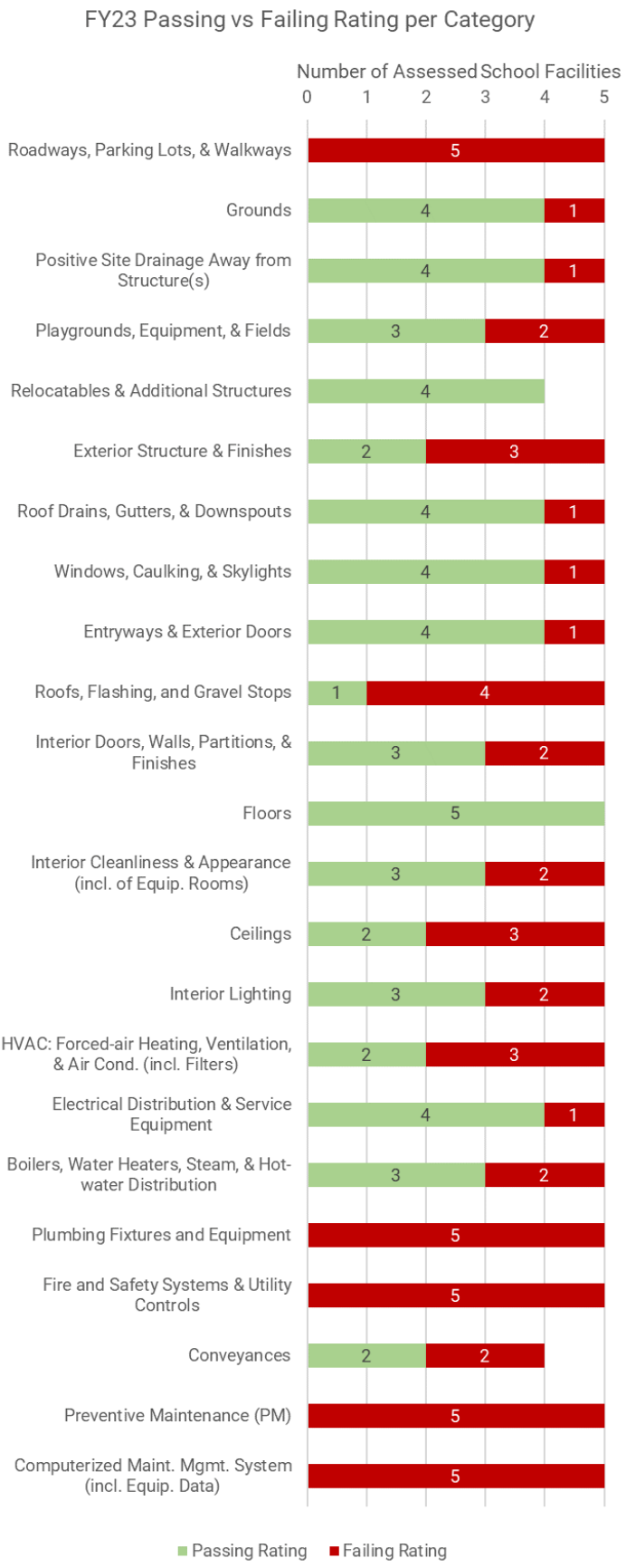


CARROLL COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Northwest Middle (06.002)	Middle	113,600	36	Not Adequate	0	0	12	11	0	0	2
2. Sandymount Elementary (06.005)	Elementary	61,521	30	Not Adequate	0	1	13	8	0	0	2
3. S. Carroll High (06.012)	High	258,326	41	Not Adequate	0	0	9	14	0	0	4
4. Freedom Elementary (06.015)	Elementary	58,443	48	Not Adequate	0	2	7	14	0	0	1
5. Mt. Airy Middle (06.026)	Middle	111,043	9	Not Adequate	0	0	15	7	0	0	4
Totals					0	3	56	54	0	0	13
Percentage of Total Ratings for System					0%	3%	50%	48%	0%		

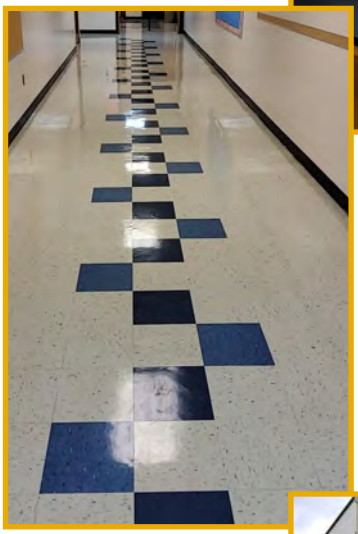
FY 2023 Results: Assessment Findings by Category



Strengths

The majority of roof drains and gutters were free of debris. The CMP identifies roof inspections are conducted annually. The reports include evaluations of the roof drains, gutters, and downspouts.

The CMP includes a list of PM checks assigned to building supervisors. Windows are checked for damage on a daily basis which is then repaired or reported. Most windows were found to have no operational issues.



The floor appeared adequately maintained at every facility and no damaged or broken floor tiles were observed. Floor maintenance is listed as a daily task on the custodial checklist.

The building supervisor's PM checklist identifies weekly operations checks for emergency generators. Annual generator PM was listed in the PM schedules for four of the assessed facilities.

Weaknesses

No fire alarm inspection reports were provided in the required pre-assessment documentation for any facility, and three facilities had their fire alarm panel in trouble status during the MEA.

Evidence of extensive corrosion and potentially damaging water quality in the chilled water loop was observed at one facility. Observations included rust and slime surrounding an active leak at the chiller and a concerning amount of rust flakes in water regularly flushed from a port which indicate that treatment of the hydronic water loops is not taking place or is ineffective. No evidence of a water treatment program was identified for the HVAC equipment at any of the assessed facilities.

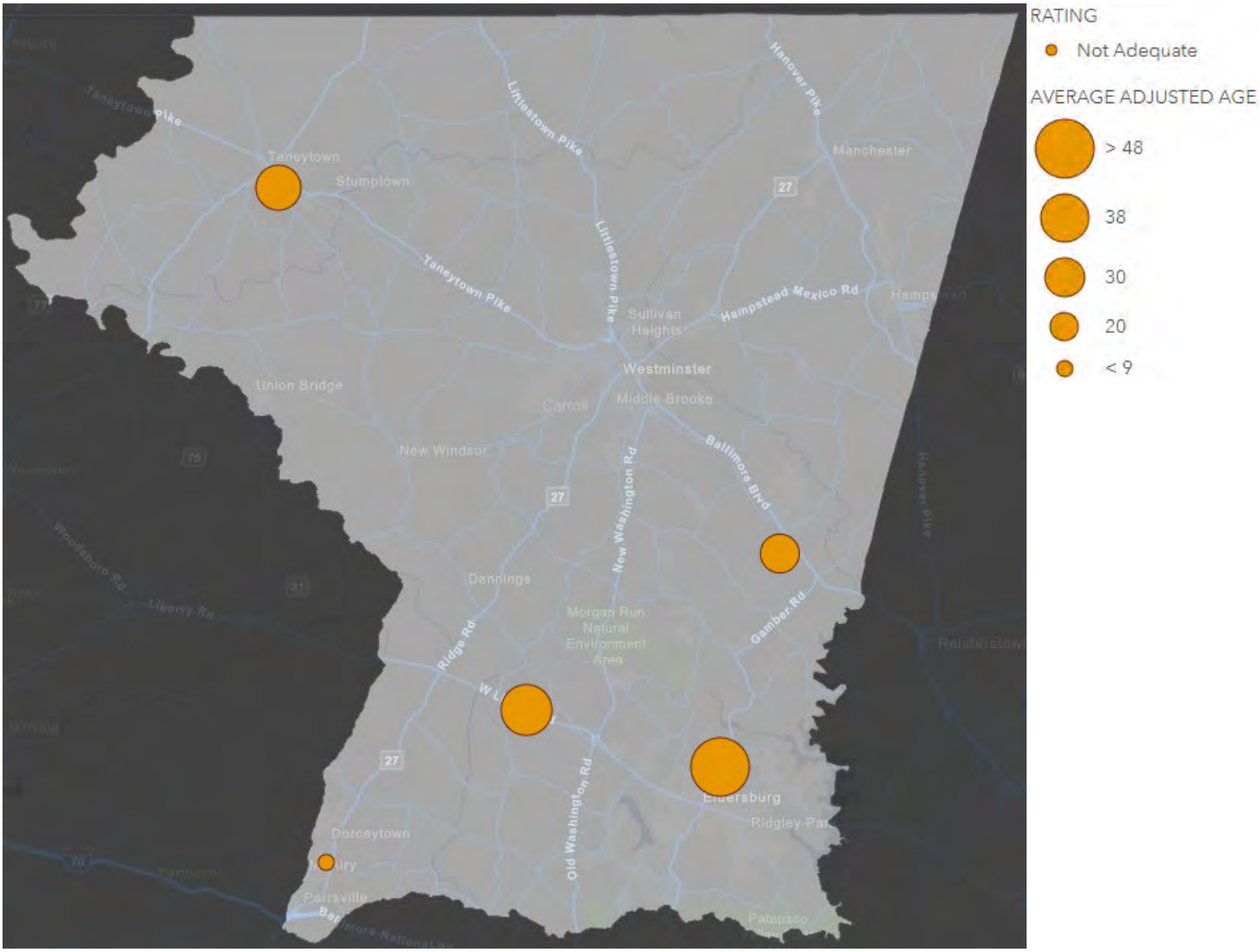
Annual roof inspections are identified in the CMP, but were not tracked using the CMMS and did not appear in the PM work order history for any of the assessed facilities. Vegetative growth and/or debris was observed on the roofs at four facilities. Sealants were noted as peeling, failing, and/or deteriorating at four facilities.

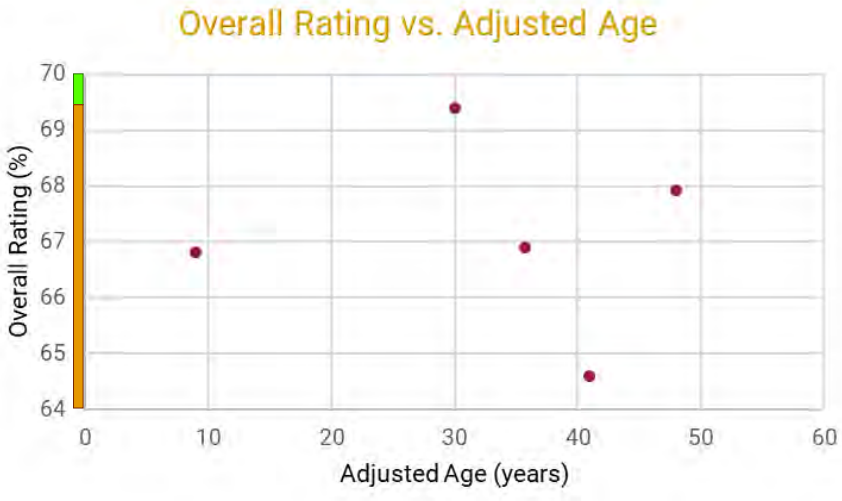
The backflow preventers at three facilities were noted with either expired or missing inspection tags. All five facilities were observed with leaking plumbing fixtures.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	4
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	1
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	1
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	1
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	1
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	3
	Conveyances	0	0
	Total	**0**	**13**

Overall Rating vs Adjusted Building Age





- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- PM activities for roofs, fire and safety systems, and plumbing fixtures and equipment should be added to each facility's PM schedule to help extend the useful life of the existing surfaces and assets, prevent hazardous conditions, and avoid premature capital replacement projects. Safety issues, such as a trouble signal on the fire alarm panel and non-functional eyewash stations, should be reported and addressed immediately.

- A field should be created in the CMMS to track the days each work order has aged to help identify causes of possible bottlenecks and streamline workflow processes. Fields should also be set up to track labor hours and costs to assist in establishing predictable cost trends and support more efficient resource management.

- It is recommended that a water treatment and testing program for all closed-loop hydronic systems be developed and implemented in order to achieve the expected life span of piping, pumps, coils, and associated components, and to avoid interruption of educational delivery due to cooling and heating breakdowns. An internal pipe inspection should be completed to evaluate the damage caused by the observed corrosion in the assessed facilities, and an action plan created to remediate the issues. A water treatment plan should be implemented and routinely maintained by a qualified professional. The CMMS should be used to track hydronic system water treatment activities.

CECIL COUNTY

Total School Facilities Assessed in FY 2023: 4

Perryville Middle

Fiscal Year 2023: Key Facts

29 facilities

Cecil County has 29 active school facilities.

No change since FY 2022.

29.4 years old

The average adjusted age of all 29 school facilities is 29.4 years old.

- 0.6 years since FY 2022.

> 2.2 M GSF

Cecil County maintains 2,267,203 SF throughout its 29 school facilities. It has the 15th greatest amount of SF of LEAs in MD.

+ 24,634 SF since FY 2022.

> $1.0 B

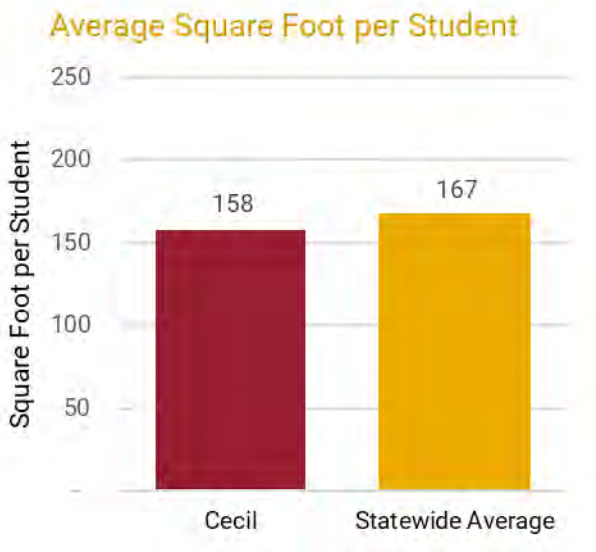
The current replacement value for Cecil County's GSF, at the IAC's current replacement cost/SF, is greater than $1.0 B.

73.91% (Adequate) = Average Overall Rating for FY 2023

- 1.94% since FY 22

FY 2023 Overall Rating Results by School Type

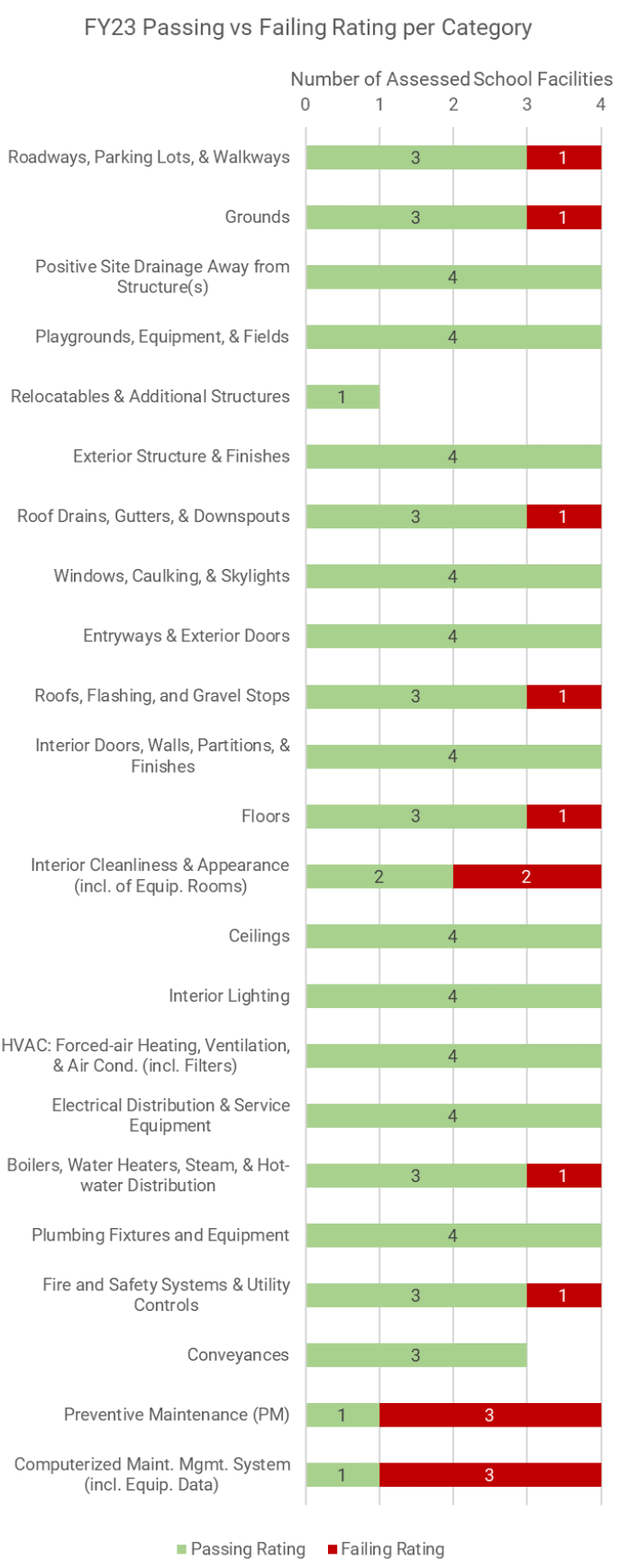
	Elementary	Middle	High	
Superior				
Good				
Adequate	2	2		4
Not Adequate				
Poor				
Totals	2	2		**4**



FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. North East Middle (07.012)	Middle	101,200	72	Adequate	1	1	16	5	0	0	2
2. Calvert Elementary (07.014)	Elementary	58,857	29	Adequate	0	3	15	3	0	0	0
3. Chesapeake City Elementary (New) (07.015)	Elementary	65,749	2	Adequate	2	2	15	3	0	0	0
4. Perryville Middle (07.018)	Middle	102,746	15	Adequate	1	1	18	2	0	0	0
Totals					4	7	64	13	0	0	2
Percentage of Total Ratings for System					5%	8%	73%	15%	0%		

FY 2023 Results: Assessment Findings by Category



Strengths

No issues or concerns were noted with the electrical distribution at three facilities. Electrical panels were noted as having detailed breaker schedules.

Annual exterior door inspections were included in the PM schedule at three of the facilities assessed. Most of the exterior doors operated as expected and showed little to no signs of damaged or deterioration.

Monthly elevator inspections were included in the PM schedule at every applicable facility. The elevator cabs appeared clean and well lit, and had current DLLR certificates on display. All three applicable facilities earned a Superior rating in the Conveyances category.

Most of the roof drains and gutters were observed free and clear of debris. The roof drains, gutters, and downspouts are evaluated during the routine roof inspections.

Weaknesses

Roadways, parking lots, and walkways were not identified in the PM schedules for the assessed facilities. At two facilities, the parking lots were observed with cracks or deterioration. The walkways were noted with deterioration at two facilities.

Annual boiler maintenance was identified in the PM schedule for one facility but no PM work orders were identified in the PM work order history and the pumps and water heater were not identified in the PM schedule. The boilers and water heaters were not identified in the PM schedules for the other three facilities. While one facility had no issues or concerns with the boilers, water heater, or hot water distribution, the other three facilities had notable concerns; one facility was observed with a leak, one facility was missing a DLLR certificate, and one facility was observed with corrosion on multiple pumps and a bypass feeder.

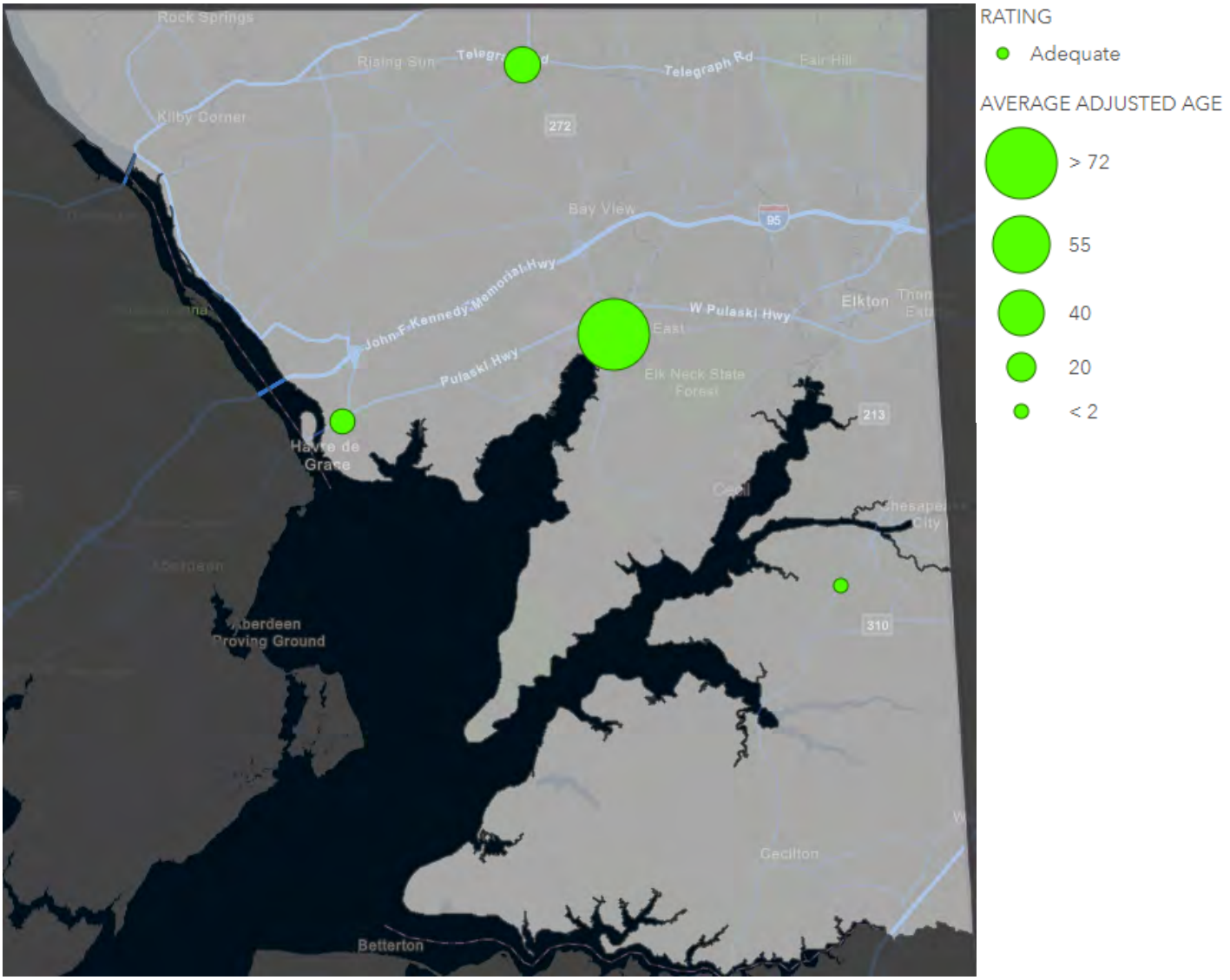
Some essential assets were not identified in the PM schedules for the assessed facilities, such as backflow preventers, HVAC units, interior lighting, and some DLLR-regulated equipment. Some assets were identified in the PM schedule but not in the PM work order history or were identified in the PM work order history but not in the PM schedule.

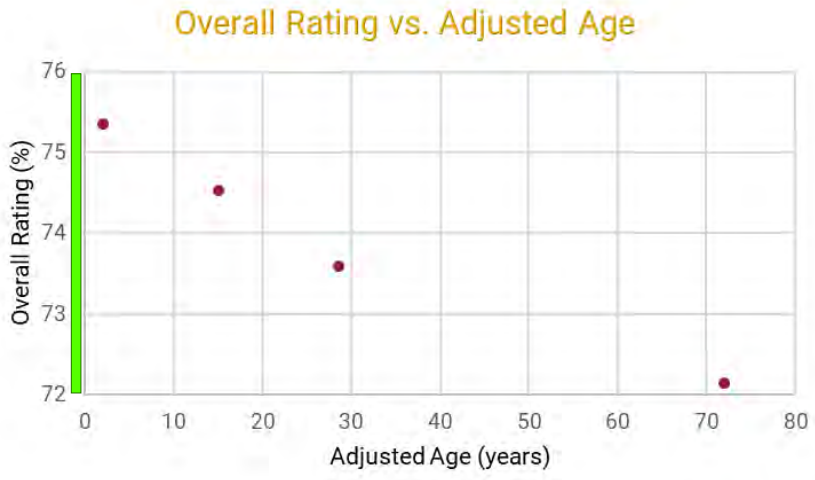
Pest management appeared to be inconsistent. Some facilities had dated sticky traps, some did not. One facility was noted as not using the pest activity log. Three facilities had pest management PM work orders, one did not. Pest activity was identified at three facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
	Total	**0**	**2**

Overall Rating vs Adjusted Building Age





- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.
- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.
- Expand the asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.
- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

CHARLES COUNTY

Total School Facilities Assessed in FY 2023: 5


Gale-Bailey Elementary

Fiscal Year 2023: Key Facts

39 facilities

Charles County has 39 active school facilities.

No change since FY 2022.

29.6 years old

The average adjusted age of all 39 school facilities is 29.6 years old.

+ 1 year since FY 2022.

> 4.2 M GSF

Charles County maintains 4,235,048 SF throughout its 39 school facilities. It has the 10th greatest amount of SF of LEAs in MD.

+ 1,155 SF since FY 2022.

> $1.9 B

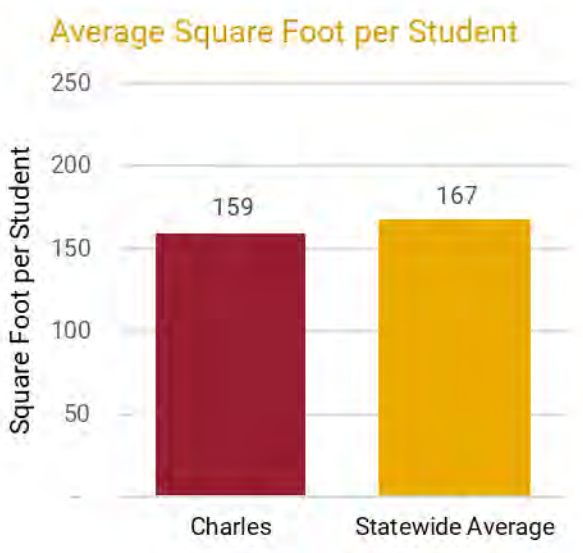
The current replacement value for Charles County's GSF, at the IAC's current replacement cost/SF, is greater than $1.9 B.

71.35% (Adequate) = Average Overall Rating for FY 2023

- 4.57% since FY 22

FY 2023 Overall Rating Results by School Type

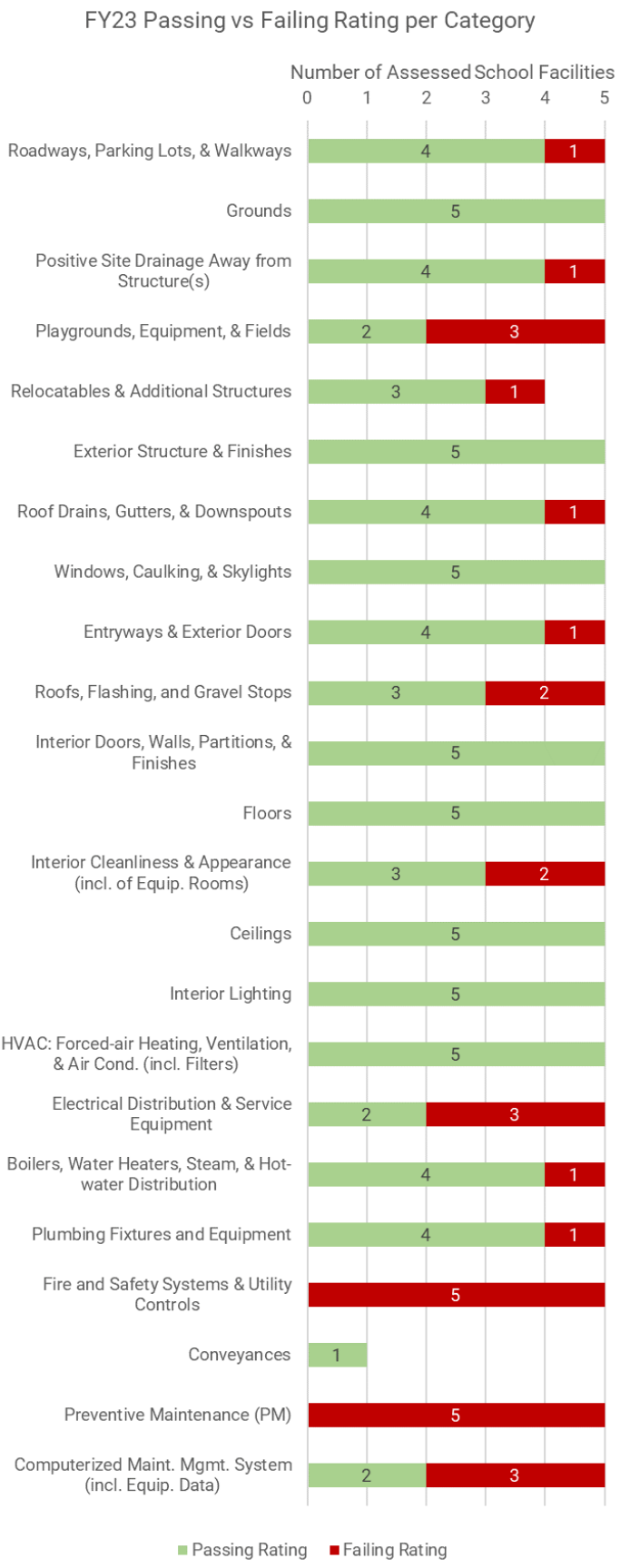
	Elementary	Middle	High	
Superior				
Good				
Adequate	2	1	1	4
Not Adequate	1			1
Poor				
Totals	3	1	1	**5**



FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Dr. James Craik Elementary (08.001)	Elementary	67,872	42	Adequate	0	1	17	4	0	0	1
2. Dr. Gustavus Brown Elementary (08.004)	Elementary	64,819	42	Adequate	2	2	13	5	0	0	2
3. Piccowaxen Middle (08.015)	Middle	83,032	45	Adequate	0	1	14	4	2	0	0
4. Gale-Bailey Elementary (08.029)	Elementary	51,422	44	Not Adequate	0	0	14	8	0	0	1
5. Westlake High (08.031)	High	186,500	30	Adequate	1	0	17	5	0	0	1
Totals					3	4	75	26	2	0	5
Percentage of Total Ratings for System					3%	4%	68%	24%	2%		

FY 2023 Results: Assessment Findings by Category



Strengths

Most of the grounds appeared maintained, with most storm drains observed free and clear of debris. All five facilities received an Adequate rating in the Grounds category.

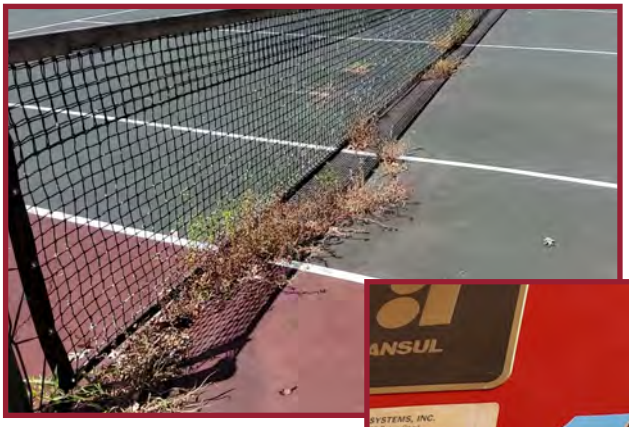
The DLLR certificates were current for all applicable boilers, water heaters, and heat exchangers. Boilers and water heaters were identified in the PM schedules for the applicable facilities.

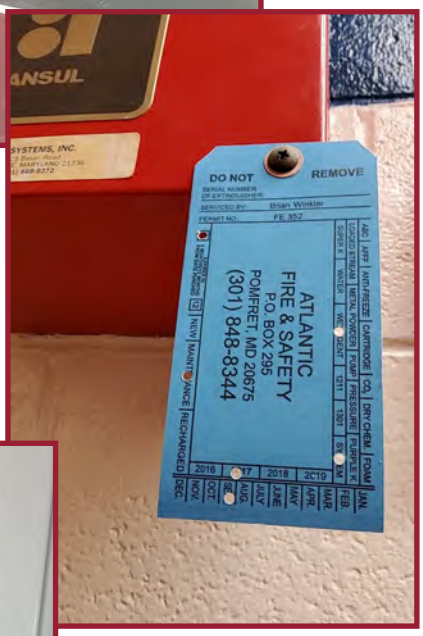
Several different HVAC-related equipment were identified in the PM schedules for the assessed facilities, such as exhaust fans, belt replacement, interior and rooftop HVAC units, and interior and exterior filter changes. Most of the filters were noted as clean and appeared to be dated.

All five facilities were observed with numbered exterior doors and classroom numbers on windows visible from the exterior. This best practice assists building occupants and emergency responders.

Weaknesses

No playground or bleacher inspection reports were provided in the required pre-assessment documentation for the applicable facilities. Fields, playgrounds, play equipment, bleachers, and hard play surfaces were not identified in the PM schedules for the applicable facilities. The two facilities with tennis courts were observed with cracking which was severe and included vegetation growing from the cracks at one facility.





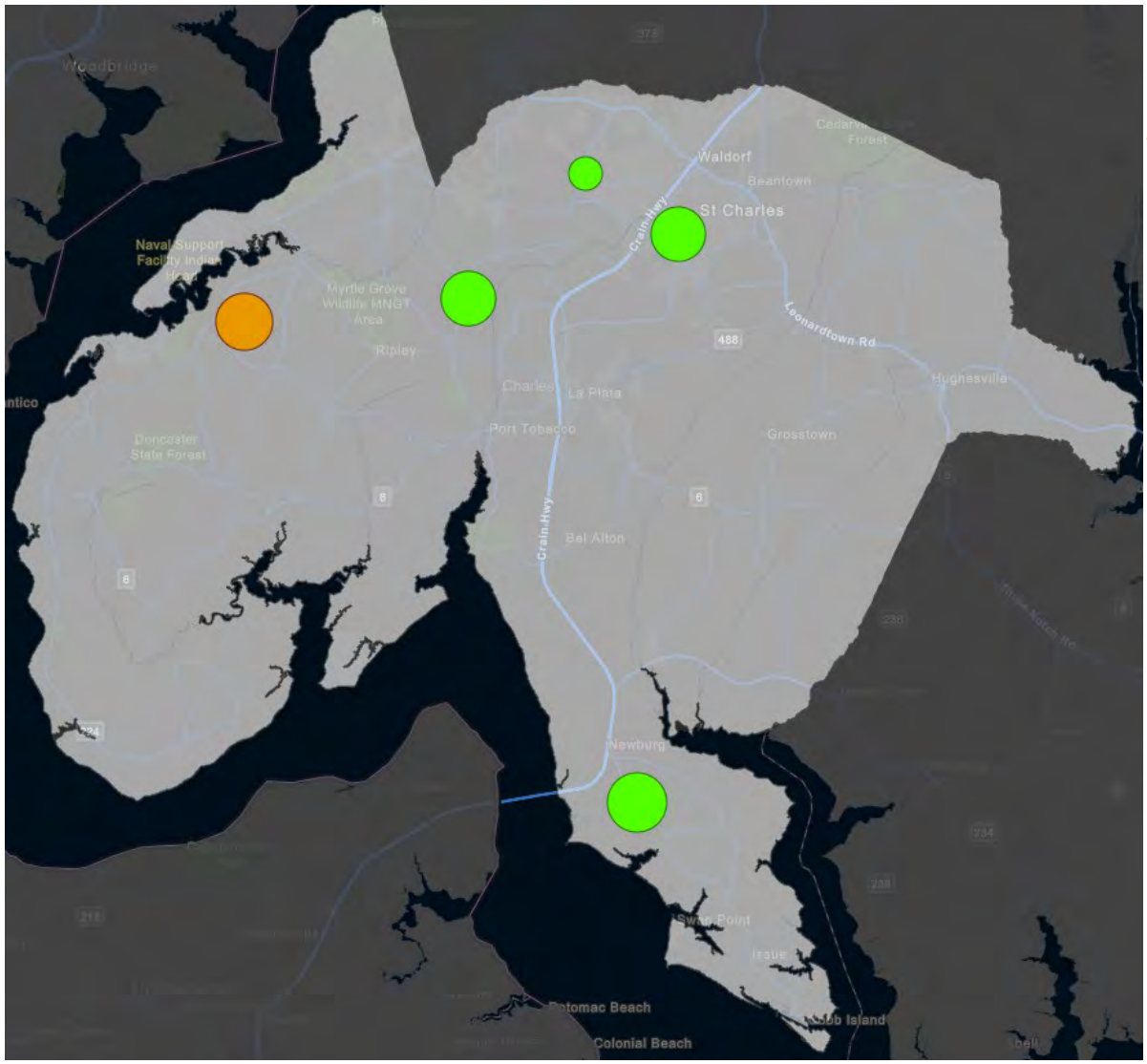
No annual fire alarm inspection reports were provided in the required pre-assessment documentation for any facility, and fire and safety systems and utility controls were not identified in the PM schedules for the assessed facilities. The ANSUL kitchen hood suppression systems at all five facilities had inspection tags dating back to September and October 2017; the ANSUL inspection tags indicated they expired six months after their inspection date.

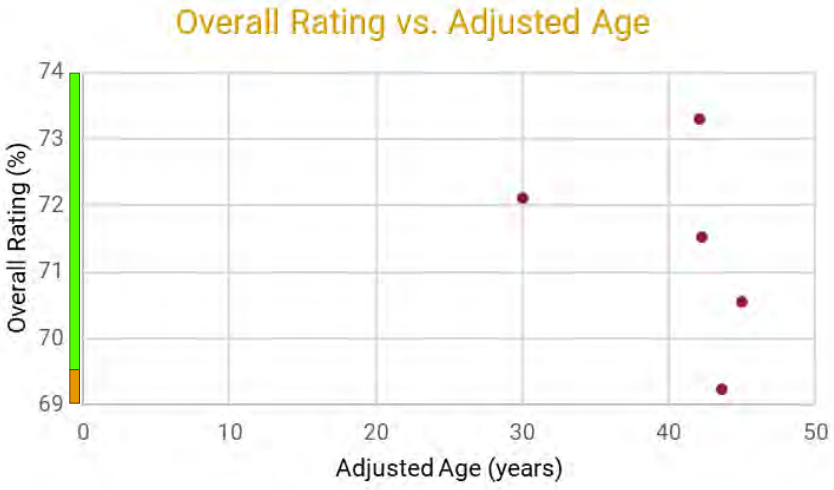
Three facilities were noted with breaker blanks missing from electrical panels. The generator appeared to be leaking oil at two facilities, and was not connected to the building's electrical system at another facility. Electrical equipment and generators were not identified in the PM schedules for the assessed facilities.

Some essential assets were not identified in the PM schedules for the assessed facilities, such as fire and safety systems, pest management, bleachers, playgrounds, backflow preventers, and generators.

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	2
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	1
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	2
	Conveyances	0	0
	Total	**0**	**5**

Overall Rating vs Adjusted Building Age





- Expand the asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively and the actions taken to complete the work are recorded accurately.

- Regularly scheduled playground and bleacher inspections should be created and tracked using the CMMS. Additional training on playground and bleacher maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place. Safety issues should be reported and addressed immediately.

- All fire and safety systems and components should have PM activities scheduled at the appropriate frequencies and tracked using the CMMS. Depending on what is installed at each facility, the PM schedule may include PM activities for fire extinguishers, battery-operated emergency lights and exit features, fire doors, kitchen hood suppression, smoke evacuation dampers, and stairwell pressurization fans.

- Abandoned equipment should be permanently disconnected from the power source and the supply terminated. Best practice is to remove abandoned equipment.

DORCHESTER COUNTY

Total School Facilities Assessed in FY 2023: 3


Choptank Elementary

Fiscal Year 2023: Key Facts

14 facilities

Dorchester County has 14 active school facilities.

No change since FY 2022.

31.3 years old

The average adjusted age of all 14 school facilities is 31.3 years old.

+ 1 year since FY 2022.

> 0.9 M GSF

Dorchester County maintains 970,840 SF throughout its 14 school facilities. It has the 19th greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $0.4 B

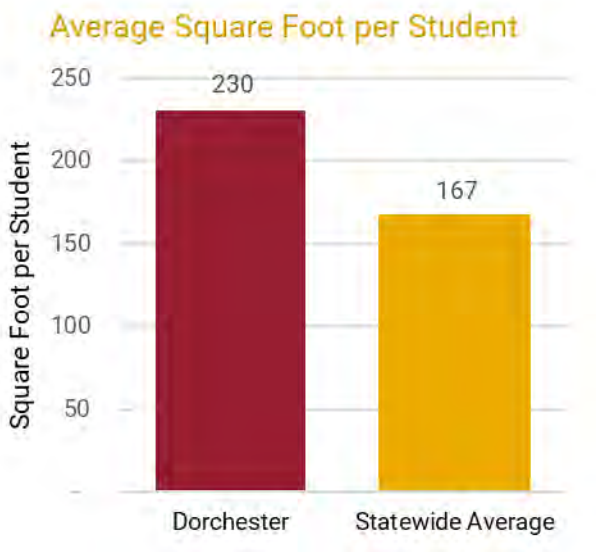
The current replacement value for Dorchester County's GSF, at the IAC's current replacement cost/SF, is greater than $0.4 B.

71.90% (Adequate) = Average Overall Rating for FY 2023

+ 1.36% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	2	1		3
Not Adequate				
Poor				
Totals	2	1		**3**

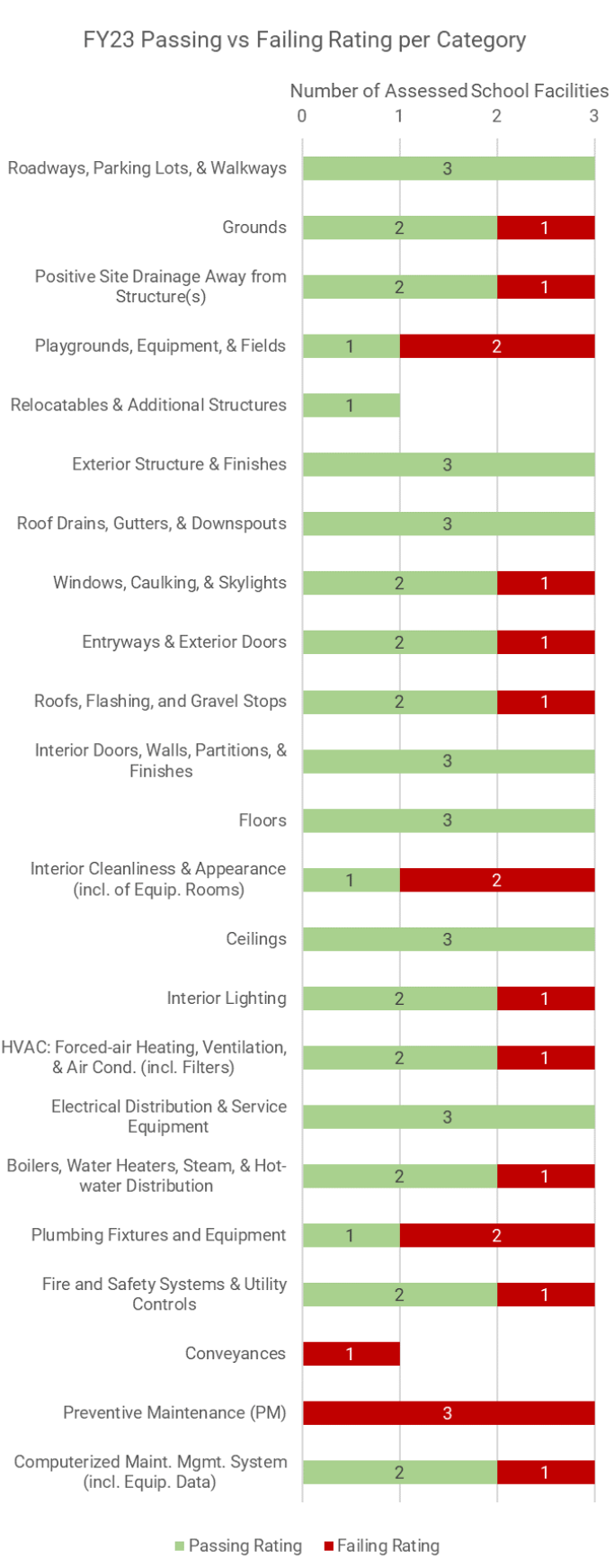


DORCHESTER COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Choptank Elementary (09.016)	Elementary	45,815	25	Adequate	0	2	14	6	0	0	2
2. Judy Hoyer Center (09.017)	Elementary	9,444	62	Adequate	1	0	18	2	0	0	1
3. North Dorchester Middle (09.019)	Middle	92,941	13	Adequate	0	0	13	9	0	0	0
Totals					1	2	45	17	0	0	3
Percentage of Total Ratings for System					2%	3%	69%	26%	0%		

FY 2023 Results: Assessment Findings by Category



Strengths

The roof drains, gutters, and downspouts appeared adequately maintained. Per the LEA's CMP, trash and debris are removed from the roof drains and gutters quarterly.

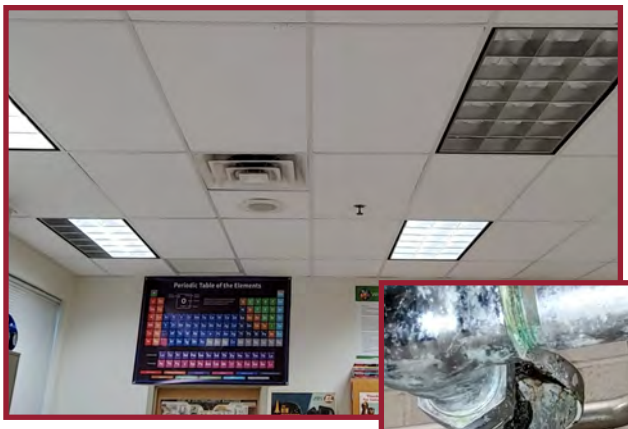
The exterior structure and finishes appeared adequately maintained at all three facilities. Two facilities were observed with evidence of sealant being applied to a few areas of the exterior walls.

The majority of exterior doors appeared to be maintained well and operate correctly. One facility had no issues or concerns identified with the exterior doors or entryways.

Two facilities had evidence of sealant being applied to the roadways and parking lots to extend their lifespan. No issues or concerns were observed with those areas at the third facility.

Weaknesses

Many essential assets were not identified in the PM work order histories for the assessed facilities, such as switchgear, roofs, generators, backflow preventers, interior lighting, playgrounds, water heaters, conveyances, and pest management activities.



One facility was noted with having a completed PM work order for restroom fixtures and was observed with only a minor leak at one toilet fixture. The other two assessed facilities were identified with multiple corroded and leaking toilet fixtures; an open restroom fixtures PM work order was identified in the CMMS history for one facility but no completed PM work orders, and there were no plumbing fixtures or equipment PM work orders identified in the CMMS history or PM schedule for the other facility.

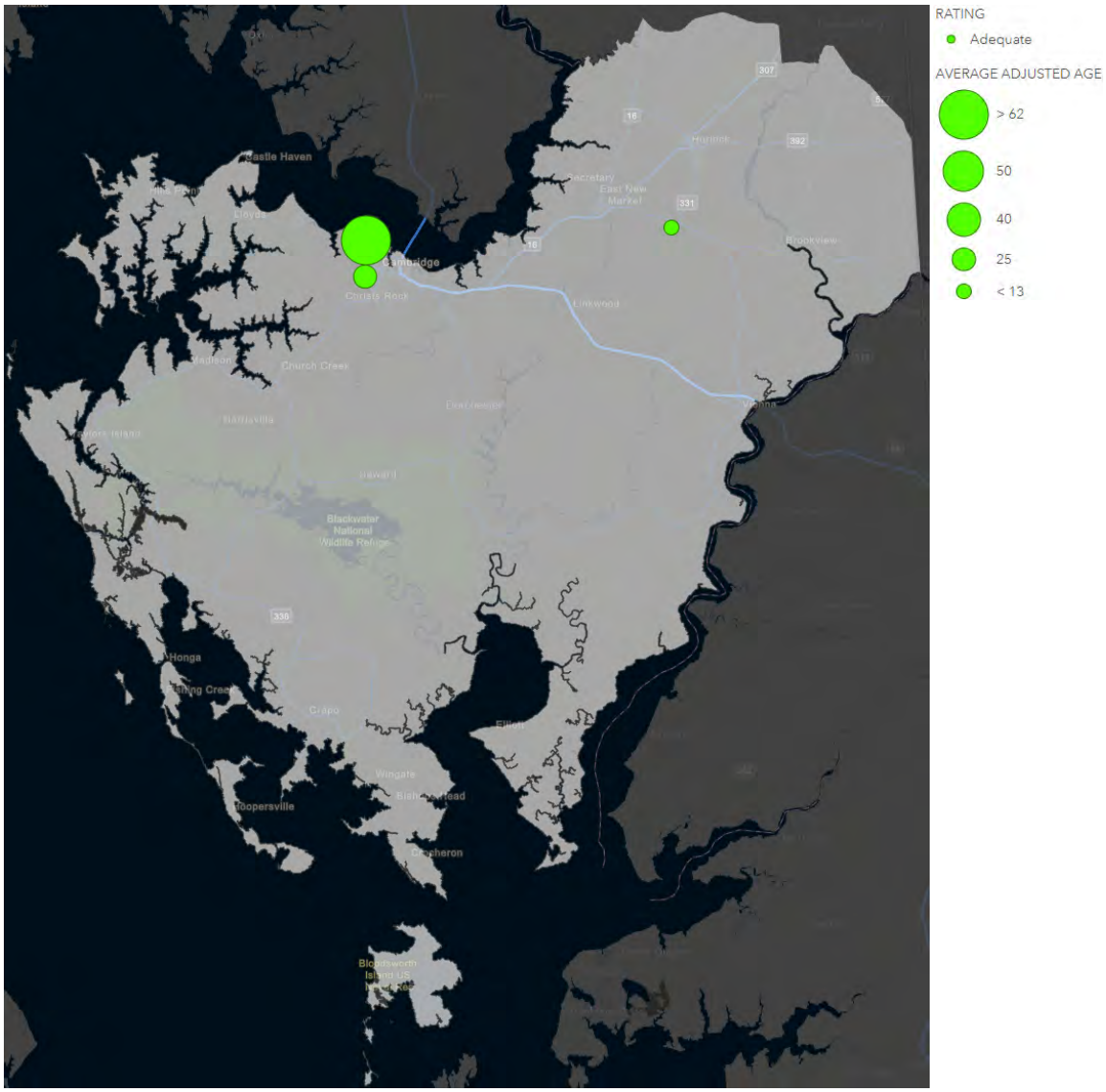
Some of the sticky pest traps were not dated to track pest activity and two facilities were observed with pests in traps in food areas and snap traps missing bait. Pest management PM activities were not tracked using the CMMS for any of the assessed facilities.

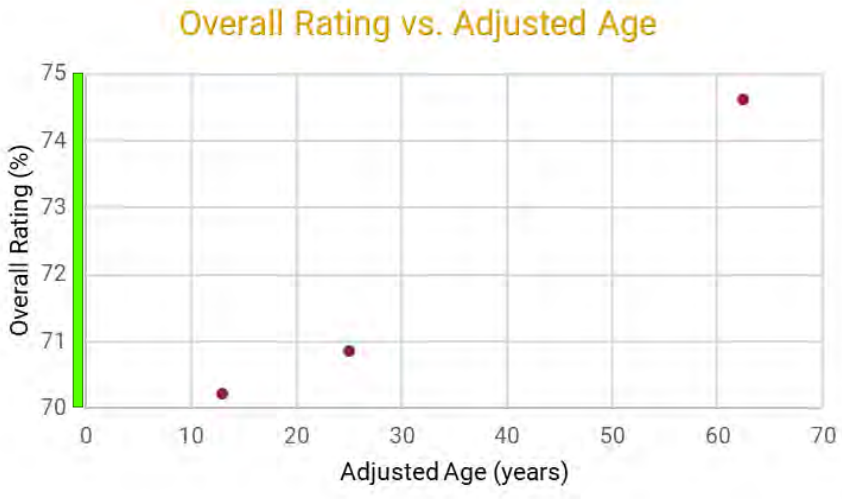
Potential safety issues were observed on the playgrounds at the two facilities with these assets. Scheduled playground inspections are identified in the CMP, but were not tracked using the CMMS and did not appear in the PM history for either of the applicable facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
	Total	**0**	**3**

Overall Rating vs Adjusted Building Age





- Expand the asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

- Regularly scheduled playground inspections should be created and tracked using the CMMS. Additional training on playground maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place. Safety issues should be reported and addressed immediately.

- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively and the actions taken to complete the work are recorded accurately.

FREDERICK COUNTY

Total School Facilities Assessed in FY 2023: 8


Wolfsville Elementary

Fiscal Year 2023: Key Facts

67 facilities

Frederick County has 67 active school facilities.

- 1 facility since FY 2022.

28.1 years old

The average adjusted age of all 67 school facilities is 28.1 years old.

+ 0.9 years since FY 2022.

< 6.8 M GSF

Frederick County maintains 6,784,025 SF throughout its 67 school facilities. It has the 7th greatest amount of SF of LEAs in MD.

- 27,000 SF since FY 2022.

~ $3.1 B

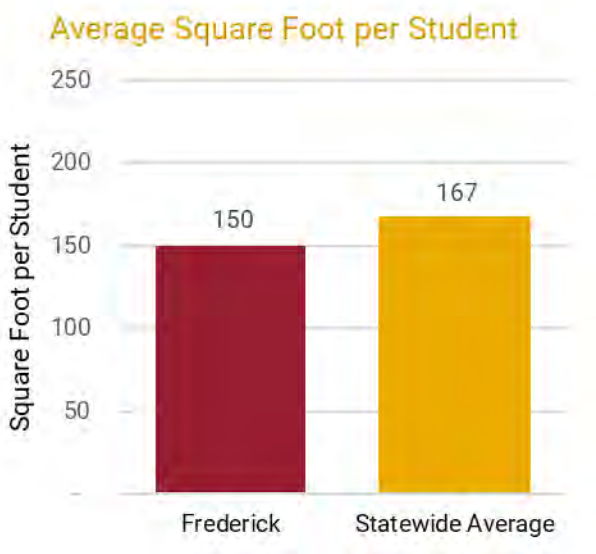
The current replacement value for Frederick County's GSF, at the IAC's current replacement cost/SF, is approximately $3.1 B.

76.93% (Adequate) = Average Overall Rating for FY 2023

- 1.26% since FY 22

FY 2023 Overall Rating Results by School Type

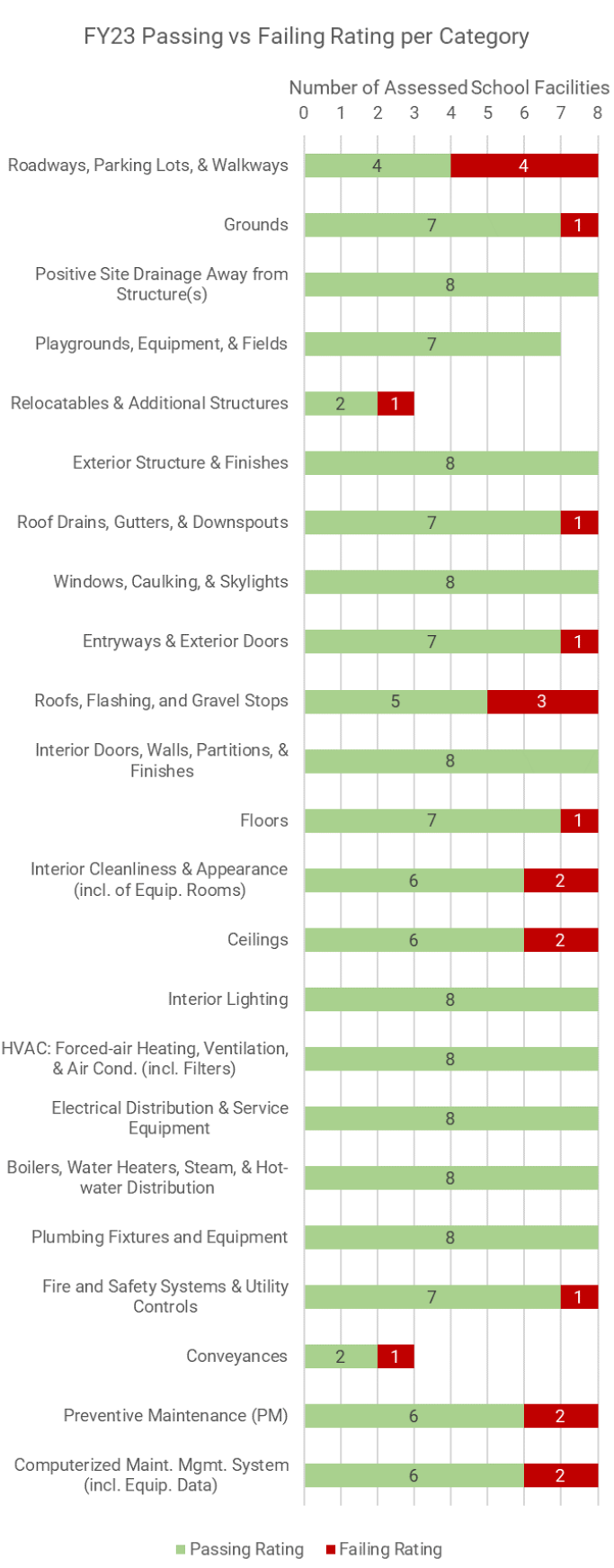
	Elementary	Middle	High	Career Tech	
Superior					
Good	2				2
Adequate	2	3		1	6
Not Adequate					
Poor					
Totals	4	3		1	**8**



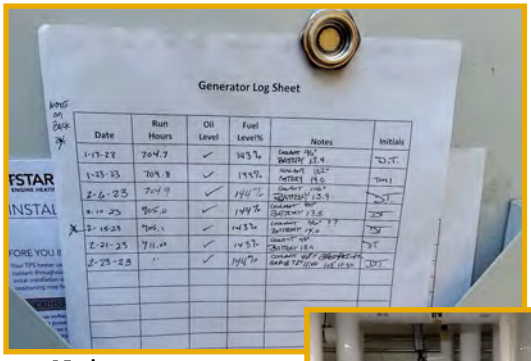
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Middletown Elementary (10.001)	Elementary	54,854	49	Adequate	1	5	15	1	0	0	1
2. Urbana Elementary (10.022)	Elementary	98,360	2	Good	3	6	13	0	0	0	1
3. Career & Technology Center (10.026)	Career Tech	86,681	42	Adequate	0	4	13	4	0	0	0
4. New Market Middle (10.031)	Middle	114,936	49	Adequate	1	4	15	3	0	0	1
5. Ballenger Creek Middle (10.041)	Middle	113,850	32	Adequate	2	3	14	2	0	0	2
6. Walkersville Middle (10.045)	Middle	119,353	47	Adequate	2	5	11	3	0	0	1
7. Wolfsville Elementary (10.056)	Elementary	41,657	38	Adequate	2	5	14	1	0	0	1
8. Thurmont Primary (10.064)	Elementary	66,334	20	Good	3	4	13	1	0	0	0
Totals					14	36	108	15	0	0	7
Percentage of Total Ratings for System					8%	21%	62%	9%	0%		

FY 2023 Results: Assessment Findings by Category

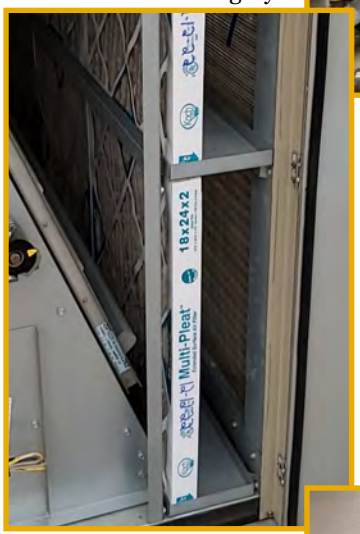


Strengths



For the six applicable facilities, the generators and automatic transfer switches are identified in the PM schedule. All eight of the assessed facilities earned either a Good or Superior rating in the Electrical Distribution & Service Equipment category.

No issues or concerns were identified with the boilers or water heaters at seven facilities. The DLLR certificates were current for all applicable boilers, water heaters, and heat exchangers. Four facilities earned a Superior rating in the Boilers, Water Heaters, Steam, & Hot-water Distribution category.



It appears all essential and most of the non-essential assets are identified and included in the PM schedule for each facility. There are 1,400 or more assets in the asset list and 100 or more individual PM checks in the PM schedule for each facility. Dating filters appears to be an LEA-wide practice to track the date when each was installed.

The PM schedule for each facility included inspections for multiple types of doors scheduled at various frequencies and PM inspections for manual and electric curtains and partitions when applicable.

Weaknesses

Roadways, parking lots, and walkways were not identified in the PM schedules for the assessed facilities. Four facilities were noted with minor trip hazards due to uneven surfaces between the curbs and walkways. Light to widespread cracking was observed in the roads and/or parking lots at six facilities.

Ceilings were not identified in the PM schedules for the assessed facilities. Five facilities were observed with stained ceiling tiles, and four facilities had sagging or improperly seated ceiling tiles.

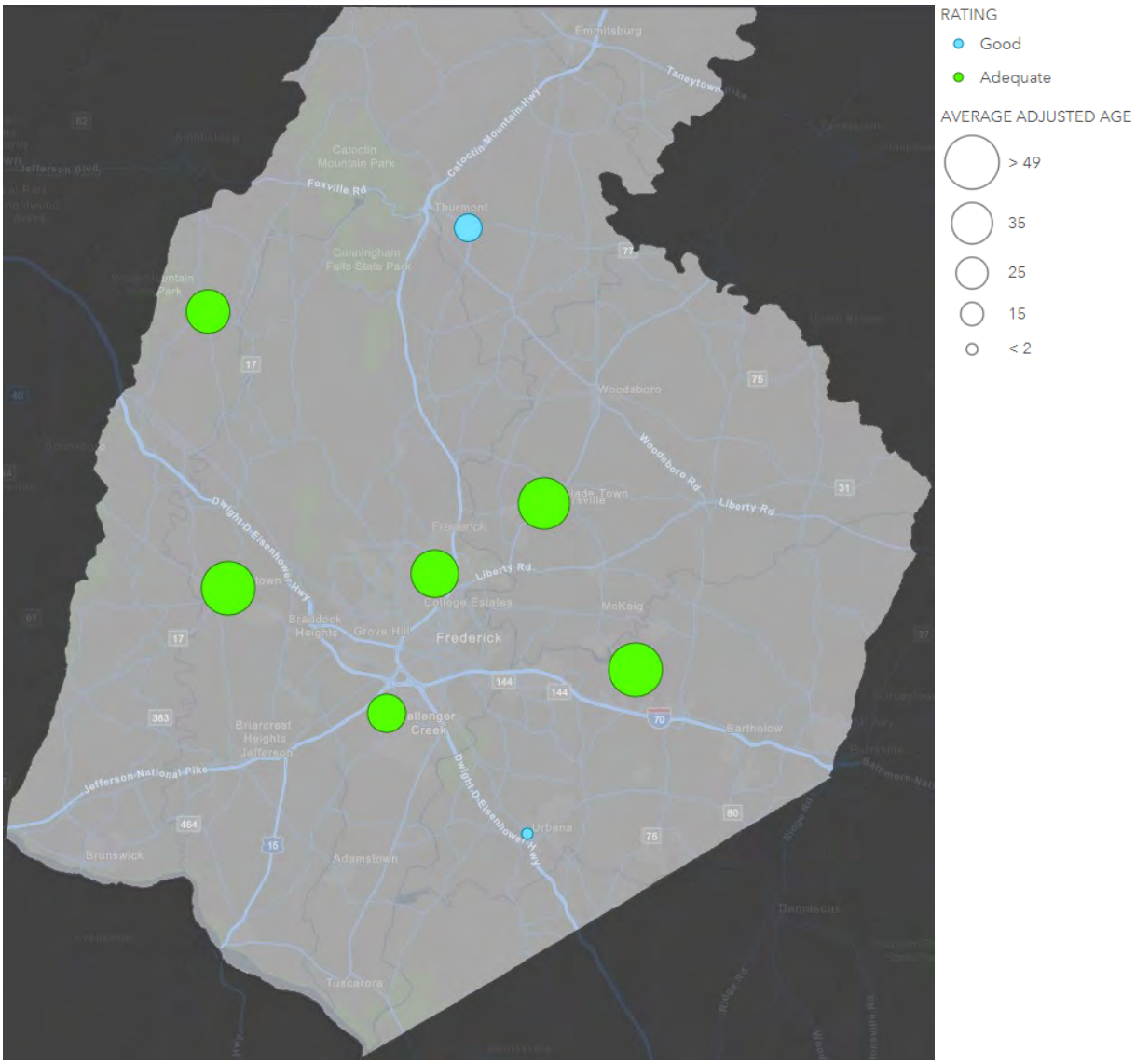
Vegetative growth or debris were identified on the roofs at five facilities. The routine roof inspection reports are being completed, however, two facilities did not have follow-up corrective action work orders in their CMMS work order history to address the concerns noted in their roof reports.

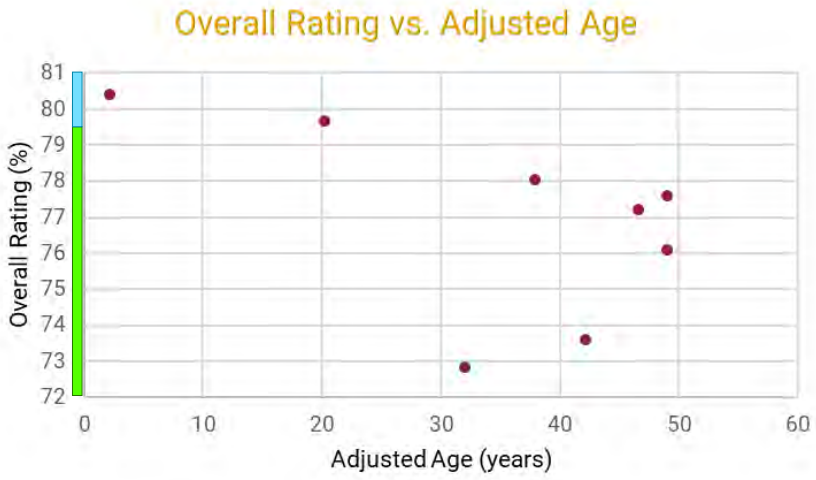
Pest management PM activities were not tracked using the CMMS for any of the assessed facilities. Rodent droppings were noted in the kitchen area at two facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	4
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	1
	Total	**0**	**7**

Overall Rating vs Adjusted Building Age





- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.

- Regularly scheduled ceiling inspections should be created and tracked using the CMMS to identify any ceiling tiles missing, stained, or damaged. Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted. Stained ceiling tiles should be replaced once the cause is identified and repaired.

- Pest management PM activities should have auto-populating PM work orders created in the CMMS and scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion. The custodial duties outlined in the IPM booklet should also be reflected in the custodial scope of work.

- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

- A field should be created in the CMMS to track the days each work order has aged to help identify causes of possible bottlenecks and streamline workflow processes.

GARRETT COUNTY

Total School Facilities Assessed in FY 2023: 3


Southern High

Fiscal Year 2023: Key Facts

13 facilities

Garrett County has 13 active school facilities.

No change since FY 2022.

35.0 years old

The average adjusted age of all 13 school facilities is 35.0 years old.

+ 1 year since FY 2022.

> 0.7 M GSF

Garrett County maintains 741,671 SF throughout its 13 school facilities. It has the 21st greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $0.3 B

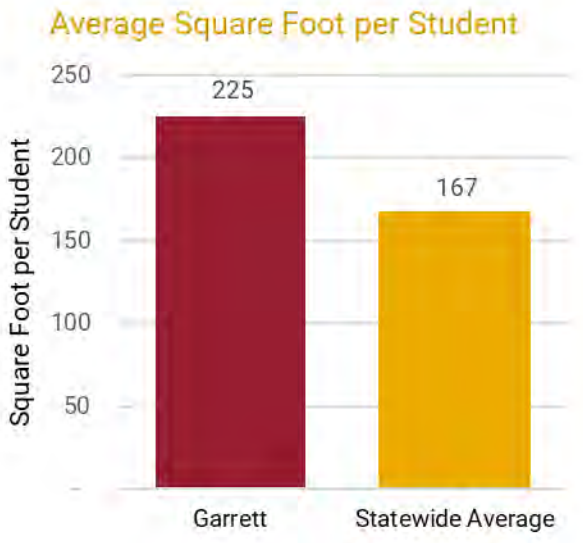
The current replacement value for Garrett County's GSF, at the IAC's current replacement cost/SF, is greater than $0.3 B.

70.40% (Adequate) = Average Overall Rating for FY 2023

- 1.30% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary/ Middle	Middle	High	
Superior				
Good				
Adequate	1	1		2
Not Adequate			1	1
Poor				
Totals	1	1	1	**3**

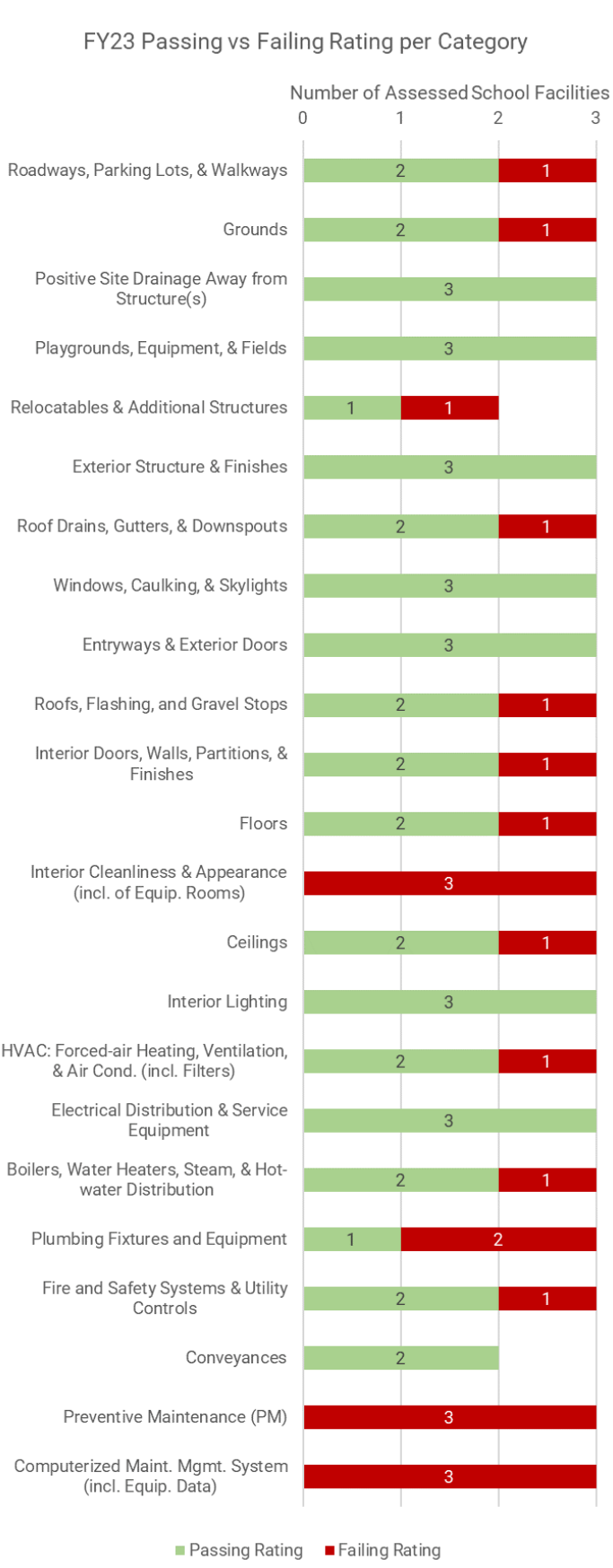


GARRETT COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Southern High (11.005)	High	177,715	34	Not Adequate	0	1	11	11	0	0	7
2. Northern Middle (11.009)	Middle	84,008	13	Adequate	1	1	15	5	0	0	0
3. Swan Meadow Elementary (11.016)	Elementary/ Middle	7,572	37	Adequate	2	2	15	3	0	0	0
Totals					3	4	41	19	0	0	7
Percentage of Total Ratings for System					4%	6%	61%	28%	0%		

FY 2023 Results: Assessment Findings by Category

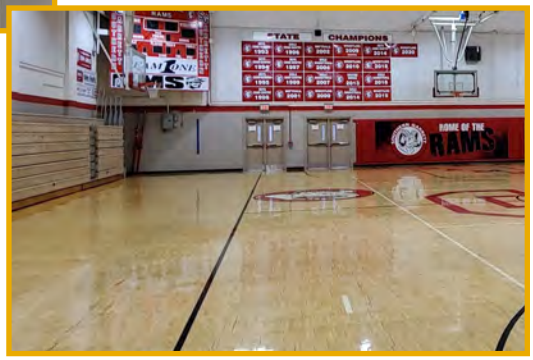


Strengths

The corridors and classrooms at all three facilities were found to be adequately lit for a proper learning environment.

The brick exteriors at all three facilities appeared to be structurally sound and waterproof. One facility was noted as having well-maintained expansion joint sealants.

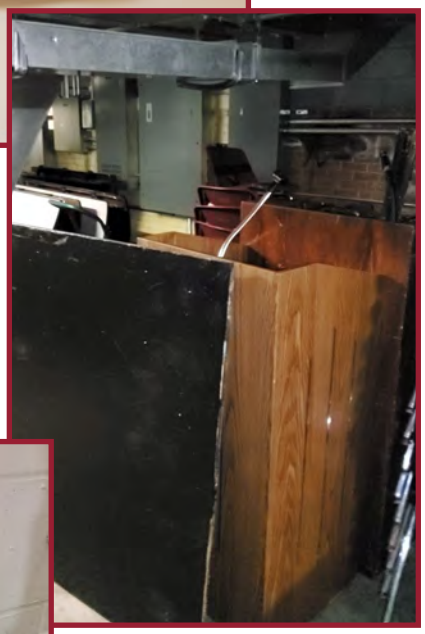
No issues or concerns were observed with the electrical distribution or service equipment at two of the assessed facilities. Proper lockout/tagout procedures were noted at one facility. One facility received a Good rating and the other two each earned a Superior rating for the Electrical Distribution & Service Equipment category.



One facility received a Good rating in the Playgrounds, Equipment, & Fields category. Consistent maintenance practices were observed at all three assessed facilities.

Weaknesses

At all three facilities, the PM schedule was missing some of the building's essential assets, such as backflow preventers, fire extinguishers, and emergency lighting.



Inconsistent custodial practices were identified at all three facilities. One facility was noted with blocked emergency exit doors and blocked access to electrical panels. All three facilities received a Not Adequate rating in the Interior Cleanliness & Appearance (incl. of Equip. Rooms) category.

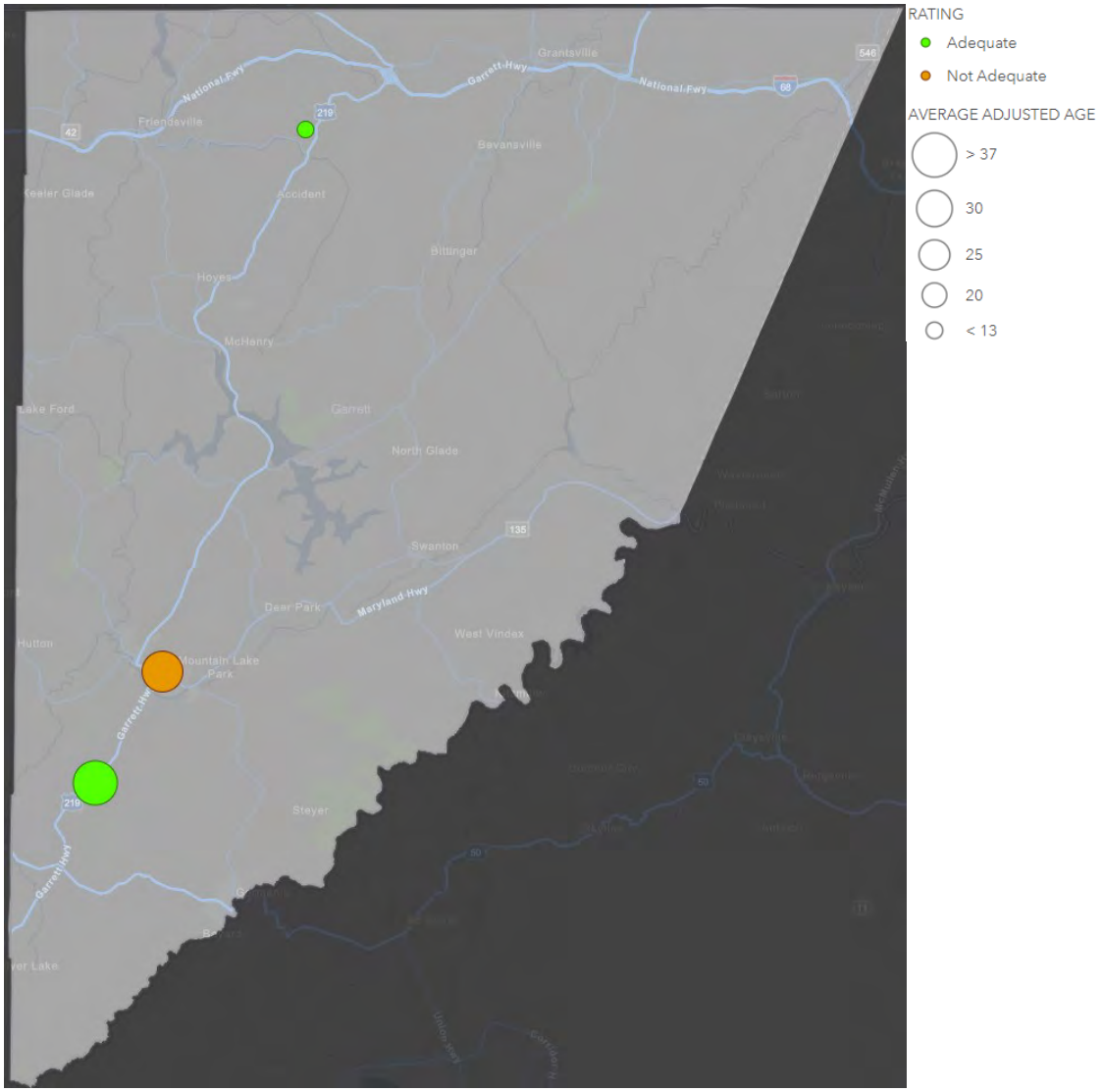
The backflow preventers in two facilities were missing inspection tags to verify that they were in proper working order. Backflow preventer inspections were not identified in the LEA's PM schedule or PM work orders.

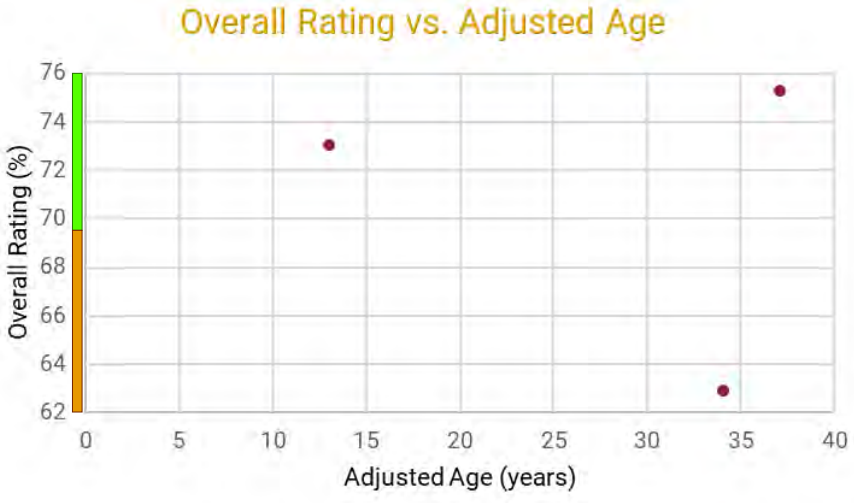
Cracked and deteriorating surfaces were identified in the roadways and parking lots at two of the assessed facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	1
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	1
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	1
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	1
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	1
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
	Total	**0**	**7**

Overall Rating vs Adjusted Building Age





- Training for custodial staff should be enhanced or refreshed with an emphasis on safety requirements, including clearances around equipment and blockage of egress points. The CMMS could be used to track some or all custodial responsibilities in order to establish and ensure accountability.

- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.

- Backflow preventer inspections are a requirement in most jurisdictions and should be scheduled and completed at the appropriate frequency. Inspections should be tracked and documented using the CMMS, and the inspection documentation should be available on site.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

HARFORD COUNTY

Total School Facilities Assessed in FY 2023: 6


Fountain Green Elementary

Fiscal Year 2023: Key Facts

52 facilities

Harford County has 52 active school facilities.

No change since FY 2022.

31.9 years old

The average adjusted age of all 52 school facilities is 31.9 years old.

+ 1 year since FY 2022.

> 6.0 M GSF

Harford County maintains 6,054,298 SF throughout its 52 school facilities. It has the 8th greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $2.7 B

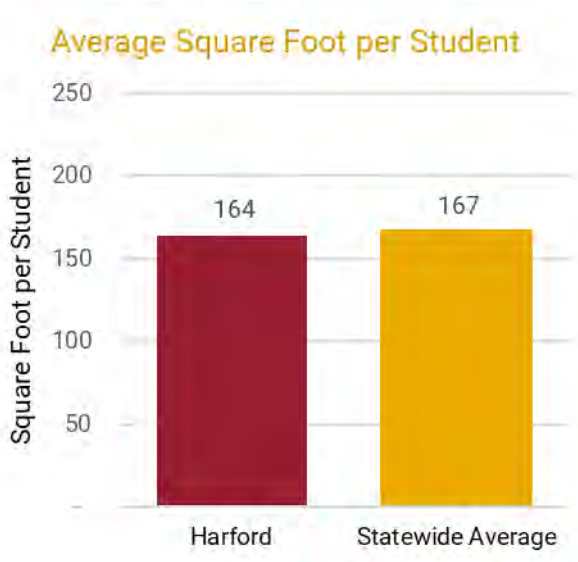
The current replacement value for Harford County's GSF, at the IAC's current replacement cost/SF, is greater than $2.7 B.

67.42% (Not Adequate) = Average Overall Rating for FY 2023

- 8.99% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	Career Tech	
Superior					
Good					
Adequate	1				1
Not Adequate	2	2		1	5
Poor					
Totals	3	2		1	**6**

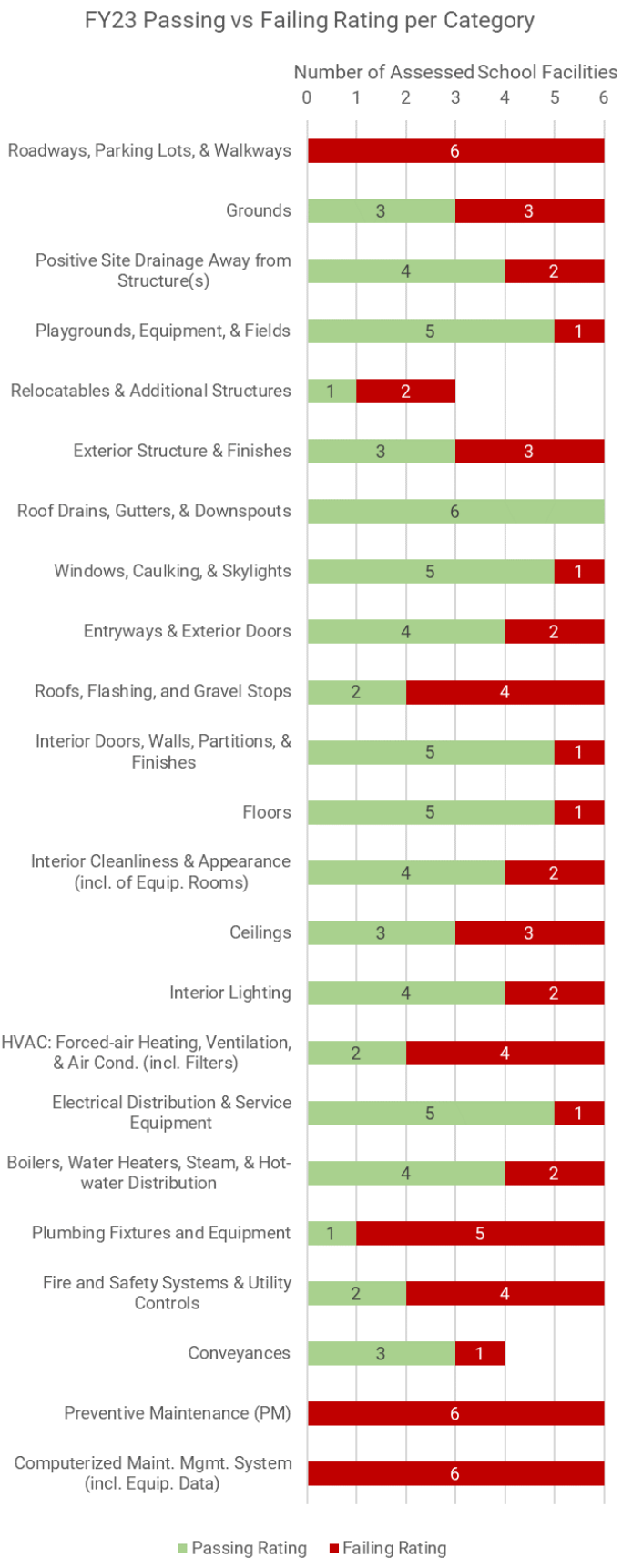


HARFORD COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. North Harford Middle (12.007)	Middle	173,728	46	Not Adequate	0	0	10	12	0	0	6
2. Harford Tech High (12.008)	Career Tech	218,225	36	Not Adequate	0	0	13	10	0	0	3
3. Fountain Green Elementary (12.033)	Elementary	60,000	29	Not Adequate	0	3	12	7	0	0	4
4. Roye-Williams Elementary (12.047)	Elementary	78,126	27	Not Adequate	0	0	9	12	1	0	1
5. Southampton Middle (12.050)	Middle	188,134	51	Not Adequate	0	0	12	10	0	0	3
6. George D. Lisby Elementary @ Hillsdale (12.052)	Elementary	56,295	53	Adequate	0	6	13	3	0	0	0
Totals					0	9	69	54	1	0	17
Percentage of Total Ratings for System					0%	7%	52%	41%	1%		

FY 2023 Results: Assessment Findings by Category



Strengths

When applicable, the facility PM schedule identified routine PM for playgrounds, bleachers, basketball units, and synthetic fields.

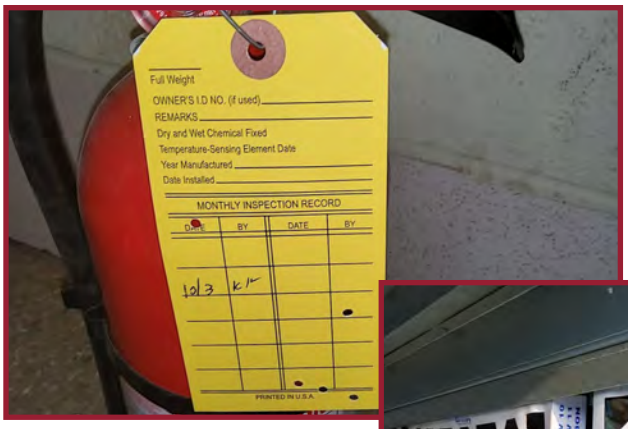
Restroom partitions and door hardware received PM annually per the PM schedule. Some facilities also identified annual PM for stage curtains and gymnasium partitions when applicable.

The majority of electrical panels appeared to be well maintained and labeled properly. No major issues or concerns were noted at any of the assessed facilities.

The roof drains appeared to be maintained well and are evaluated annually during the routine roof inspection.

Weaknesses

Monthly fire extinguisher inspection tags were not consistently filled out at three facilities, and another facility was noted with non-functioning emergency lights. Some or all fire and safety equipment assets were missing from the PM schedule for every facility.



The PM schedules for the assessed facilities were missing some essential assets, such as fire and safety systems, boilers, backflow preventers, and conveyances

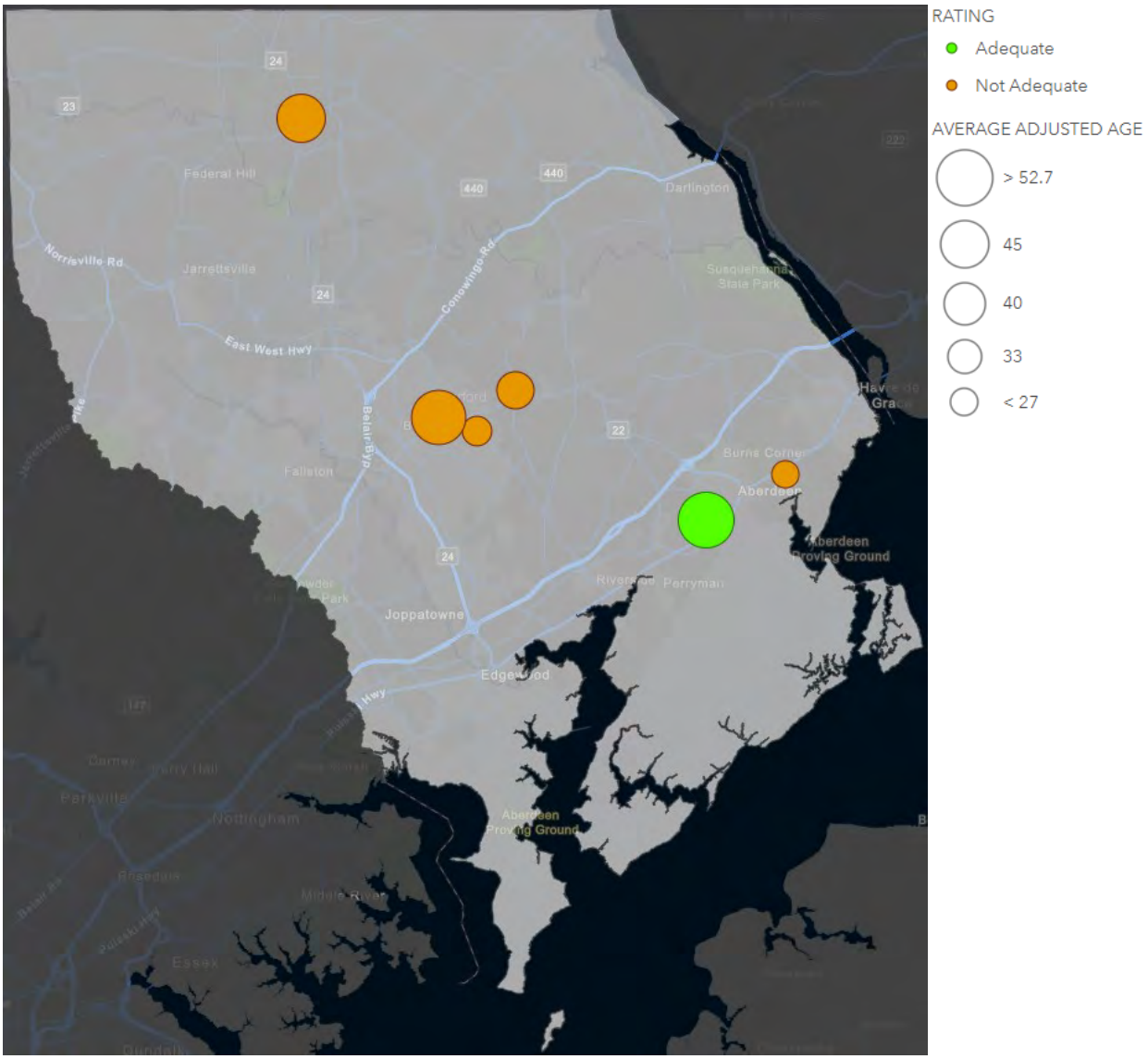
Five facilities were observed with leaking faucets. Backflow preventers were not identified in any facility's PM schedule and the backflow preventers at five facilities were missing inspection tags; one of these facilities was observed with a leaking backflow preventer.

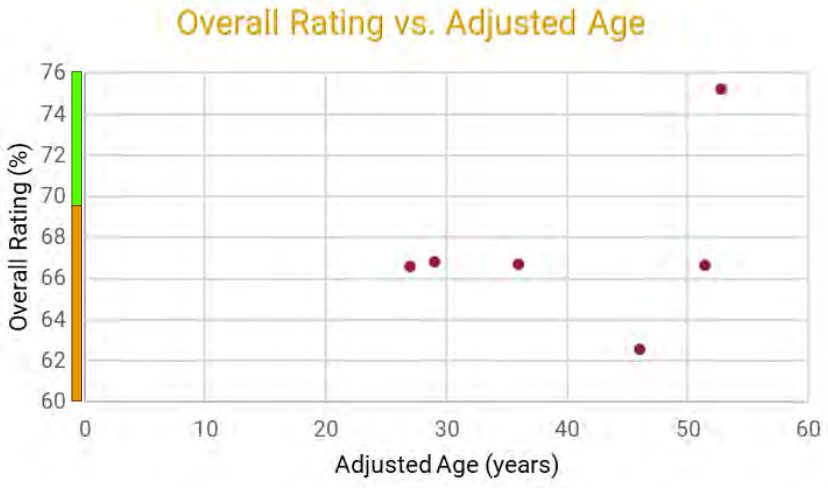
Three facilities were noted with vegetative growth in the walkways. All six facilities had cracks in their parking lots.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	3
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	1
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	1
	Floors	0	1
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	2
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	1
	Electrical Distribution & Service Equipment	0	1
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	2
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	3
	Conveyances	0	1
	Total	**0**	**17**

Overall Rating vs Adjusted Building Age





- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- PM activities for roadways, parking lots, and walkways should be added to each facility's PM schedule to help extend the useful life of the existing surfaces, prevent hazardous conditions, and avoid premature capital replacement projects.

- Backflow preventer inspections are a requirement in most jurisdictions and should be scheduled and completed at the appropriate frequency. Inspections should be tracked and documented using the CMMS, and the inspection documentation should be available on site.

- All fire and safety systems and components should have PM activities scheduled at the appropriate frequencies and tracked using the CMMS. Depending on what is installed at each facility, the PM schedule may include PM activities for fire extinguishers, battery-operated emergency lights and exit features, fire doors, kitchen hood suppression, smoke evacuation dampers, and stairwell pressurization fans.

HOWARD COUNTY

Total School Facilities Assessed in FY 2023: 10


Patuxent Valley Middle

Fiscal Year 2023: Key Facts

76 facilities

Howard County has 76 active school facilities.

No change since FY 2022.

21.6 years old

The average adjusted age of all 76 school facilities is 21.6 years old.

+ 1 year since FY 2022.

> 8.2 M GSF

Howard County maintains 8,250,880 SF throughout its 76 school facilities. It has the 6th greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $3.7 B

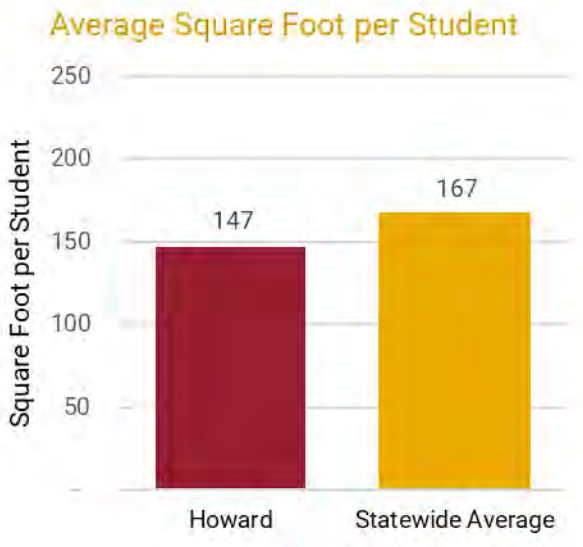
The current replacement value for Howard County's GSF, at the IAC's current replacement cost/SF, is greater than $3.7 B.

72.20% (Adequate) = Average Overall Rating for FY 2023

- 4.91% since FY 22

FY 2023 Overall Rating Results by School Type

	Alternate	Elementary	Middle	High	
Superior					
Good					
Adequate	1	2	4	1	8
Not Adequate		1		1	2
Poor					
Totals	1	3	4	2	**10**

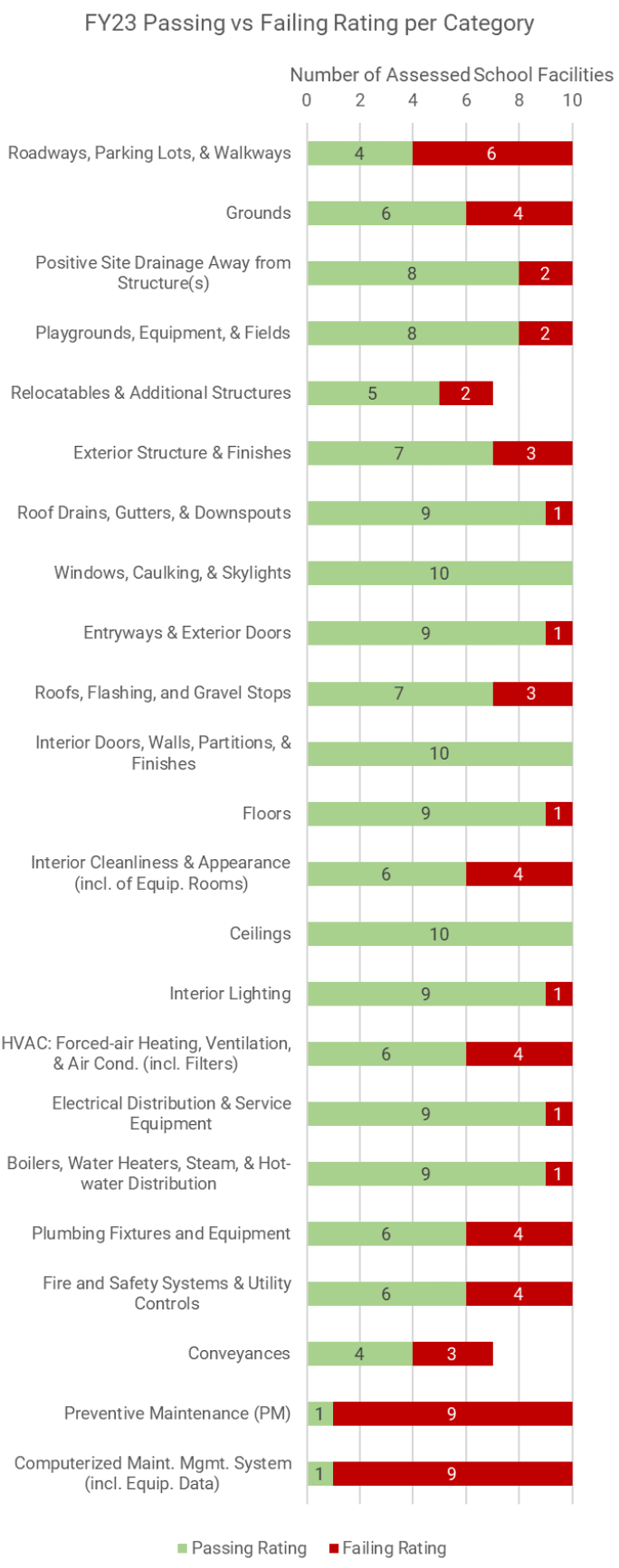


HOWARD COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Lisbon Elementary (13.004)	Elementary	55,999	16	Adequate	3	2	16	2	0	0	1
2. Oakland Mills Middle (13.008)	Middle	81,036	24	Adequate	1	2	14	4	0	0	3
3. Atholton High (13.013)	High	250,465	7	Adequate	3	2	15	3	0	0	3
4. Patuxent Valley Middle (13.041)	Middle	106,987	5	Adequate	1	0	15	6	0	0	0
5. Deep Run Elementary (13.042)	Elementary	94,570	6	Adequate	1	1	15	5	1	0	0
6. Mayfield Woods Middle (13.045)	Middle	100,894	31	Adequate	1	5	14	3	0	0	0
7. Long Reach High (13.055)	High	234,007	26	Not Adequate	0	0	12	11	0	0	4
8. Longfellow Elementary (13.056)	Elementary	68,590	8	Not Adequate	0	0	10	11	0	0	2
9. Hammond Middle (13.076)	Middle	87,030	31	Adequate	1	3	15	4	0	0	1
10. Homewood Center (13.091)	Alternate	61,421	20	Adequate	1	1	16	4	0	0	1
Totals					12	16	142	53	1	0	15
Percentage of Total Ratings for System					5%	7%	63%	24%	0%		

FY 2023 Results: Assessment Findings by Category



Strengths

Four facilities were observed with no roof drain issues. The PM schedules listed semi-annual roof inspections. The reports include evaluations of the roof drains, gutters, and downspouts.

The majority of assessed exterior doors appeared to be weatherproof and function as intended. Exterior doors were included in the PM work orders and/or PM schedule at every facility assessed.

No issues or concerns were observed with the electrical equipment at three facilities. Four facilities were noted as having detailed breaker schedules at every electrical panel. Two facilities earned a Superior rating and two facilities received a Good rating for the Electrical Distribution & Service Equipment category.

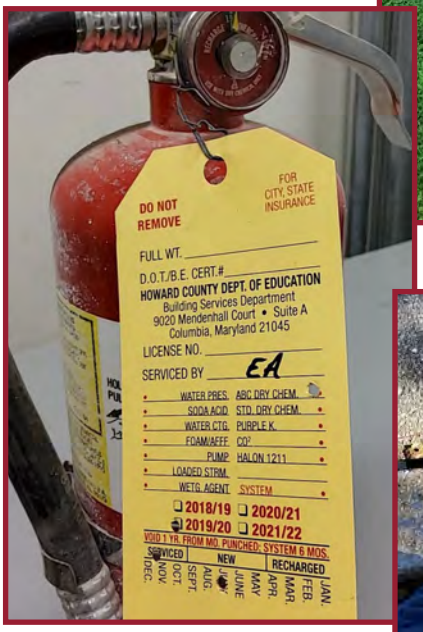
Only minor issues with the windows or skylights were observed at some facilities. Two facilities had no issues or concerns with these assets. The windows at five facilities were noted as fully functional.

Weaknesses

Dirty filters were noted at eight facilities. These same eight facilities were also observed with missing filters, collapsing filters, and/or filters not installed properly. Four facilities received a Not Adequate rating in the HVAC category.

Relocatables and concession stands were identified in the PM schedules of the seven applicable facilities that had relocatables and/or additional structures; however, the relocatable PM only identified HVAC and the concession stand PM only identified plumbing. No other PM work orders were identified for these structures.

Seven facilities were identified with fire extinguishers missing inspection tags, tags not filled out correctly, or tags missing current monthly inspections. Fire extinguishers were not identified in the asset list for any of the assessed facilities.

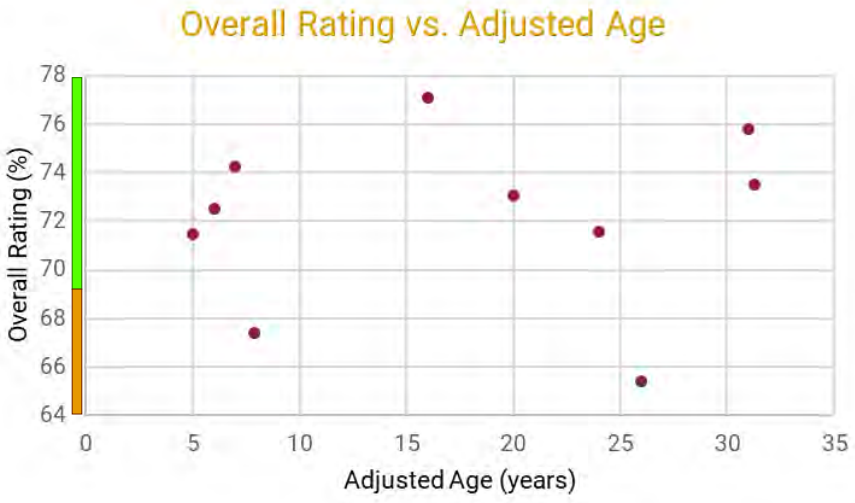


Six facilities had uneven walkway surfaces. Roadways, parking lots, and walkways were not identified in the PM schedule for any of the assessed facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	4
	Grounds	0	3
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	2
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	3
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	1
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	1
	Total	**0**	**15**

Overall Rating vs Adjusted Building Age



- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.

- All fire and safety systems and components should have PM activities scheduled at the appropriate frequencies and tracked using the CMMS. Depending on what is installed at each facility, the PM schedule may include PM activities for fire extinguishers, battery-operated emergency lights and exit features, fire doors, kitchen hood suppression, smoke evacuation dampers, and stairwell pressurization fans.

- Additional PM checks and/or additional oversight are recommended to ensure the HVAC systems receive the necessary amount of PM work at the appropriate frequency to remain functional and efficient.

- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

KENT COUNTY

Total School Facilities Assessed in FY 2023: 3

Galena Elementary

Fiscal Year 2023: Key Facts

5 facilities

Kent County has 5 active school facilities.

No change since FY 2022.

44.7 years old

The average adjusted age of all 5 school facilities is 44.7 years old.

+ 0.9 years since FY 2022.

> 0.4 M GSF

Kent County maintains 441,409 SF throughout its 5 school facilities. It has the least amount of SF of LEAs in MD.

+ 1,183 SF since FY 2022.

~ $0.2 B

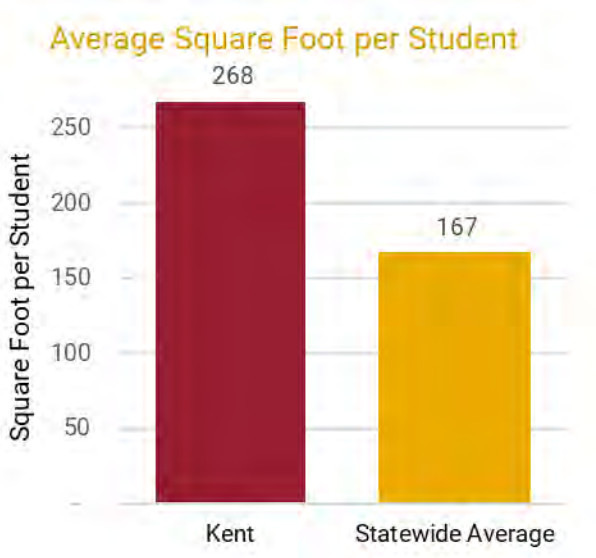
The current replacement value for Kent County's GSF, at the IAC's current replacement cost/SF, is approximately $0.2 B.

68.74% (Not Adequate) = Average Overall Rating for FY 2023

- 0.73% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	2			2
Not Adequate		1		1
Poor				
Totals	2	1		**3**



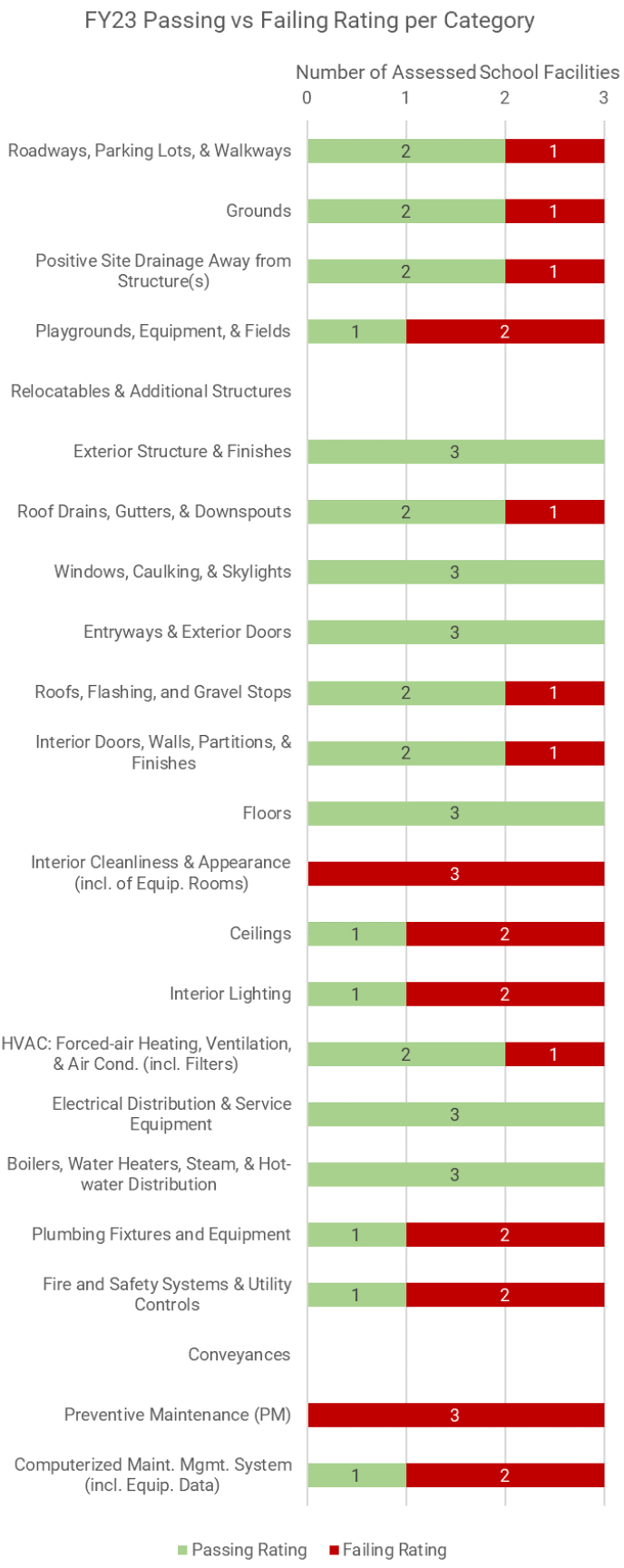
KENT COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Galena Elementary (14.002)	Elementary	59,468	58	Adequate	1	0	12	8	0	0	2
2. Kent County Middle (14.003)	Middle	78,785	46	Not Adequate	0	0	11	9	1	0	5
3. Rock Hall Elementary (14.004)	Elementary	54,521	58	Adequate	0	0	16	5	0	0	0
Totals					1	0	39	22	1	0	7
Percentage of Total Ratings for System					2%	0%	62%	35%	2%		

KENT COUNTY

FY 2023 Results: Assessment Findings by Category

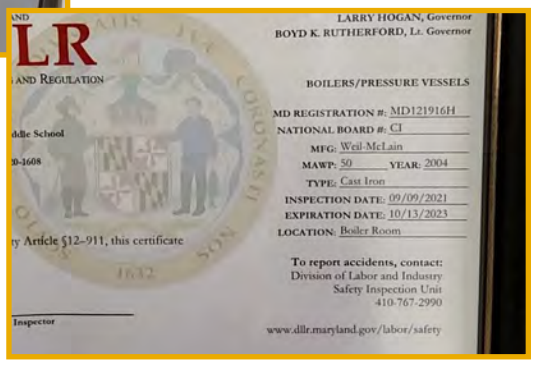


Strengths

The windows at all three facilities appeared adequately maintained. One facility had no issues or concerns observed during the MEA.

Most floors at the three facilities appeared clean and well maintained. Floor cleaning procedures for various surface types are detailed in the Guide to Custodial Services document.

One facility had no issues observed with the electrical distribution equipment. All three facilities received an Adequate rating for the Electrical Distribution & Service Equipment category.



The DLLR certificates for the boilers and water heaters were current and on display at all three facilities. Water heaters are listed in the PM schedules for all three facilities.

Weaknesses

No playground or bleacher inspection reports were provided in the required pre-assessment documentation for the applicable facilities. Potential safety issues were observed with these assets at two facilities. Playgrounds and bleachers were not identified in the PM schedule for any of the assessed facilities.

At all three facilities, the PM schedule was missing a significant number of essential assets, such as electrical equipment, roofs, fire and safety systems, and backflow preventers.

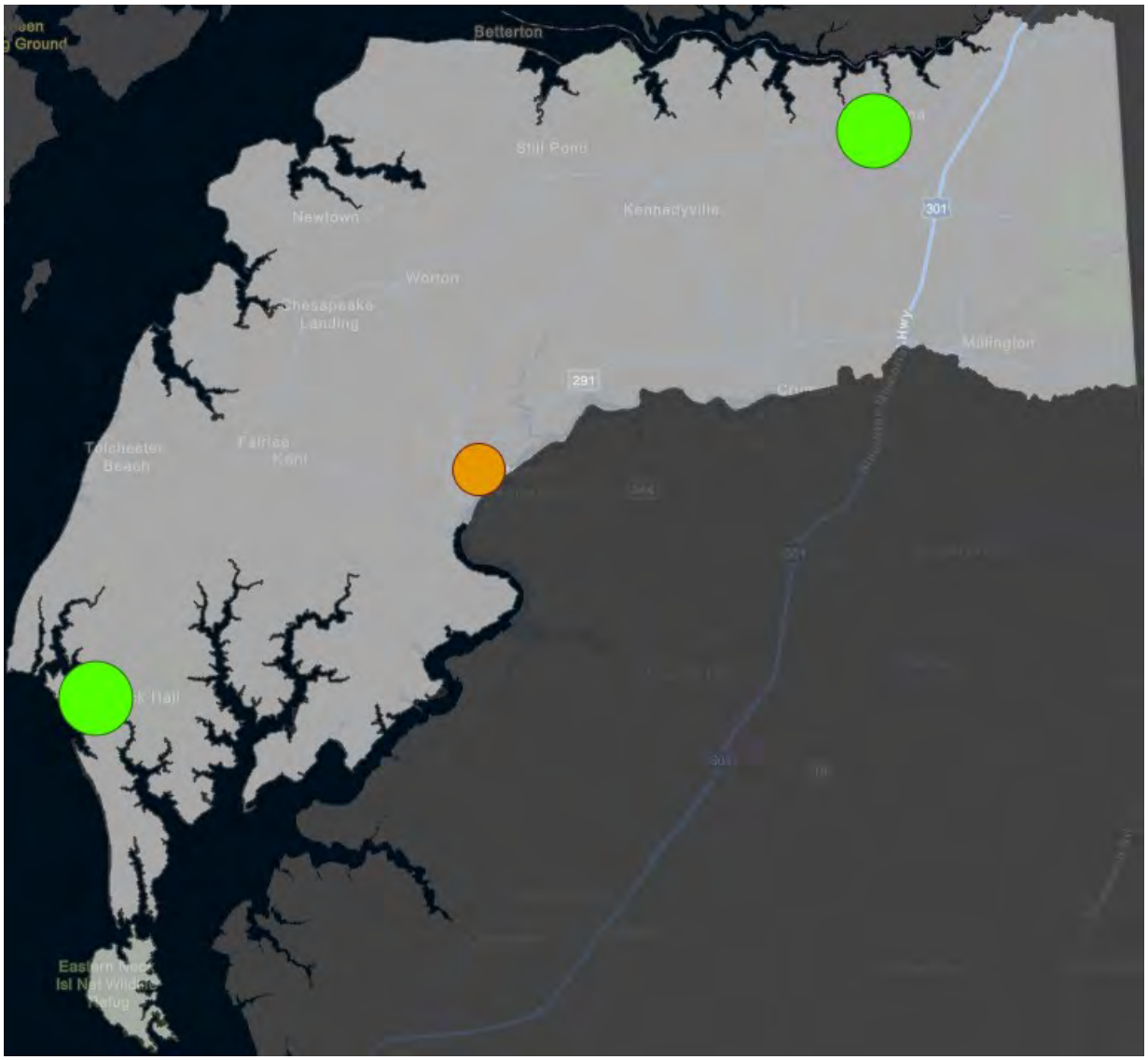
Pest management PM activities were not tracked using the CMMS for any of the assessed facilities. Sticky pest traps did not appear to be dated at any of the facilities to track pest activity and all three facilities were observed with pests in traps.

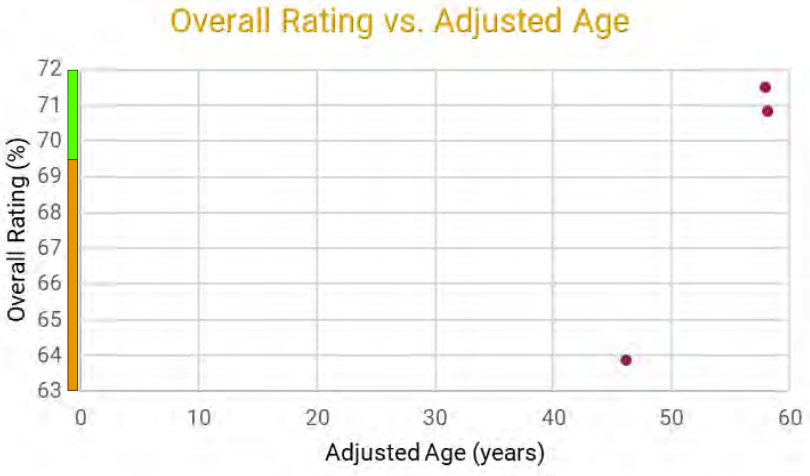
Fire and safety systems were not identified in the PM schedule for any of the assessed facilities. Two facilities were observed with a non-functioning emergency light.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	1
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	2
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	1
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
	Total	**0**	**7**

Overall Rating vs Adjusted Building Age





- Backflow preventer inspections are a requirement in most jurisdictions and should be scheduled and completed at the appropriate frequency. Inspections should be tracked and documented using the CMMS, and the inspection documentation should be available on site.

- All fire and safety systems and components should have PM activities scheduled at the appropriate frequencies and tracked using the CMMS. Depending on what is installed at each facility, the PM schedule may include PM activities for fire extinguishers, battery-operated emergency lights and exit features, fire doors, kitchen hood suppression, smoke evacuation dampers, and stairwell pressurization fans.

- Regularly scheduled playground inspections should be created and tracked using the CMMS. Additional training on playground maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

MONTGOMERY COUNTY

Total School Facilities Assessed in FY 2023: 22


Potomac Elementary

Fiscal Year 2023: Key Facts

210 facilities

Montgomery County has 210 active school facilities.

No change since FY 2022.

25.9 years old

The average adjusted age of all 210 school facilities is 25.9 years old.

+ 0.8 years since FY 2022.

> 25.1 M GSF

Montgomery County maintains 25,147,251 SF throughout its 210 school facilities. It has the greatest amount of SF of LEAs in MD.

No change since FY 2022.

~ $11.5 B

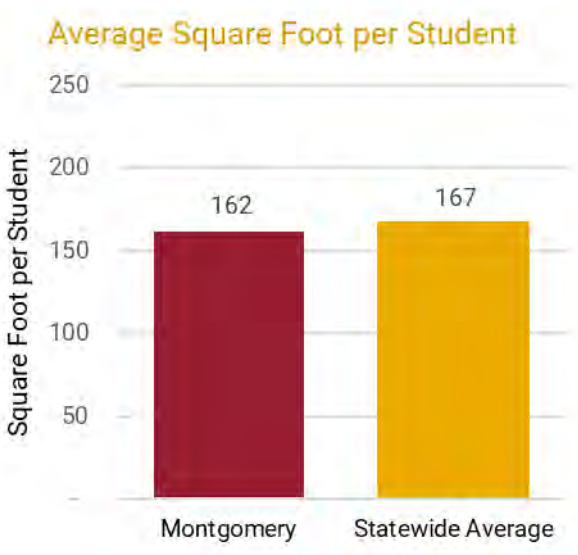
The current replacement value for Montgomery County's GSF, at the IAC's current replacement cost/SF, is approximately $11.5 B.

72.42% (Adequate) = Average Overall Rating for FY 2023

- 1.24% since FY 22

FY 2023 Overall Rating Results by School Type

	Alternate	Special Education	Elementary	Middle	High	
Superior						
Good						
Adequate	1	1	12	4	3	21
Not Adequate			1			1
Poor						
Totals	1	1	13	4	3	**22**

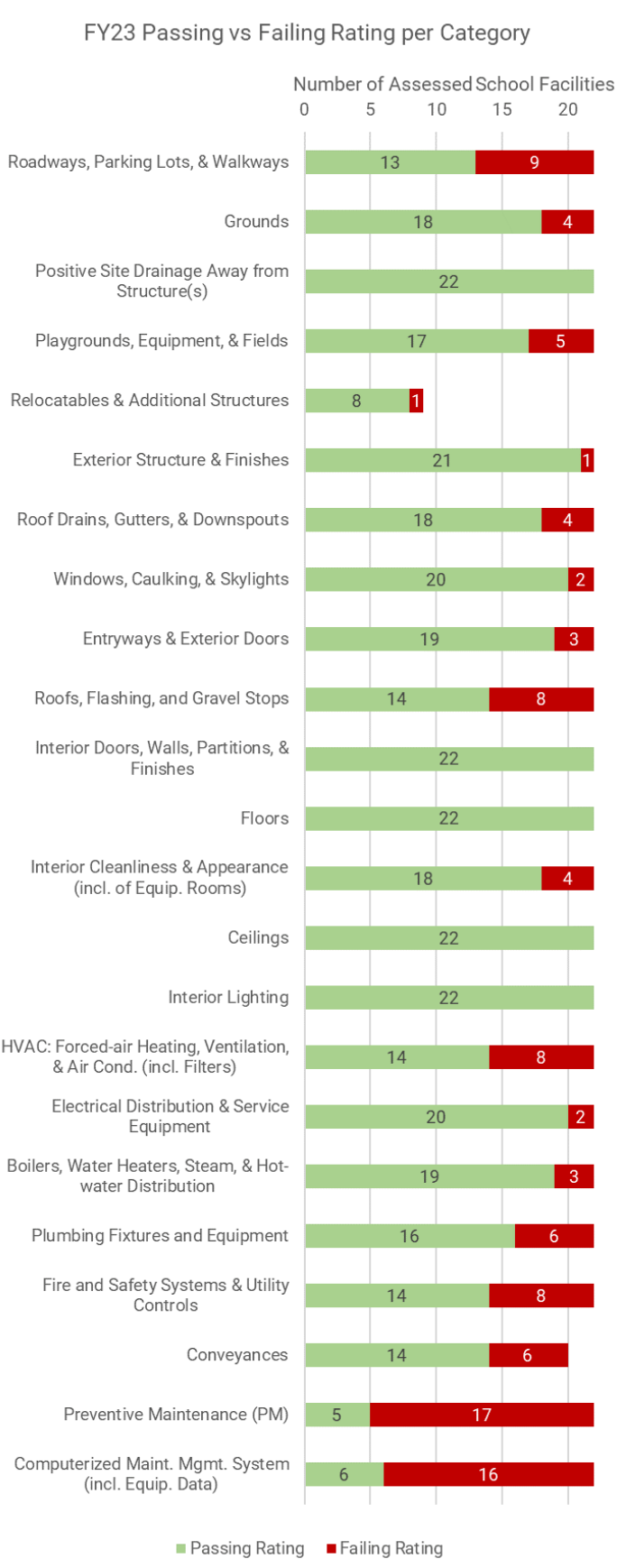


MONTGOMERY COUNTY

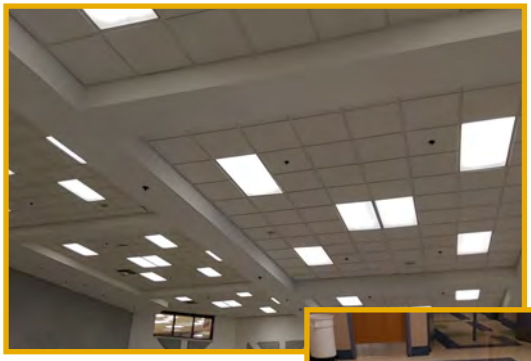
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Glen Haven Elementary (15.010)	Elementary	85,845	19	Adequate	0	2	16	4	0	0	1
2. Arcola Elementary (15.049)	Elementary	95,421	14	Adequate	1	2	17	3	0	0	0
3. Churchill (Winston) High (15.053)	High	322,078	23	Adequate	0	1	18	4	0	0	0
4. Potomac Elementary (15.110)	Elementary	86,550	2	Adequate	0	0	19	3	0	0	0
5. West (Julius) Middle (15.127)	Middle	182,617	25	Adequate	0	1	17	4	0	0	0
6. Woodfield Elementary (15.143)	Elementary	53,212	38	Adequate	0	1	15	5	0	0	1
7. Oak View Elementary (15.149)	Elementary	57,560	33	Adequate	0	0	15	8	0	0	0
8. Rockwell (Lois P.) Elementary (15.173)	Elementary	75,520	29	Adequate	1	0	13	8	0	0	1
9. Summit Hall Elementary (15.174)	Elementary	68,059	43	Adequate	0	1	17	3	0	0	0
10. Forest Oak Middle (15.191)	Middle	132,259	23	Adequate	0	4	17	1	0	0	1
11. Cashell Elementary (15.193)	Elementary	71,171	14	Adequate	0	2	18	3	0	0	1
12. Kingsview Middle (15.200)	Middle	140,398	25	Adequate	0	0	18	4	0	0	0
13. Bannockburn Elementary (15.204)	Elementary	54,234	35	Not Adequate	0	0	12	11	0	0	3
14. Bel Pre Elementary (15.206)	Elementary	102,198	8	Adequate	0	1	18	3	0	0	0
15. Tilden Middle (15.210)	Alternate	244,561	3	Adequate	0	0	19	3	0	0	0
16. Cedar Grove Elementary (15.214)	Elementary	57,037	35	Adequate	0	0	15	8	0	0	1
17. Luxmanor Elementary (15.220)	Elementary	99,376	4	Adequate	1	2	17	2	0	0	0
18. Sandburg (Carl) Learning Center (15.222)	Special Ed.	31,252	59	Adequate	1	2	15	4	0	0	1
19. Blake (James Hubert) High (15.226)	High	297,125	24	Adequate	0	0	18	5	0	0	1
20. Argyle Middle (15.231)	Middle	120,205	52	Adequate	1	2	14	6	0	0	0
21. Northwest High (15.239)	High	342,101	22	Adequate	0	0	19	4	0	0	2
22. Rock View Elementary (15.244)	Elementary	91,977	21	Adequate	1	2	17	2	0	0	0
Totals					6	23	364	98	0	0	13
Percentage of Total Ratings for System					1%	5%	74%	20%	0%		

FY 2023 Results: Assessment Findings by Category

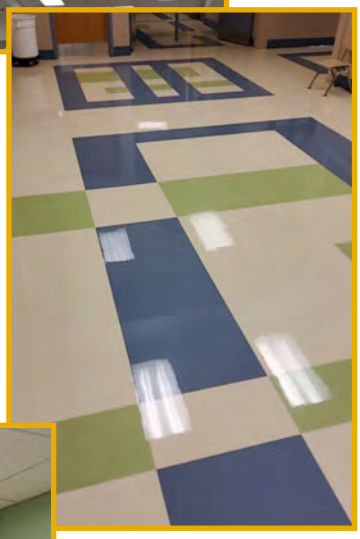


Strengths



The Preventive Maintenance Tasks document identifies weekly checks of the lights and lenses. Eight facilities had no operational issues with their interior lighting.

All 22 assessed facilities received an Adequate rating in the Floors category. No issues or concerns with the floors were identified at five facilities.



Weekly door inspections for operational and hardware issues are listed in the Preventive Maintenance Tasks document. No operational issues were identified with the interior doors at eight facilities, and the fire doors appeared operational at 16 facilities.

The Preventive Maintenance Tasks document identifies daily ceiling inspections for missing and stained tiles. Seven facilities had no stained ceiling tiles identified.

Weaknesses

Besides quarterly filter changes, most HVAC equipment was not identified in the PM schedules for the assessed facilities. Dirty HVAC equipment coils were observed at 10 facilities. Eight facilities received a Not Adequate rating in the HVAC category.

The Preventive Maintenance Tasks document identified monthly condition inspections of the sidewalks, steps, and parking lots, but were not tracked using the CMMS and did not appear in the PM work order history for any of the assessed facilities. Uneven walkway surfaces were noted as potential trip hazards at 11 facilities. The walkways at 18 facilities were observed cracked, damaged, and/or deteriorated.

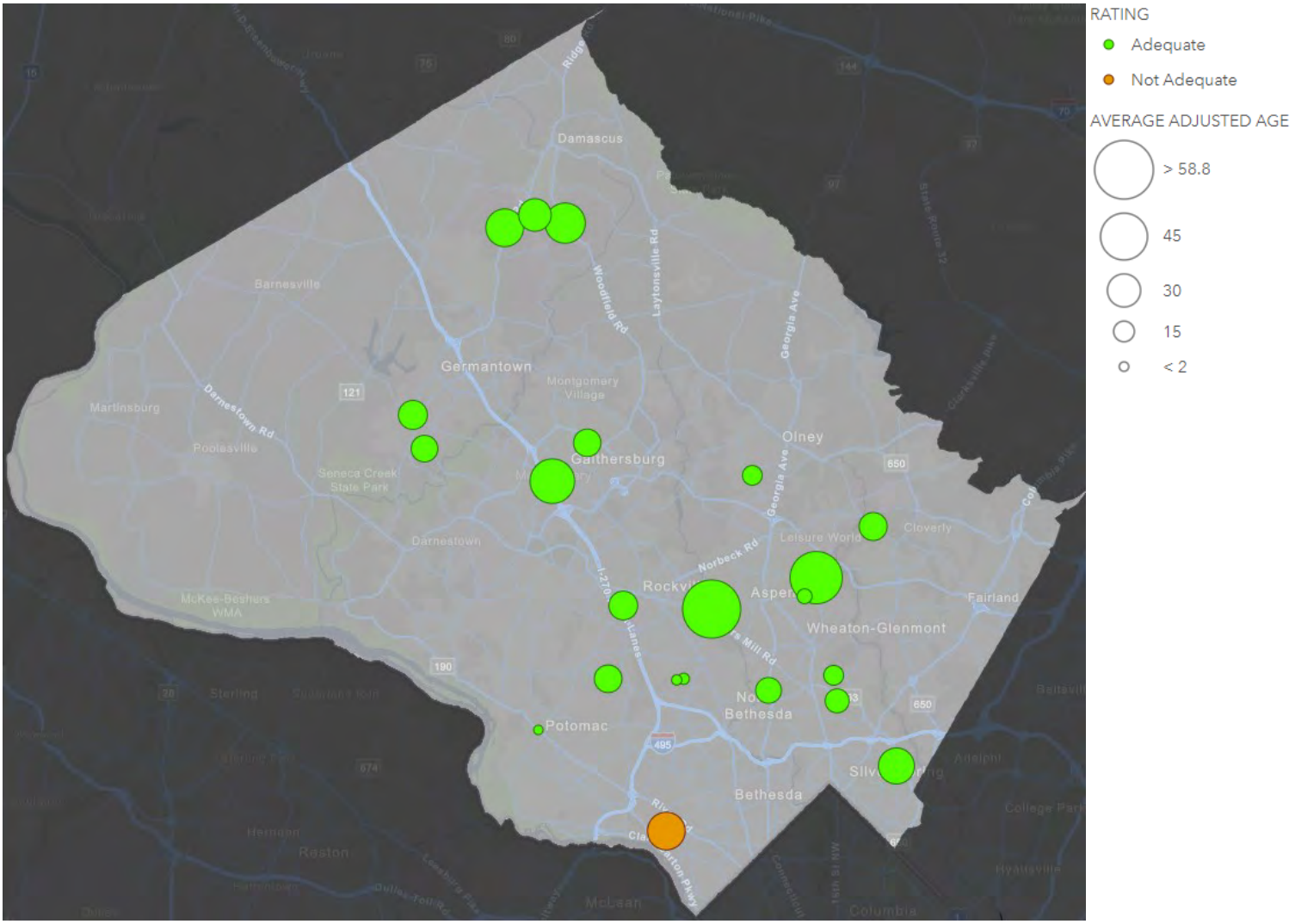
Besides annual backflow preventer inspections, no other plumbing fixtures or equipment were identified in the PM schedules for the assessed facilities or tracked using the CMMS. Leaking plumbing fixtures or equipment were observed at 13 facilities. Five facilities were noted with inoperable sinks, toilets, and/or urinals.

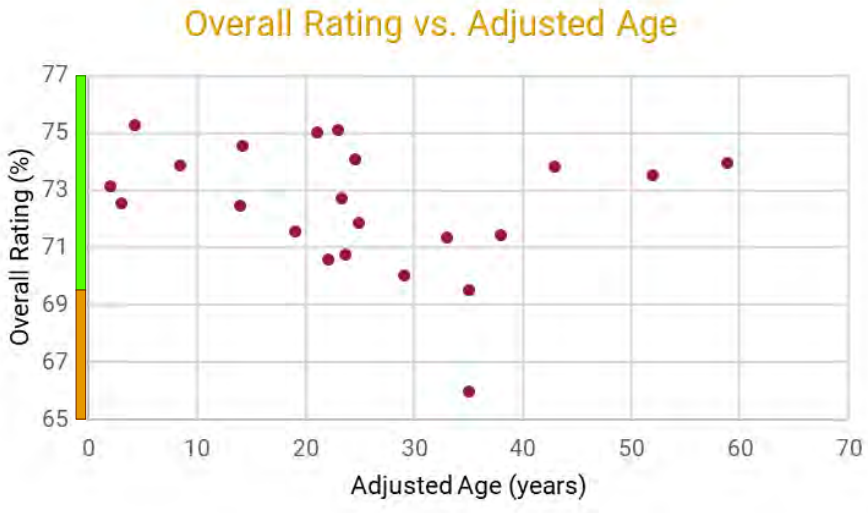
Eight facilities received a Not Adequate rating in the Roofs, Flashing, and Gravel Stops category. Roofing sealants or coatings were noted as cracked and/or deteriorated at 18 facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	6
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	2
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	1
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	2
	Total	**0**	**13**

Overall Rating vs Adjusted Building Age





- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

- PM activities for roofs, HVAC equipment, and plumbing fixtures and equipment should be added to each facility's PM schedule to help extend the useful life of the existing surfaces and assets, prevent hazardous conditions, and avoid premature capital replacement projects.

- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.

PRINCE GEORGE'S COUNTY


Forestville High

Total School Facilities Assessed in FY 2023: 21

Fiscal Year 2023: Key Facts

198 facilities

Prince George's County has 198 active school facilities.

+ 1 facility since FY 2022.

39.7 years old

The average adjusted age of all 198 school facilities is 39.7 years old.

+ 0.7 years since FY 2022.

~ 18.7 M GSF

Prince George's County maintains 18,712,667 SF throughout its 198 school facilities. It has the 2nd greatest amount of SF of LEAs in MD.

+ 60,568 SF since FY 2022.

> $8.5 B

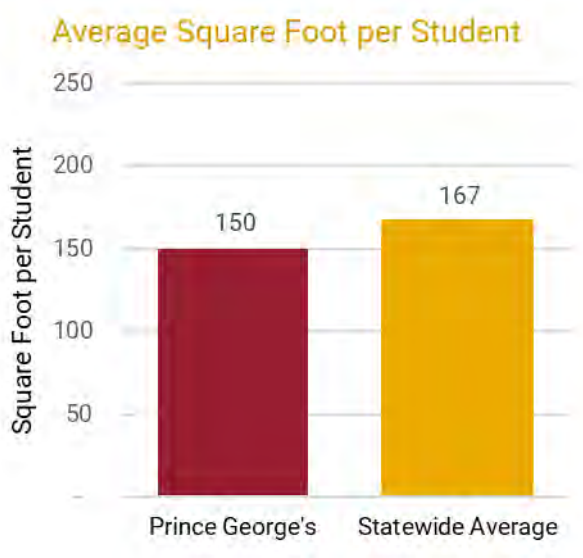
The current replacement value for Prince George's County's GSF, at the IAC's current replacement cost/SF, is greater than $8.5 B.

63.70% (Not Adequate) = Average Overall Rating for FY 2023

- 2.42% since FY 22

FY 2023 Overall Rating Results by School Type

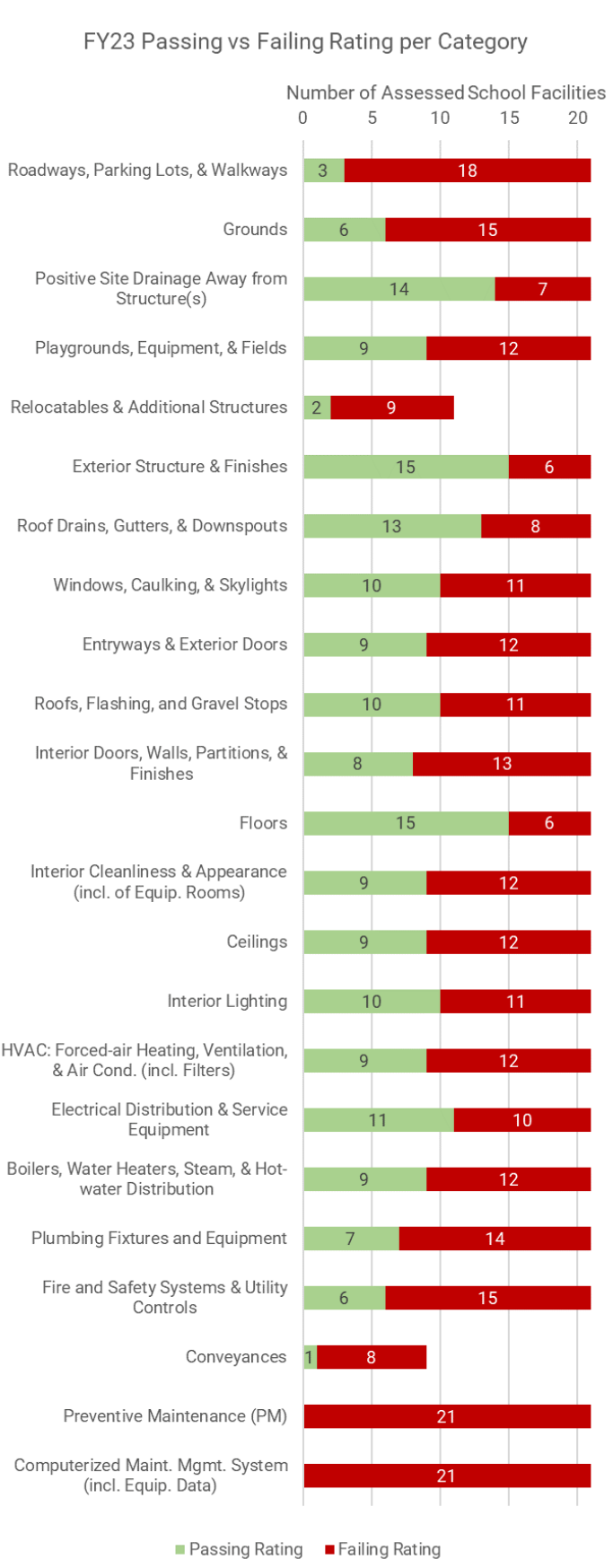
	Environmental Education	Elementary	Elementary/ Middle	Middle	High	
Superior						
Good						
Adequate	1	1				2
Not Adequate		9	1	4	1	15
Poor		3			1	4
Totals	1	13	1	4	2	**21**



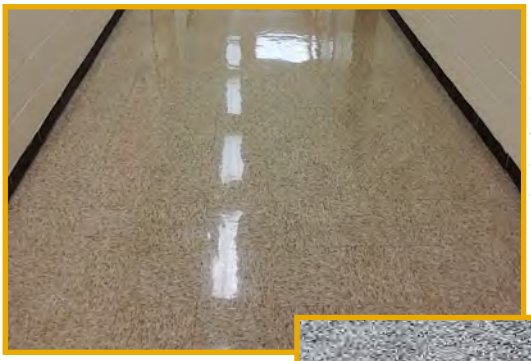
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Roosevelt (Eleanor) High (16.002)	High	327,458	47	Not Adequate	0	1	11	11	0	0	7
2. Paint Branch Elementary (16.018)	Elementary	59,021	51	Poor	0	0	8	12	2	0	9
3. Bradbury Heights Elementary (16.025)	Elementary	79,457	32	Not Adequate	0	1	16	5	0	0	4
4. Kettering Middle (16.043)	Middle	120,800	44	Not Adequate	0	0	4	17	0	0	6
5. Lewisdale Elementary (16.049)	Elementary	54,103	42	Poor	0	0	6	14	2	0	13
6. District Heights Elementary (16.076)	Elementary	54,415	42	Not Adequate	0	0	16	5	0	0	6
7. Potomac Landing Elementary (16.086)	Elementary	60,596	35	Adequate	0	0	17	5	0	0	3
8. Forestville High (16.104)	High	193,222	28	Poor	0	0	3	16	3	0	7
9. Madison (James) Middle (16.114)	Middle	129,348	50	Not Adequate	0	0	10	13	0	0	8
10. Cooper Lane Elementary (16.131)	Elementary	47,370	56	Not Adequate	0	1	11	10	0	0	5
11. Heather Hills Elementary (16.132)	Elementary	36,825	53	Not Adequate	0	0	17	5	0	0	3
12. Columbia Park Elementary (16.147)	Elementary	57,372	61	Not Adequate	0	1	13	7	0	0	4
13. Cherokee Lane Elementary (Former) (16.158)	Elementary	140,030	19	Not Adequate	1	0	11	10	0	0	5
14. Kennedy (Dora) French Immersion (16.184)	Elementary/ Middle	141,125	66	Not Adequate	0	0	8	13	0	0	5
15. Tasker (Benjamin) Middle (16.185)	Middle	161,678	52	Not Adequate	0	0	8	14	0	0	9
16. Schmidt (William S.) Outdoor Education Center (16.199)	Environmental Ed.	37,790	52	Adequate	0	1	14	7	0	0	0
17. Fort Washington Forest Elementary (16.210)	Elementary	45,648	59	Poor	0	0	4	16	1	0	9
18. King, Jr. (Martin Luther) Middle (16.213)	Middle	127,516	45	Not Adequate	0	0	14	8	1	0	7
19. Robert R. Gray Elementary (16.222)	Elementary	74,520	22	Not Adequate	0	1	12	9	0	0	7
20. Rosaryville Elementary (16.227)	Elementary	76,200	21	Not Adequate	0	0	12	10	0	0	6
21. Mary Harris Mother Jones Elementary (16.231)	Elementary	76,842	20	Not Adequate	0	0	10	13	0	0	7
Totals					1	6	225	220	9	0	130
Percentage of Total Ratings for System					0%	1%	49%	48%	2%		

FY 2023 Results: Assessment Findings by Category



Strengths



19 facilities received an Adequate rating in the Floors category. No issues or concerns were noted with the floors at two of those facilities.

Many of the roof drains appeared to be intact and free of debris. Roof drains, gutters, and downspouts were evaluated when applicable during the routine roof inspection at most of the assessed facilities.

No issues or concerns were identified with the electrical distribution or service equipment at three facilities. 11 facilities were noted with completed electrical panel schedules. Of the 12 facilities with generators, nine tracked generator PM activities using their CMMS.

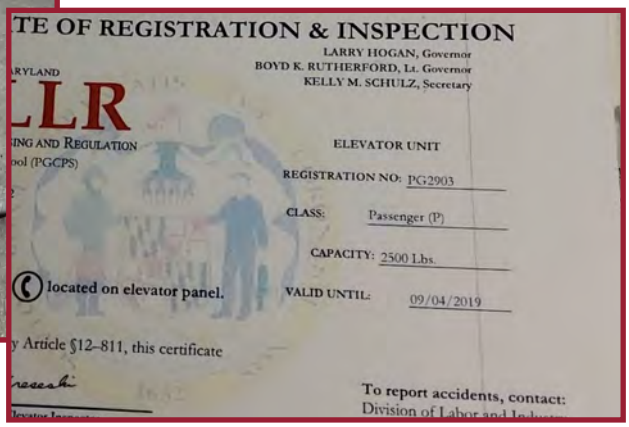
17 facilities received an Adequate rating in the Exterior Structure & Finishes category. No issues or concerns were observed with the exterior building lights at 10 facilities.

Weaknesses

13 facilities received a Not Adequate rating in the Fire and Safety Systems & Utility Controls category. The fire alarm and/or sprinkler system PM work orders were not identified in the CMMS history at nine facilities. Issues were noted concerning emergency lights and/or exit signs at 11 facilities.

No custodial scope of work, integrated pest management plan, or PM schedule were provided in the required pre-assessment documentation for any facility. The required inspection reports for fire alarms, sprinkler systems, playgrounds, and bleachers were also not provided for many of the assessed facilities. Some essential assets were not identified in the PM work order histories for many of the assessed facilities, such as backflow preventers, HVAC equipment, fire and safety systems, and DLLR-regulated equipment.

Roadways, parking lots, and walkways were not identified in the PM schedules for the assessed facilities. Trip hazards due to uneven walkway surfaces were identified at 10 facilities. Every assessed facility was observed with cracking walkways and/or parking lots. Potholes were noted in the roadways at three facilities.

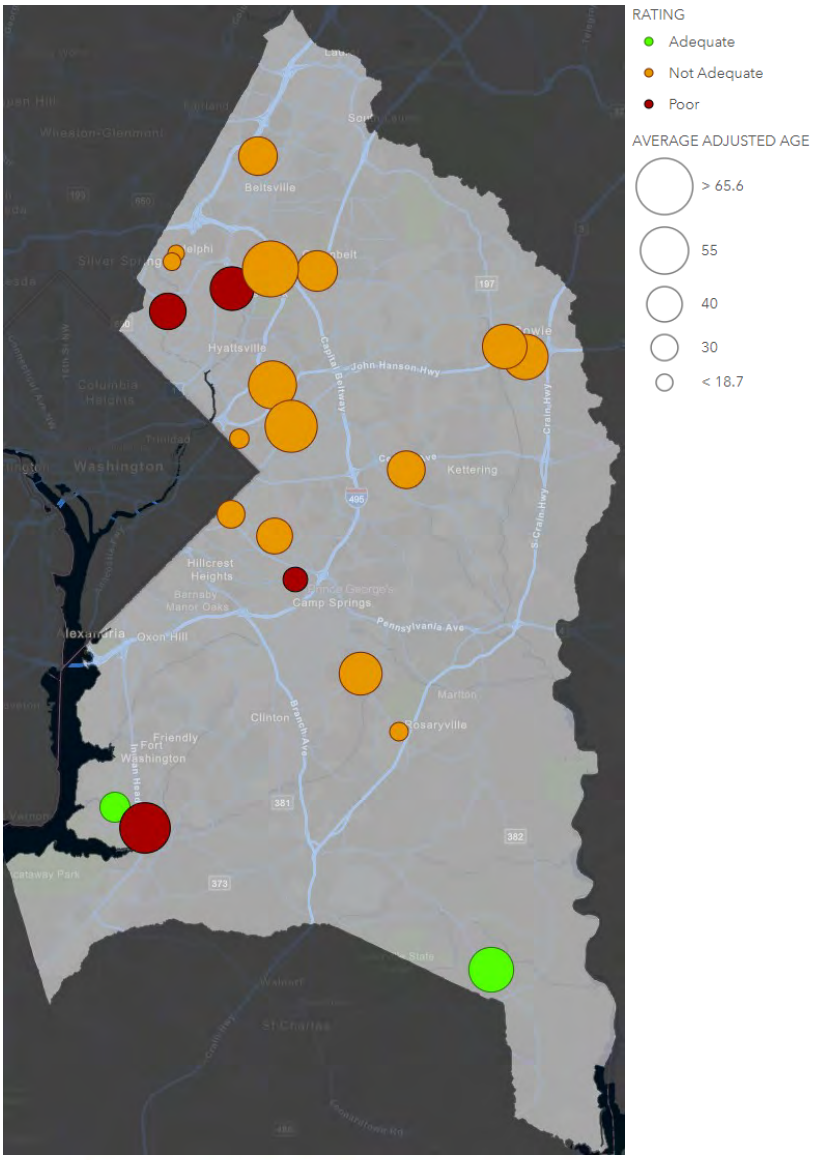


Of the nine facilities with conveyances, eight had one or more expired DLLR certificates, one of which expired in 2019. Conveyances were not identified in the PM work order histories for the applicable facilities.

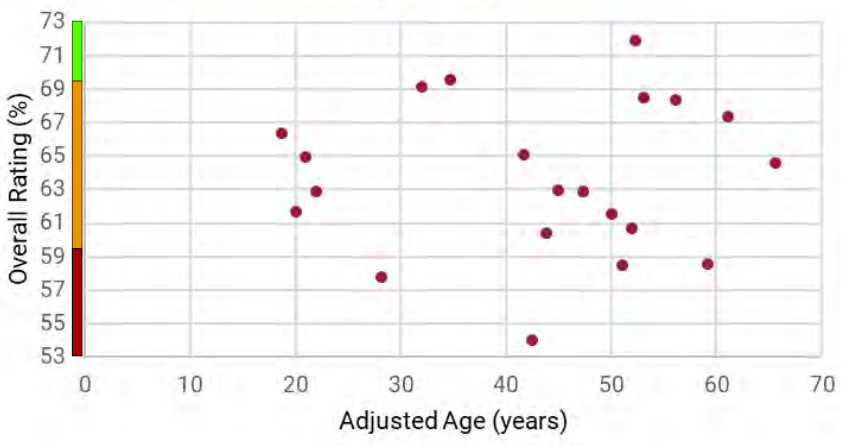
FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	10
	Grounds	0	9
	Positive Site Drainage Away from Structure(s)	0	2
	Playgrounds, Equipment, & Fields	0	10
	Relocatables & Additional Structures	0	7
Building Exterior	Exterior Structure & Finishes	0	4
	Roof Drains, Gutters, & Downspouts	0	2
	Windows, Caulking, & Skylights	0	3
	Entryways & Exterior Doors	0	4
	Roofs, Flashing, and Gravel Stops	0	1
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	6
	Floors	0	5
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	10
	Ceilings	0	5
	Interior Lighting	0	5
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	7
	Electrical Distribution & Service Equipment	0	6
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	10
	Plumbing Fixtures and Equipment	0	7
	Fire and Safety Systems & Utility Controls	0	10
	Conveyances	0	7
	Total	**0**	**130**

Overall Rating vs Adjusted Building Age



Overall Rating vs. Adjusted Age



- Create an asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced. Safety issues should be reported and addressed immediately.

- Create and implement an integrated pest management (IPM) plan. Pest management PM activities should have auto-populating PM work orders created in the CMMS and scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion. The custodial duties outlined in the IPM plan should also be reflected in the custodial scope of work.

- All fire and safety systems and components should have PM activities scheduled at the appropriate frequencies and tracked using the CMMS. Depending on what is installed at each facility, the PM schedule may include PM activities for fire extinguishers, battery-operated emergency lights and exit features, fire doors, kitchen hood suppression, smoke evacuation dampers, and stairwell pressurization fans.

- DLLR-regulated equipment inspections are a requirement and need to be scheduled and completed at the appropriate frequency. Inspections should be tracked and documented using the CMMS, and the inspection documentation should be available on site.

QUEEN ANNE'S COUNTY

Total School Facilities Assessed in FY 2023: 3


New Sudlersville Middle

Fiscal Year 2023: Key Facts

14 facilities

Queen Anne's County has 14 active school facilities.

No change since FY 2022.

22.0 years old

The average adjusted age of all 14 school facilities is 22.0 years old.

+ 1 year since FY 2022.

~ 1.3 M GSF

Queen Anne's County maintains 1,302,658 SF throughout its 14 school facilities. It has the 18th greatest amount of SF of LEAs in MD.

No change since FY 2022.

< $0.6 B

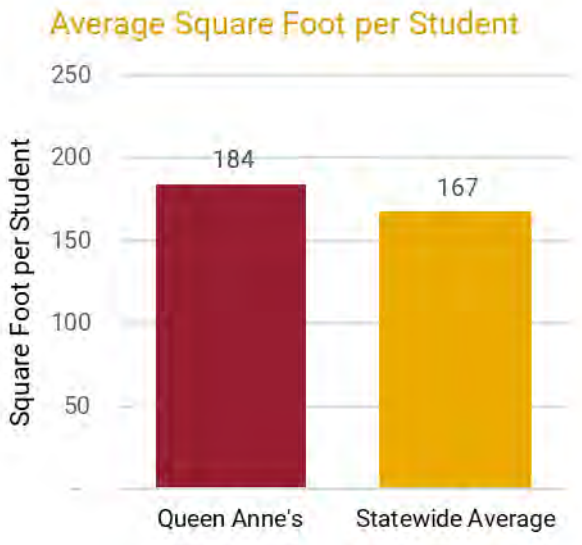
The current replacement value for Queen Anne's County's GSF, at the IAC's current replacement cost/SF, is nearly $0.6 B.

70.49% (Adequate) = Average Overall Rating for FY 2023

+ 3.21% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	1	2		3
Not Adequate				
Poor				
Totals	1	2		**3**



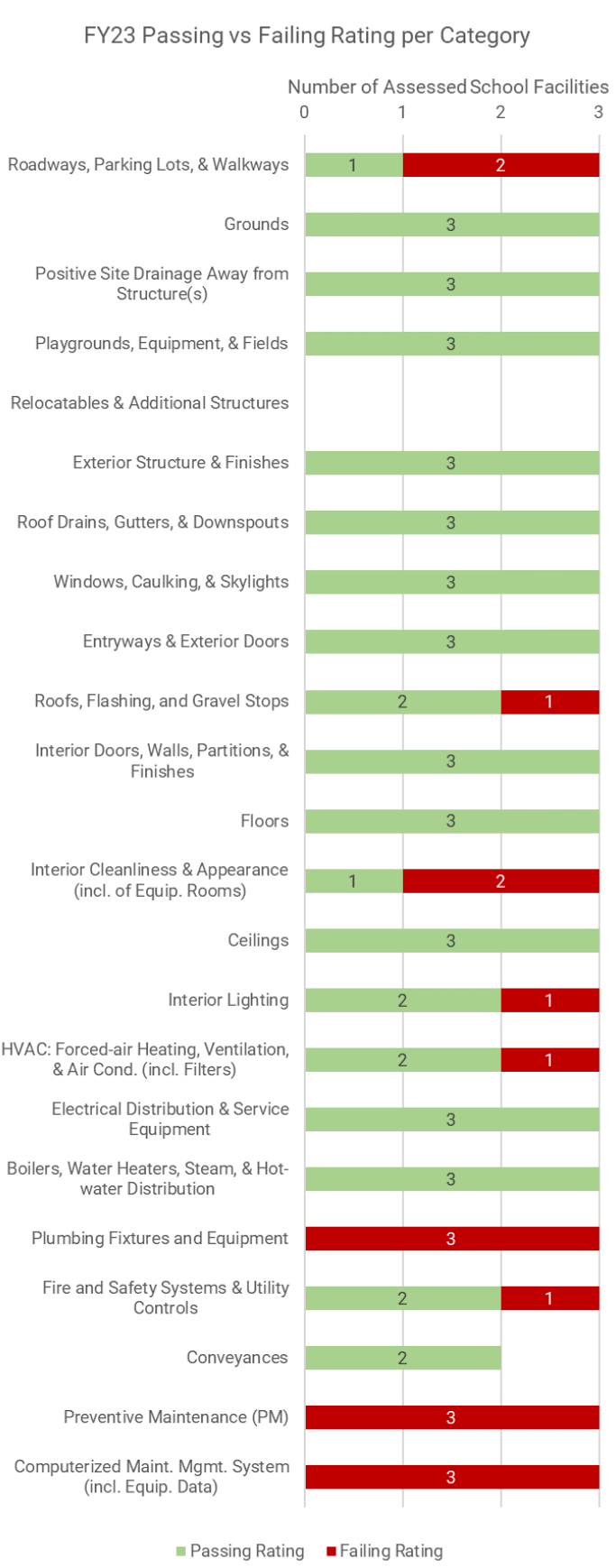
QUEEN ANNE'S COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Kennard Elementary (17.012)	Elementary	64,010	20	Adequate	0	0	16	5	0	0	1
2. Matapeake Middle School (17.025)	Middle	110,427	16	Adequate	0	0	15	7	0	0	1
3. New Sudlersville Middle (17.026)	Middle	100,884	11	Adequate	0	0	18	4	0	0	1
Totals					0	0	49	16	0	0	3
Percentage of Total Ratings for System					0%	0%	75%	25%	0%		

QUEEN ANNE'S COUNTY

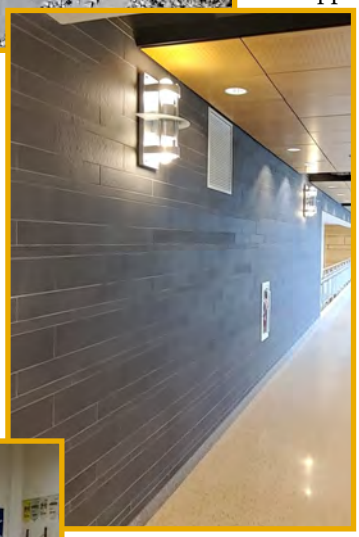
FY 2023 Results: Assessment Findings by Category

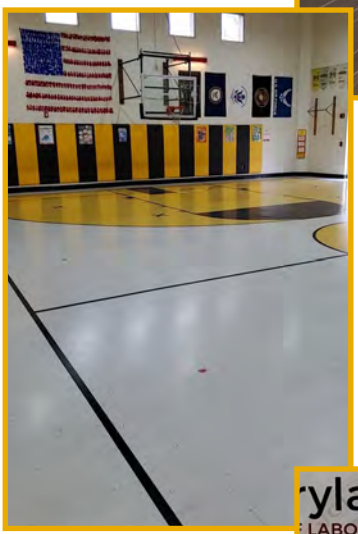


Strengths

The roof drains appeared to be maintained well and are evaluated annually during the routine roof inspection along with gutters, overflow drains, scuppers, and downspouts, when applicable.

The fire doors appeared to function as designed at the assessed facilities. The interior walls and finishes were free of cracks and damage at two facilities, and the restroom partitions appeared well maintained at two facilities.



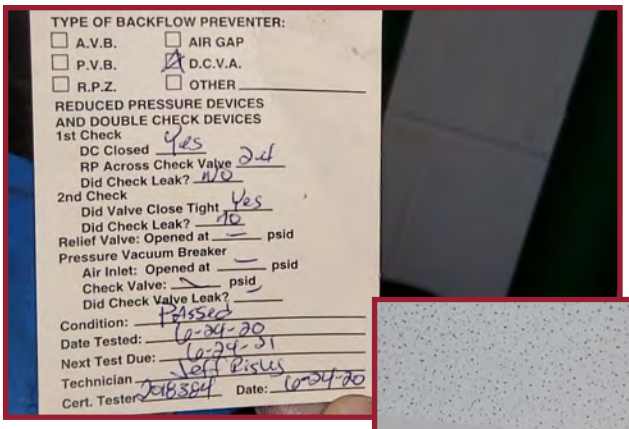


The play structures and gymnasium equipment appeared well maintained at all three facilities. The bleacher inspection reports were provided in the required pre-assessment documentation for the applicable facilities, and no deficiencies were noted on the reports.

All three facilities received an Adequate rating for the Boilers, Water Heaters, Steam, & Hot-water Distribution category. The DLLR certificates were current and on display for all applicable boilers and water heaters.

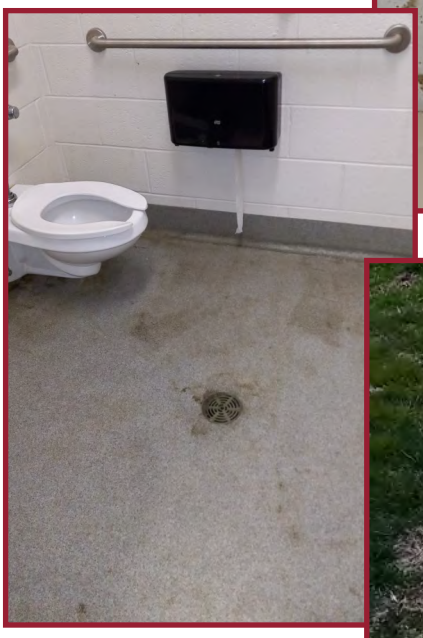
Weaknesses

The backflow preventers in two facilities had either missing and/or expired inspection tags to verify that they were in proper working order, and a backflow preventer at the third facility appeared to be leaking. Other than PM work orders for water fountains, no other PM work orders were identified for plumbing fixtures or related equipment.



No site-specific PM plan was provided for any of the assessed facilities, and it did not appear that most PM activities were tracked using the CMMS, such as fire and safety systems, HVAC equipment, bleachers, playgrounds, ceilings, windows, roofs, and some DLLR-regulated equipment. Multiple stained ceiling tiles were observed at all three assessed facilities.

Improper storage practices were noted at all three assessed facilities. At two facilities, storage was observed blocking egress or access to equipment. Cleaning activities appeared to be inconsistent at all three facilities. Custodial activities did not appear to be tracked using the CMMS at any of the assessed facilities.

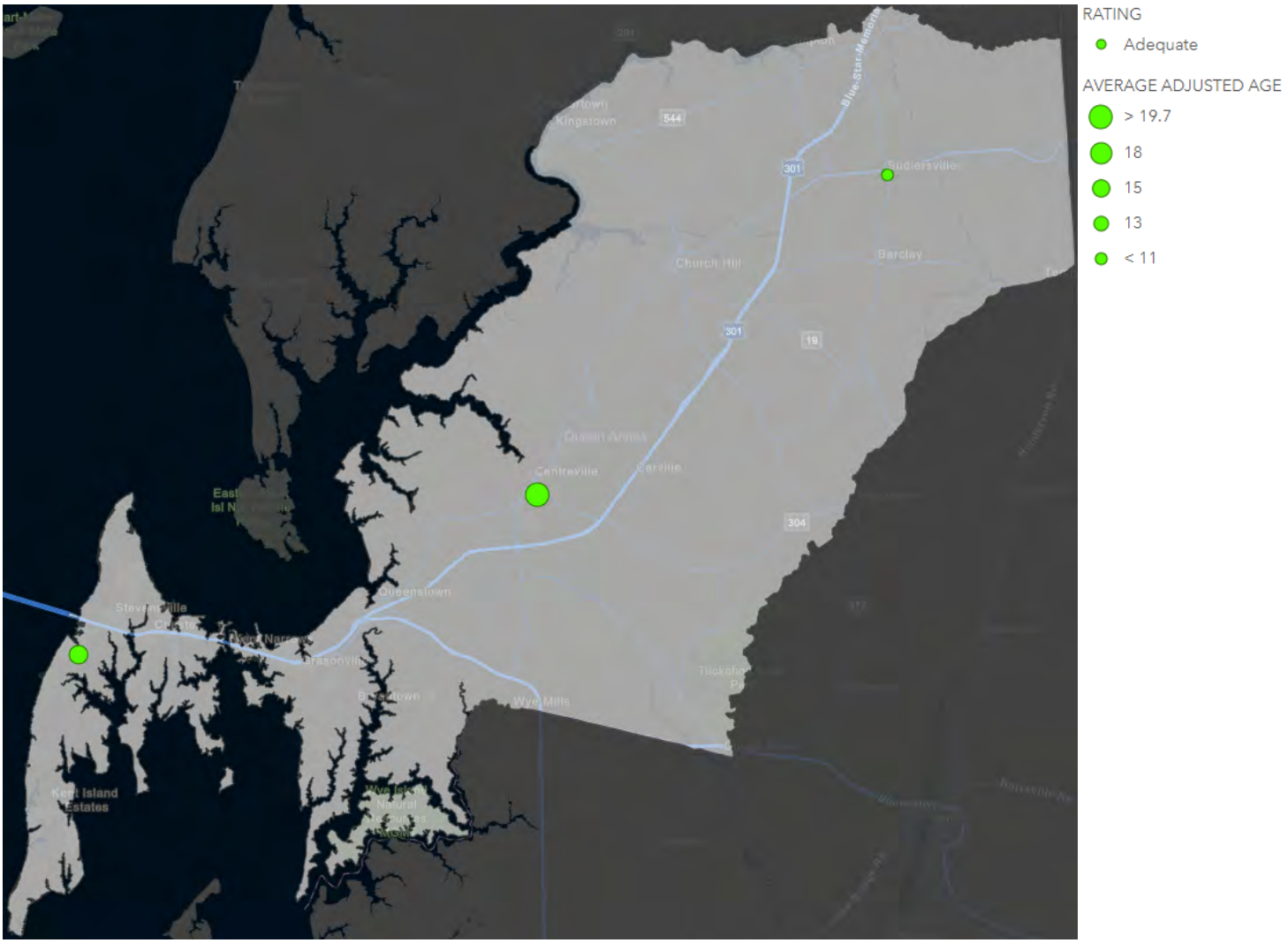


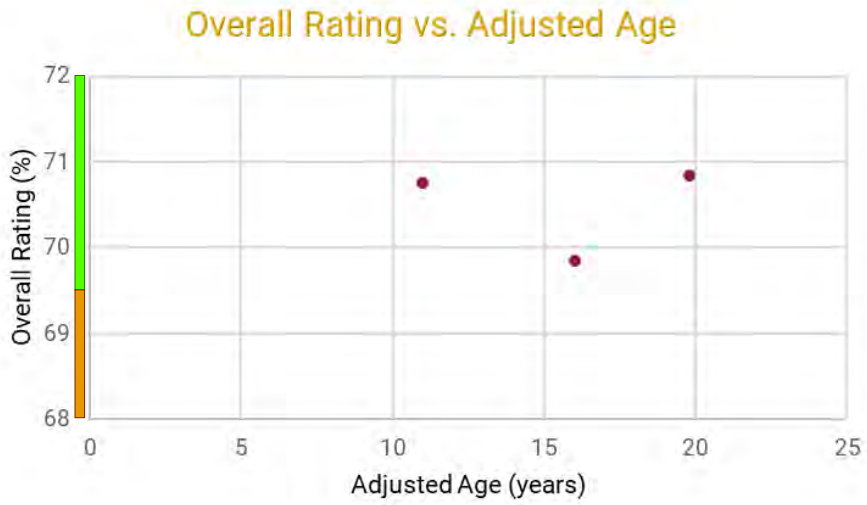
Cracked and/or deteriorated walkway surfaces were noted at all three facilities. One or more potholes were observed in the roadways at two facilities. Roadways, parking lots, and walkways were not identified in the PM schedules for the assessed facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	1
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	1
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
	Total	**0**	**3**

Overall Rating vs Adjusted Building Age





- Create an asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- All essential assets should have auto-populating PM work orders created in the CMMS. These work orders should be scheduled to ensure the activities occur at industry-standard frequencies and within a reasonable timeframe of the expected completion.

- Fields should be set up to track the actions taken to complete the work order, work order purpose (such as preventive or reactive), labor hours, and costs to assist in establishing predictable cost trends and support more efficient resource management.

- Training for custodial staff should be enhanced or refreshed with an emphasis on safety requirements, including clearances around equipment and blockage of egress points. The CMMS could be used to track some or all custodial responsibilities in order to establish and ensure accountability.

- Backflow preventer inspections are a requirement in most jurisdictions and should be scheduled and completed at the appropriate frequency. Inspections should be tracked and documented using the CMMS, and the inspection documentation should be available on site.

- PM activities for roofs, HVAC equipment, fire and safety systems, and plumbing fixtures and equipment should be added to each facility's PM schedule to help extend the useful life of the existing surfaces and assets, prevent hazardous conditions, and avoid premature capital replacement projects.

- Regularly scheduled ceiling inspections should be created and tracked using the CMMS to identify any ceiling tiles missing, stained, or damaged. Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted. Stained ceiling tiles should be replaced once the cause is identified and repaired.

- Roadways and parking lots should be added to the PM schedule. Consider applying sealants to asphalt parking lots and roadways to slow deterioration until such assets can be resurfaced.

ST. MARY'S COUNTY

Total School Facilities Assessed in FY 2023: 4

Leonardtown Elementary

Fiscal Year 2023: Key Facts

27 facilities

St. Mary's County has 27 active school facilities.

No change since FY 2022.

26.6 years old

The average adjusted age of all 27 school facilities is 26.6 years old.

+ 1 year since FY 2022.

~ 2.3 M GSF

St. Mary's County maintains 2,300,101 SF throughout its 27 school facilities. It has the 13th greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $1.0 B

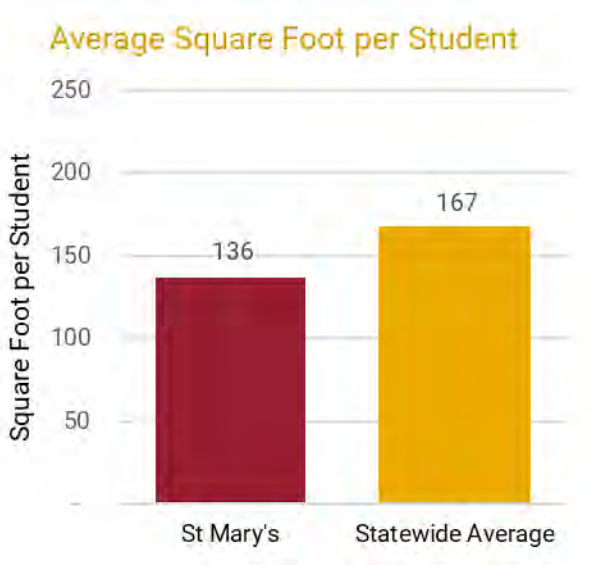
The current replacement value for St. Mary's County's GSF, at the IAC's current replacement cost/SF, is greater than $1.0 B.

63.91% (Not Adequate) = Average Overall Rating for FY 2023

- 10.03% since FY 22

FY 2023 Overall Rating Results by School Type

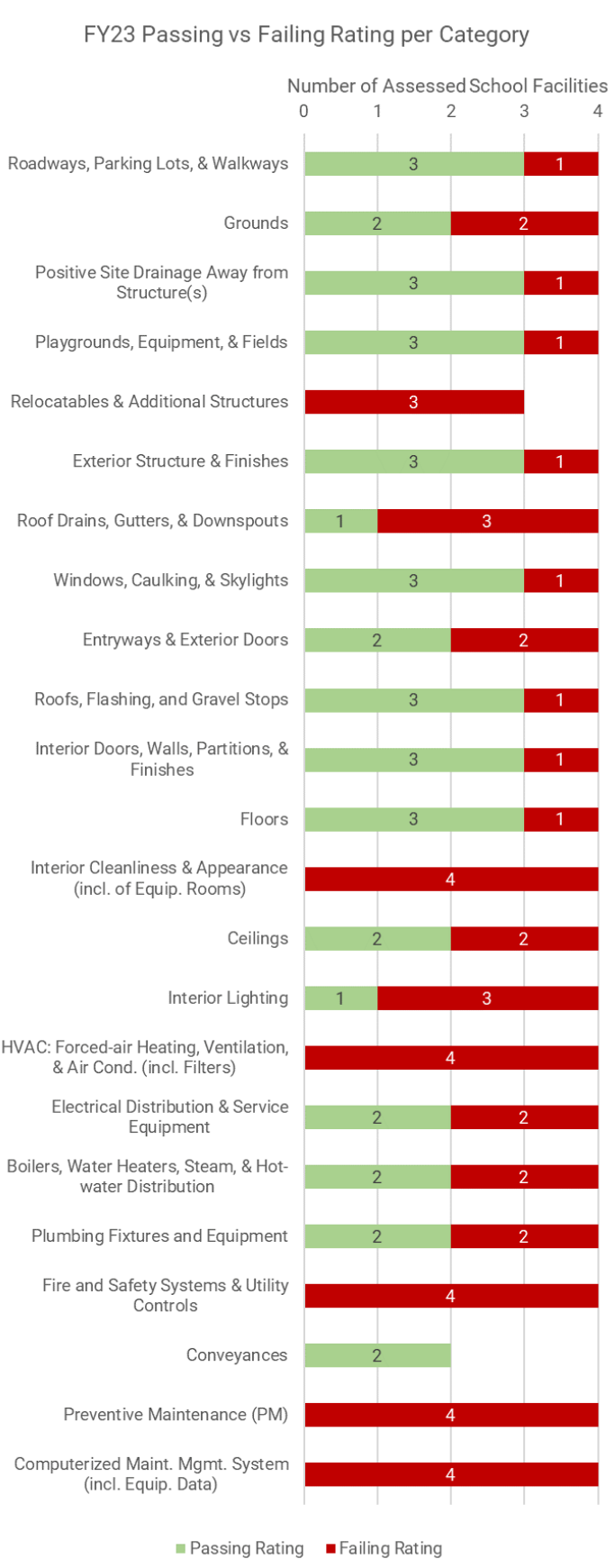
	Elementary	Middle	High	
Superior				
Good				
Adequate				
Not Adequate	3	1		4
Poor				
Totals	3	1		**4**



FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Ridge Elementary (18.006)	Elementary	32,537	46	Not Adequate	0	1	13	8	1	0	7
2. Leonardtown Elementary (18.008)	Elementary	67,847	14	Not Adequate	1	1	10	10	0	0	6
3. Margaret Brent Middle (18.009)	Middle	131,354	17	Not Adequate	0	0	15	7	0	0	7
4. Piney Point Elementary (18.027)	Elementary	57,794	25	Not Adequate	0	0	12	10	0	0	6
Totals					1	2	50	35	1	0	26
Percentage of Total Ratings for System					1%	2%	56%	39%	1%		

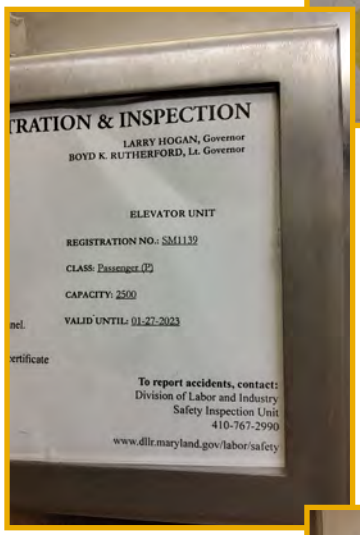
FY 2023 Results: Assessment Findings by Category



Strengths

All windows appeared to operate as expected. Annual window glazing inspections were identified in the PM schedule at three facilities.

Dust mopping floors and vacuuming carpets are identified as daily tasks in the Operations Department - Standards document, which also details general procedures for floor care. No major issues that would require extensive repairs were identified.



The DLLR certificates were current for all applicable boilers, water heaters, and conveyances. When applicable, the facility PM schedule identified routine PM for boilers and water heaters.

Semi-annual restroom partition inspections and annual cabinet inspections were included in the PM schedule at every facility assessed. No issues were noted concerning the cabinets or restroom partitions.

Weaknesses

Three facilities were noted with dirty coils in HVAC units. Drive belts were observed broken, cracked, and/or loose at all four facilities. Two facilities had multiple non-functioning exhaust fans, and one facility was observed with mold-like growth on multiple split system units. All four facilities received a Not Adequate rating for the HVAC category.

Unsafe storage practices were observed at all four facilities assessed blocking access to mechanical equipment. Items were also obstructing a doorway and access to a chairlift at one facility, and obstructing egress in an emergency exit stairwell at another facility.

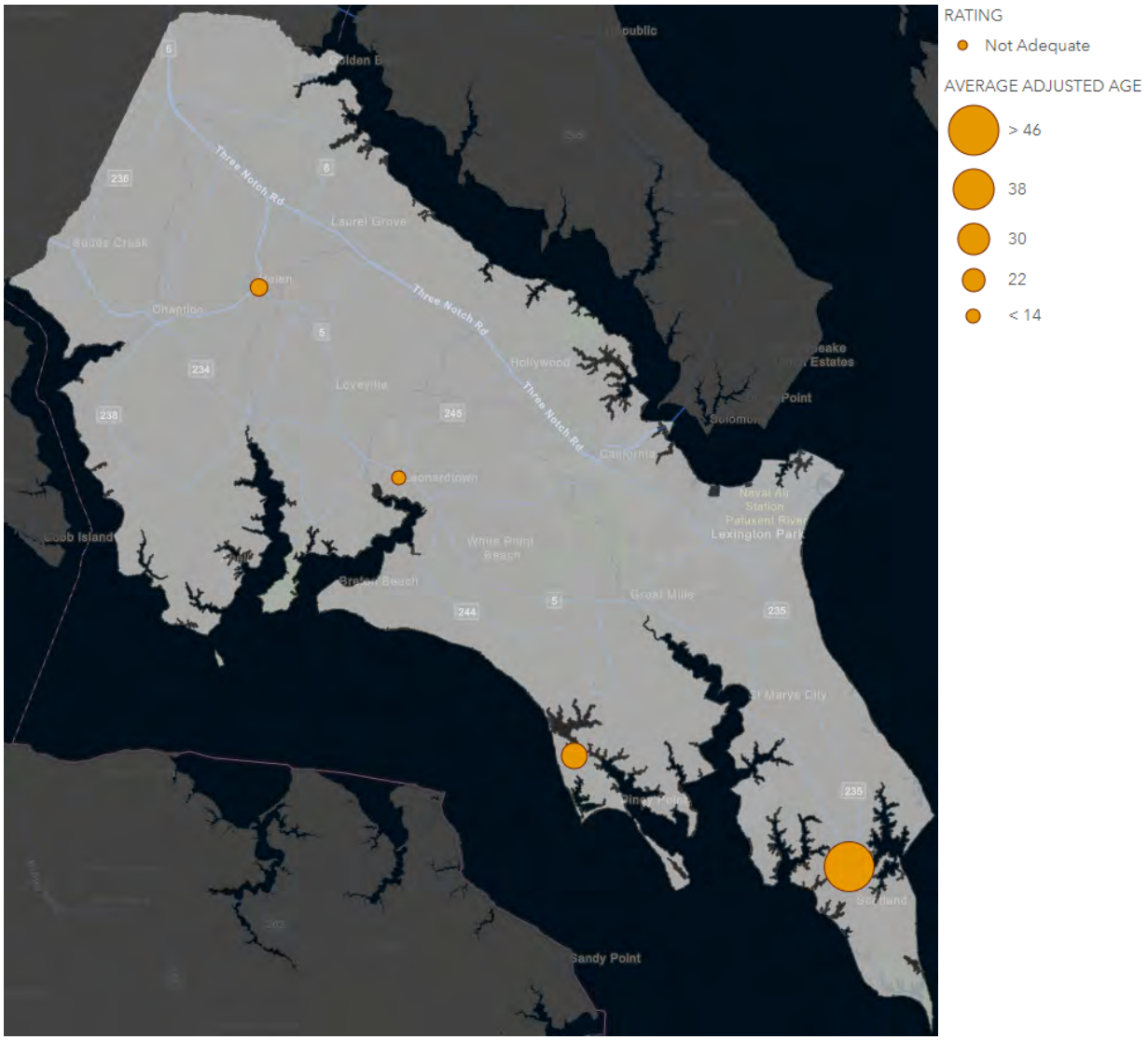
Even though many essential assets were included in the PM schedule for each facility, many work orders, both PM and reactive, were taking more than 30 days to complete. At least 93 or more work orders were aged over 30 days at each facility. Between 17 and 56 PM work orders were aged over 30 days at each facility, equating to 50%-100% of each facility's open PM work orders.

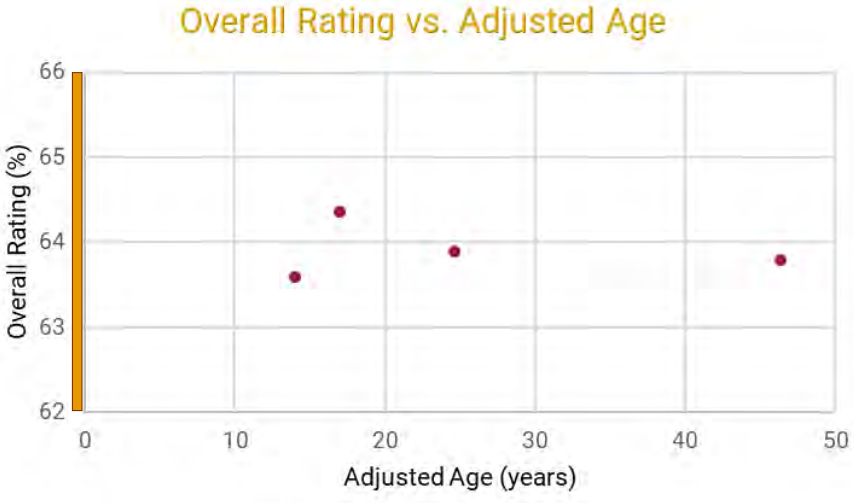
Annual emergency lighting inspections were identified in the PM schedules for the assessed facilities but were not being completed in a timely manner at every facility. One or more non-functioning emergency lights were identified at three facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	1
	Grounds	0	2
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	3
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	1
	Windows, Caulking, & Skylights	0	1
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	1
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	1
	Ceilings	0	2
	Interior Lighting	0	3
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	1
	Electrical Distribution & Service Equipment	0	2
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	1
	Plumbing Fixtures and Equipment	0	2
	Fire and Safety Systems & Utility Controls	0	4
	Conveyances	0	0
	Total	**0**	**26**

Overall Rating vs Adjusted Building Age





- Additional PM checks and/or additional oversight are recommended to ensure the HVAC systems receive the necessary amount of PM work at the appropriate frequency to remain functional and efficient.

- Training for custodial staff should be enhanced or refreshed with an emphasis on safety requirements, including clearances around equipment and blockage of egress points. The CMMS could be used to track some or all custodial responsibilities in order to establish and ensure accountability.

- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively and the actions taken to complete the work are recorded accurately.

- A field should be created in the CMMS to track the days each work order has aged to help identify causes of possible bottlenecks and streamline workflow processes. Fields should also be set up to track labor hours and costs to assist in establishing predictable cost trends and support more efficient resource management.

SOMERSET COUNTY

Total School Facilities Assessed in FY 2023: 3

Ewell Elementary School

Fiscal Year 2023: Key Facts

10 facilities

Somerset County has 10 active school facilities.

No change since FY 2022.

22.3 years old

The average adjusted age of all 10 school facilities is 22.3 years old.

+ 1 year since FY 2022.

> 0.6 M GSF

Somerset County maintains 671,356 SF throughout its 10 school facilities. It has the 23rd greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $0.3 B

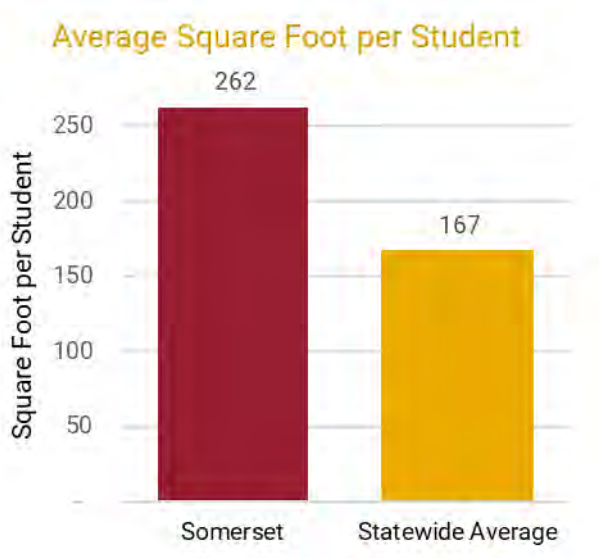
The current replacement value for Somerset County's GSF, at the IAC's current replacement cost/SF, is greater than $0.3 B.

62.87% (Not Adequate) = Average Overall Rating for FY 2023

- 5.27% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Elementary/ Middle	Administrative	
Superior				
Good				
Adequate				
Not Adequate	1		1	2
Poor		1		1
Totals	1	1	1	**3**

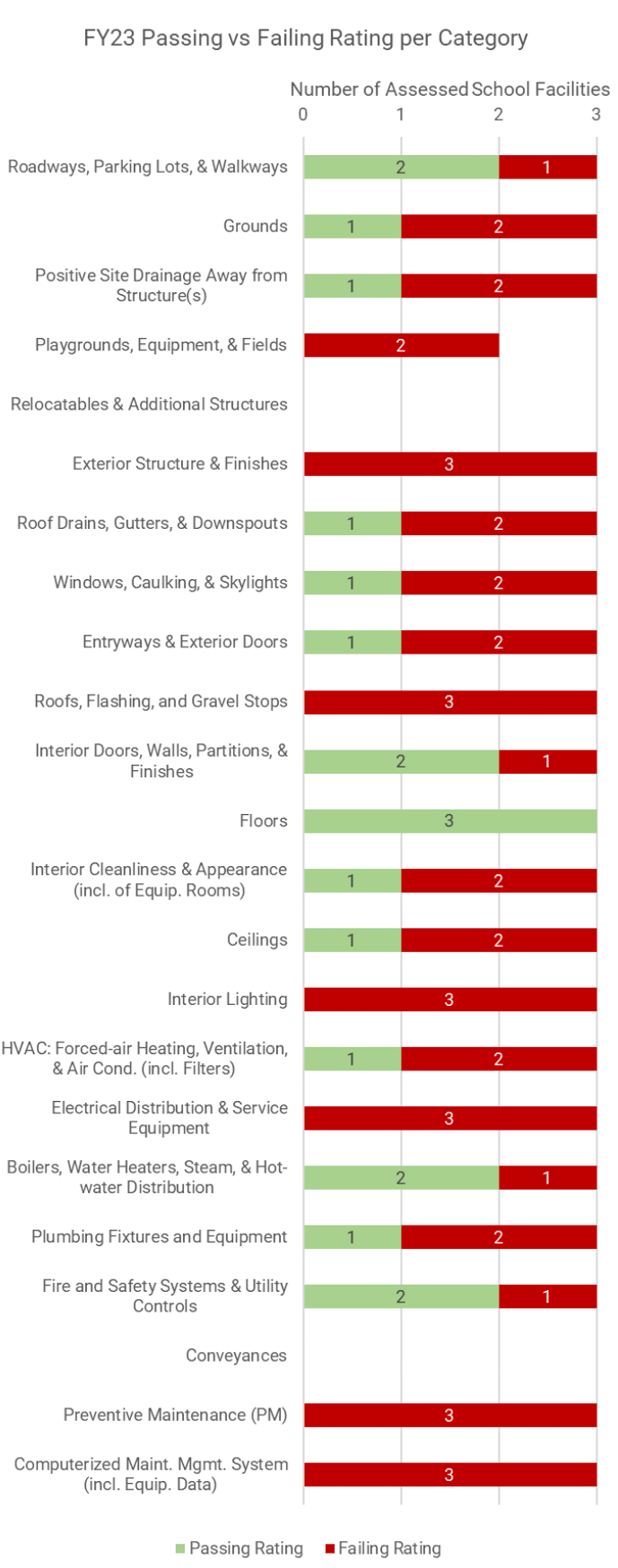


SOMERSET COUNTY

FY 2023 Results: Summary of School Ratings

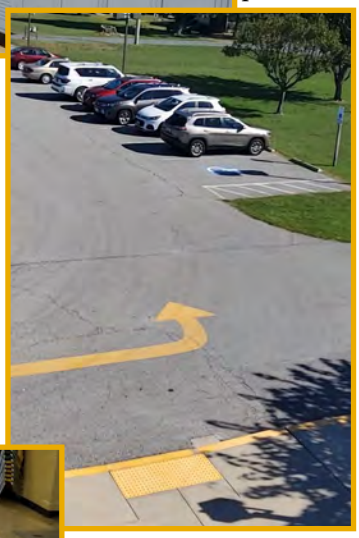
School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Somerset County Board of Education (19.003)	Administrative	49,500	46	Not Adequate	0	0	7	10	3	0	2
2. Deal Island Elementary School (19.007)	Elementary	29,462	46	Not Adequate	0	0	9	12	0	0	3
3. Ewell Elementary School (19.011)	Elementary/ Middle	8,614	52	Poor	0	0	6	10	5	0	8
Totals					0	0	22	32	8	0	13
Percentage of Total Ratings for System					0%	0%	35%	52%	13%		

FY 2023 Results: Assessment Findings by Category

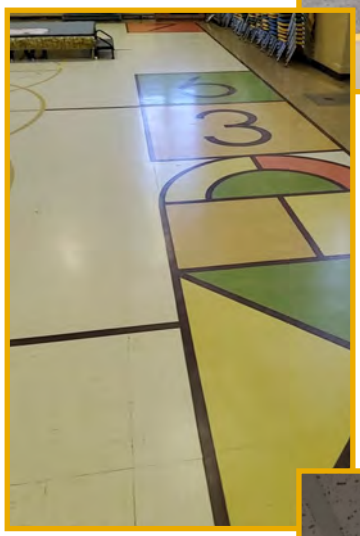


Strengths

Two facilities received an Adequate rating for Interior Doors, Walls, Partitions, & Finishes due to evidence of regular competent custodial and maintenance practices.



The paving schedule for each facility's parking lots and sidewalks was provided in the CMP. Two facilities received an Adequate rating for Roadways, Parking Lots, & Walkways, and showed no significant signs of deterioration in these areas.



A chart detailing the carpet and tile replacement schedule for each facility was included in the CMP. All three facilities appeared to receive regular custodial and maintenance to their flooring assets.

All of the assessed emergency lights operated correctly and no troubles were present in the fire alarm systems. Per the CMP, fire sprinklers, fire alarms, and fire extinguishers receive routine inspections.

Weaknesses

Roof blistering was noted at two facilities and vegetative growth was identified on all three facilities' roofs. No roof inspection reports were provided in the required pre-assessment documentation, and roof inspections were not identified in the PM work order history for any of the assessed facilities.

The two facilities with playgrounds were both observed with damaged equipment. Per the CMP, service maintenance contracts and/or agreements are in place for routine playground inspections. However, no playground inspection reports were provided in the required pre-assessment documentation, and playground inspections were not identified in the PM work order history for either facility.

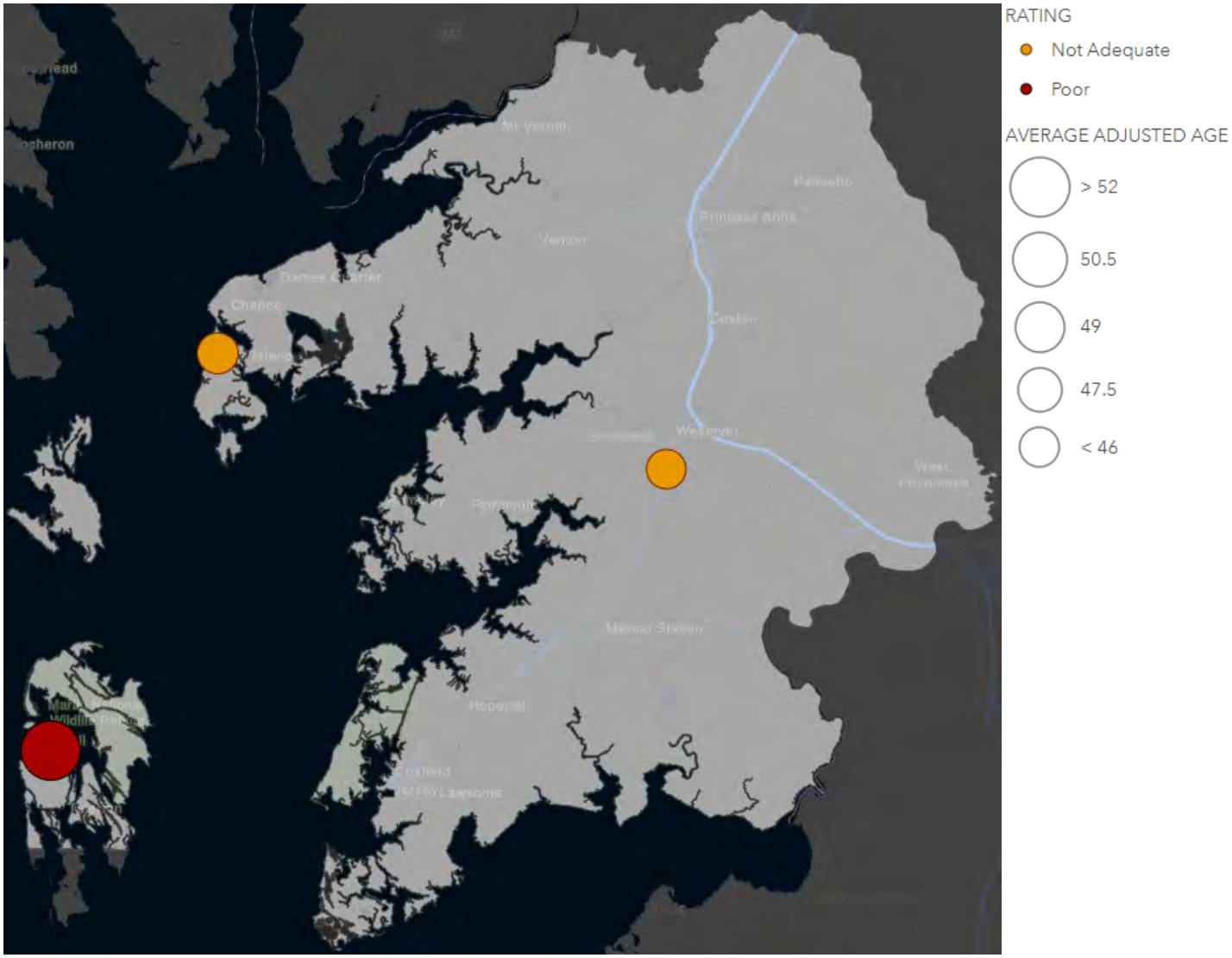
No PM plans or schedules were provided in the required pre-assessment documentation. Based on the CMMS work order history documentation received, it did not appear PM work orders were auto-generated or manually populated on a set schedule.

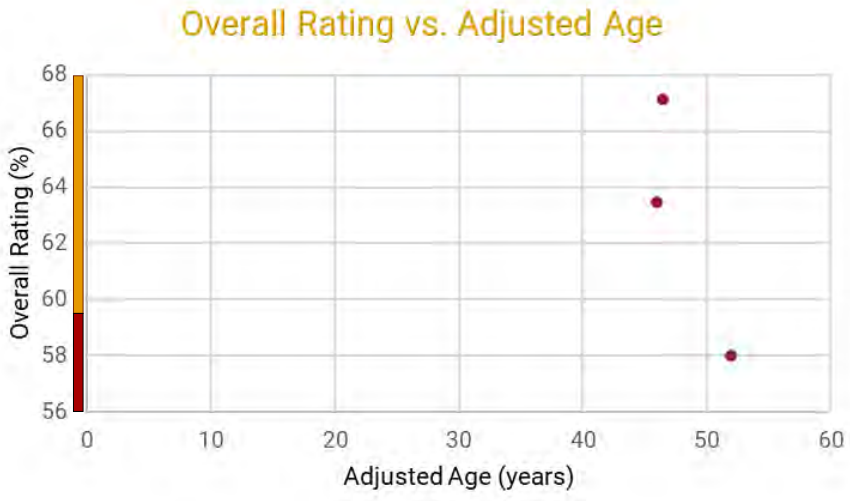
Several non-functioning light fixtures were observed at all three facilities. Interior lighting was not identified in the PM work order history for any of the assessed facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	2
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	1
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	1
	Entryways & Exterior Doors	0	1
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	1
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	1
	Interior Lighting	0	1
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	3
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
	Total	**0**	**13**

Overall Rating vs Adjusted Building Age





- Roof inspections should be completed on an annual basis. These inspections should be scheduled and tracked using the CMMS.

- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

- Auto-populating PM work orders should be created and implemented for interior lighting. PM checks should detail the desired outcome for each check, such as:
    - ◊ ensure all light bulbs and fluorescent and LED tubes are functioning properly
    - ◊ ensure lenses, protective cages, or plastic tube sleeves in place

- Regularly scheduled playground inspections should be created and tracked using the CMMS. Additional training on playground maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place.

- A site-specific PM plan should be created, encompassing all essential and applicable non-essential assets, and PM work orders scheduled to auto-populate to address all maintainable features of equipment and systems at industry-standard frequencies.

TALBOT COUNTY

Total School Facilities Assessed in FY 2023: 3

Tilghman Elementary

Fiscal Year 2023: Key Facts

8 facilities

Talbot County has 8 active school facilities.

No change since FY 2022.

18.1 years old

The average adjusted age of all 8 school facilities is 18.1 years old.

+ 1 year since FY 2022.

~ 0.7 M GSF

Talbot County maintains 700,971 SF throughout its 8 school facilities. It has the 22nd greatest amount of SF of LEAs in MD.

No change since FY 2022.

> $0.3 B

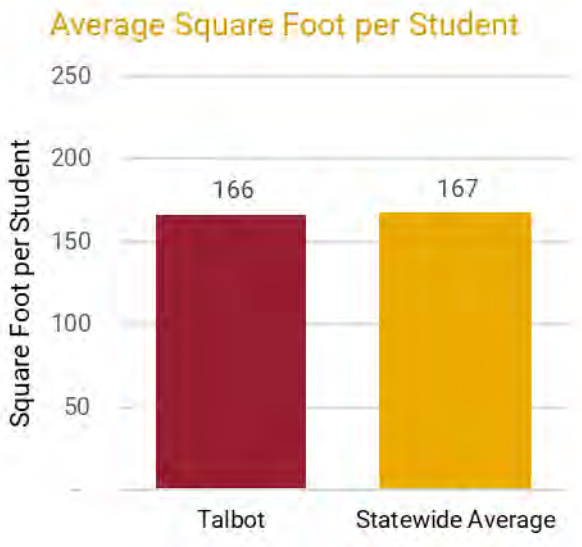
The current replacement value for Talbot County's GSF, at the IAC's current replacement cost/SF, is greater than $0.3 B.

71.96% (Adequate) = Average Overall Rating for FY 2023

+ 1.13% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	2		1	3
Not Adequate				
Poor				
Totals	2		1	**3**

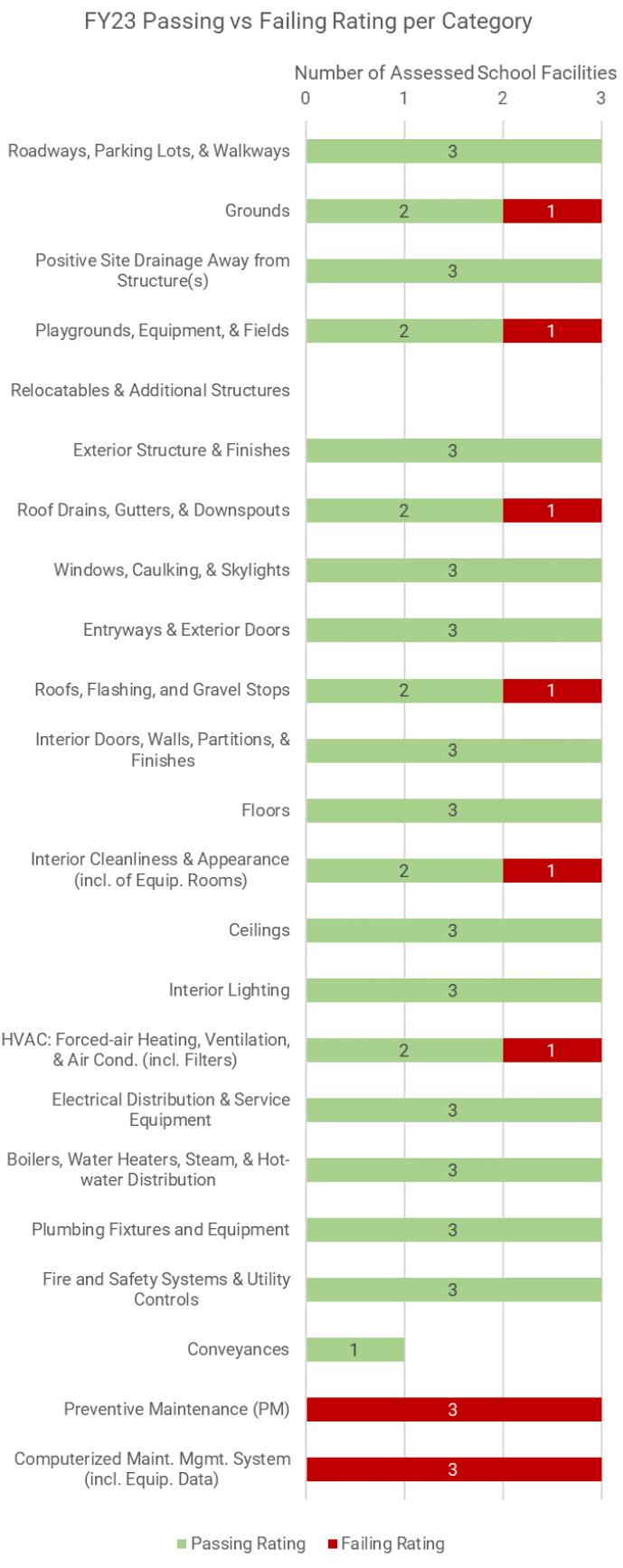


TALBOT COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. St. Michaels Elementary (20.001)	Elementary	80,581	14	Adequate	0	0	14	7	0	0	0
2. Easton High (20.002)	High	186,829	25	Adequate	0	0	20	2	0	0	0
3. Tilghman Elementary (20.009)	Elementary	28,684	20	Adequate	0	0	18	3	0	0	0
Totals					0	0	52	12	0	0	0
Percentage of Total Ratings for System					0%	0%	81%	19%	0%		

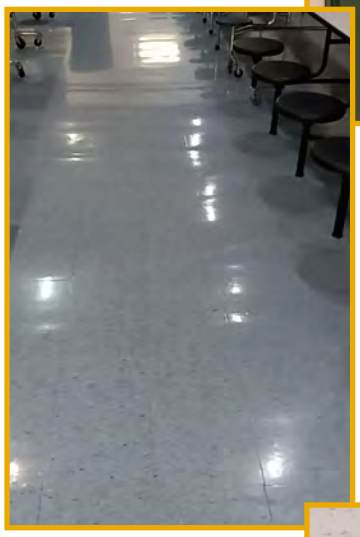
FY 2023 Results: Assessment Findings by Category



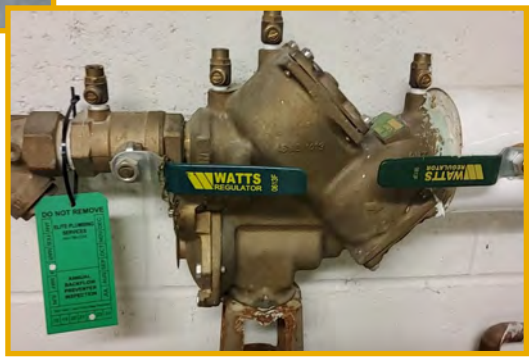
Strengths

No significant issues were noted with the exterior structures or finishes. The brick exteriors appeared structurally sound with little to no signs of deterioration.

Only minor issues were noted with the windows or skylights, and most appeared to be weatherproof and watertight.



The Custodial Standard Task List identifies various floor cleaning activities. No issues were observed with the floors at one facility, and most of the floors at another facility appeared well maintained. All three facilities received an Adequate rating in the Floors category.



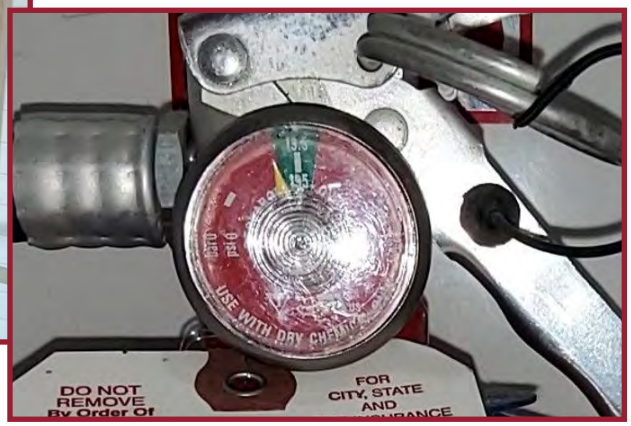
No plumbing fixtures were leaking at two facilities. The backflow preventer inspection tags were current at all three facilities.

Weaknesses

Roadways, parking lots, and walkways were not identified in the PM schedules for the assessed facilities. Cracked and deteriorated concrete walkways were observed at two facilities; both also had vegetation growing from cracks in the walkways and/or roadways.

Damaged gymnasium or play area equipment were observed at two facilities. The bleachers were not identified in the PM schedules for the two applicable facilities. Two facilities had playground equipment; playground inspections were identified in the PM schedule for only one of those facilities, and the associated PM work order was open and aged over 120 days.

Improper storage practices were observed at all three facilities. At one facility, storage was obstructing egress. One facility received a Not Adequate rating in the Interior Cleanliness & Appearance (incl. of Equip. Rooms) category.



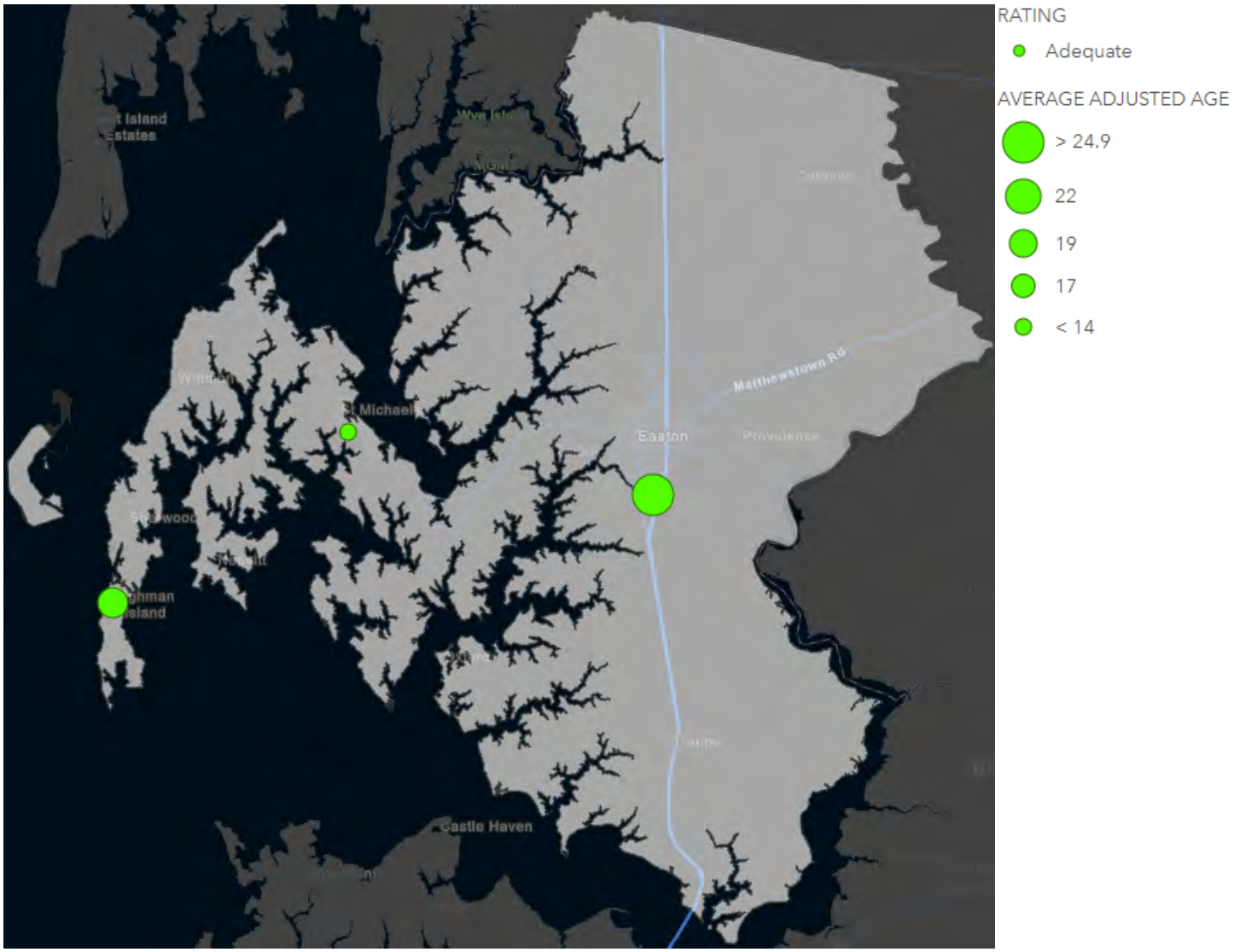
Some essential assets were not identified in the PM schedules for the assessed facilities, such as fire and safety systems, pest management, and some DLLR-regulated equipment.

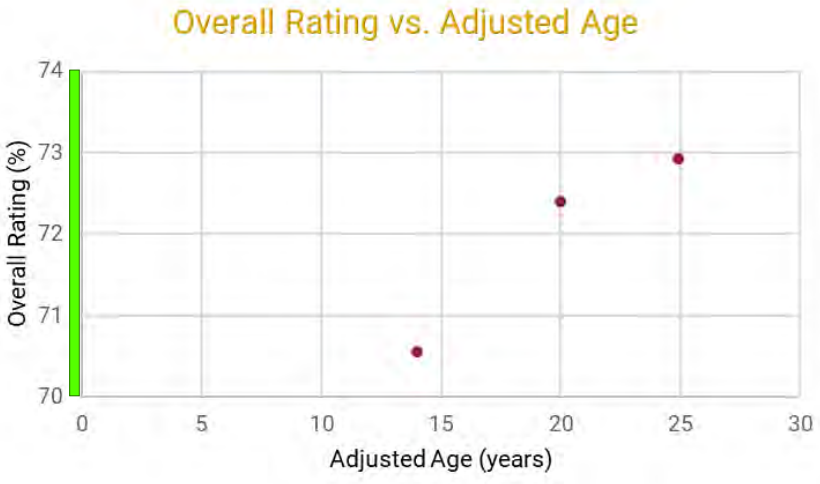
TALBOT COUNTY

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
	Total	**0**	**0**

Overall Rating vs Adjusted Building Age





- All fire and safety systems and components should have PM activities scheduled at the appropriate frequencies and tracked using the CMMS. Depending on what is installed at each facility, the PM schedule may include PM activities for fire extinguishers, battery-operated emergency lights and exit features, fire doors, kitchen hood suppression, smoke evacuation dampers, and stairwell pressurization fans.

- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- Training for custodial staff should be enhanced or refreshed with an emphasis on safety requirements, including clearances around equipment and blockage of egress points. The CMMS could be used to track some or all custodial responsibilities in order to establish and ensure accountability.

- Additional training on playground maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place. Safety issues should be reported and addressed immediately.

WASHINGTON COUNTY

Total School Facilities Assessed in FY 2023: 6


Smithsburg Elementary

Fiscal Year 2023: Key Facts

46 facilities

Washington County has 46 active school facilities.

No change since FY 2022.

35.8 years old

The average adjusted age of all 46 school facilities is 35.8 years old.

+ 1 year since FY 2022.

> 3.4 M GSF

Washington County maintains 3,476,622 SF throughout its 46 school facilities. It has the 11th greatest amount of SF of LEAs in MD.

No change since FY 2022.

< $1.6 B

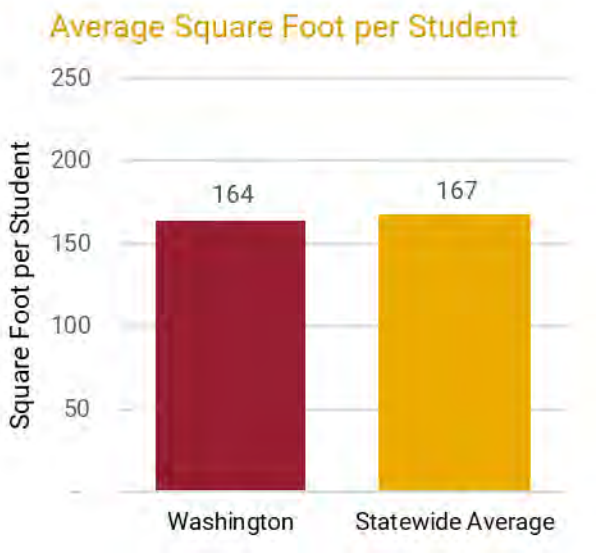
The current replacement value for Washington County's GSF, at the IAC's current replacement cost/SF, is nearly $1.6 B.

68.03% (Not Adequate) = Average Overall Rating for FY 2023

- 5.22% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	1	1		2
Not Adequate	3	1		4
Poor				
Totals	4	2		6

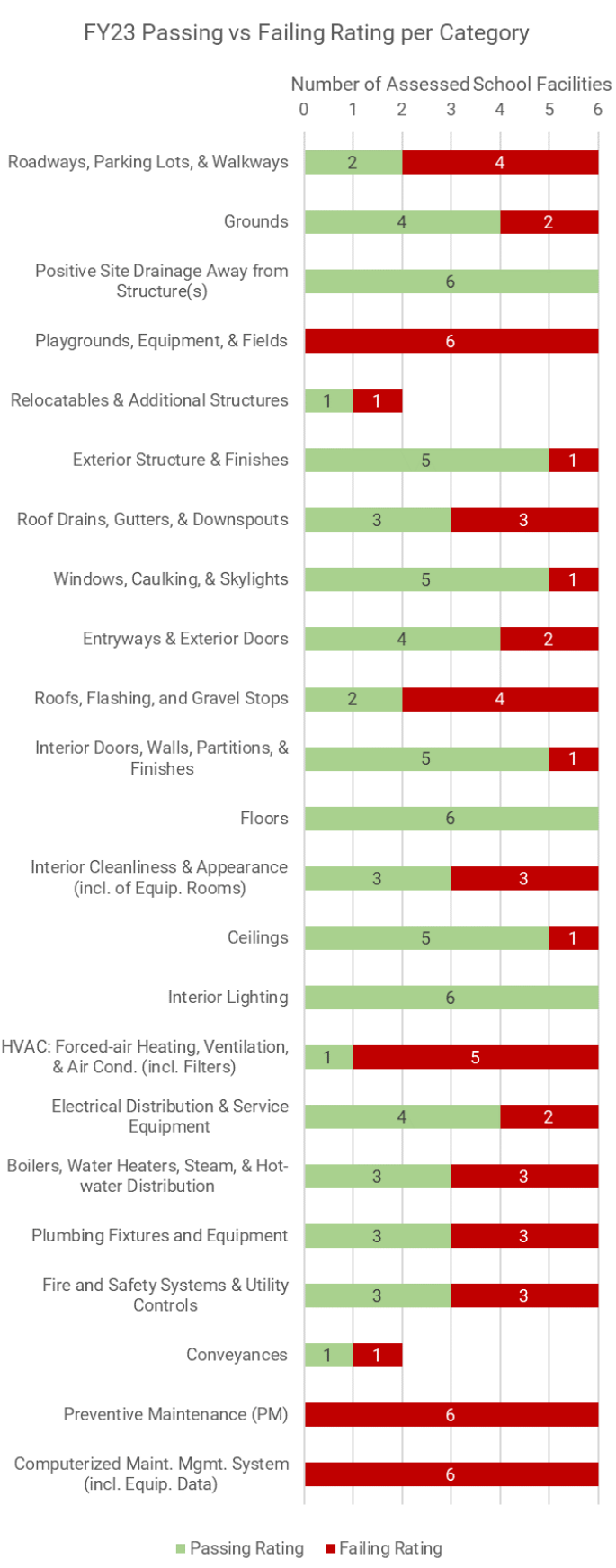


WASHINGTON COUNTY

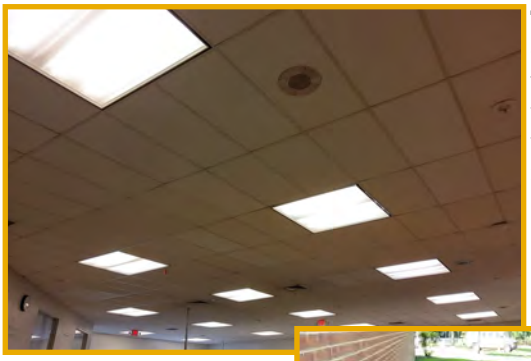
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Hickory Elementary (21.004)	Elementary	39,571	47	Adequate	0	0	14	7	0	0	0
2. Clear Spring Middle (21.007)	Middle	66,122	43	Adequate	0	1	13	7	0	0	0
3. Boonsboro Middle (21.010)	Middle	105,590	46	Not Adequate	0	0	11	10	0	0	7
4. Bester Elementary (21.021)	Elementary	72,951	8	Not Adequate	0	0	14	8	0	0	3
5. Williamsport Elementary (21.029)	Elementary	64,112	19	Not Adequate	0	0	12	10	0	0	2
6. Smithsburg Elementary (21.036)	Elementary	48,587	25	Not Adequate	0	0	12	11	0	0	1
Totals					0	1	76	53	0	0	13
Percentage of Total Ratings for System					0%	1%	58%	41%	0%		

FY 2023 Results: Assessment Findings by Category



Strengths



The majority of classrooms appeared to be well lit with functional lighting fixtures. Daily lighting maintenance tasks are identified in the Custodial Manual.

No evidence of ponding water at the buildings' foundations or water intrusion were observed at any of the assessed facilities. All six facilities received an Adequate rating in the Positive Site Drainage Away from Structure(s) category.

Two facilities were observed with no issues or concerns with the windows or skylights, and the other facilities did not have any major issues noted. Some facilities have their classroom windows identified with the room number identification visible from the exterior which is considered a best practice.

Cleaning routines for various floor types are identified in the Custodial Manual. All six assessed facilities received an Adequate rating in the Floors category.

Weaknesses

Inoperable exhaust fans were noted at five facilities, and the exhaust fans were observed with cracked belts at five facilities. Dirty filters and/or coils were identified at all six assessed facilities. Five facilities received a Not Adequate rating in the HVAC category.

Some essential assets were not identified in the PM schedules for the assessed facilities, such as water heaters, emergency lighting, and backflow preventers. Closing aging PM work orders also appeared to be a challenge as several were open 30 days or more at all six facilities; aged HVAC-related PM work orders were identified at all six facilities.

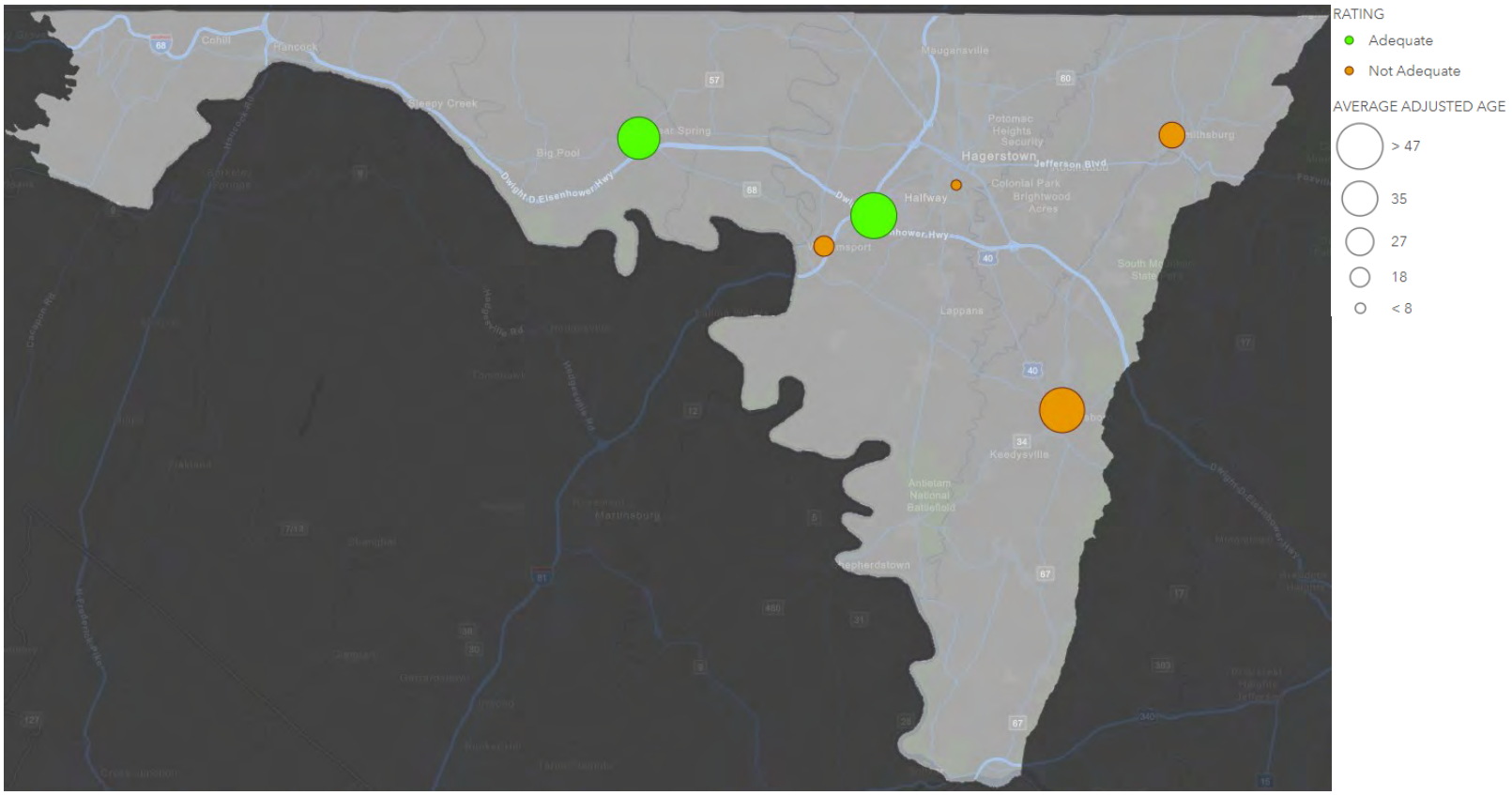
Ponding water or evidence of ponding was observed at five facilities. These same five facilities were also noted with either open seams or cracks in seam sealants. Four facilities received a Not Adequate rating in the Roofs, Flashing, and Gravel Stops category.

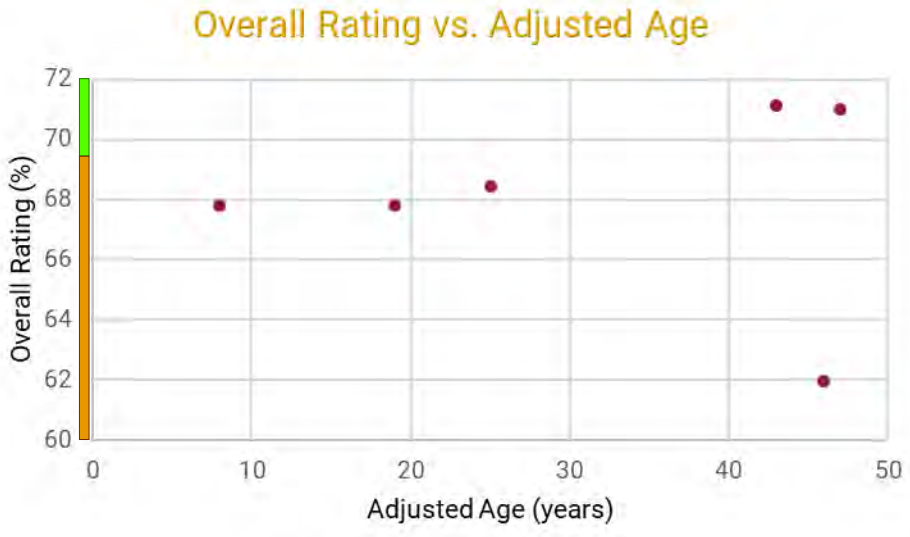
Damaged or deteriorated rubberized protective surfaces were observed on the playground equipment at four facilities. Vegetation was growing from cracks in the athletic courts at three facilities.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	3
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	3
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	1
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	1
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	2
	Ceilings	0	1
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	1
	Fire and Safety Systems & Utility Controls	0	1
	Conveyances	0	0
	Total	**0**	**13**

Overall Rating vs Adjusted Building Age





- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- Implementing quality control procedures is recommended to ensure PM work orders are being completed effectively and the actions taken to complete the work are recorded accurately.

- Regularly scheduled playground and bleacher inspections should be created and tracked using the CMMS. Additional training on playground and bleacher maintenance procedures and requirements may be needed to ensure the required inspections, cleaning, and repairs are taking place. Safety issues should be reported and addressed immediately.

- Additional PM checks and/or additional oversight are recommended to ensure the HVAC systems receive the necessary amount of PM work at the appropriate frequency to remain functional and efficient.

WICOMICO COUNTY

Total School Facilities Assessed in FY 2023: 3


Wicomico Middle

Fiscal Year 2023: Key Facts

24 facilities

Wicomico County has 24 active school facilities.

No change since FY 2022.

28.7 years old

The average adjusted age of all 24 school facilities is 28.7 years old.

- 0.7 years since FY 2022.

> 2.2 M GSF

Wicomico County maintains 2,283,618 SF throughout its 24 school facilities. It has the 14th greatest amount of SF of LEAs in MD.

+ 39,300 SF since FY 2022.

> $1.0 B

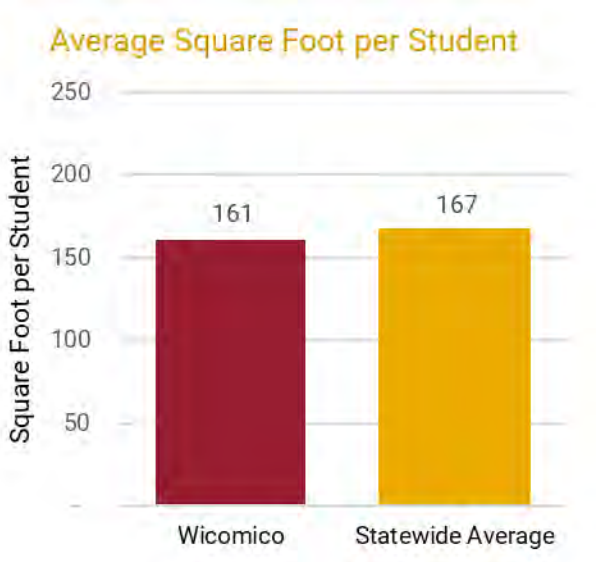
The current replacement value for Wicomico County's GSF, at the IAC's current replacement cost/SF, is greater than $1.0 B.

73.76% (Adequate) = Average Overall Rating for FY 2023

- 5.07% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Middle	High	
Superior				
Good				
Adequate	2	1		3
Not Adequate				
Poor				
Totals	2	1		**3**

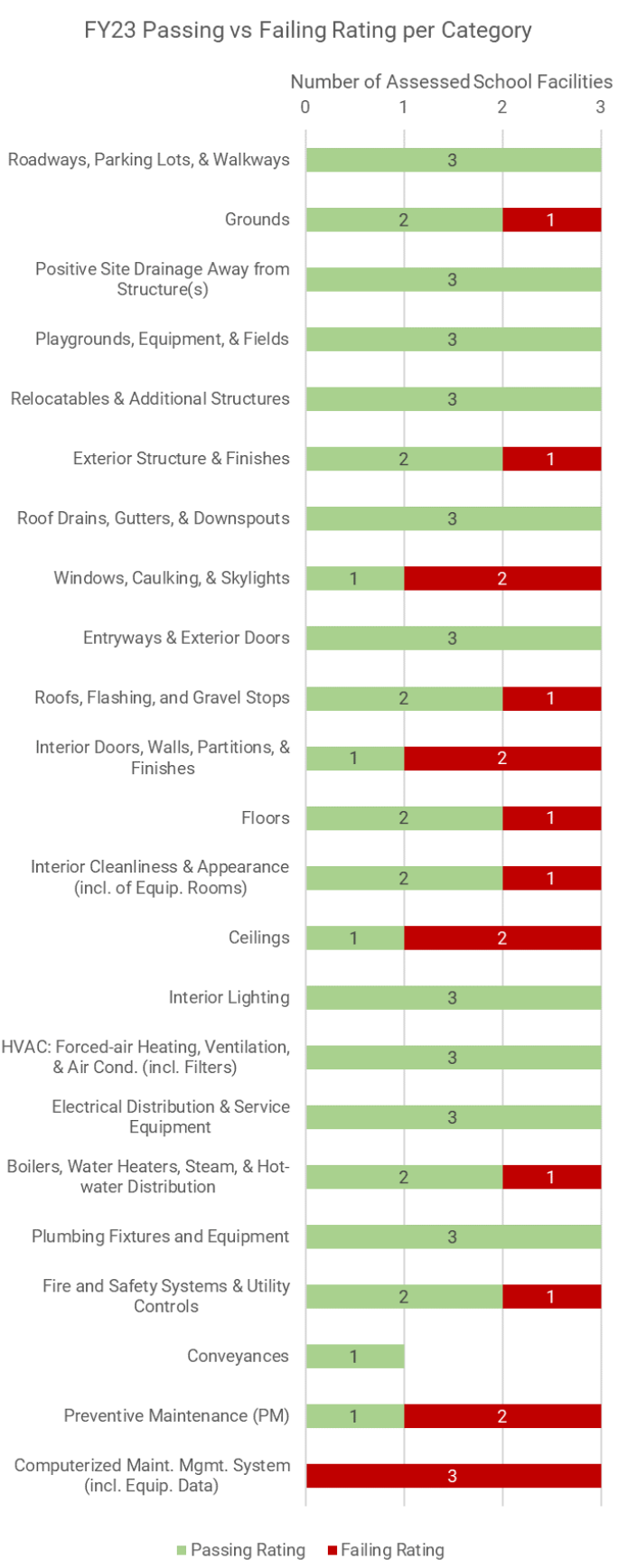


WICOMICO COUNTY

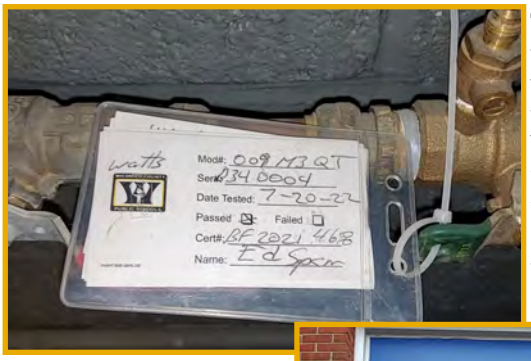
FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. East Salisbury Elementary (22.003)	Elementary	61,889	47	Adequate	1	1	14	6	0	0	0
2. Wicomico Middle (22.015)	Middle	135,750	45	Adequate	1	0	12	10	0	0	0
3. Fruitland Primary (22.016)	Elementary	56,308	46	Adequate	1	4	15	2	0	0	0
Totals					3	5	41	18	0	0	0
Percentage of Total Ratings for System					4%	7%	61%	27%	0%		

FY 2023 Results: Assessment Findings by Category



Strengths



The inspection tags on the backflow preventers were current at all three facilities. Annual backflow preventer inspections were included in the PM schedule at every facility assessed.

Most of the exterior doors appeared to be weatherproof and watertight with little to no signs of deterioration. Annual exterior door inspections were included in the PM schedule at every facility assessed.

The HVAC filters appeared to be dated and serviced according to industry standards. Multiple HVAC assets were included in the PM schedule at every facility assessed, such as summer coil cleaning and electrical unit heater cleaning, annual exhaust fan inspections, and quarterly air handler unit inspections.

Most areas in the facilities appeared well lit. No instances of non-functioning light fixtures were noted at one facility, and another facility was observed with only one inoperable light.

Weaknesses

Sagging ceiling tiles were observed at all three facilities, and two facilities were noted with multiple stained ceiling tiles in both classroom and non-classroom areas. Ceilings were not identified in the PM schedules for the assessed facilities.

Damaged walls and peeling paint were noted at all three facilities. Two facilities received a Not Adequate rating in the Interior Doors, Walls, Partitions, & Finishes category.

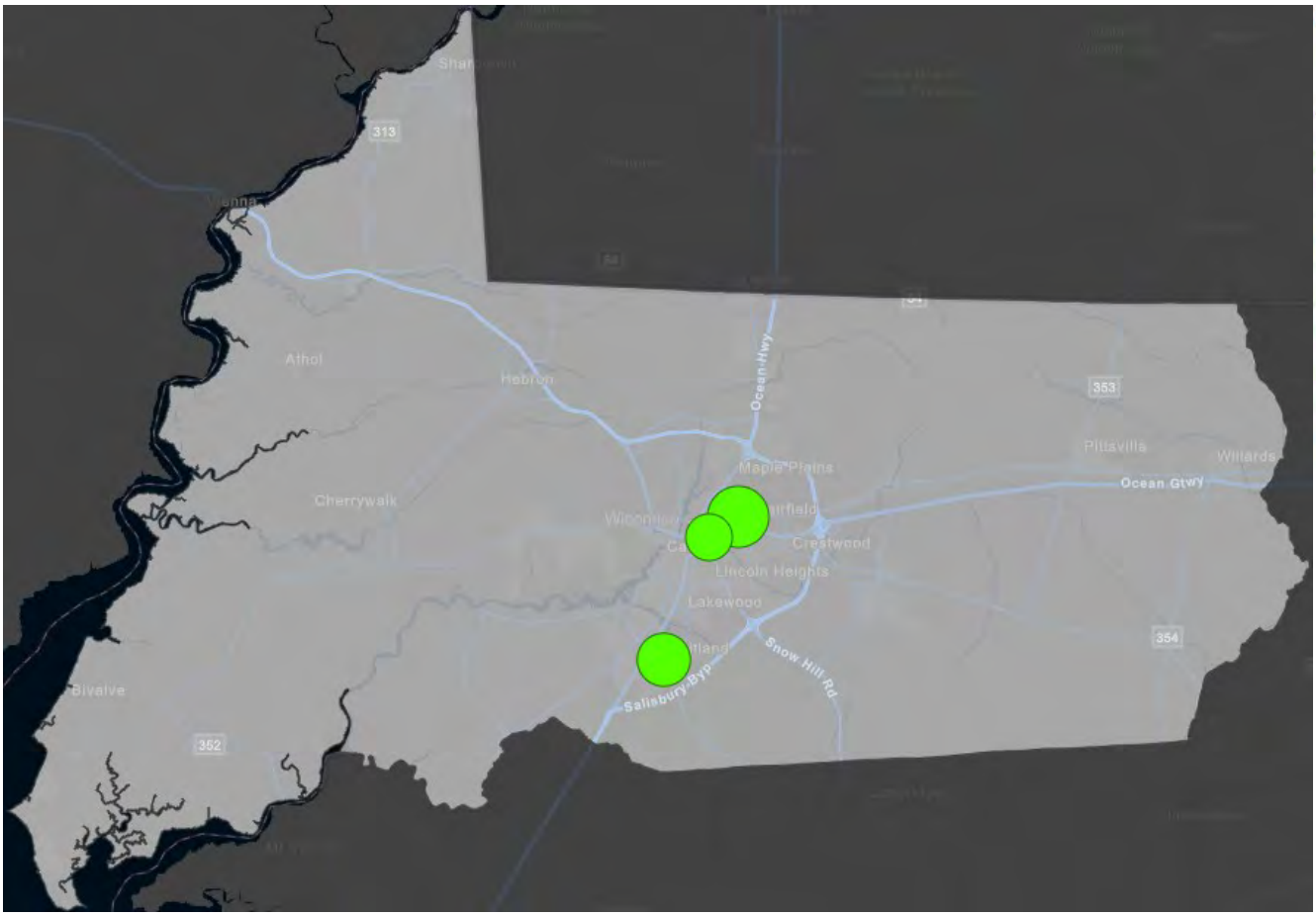
Two facilities were observed with ponding water or evidence of ponding water on their roofs, and two facilities were noted with vegetative growth. The roof inspection report for one facility indicated that the roof leaks every time it rains but no work orders were identified in the open or closed work order history to address the issues noted in the report.

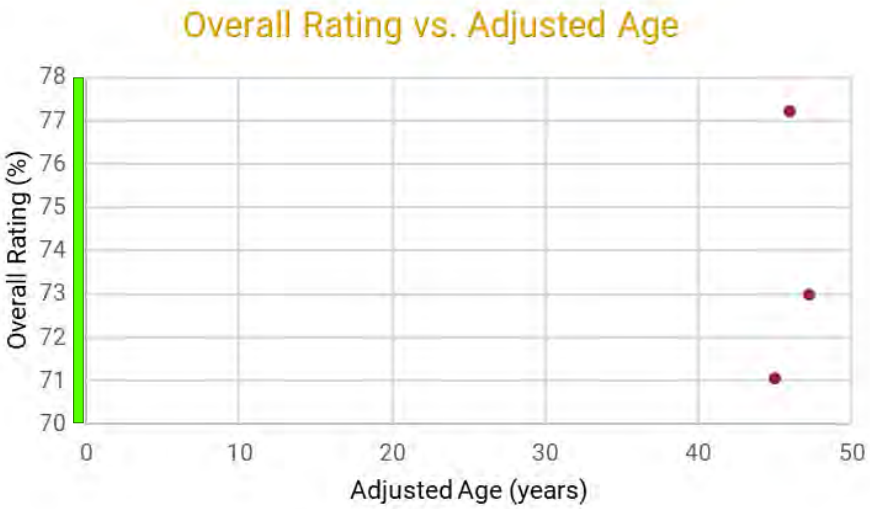
Some essential assets were not identified in the PM schedules and/or asset lists for the assessed facilities, such as emergency lighting, water heaters, and pumps.

FY 2023 Results: Summary of Deficiencies by Category

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	0
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	0
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
	Total	**0**	**0**

Overall Rating vs Adjusted Building Age





- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- A field should be created in the CMMS to track the days each work order has aged to help identify causes of possible bottlenecks and streamline workflow processes. Fields should also be set up to track labor hours and costs to assist in establishing predictable cost trends and support more efficient resource management.

- Expand the asset list for each facility to encompass all essential and non-essential assets to store and manage asset-specific data (such as asset name, purchase date, purchase price, expected life span, model number, serial number, asset tag number or unique identification, type of asset, location, and any other relevant details), and use the CMMS to track the maintenance and repair history as well as performance of each asset over time.

- Regularly scheduled ceiling inspections should be created and tracked using the CMMS to identify any ceiling tiles missing, stained, or damaged. Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted. Stained ceiling tiles should be replaced once the cause is identified and repaired.

WORCESTER COUNTY

Total School Facilities Assessed in FY 2023: 3

Snow Hill High

Fiscal Year 2023: Key Facts

14 facilities

Worcester County has 14 active school facilities.

No change since FY 2022.

27.0 years old

The average adjusted age of all 14 school facilities is 27.0 years old.

+ 0.5 years since FY 2022.

> 1.3 M GSF

Worcester County maintains 1,310,647 SF throughout its 14 school facilities. It has the 17th greatest amount of SF of LEAs in MD.

+ 24,795 since FY 2022.

~ $0.6 B

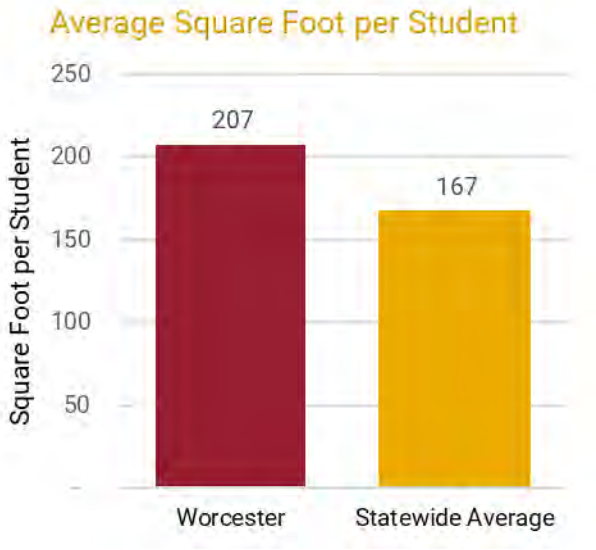
The current replacement value for Worcester County's GSF, at the IAC's current replacement cost/SF, is approximately $0.6 B.

71.28% (Adequate) = Average Overall Rating for FY 2023

- 1.89% since FY 22

FY 2023 Overall Rating Results by School Type

	Elementary	Elementary/ Middle	High	
Superior				
Good				
Adequate		1	1	2
Not Adequate	1			1
Poor				
Totals	1	1	1	**3**

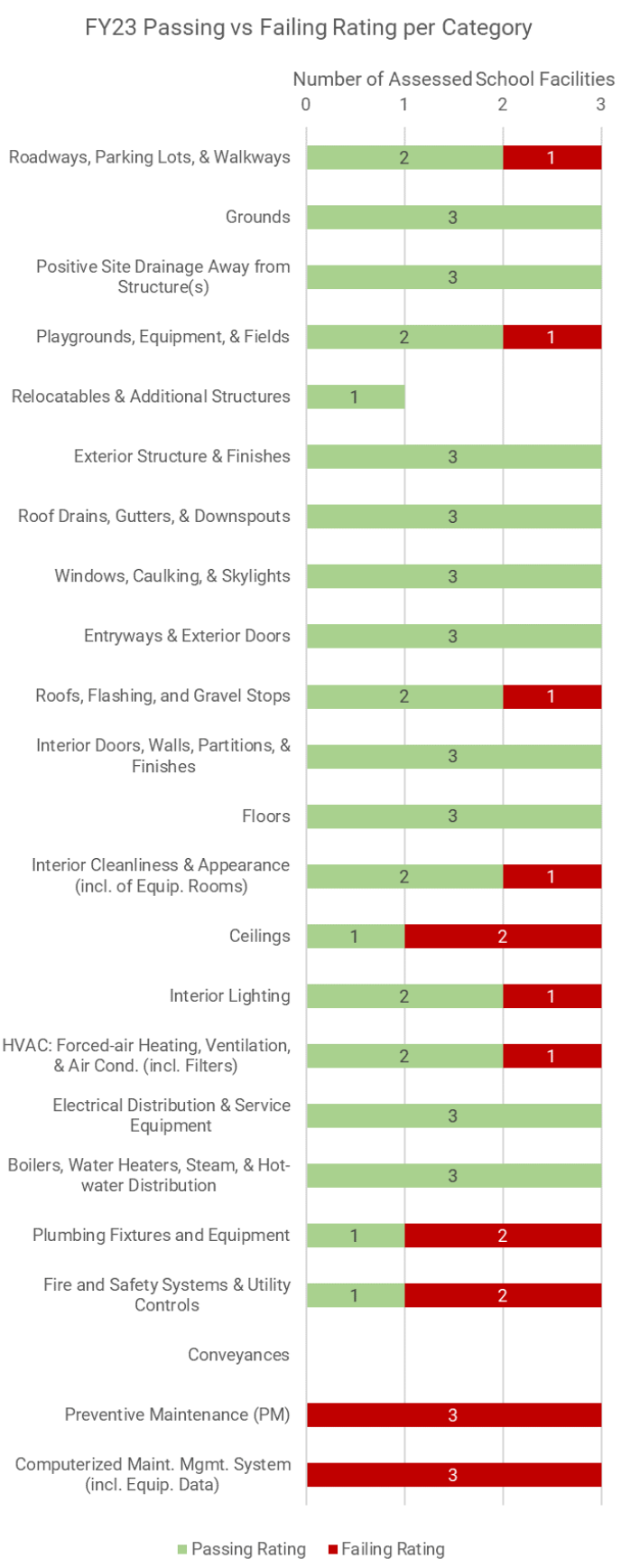


WORCESTER COUNTY

FY 2023 Results: Summary of School Ratings

School Name	School Type	Square Footage	Adjusted Age	Overall Rating	Rating of Individual Categories (does not include items not rated)					Deficiencies	
					Superior	Good	Adequate	Not Adequate	Poor	Major	Minor
1. Snow Hill High (23.005)	High	122,310	6	Adequate	0	0	18	4	0	0	0
2. Ocean City Elementary (23.006)	Elementary	87,477	17	Not Adequate	0	0	14	7	0	0	2
3. Pocomoke Middle (23.011)	Elementary/ Middle	87,600	53	Adequate	0	3	12	6	0	0	0
Totals					0	3	44	17	0	0	2
Percentage of Total Ratings for System					0%	5%	69%	27%	0%		

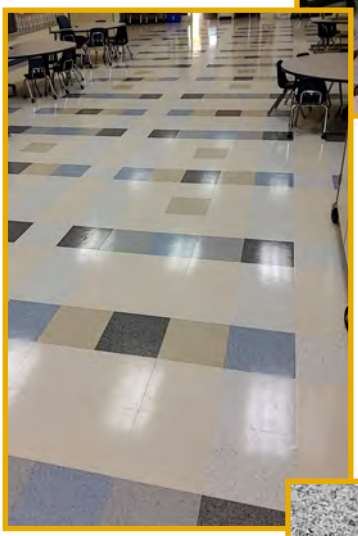
FY 2023 Results: Assessment Findings by Category



Strengths

All of the assessed windows operated as expected. The PM schedules at two facilities identified yearly PM for windows. The skylights at the one applicable facility appeared watertight.

No issues or concerns were identified with the water heaters or hot water distribution at any of the assessed facilities. The DLLR certificates were current and on display for all applicable water heaters.

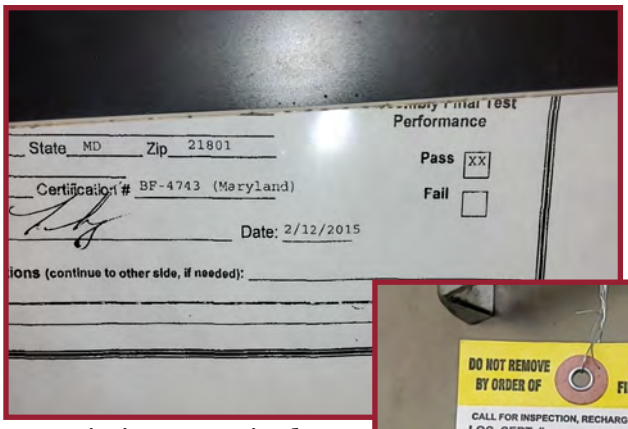


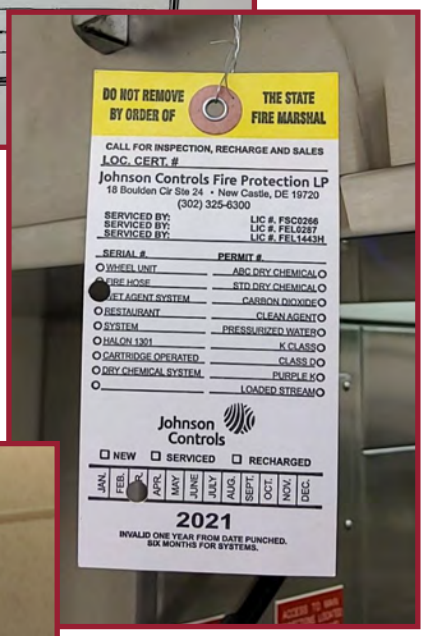
No issues or concerns were identified with the flooring at one facility, and the other two facilities had no issues noted concerning flooring in classroom areas. Floor cleaning procedures for various surface types are detailed in the Custodial Training and Procedures Manual document.

The roof drains, gutters, and downspouts were clean and free of debris at two facilities. These assets are evaluated annually during the routine roof inspection.

Weaknesses

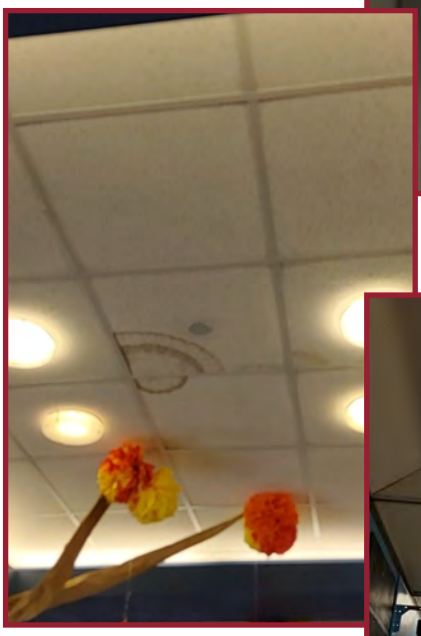
Plumbing fixtures are not identified in the PM schedules for the assessed facilities, and leaks were observed at the plumbing fixtures or equipment at two facilities. Two facilities were noted with backflow preventer inspection tags missing or expired.





Fire and safety systems were not identified in the PM schedule for one facility. Some fire and safety assets were included in the PM schedules for the other two facilities but most did not appear in the PM work order histories. One facility was noted with an expired kitchen hood suppression system inspection tag. Deficiencies were noted in various fire and safety inspection reports provided in the pre-assessment documentation for all three facilities but no corrective action work orders were identified in the CMMS work order histories to address the identified deficiencies.

Ceilings were not identified in the PM schedules for the assessed facilities, and multiple stained ceiling tiles were observed in classrooms as well as other areas at all three facilities. Two facilities received a Not Adequate rating in the Ceilings category. Ceilings were also identified as a weakness for WCPS in FY20 and FY22 due to stained ceiling tiles.

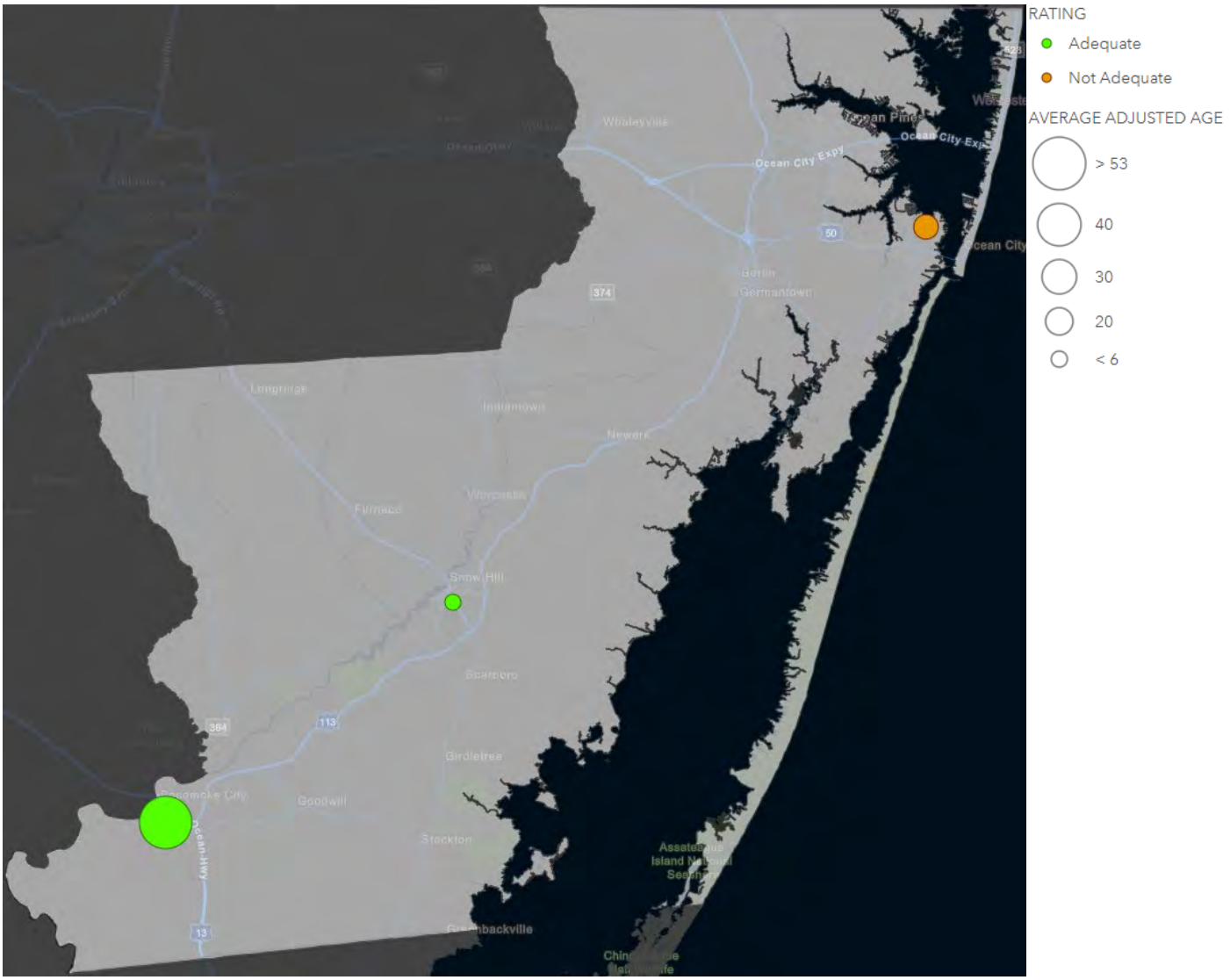


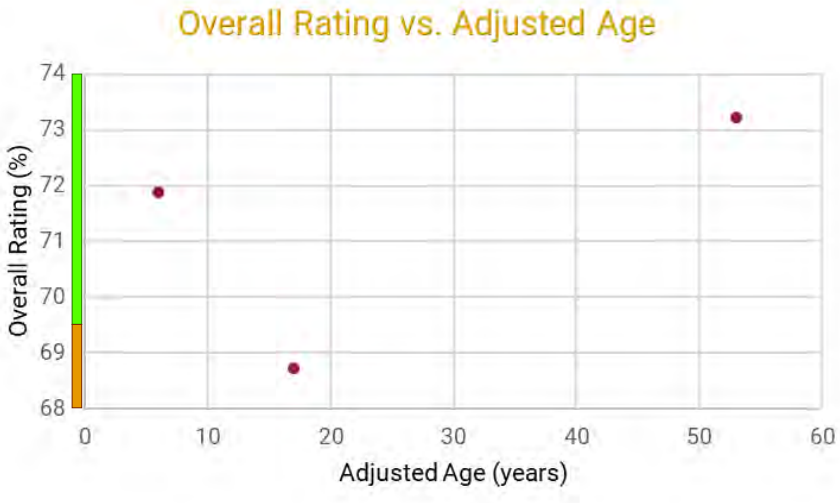
Some essential assets were not identified in the PM schedules for the assessed facilities, such as interior lighting, ceilings, plumbing fixtures, and some fire and safety systems.

FY 2023 Results: Summary of School Ratings

	Category	# of Major Deficiencies	# of Minor Deficiencies
Site	Roadways, Parking Lots, & Walkways	0	1
	Grounds	0	0
	Positive Site Drainage Away from Structure(s)	0	0
	Playgrounds, Equipment, & Fields	0	1
	Relocatables & Additional Structures	0	0
Building Exterior	Exterior Structure & Finishes	0	0
	Roof Drains, Gutters, & Downspouts	0	0
	Windows, Caulking, & Skylights	0	0
	Entryways & Exterior Doors	0	0
	Roofs, Flashing, and Gravel Stops	0	0
Building Interior	Interior Doors, Walls, Partitions, & Finishes	0	0
	Floors	0	0
	Interior Cleanliness & Appearance (incl. of Equip. Rooms)	0	0
	Ceilings	0	0
	Interior Lighting	0	0
Building Equipment & Systems	HVAC: Forced-air Heating, Ventilation, & Air Cond. (incl. Filters)	0	0
	Electrical Distribution & Service Equipment	0	0
	Boilers, Water Heaters, Steam, & Hot-water Distribution	0	0
	Plumbing Fixtures and Equipment	0	0
	Fire and Safety Systems & Utility Controls	0	0
	Conveyances	0	0
	Total	**0**	**2**

Overall Rating vs Adjusted Building Age





- All site-specific PM schedules should have the remainder of essential and applicable non-essential assets added and auto-populating PM work orders created to address all maintainable features of equipment and systems at industry-standard frequencies.

- Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted and identified as inspection deficiencies. This will help identify trends and common issues in order to better proactively maintain areas.

- Regularly scheduled ceiling inspections should be created and tracked using the CMMS to identify any ceiling tiles missing, stained, or damaged. Corrective work orders should be created in the CMMS immediately following any inspection where deficiencies or issues are noted. Stained ceiling tiles should be replaced once the cause is identified and repaired.

- PM activities for fire and safety systems and plumbing fixtures and equipment should be added to each facility's PM schedule to help extend the useful life of the existing surfaces and assets, prevent hazardous conditions, and avoid premature capital replacement projects.

- A field should be created in the CMMS to track the days each work order has aged to help identify causes of possible bottlenecks and streamline workflow processes. Fields should also be set up to track labor hours and costs to assist in establishing predictable cost trends and support more efficient resource management.